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This study examined certain educationally related attitudes held by a disadvantaged group of college freshmen with no previous experience at the college level. The study focused on changes in attitude exhibited by disadvantaged students enrolled in a program of study skills instruction at Oregon State University during the Fall term of 1972.

In addition to the disadvantaged group, a group of ethnic minority freshmen and a group of average freshmen students were included in the study. Scores on the Teacher Approval and Educational Acceptance subscales of the Survey of Study Habits and Attitudes were used as measurement criteria for the determination of attitudes.

Significant differences were found in the acceptance of common educational goals by students of differing ethnicity and differing grade point averages. The study skills instruction was found to have a significant effect only on the attitudes measured on the Teacher Approval subscale.

EFFECTS OF A PROGRAM OF STUDY SKILLS INSTRUCTION
ON THE ATTITUDES OF A DISADVANTAGED GROUP
OF COLLEGE FRESHMEN

by

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CHAPTER I.

INTRODUCTION

During the Fall term of the 1971-1972 school year, a number of students were enrolled at Oregon State University under the Educational Opportunities Program. Many of these students had a past academic history which would have prohibited their entry under the standard admissions procedures of the University. These special students were evaluated and admitted under the guidelines of the Experimental Modified Admissions Requirements (EMAR). The accomplishment of entry into the University would not have guaranteed a realistic opportunity for academic success for these students. "EMAR" students brought both academic and behavioral handicaps to the University as a result of their educational backgrounds. The majority had to make a difficult adjustment to the different cultural situation existing at the University. The time and energy required to make these adjustments to the cultural setting of necessity had some effect on academic performance.

The staff at the Office of Educational Opportunities held the view that student attitudes would have a direct relationship to

student academic success. The Educational Opportunities Program provided a one-term course in the study skills in an effort to facilitate student success. An adequate assessment of the contribution that the study skills program was making to the adjustment of the students was not available. Additional information concerning the attitudes of the students involved was necessary for both student advising and program evaluation. This study was initiated to provide some of the necessary information.

Definition of Terms

Attitudes

An attitude is considered to be an individual's propensity for a particular response when that individual is presented with some given psychological stimulus. The existence of an attitude may be evidenced by either a verbalization or an overt behavior on the part of the individual (Kiesler, Collins and Miller, 1967). This study assumes that the same attitude which produces a specific response to a test item will also produce a specific overt behavior in academic situations. Mean scores on the Teacher Approval and on the Educational Acceptance subscales of the Survey of Study Habits and Attitudes (Brown and Holtzman, 1967) are taken to represent the attitudes of the students involved in the study.

Disadvantaged Group

A selected group of students who possessed skill levels and habit patterns which correlated negatively with predictors of academic success on standard measuring instruments utilized by Oregon State University. Semantic implications notwithstanding, use of this term is meant to carry no negative connotations as to individual worth, or the worth of differing ethnic backgrounds.

College Freshmen

Students who were enrolled at Oregon State University during the Fall and Winter terms of the 1971-1972 school year. These

students indicated no previous college experience at the beginning of that Fall term.

Experimental Modified Admissions Requirements (EMAR)

This set of admissions procedures (see Appendix I) was initiated by the Faculty Senate to provide a means by which students might be admitted to Oregon State University without meeting the usual criteria for admission. Students admitted under these criteria were referred to as "EMAR" students and were under the auspices of the Office of Educational Opportunities.

Office of Educational Opportunities

This office of Oregon State University was charged with the responsibility for the direction, administration, and implementation of the Educational Opportunities Program.

Educational Opportunities Program (EOP)

This program was established by Oregon State University to facilitate an increase in the enrollment of ethnic minority and/or poverty background students. Under this program students were supported both financially and academically. Supportive services included counseling, tutoring, advising, and intermediary assistance as needed on an individual basis.

Survey of Study Habits and Attitudes

This standardized instrument utilizes student self-evaluation of normal feelings about, or performance in various given educational situations. Each of one hundred statements is followed by a five-level, Likert-type scale on which the student can respond. The questions fall into two main groups. The "Study Habits" group deals with the mechanics of study and the "Study Attitudes" group deals with student motivation (Brown and Holtzman, 1965). This study utilized two subscales of the "Study Attitudes" group, the Teacher Approval and the Educational Acceptance subscales.

Evidence has been presented supporting the predictive value of this instrument in the area of student success (Brown and Holtzman, 1967).

Teacher Approval (TA)

A subscale of the Survey of Study Habits and Attitudes which is designed to measure the respondent's feelings and opinions about methods of instruction, personal actions, and classroom behavior of teachers (Brown and Holtzman, 1967)

Educational Acceptance (EA)

A subscale of the Survey of Study Habits and Attitudes which is designed to measure the respondent's approval of commonly accepted educational objectives, practices, and requirements (Brown and Holtzman, 1967).

Statement of the Problem

The staff of the Educational Opportunities Program recognized that the success of the program was closely related to the academic performance of the students involved. Extensive experience with disadvantaged students had resulted in an intuitive opinion on the part of the staff that student attitudes would have a significant impact on that performance. Previous considerations of student attitude had been carried out using subjective criteria. Program needs, limited staffing, and an increasing student population resulted in a felt need for more precise procedures. Staff intercommunication resulted in a consensus that the more objective measurements produced by a standardized instrument would be preferable for use in the statistical evaluations necessary in the expanded program.

This study utilizes student scores on the Survey of Study Habits and Attitudes (Brown and Holtzman, 1967) to represent the attitudes held by student groups in the university setting. The scores of disadvantaged students, students of minority ethnic background, and a random sample of freshmen at Oregon State University are compared.

The main objective of this study was to gather evidence to assist in determining whether any significant changes in attitude might be identified which could be attributed to the program of study skills instruction. This emphasis was determined by an intuitive assumption that attitude differences did exist

between the groups included in the study. Three hypotheses were formulated for purposes of examination. These were stated in the null form as follows:

1. The measured attitudes of any given group in the study will not be significantly different from the measured attitudes of the same group on subsequent administrations.
2. No significant differences exist between the measured attitudes of any given group and the corresponding measured attitudes of any other group in the study.
3. Any changes in measured attitude for a given group will not be significantly different from temporarily corresponding changes in measured attitude for any other group in the study.

The initial hypothesis resulted from the author's proposal that educational experiences would result in changes in attitude on the part of the students. Attitudes were not considered to be invariably static, but subject in some instances to the many environmental influences existent in the university situation. All students included in the study were anticipated to experience some changes due to new social experiences and to the impact of new information gained in the instructional situation at the University. Consecutive attitude measurements within each group were therefore predicted to differ in some manner.

The second hypothesis resulted from the author's premise that students grouped according to differing ethnic background and differing educational experience would consequently be grouped according to differing attitudes. This follows from the basic assumption that attitudes are formed by personal experience in social and instructional situations. Since the backgrounds of disadvantaged students differed in economic opportunity, educational history and cultural values from those of the average student, disadvantaged student groups were presumed to maintain different attitudes than those of a random sample group of freshmen.

The third hypothesis anticipated that experiences at Oregon State University would be significantly different for each of the groups involved in the study. Whether the differences were considered to be real or only perceptual, their effect would be evidenced by differences in the magnitude and direction of attitude change within the groups. The positive correlation of the test mean scores with student achievement (Brown and Holtzman, 1967) was considered along with the past academic records of the students. Lower initial mean scores for disadvantaged students were therefore projected from past academic performance. The most optimistic projection for the study skills program was that disadvantaged student test scores would rise while the scores of other groups would remain constant or decline. Changes in

attitude found in disadvantaged and/or ethnic minority students were therefore compared with those found in a random sample of freshmen to test the validity of that projection. The basic assumption that students of ethnic minority background would relate to their experience at Oregon State University in a different manner than the average student was supported by the common use of the term "prejudiced" by these students when defining the relationship of elements of the university community to the individual student. This term was never used by any member of the random sample freshmen when discussing those relationships during the study.

Significance of the Study

Recent sociological trends have led toward a general recognition of certain aspects of the American social structure which tend to suppress rather than enhance equality of opportunity. The long history of systematic discrimination in civil, economic, and educational areas has created enclaves within the structure where the lack of equal opportunity is not necessarily remedied by the mere passage of civil regulations. In members of the majority group, lingering individual bias and personal prejudices combine to maintain some of the discriminatory situations that were formerly sanctioned within the civil statutes.

The probability exists that the structure of the educational system of America has systematically hindered the success of certain groups and thereby prevented those groups from deriving the full benefits of the system - benefits due morally and often legally to those groups. Members have been deprived of contact with substantial numbers of peers who have experienced success at even the lower levels of the educational process. Many are restricted in their own expectancies by the pressures of the expectancies of those in control of the elementary and secondary educational institutions which they were compelled to attend. They have been required to sustain extraordinary levels of motivation and commitment in order to merely gain entry into the institutions of higher education, a privilege which increasing numbers of the members of the majority group enjoy as a

matter of course. The condition is self-perpetuating. The concepts utilized by the majority group to rationalize the continued existence of the situation are self-fulfilling.

Observers not in regular contact with ethnic minority students may feel that the behaviors and attitudes of these students are often counterproductive. They may find the reasons behind the patterns of functioning difficult to discern. Many of these behaviors are influenced by negative aspects of the social and educational systems of which the minority student is a part. The behaviors exhibited are not necessarily unique to the minority student (Gibbs, 1965). Withdrawal from academic situations as a reaction to academic pressures is a pattern noted in a large number of students in the American educational system (ASCD, 1962; Magoon, 1965). The ethnic minority student often carries the additional weight of internalized negative self-concepts, a socially produced condition crippling to the individual and detrimental to the possibility of future success (Riessman, 1962).

One method of attempted alleviation of the inequitable situation has been to increase the availability of opportunities in the higher educational system. It is commonly accepted that education beyond the level of the secondary school is both individually and sociologically beneficial. To implement the logical and practical consequences engendered by acceptance of this view, active recruitment began in an attempt to enroll additional students from minority groups. These students are members of those elements of

American society which were under-represented in the student populations of the institutions of higher education. The Office of Educational Opportunities accepted a definition of under-represented elements stated in both economic and ethnic terms. Potential for academic success at the college level was the stated prime criterion for student selection. In practice, members of ethnic minority groups (limited for practical purposes to Black, Chicano, or Native American) were given preference in the selection process. Most of the students selected did not possess the ability to make the financial investment necessary for university level education, and these students were provided with financial as well as academic assistance.

It is not to be assumed that the benefits engendered by this program were limited to the students involved. In an immediate sense, mere increase in contact between the community and minority student populations, if that contact is of a positive nature, in many cases provides direct benefits in the area of greater understanding to both groups. In addition, positive relationships on campus will be felt in the student's home community as well, and one student's successes at a university should help initiate new desires to participate on the part of students not yet in the program. In the same manner, however, the effects of negative experiences may also have repercussions in the home community. Recognition of the import and reality of this possibility leads to the conclusion that if the Educational Opportunities Program is to be successful, the number of

individual negative experiences must be minimized.

The difficulties experienced in performing at the academic level required at the University may not be anticipated by new students familiar with only high school requirements. Mastery of at least some of the techniques presented in study skills instruction would seem indispensable if the students are to perform adequately in the more demanding university situation. This argument by itself provides strong support for continuance of a program of study skills instruction, but consideration must be given to the conflicting results of research concerning the efficacy of instruction in this area. Ikenberry (1966) did conclude that knowledge of the study skills was related to student achievement, but Stout (1966) found no significant relationship between the level of selected study skills and academic achievement. Brown (1941) found that failing college students were as likely to report good study habits as were successful college students.

Further consideration of the literature relating to college success discloses that a number of researchers (Kim, 1957; Maxwell, 1968; Preston and Botel, 1952) have found that affective considerations (set, interest, attitude, motivation) had greater effect on success than skill development.

Correctly using available knowledge concerning the different characteristics of the incoming student promotes increased efficiency in minimizing negative experiences. Many of those behaviors

and attitudes exhibited by low-achieving students in general (Magoon, 1965) were common to students entering under the Educational Opportunities Program at Oregon State University. A large number of the behaviors which had been instilled in these ethnic minority youths by the educational and social system to which they had been subjected, did not enhance their chances of success. Research findings indicate (Entwistle, 1960; Creaser, 1963) that unsupported experience at the university level is not likely to generate by itself the skills necessary for success.

Past experiences within the program have indicated that students who have experienced life under conditions of poverty often form an orientation toward present and short-term goals. Students who relate negative past experience in educational situations sometimes exhibit negative coping behaviors in instructional situations. Students may react by withdrawal from classroom interaction, or at the other extreme may engage in an active defense of the self-image. The defense utilized is sometimes offensive to others within the university community. Any lack of solid preparation in the basic academic skills tends to increase the pressure on the student. This has been found to be especially true during the critical initial term. A combination of these factors may hinder even the best motivated students in the achievement of satisfactory levels of progress.

The case for a program of study skills instruction designed for the disadvantaged student is clearly a strong one. It is necessary to determine those outcomes by which the beneficial effects of the course are to be measured. Cognitive study skills, while commonly accepted as having great value in the achievement of academic success, cannot in all cases be shown to correlate positively with university grade point averages (Brown, 1941; Maxwell, 1968; Preston and Botel, 1952; Scheller, 1967). DeSena (1964) tends to support the position that certain personality characteristics are of greater import than academic skills.

If the attitudes of disadvantaged students, as evidenced by past academic records and present overt behaviors, negatively influence the possibility of student success, then it is readily apparent that unless some attitude change on the part of disadvantaged students is generated by the instructional program, little has been accomplished toward enabling the student to successfully compete at the university level. The results of this study should therefore have serious implications for future program proposals and should help provide information which may lead to more realistic instructional programs for disadvantaged students.

Limitations of the Study

The inability to select truly randomized groups for comparison, the specific and peculiar characteristics of the student group, and the unique social and academic environment existent at Oregon State University impose limits on the generalizations which may be drawn from the results of this study. When other student populations or other institutions are considered, the results and conclusions of this study may not be valid.

The use of scores on the Teacher Approval and Educational Acceptance portions of the survey as the criteria measurement of student attitudes restricts the applicability of these results to the specific characteristics measured by those portions of the survey. Further analysis of the attitudes measured by the instrument was limited by the refusal of the publisher to allow reproduction of test items.

The presence of the author as both instructor and test supervisor may be relevant to the test scores evidenced by the disadvantaged group, particularly the scores on the Teacher Approval subscale. The results of the study skills instruction are limited in application to programs of similar instructional format and staffing.

CHAPTER II

REVIEW OF RELATED LITERATURE

Success has traditionally been measured at the University in terms of degrees gained. The acquisition of degrees has in turn depended directly on the maintenance of certain standards of academic output. Consequently, on a term-to-term basis, success has come to be measured in terms of grade point averages. Both Huser (1967) and Creaser (1963) point out that grades are in themselves poor and incomplete measures of success. The satisfaction of the individual with progress should in their view also be considered. This perception of success on the part of the student was found to have significant influence on the future attitudes of that student.

Interaction patterns between student grades and student attitudes are so intricately interwoven that a causal relationship in either direction cannot be discerned. The available literature supports a close correlation between the attitudes of the students and the academic success of that student. Zimmerman (1969) finds significant positive correlations between academic performance and student attitudes toward the faculty, the academic major and the study skills. In the case of more specific attitude objects, the correlations are not as clear. Ikenberry (1966) could find no significant evidence that either attitudes toward study skills or

attitudes toward the instructor of that course were related to achievement.

The effects of attitudes often appear as uncontrolled variables in experimentation designed to deal with other aspects of the educational situation. While studying specific study skills, the study of both Maxwell (1968) and that of Preston and Botel (1952) concluded that psychological factors commonly associated with attitudes (persistence, interests, aspirations) were crucial factors in the achievement of academic success at the university level.

The effects of attitudes can be both immediate and persistent. Extreme attitudes toward the institution attended (Ellish, 1968) may in themselves have an effect on initial success. The fact that attitudes of this sort are evident in many of the students in the Educational Opportunities Program lends support to the acceptance of a need for measures to counteract negative influences at the very beginning of student programs.

Past experience with academic situations has supported the assumption that conforming to the demands of the university community would enhance the possibility of success in that environment. Consideration of the negative personal aspects of being required to adapt one's own life style to that of a different culture, however, has led to a closer examination of the question. Studies done in this area have consistently rejected the initial assumption that conformity brings success. Marquette (1967) finds no evidence at all that academic achievement is related to the tendency to conform. Erb

(1961) did find some evidence that a positive relationship did exist between achievement and conformity for the female population of his study but could find no corresponding relationship for the males.

Related to and supporting this research on conformity is the work of Ikenberry (1966), who finds no significant relationship between social backgrounds involving college expectancy and college achievement. It would appear that the purely social criteria, as dictated by the academic and community forces, might have little significant impact on the individual student, at least insofar as providing significant motivation for academic success. Hronek (1969) supports this in some measure and further concludes that ethnic subcultures and substructures are of greater significance in value internalization than class substructures. This conclusion is related to the difference in the individual internalization of ethnically imposed, as opposed to socially imposed, values and assists in the explanation of finding that orientation to the future seems to differentiate students more significantly than the social class of the parents.

In a study concerned with this same area, Gibbs (1965) finds unsuccessful students tend to show characteristics of inadequate personal-social orientation, and individual manifestations of the difficulties may include both extroverted overreactivity and low motivation for study.

The work of Marquette (1967) explores the relationship between achievement and social orientation in some depth. The study indicates that academic success is positively related to a congruency between the self concept and the individual's view of social desirability. A positive relationship was also found to exist between the individual's ideal image of self as compared to his perceptions of what is socially desirable. Marquette further suggested that self-satisfaction is positively related to academic achievement. These results support the idea that many of the difficulties that students of minority ethnic status encounter are the result of social situations in which the student's self-concepts are negative in relation to his perception of desirable social criteria.

Zimmerman (1969) found the attitude of the student toward his academic major positively correlated with the student's performance within that major. Carew (1957) reported that high grade point averages are related to the acceptance of the individual by the group with which he identifies. In his case studies, the correlations between acceptance and grade point average were found to be positive. This would hold only so long as the ideals of the groups included in the study corresponded positively with the ideals of the university community in which the group was located. In those cases in which the social peer group is comprised of ethnic minority students, the correlations might be less significant or even negative.

Lack of academic success does not seem to be due to either simple or temporarily static causes. Gibbs (1965) finds that characteristics of failing students are both heterogeneous and non-linear. The persistent nature of non-success leads to his postulation of the existence of a "failure orientation" within individuals. Any situation in which a clash existed between the demands of the student's cultural background and the demands of the University would therefore contribute to academic failure. The extent of impact due to this situation could be evaluated through the determination of individual attitudes.

CHAPTER III

METHODOLOGY

Program of Instruction

The Office of Educational Opportunities originally initiated specialized instruction for the particular benefit of those students entering Oregon State University under the Experimental Modified Admissions Requirements (EMAR) criteria. Participation was encouraged for all students who were under the auspices of the Educational Opportunities Program and who felt an individual need for the training. Instruction was given on a block basis, including enough course hours to constitute a full academic load for the students involved. The students were enrolled in the program for one complete term.

The study skills instruction included course work in reading and study methods. Instructed by the author, the courses also dealt with affective considerations of educational situations.

Mathematics instruction was given on a group basis utilizing programmed materials. Tutors were available for individual help both within the classroom and at other times.

Writing skills were taught on a small group basis. Groups of students were assigned to advanced writing students for help. The groups were limited to a maximum of three students. Writing programs for the students were approved by certified instructors.

Beginning students under the program were assigned on an ethnic basis to students of the same background who were at a more advanced level within the program. The advanced students presented instruction in psychological and sociological concepts and skills under the supervision of certified instructors.

Student Characteristics

Each student within the program was considered on an individual basis. Certain common traits existed within the student groups, however, and the following generalizations were considered realistic by the staff of the Educational Opportunities Office. Black students in this program were for the most part from an urban poverty setting. Most of the Black students came from the large high schools of the Portland, Oregon area. The Black community of that city expressed negative feelings about the Corvallis community, and about Oregon State University. Ambivalence existed as to the desirability of sending students from the community to Oregon State University. The school was considered harsh in terms of the output required of students, and the term "racist" was often applied to the social situation. Black students entered with a minimum of enthusiasm and negative anticipations. They seemed confused and uncertain concerning individual educational goals. They expressed little interest in meeting demands that they perceived the University making on them. The academic pressures were often described as requirements which forced Black students to abandon their own life styles. Many individuals found that immediate needs became paramount, and long-term goals more difficult to realistically evaluate. Some Black students attempted overt con-

frontation in the classroom situation. Numerous other Black students expressed feelings of being stereotyped by the expectations of instructors. The fact that their numbers were severely limited increased a tendency in some students to conform closely to the norms of the Black group which did exist. Since some academically positive behaviors were downgraded by prestigious group members, those behaviors were consequently suppressed.

The Chicano students were generally from rural areas. Many had lived under conditions of poverty or near poverty. The Chicano students were more varied in background location than the Blacks. Most of these students had had migrant backgrounds. They individually experienced more or less difficulty with verbal and written expression of their own ideas in the English language.

Habit patterns associated with long experience in living on the edge of destitution were evident in a majority of the Chicano students. The usual orientation tended toward a satisfaction of present needs. This did not facilitate the formulation of the long-term goals necessary for students to persist at the university level. Chicano students expressed uncertainty as to the value of a university education. They were unsure of their own ability to obtain the rewards which the American social system promises those who succeed at the university level. Many students stated feelings of isolation and despondency. Chicano

students many times withdrew from participation in pressure-filled academic situations, exhibiting behaviors attributable to a combination of past educational experience and Chicano cultural values. Many Chicano students felt demands of the academic situation at the University concurrently with pressure from their parents to return to the home situation to "help out the family".

The Native American students were probably the most varied in background of the three major ethnic groups enrolled under the program. Most were from a background which included living under the conditions associated with incomes at poverty levels. Most could relate at least some experience of being confined and frustrated by the Federal bureaucracy which is in charge of Indian affairs. These students often stated a felt isolation from their own group at the University, and tended to form internal cliques within their cultural group for social interaction. Native American students described conflicting feelings about the role of a university education in their life. A major concern was how that education might change their individual relationship with their own culture. As in the case of the Chicano students, the Native American students were likely to feel that their unique backgrounds were important at the University only in negative aspects. Any positive recognition tendered the student was often discerned by the student as an exhibition of differences rather than a portrayal of desirable aspects of a different life style.

The average student at Oregon State University was white. The campus was considered conservative. The University was noted for its science and applied science programs rather than its liberal studies programs. The rigorous academic requirements were considered one cause of a perceived apathetic attitude toward external social and cultural activities on the part of these students. Cross-cultural contacts were minimal. Little student effort was noted which might have brought about a change in the concepts of individuals toward those ethnically different.

Measurement Instrument

The use of Survey of Study Habits and Attitudes (Brown and Holtzman, 1967) was decided upon after study of the available measuring techniques. The use of the instrument in past research, and the availability of the results of that research were carefully considered in the case of each instrument. Utilization of this particular survey in a previous edition by Neidt (1966) and Ikenberry (1966) were determining factors in the decision to use it in the present study.

The survey contains four independent subscales. Independent scores are established for each subscale. These scores may be combined to produce three composite scores; but for the purposes of this study, only the results of two independent subscales dealing with attitudes were used. These subscales have been found to be slightly less reliable than the subscales dealing with study habits (Brown, 1964), but the correlations between the attitude subscales and student grade point averages were high enough to indicate that the scores could be considered useful for working in academic situations. Correlation coefficients were low between the attitude subscales and standard measures of academic aptitude. This may be an indication that this survey measures student probability of academic success by employing indicators other than those commonly utilized for this measurement. (Brown, 1964)

Validation studies and the construction of norms for the survey were completed using members of typical university populations. Substantiation of the validity of the instrument is found in the work of Brown (1955). Due to the sampling process, the statistical population used contained limited numbers of minority group students. The work of Phillips (1970) is the most comprehensive study found which applied this instrument to a student population consisting of ethnic minority group members.

Operational Procedures

At the beginning of the Fall term of the 1971-72 school year, the Educational Opportunities Program had recruited and enrolled thirty-eight students. Of these students, six entered with high school transcripts recording grade point averages of less than 2.00. These students, who entered under the Experimental Modified Admissions Requirements criteria, were felt to require special support if they were to enjoy a realistic chance of academic success. Each of these six students was enrolled in the study skills coursework. The records of the remaining thirty-two students were examined; and in each case where the members of the staff felt the coursework would be necessary, the student concerned was advised to enroll in the program. A total of ten students did so. The initial enrollment for study skills coursework was, therefore, sixteen students. These students will be referred to in subsequent entries as Group I.

Twenty-two students enrolled for regular programs. This group will be referred to in subsequent entries as Group II. The manner of selection of these two groups resulted in a significant difference in the means of the high school grade point averages for the two groups. This difference limits the comparability of the groups; and the statistical treatment chosen was that which would minimize, insofar as possible, the effects of that difference.

All students at Oregon State University were required to complete a course of instruction in writing. The vast majority of the students completed this course during the first year of study. Large student loads in this course necessitated an initial departmental division of the students. This was carried out on the basis of the alphabetical sequence of the initial letter of the student's surname. The selected students were assigned by computer to the various classes available. These classes were each considered to consist of a random selection of the students in the freshman class. A convenient class was selected as a group representative of the total freshman student population. This group initially consisted of thirty-seven students, none of whom identified as a member of an ethnic minority group. This group will be referred to on later occasions as Group III. The results obtained from this group were utilized to help determine if differences in ethnic background contribute significantly to the attitudes of students.

The response by the student to any instrument attempting to measure attitudes can be considered due either to the actual attitude or to the influence of other contributing factors. Discrepancies between overt test behavior and true attitude may be due to social pressures which tend to influence responses in socially "preferred" directions (Kiesler, Collins and Miller, 1969). This effect limits the absolute validity of all attitudinal test scores. Only the overt responses to the test

instrument were considered in this study. It was felt to be impossible within the format of this study to distinguish causal relationships for individual item responses, and all responses were evaluated on a group basis. Significant differences in response were considered equally valid whether due to sincere attempts to reflect inner feelings or to attempts to reflect the subject's self in the light of some perceived positive image.

Students taking the survey were informed that slanted responses would not necessarily reduce the usefulness of the results of the study, but would limit the usefulness of the instrument to the individual student. It was not possible to control the reactions of the students to the testing situation, but all testing was done with students outside the class and on an individual basis.

Gathering the Data

The academic and organizational constraints under which this study was carried out precluded selection of truly randomized groups for comparison. The resulting initial differences between groups were therefore weighted statistically in the data analysis.

Each of the three groups of students was given three opportunities to respond to the Survey of Study Habits and Attitudes. The first application was administered at the beginning of the Fall term. The effects of collegiate experiences and study skills instruction were considered negligible at this point, and the results were utilized for the initial comparisons between groups.

The second administration of the instrument was given at the end of the Fall term. Group I students had just completed a term of study skills instruction, and the immediate effects of the instruction were expected to be discernible at this point. The instrument was administered for the third and last time at the end of the Winter term. Persistent effects of the study skills instruction were anticipated to be discernible at the final administration. In addition the instrument was anticipated to reflect any effect differing ethnic backgrounds might have had in the individual's reactions to the university experience.

Since the "correct" response to each item on the survey is a statement of internal perception of the individual's own mode of functioning, an accumulation of cognitive data pertaining to

the instrument would have little effect on student responses. The position that test-retest situations do not lead to significant response differences on this instrument is supported by Brown and Holtzman (1967) who report stability co-efficients for a four-week span ranging from .88 on the Teacher Approval subscale to .90 on the Educational Acceptance subscale. For a fourteen-week period, an interval comparable to that used in this study, coefficients of .83 on the Teacher Approval subscale and .90 on the Educational Acceptance subscale were reported.

An obvious source of possible bias in the results of this study is the group of students who did not complete the test series. Examination of known characteristics of those individuals who did drop out revealed no consistent data which were considered of significance in producing the results of the study. This position accords with that of Kiesler, Collins, and Miller (1969, p. 60). They conclude that in studies dealing with psychological processes any differential effect due to the characteristics of students not completing the series of applications of the instrument should be considered nonsignificant unless there is knowledge of an operant factor which could reasonably be expected to produce results similar to those found in the study.

Treatment of the Data

The three variables treated in this study were high school grade point average, ethnic composition, and study skills instruction. Each group was directly comparable with itself on each administration of the instrument over the period of the study. It was anticipated that the effects of experiences at the University and the program of instruction would produce changes in student attitudes. Attitude changes were expected to be reflected by changes in mean scores on the survey instrument. To determine if changes found in group means from test to test were significant, each mean score on a given administration of the survey was compared with that of every other administration of the instrument to that group. The "t" test of significance between sample means was used for the comparison.

Since each group in the study differed from every other in at least one of the variables considered, it was anticipated that the overall attitudes of each group would also differ. This difference was expected to be reflected in the mean scores of the survey. To determine whether differences in group mean scores were significant on any single application of the test, the mean scores of each group were fitted to a model of the general linear hypothesis, using an analysis of co-variance with missing observations. This statistical technique was necessary

since no comparable study skills program existed for students not selected for the Educational Opportunities Program.

It was considered probable that experiences at a university would affect the amount and direction of attitude change shown by groups of different characteristics. To test the significance of changes found during the study, the results of each survey administration were compared with subsequent survey administrations for the same group. The changes found within groups were then fitted to a model of the general linear hypothesis, using an analysis of co-variance with missing observations.

CHAPTER IV

ANALYSIS OF DATA

In the presentation of the following tables, "Test I" shall refer to the survey administered at the beginning of the Fall term, "Test 2" to the survey administered at the end of the Fall term, and "Test 3" to the survey administered at the end of the Winter term. "Group I", "Group II", and "Group III" shall be as defined in previous chapters.

Individual scores for the Teacher Approval subscale of the Survey of Study Habits and Attitudes were tabulated by groups. From these tabulations a mean and a standard deviation were computed for each group and administration of the survey. The results of these computations are entered in Table I.

TABLE I. TEACHER APPROVAL - MEANS AND STANDARD DEVIATIONS

		Test 1	Test 2	Test 3
Group 1 (n=11)	Mean	23.18	24.18	23.55
	St. Dev.	7.52	8.99	8.52
Group II (n=11)	Mean	29.18	31.27	27.55
	St. Dev.	7.61	8.57	9.18
Group III (n=22)	Mean	27.27	25.59	26.36
	St. Dev.	6.08	5.96	8.59

It may be immediately noted that the mean scores of Group I and Group II (students with ethnic minority backgrounds) rose over the first term and fell over the second. The scores of Group III fell during the first term and rose during the second. Since the Teacher Approval subscores do show significant positive correlations with student grade point averages (Brown and Holtzman, 1967), higher mean scores are interpreted as positive indicators in comparing students' chances for academic success.

The relatively large values of the standard deviations in comparison with the means of the groups indicated the great individual variability within groups. Statistically, this has the effect of lowering the probability of significant results when comparisons between the mean scores are made.

The scores on the Educational Acceptance subscale of the Survey of Study Habits and Attitudes were treated in the same manner as those on the preceding subscale. Mean scores and standard deviations for each group and administration of the survey are entered in Table II.

TABLE II. EDUCATIONAL ACCEPTANCE MEANS AND STANDARD DEVIATIONS

		Test I	Test 2	Test 3
Group I	Mean	21.28	22.91	21.36
(n=11)	St. Dev.	7.70	8.04	8.19
Group II	Mean	28.00	32.45	29.45
(n=11)	St. Dev.	8.79	7.22	8.66
Group III	Mean	26.77	27.36	27.41
(n=22)	St. Dev.	7.99	7.35	7.56

In contrast to the preceding table the mean scores of all three groups rise during the first term with the scores of Group II rising to a greater extent than those of the other two groups. It should be further noted that during the second term the mean scores of Group III continued to rise, while those of Group I and Group II fell.

On each of these subscales the mean scores of the two ethnically comparable groups (Group I and Group II) changed in a similar manner over the first and the second term. The students who completed the program of study skills instruction had scores consistently lower than those of the other groups. The changes in mean scores from one test to the next were less pronounced in Group I than Group II.

In order to test the significance of changes in attitude within groups, it was first necessary to reaffirm the working premise of this study for evidence of attitudes and attitude change. The mean scores of each group on the Teacher Approval and Educational Acceptance subscales of the Survey of Study Habits and Attitudes are by definition taken to represent attitudes within the groups. Changes in these mean scores can therefore be taken to represent changes in attitudes within the groups. Since each group is comparable statistically with itself over the period of the study, the "t" statistic was used. The .05 level of confidence was chosen as the necessary level for rejection of the null hypothesis:

The measured attitudes of any given group in the study will not be significantly different from the measured attitudes of the same group on subsequent administrations of the test.

The .05 level of confidence is signified by a value of "t" equal to or greater than 2.201 in the case of Group I or Group II and equal to or greater than 2.074 in the case of Group III.

Values generated by applying the "t" test to determine significance between means of successive applications of the Teacher Approval subscale are entered in Table III.

TABLE III. TEACHER APPROVAL - VALUES OF "t"

		Test 2	Test 3
Group I (n=11)	Test 1	-.28	-.11
	Test 2		.17
Group II (n=11)	Test 1	-.61	.45
	Test 2		.98
Group III (n=22)	Test 1	.93	.41
	Test 2		-.35

Tables of test comparisons are presented for each group for each combination of test applications. Test comparisons are presented listing the "t" statistic for each comparison in a standard two-by-two table.

The "t" statistic was computed in like manner for differences between means of successive applications of the Educational Acceptance subscale. The results of these computations are entered in Table IV.

TABLE IV. EDUCATIONAL ACCEPTANCE - VALUES OF "t"

		Test 2	Test 3
Group I (n=11)	Test 1	- .51	- .05
	Test 2		.45
Group II (n=11)	Test 1	-1.30	- .39
	Test 2		.88
Group III (n=22)	Test 1	- .26	- .27
	Test 2		- .02

It is immediately evident that no value included in either table reaches the level necessary for rejection of the null hypothesis.

The comparison of test scores between groups on a single administration of the survey presents a more complicated problem than the comparison of a test-retest sequence for a single group. Due to the diverse variables involved and the fact that no observations exist for a random group of college freshmen enrolled in a program of study skills instruction, it was necessary to compute an analysis of co-variance with missing observations for each administration of the survey.

The mean scores for the three groups were assumed to fit the model:

$$y_{ijk} = y + a_i + B_j + T_{ijk} + e_{ijk}$$

where

y_{ijk} is the adjusted mean of the group scores,

y is the overall mean of the group scores,

a_i is the deviation of the mean due to effects of the ethnic background of the student group,

B_j is the deviation of the mean due to the effects of the study skills instruction,

T_{ijk} is a linearly related effect on the mean due to the high school grade point averages of the students,

and

e_{ijk} is an error factor assumed to have zero mean and a normal distribution.

In order to test for differences due to the effects of differing ethnic backgrounds, students in Group I and Group II were assigned an arbitrary designation of +1, and students in Group III were assigned an arbitrary designation of -1. This procedure assumes that differentiations are made in the American social system between varying ethnic groups and that the label "minority" group is assigned groups containing smaller numbers of members. It further assumes that students are cognizant of the group to which they belong, and that this cognition has consequences in determining their individual modes of function.

In the same manner, students who underwent the program of study skills instruction were assigned the arbitrary designation of +1. All other students in the study were assigned the arbitrary designation of -1.

Each variate and co-variate was in turn tested to determine if the effect of that variate or co-variate on the adjusted mean was significantly different from zero. The .05 level of confidence was chosen as an acceptable level for rejection of the null hypothesis:

No significant differences exist between the measured attitudes of a given group and the corresponding measured attitudes of any other group in the study.

To achieve this level of confidence, a value of "F" equal to or greater than 4.08 must result from the computations. "F" values for equality of variance for the Teacher Approval subscale are presented in Table V. Scores are entered for the effect produced by each variate and co-variate on each application of the survey.

TABLE V. TEACHER APPROVAL - "F" VALUES FOR MEANS
BETWEEN GROUPS FOR EACH TEST APPLICATION

	Grade Point Average	Ethnic Background	Study Skills Instruction
Test 1	.85	1.17	1.58
Test 2	.79	5.25*	1.86
Test 3	.59	.44	.25

*"F" values which are significant at the .05 level when computed with one degree of freedom for the greater mean square and forty degrees of freedom for the lesser mean square.

The null hypothesis may be rejected at the .05 level of confidence for the second administration of the survey. At that point the mean scores of the three groups differ significantly. The only significant variant contributing to that difference is the ethnic background of the students involved.

The high school grade point average of the students was not shown to have a significant effect on the scores on this subscale for any of the three test applications.

The ethnic background of the students tested was not a significant factor on the first nor the third application of the survey. This variant was significant for the second application of the survey. When the mean scores on the "Test 2" application were adjusted to compensate for the effects of the study skills instruction, the adjusted mean score for Group III (36.74) was

significantly higher than the combined adjusted mean score of Group I and Group II (34.03). This result indicates a significantly less positive attitude toward those in authority on the part of ethnic minority students.

The study skills instruction was in no case found to be significant in determination of the results of the Teacher Approval subscale.

"F" values for equality of variance for the Educational Acceptance subscale were computed using the same method of analysis as previously described in this study. The results are presented in Table VI.

TABLE VI. EDUCATIONAL ACCEPTANCE - "F" VALUES FOR MEANS BETWEEN GROUPS FOR EACH TEST APPLICATION.

	Grade Point Average	Ethnic Background	Study Skills Instruction
Test 1	4.36*	1.67	.41
Test 2	1.67	4.98*	3.54
Test 3	2.25	1.65	1.58

*"F" values which are significant at the .05 level when computed with one degree of freedom for the greater mean square and forty degrees of freedom for the lesser mean square.

The student high school grade point average was a factor significantly affecting scores on the Educational Acceptance subscale on the initial test. The null hypothesis is rejected for this subscale on the "Test 1" survey administration. Significant differences did exist between groups at that point due to effects related to the students' high school grade point averages. This co-variant was not significant on later applications of the survey.

The "Test 2" administration of the Educational Acceptance subscale identified a significant effect on the mean scores related to the ethnic background of the students taking the survey. After the effects of the study skills instruction were compensated for, the adjusted mean score for Group III (41.82) was significantly higher than the adjusted combined mean score for Group I and Group II (35.76). This would again indicate a more positive attitude toward the goals of education on the part of the members of Group III at that point.

The extent and direction of changes that did occur in mean scores between survey applications for each group were examined to determine if any of the variant factors significantly influenced attitude change within groups. The .05 level of confidence was chosen as appropriate for rejection of the null hypothesis:

Any changes in measured attitude for a given group will not be significantly different from temporarily corresponding changes in measured attitude for any other group in the study.

The .05 level of confidence would be signified by "F" values equal to or greater than 4.08.

In this analysis, the differences in individual test scores between pairs of survey administrations were first computed and tabulated by group. Since no observations existed for a random group of students enrolled in a program of study skills instruction, the means of the difference scores for each group were compared using an analysis of co-variance with missing observations. The differences between group means were assumed to fit the model:

$$y_{ijk} = y + a_i + B_j + T_{ijk} + e_{ijk}$$

where

y_{ijk} is the adjusted mean of the differences,

y is the overall mean of the differences,

a_i is the deviation of the mean due to the effects of the ethnic background of the students.

B_j is the deviation of the mean due to the effects of the study skills instruction,

T_{ijk} is a linearly related effect due to the high school grade point averages of the students,

and

e_{ijk} is an error factor assumed to have zero mean and a normal distribution.

Each variate and co-variate was in turn tested to determine if the effect on the adjusted mean of the differences due to that variate or co-variate was significantly different from zero. Values

of the "F" test for equality of variance for mean differences of scores on successive applications of the Teacher Acceptance subscale are entered in Table VII. "F" values are listed for each variate and co-variate for each possible combination of the three test administrations.

TABLE VII. TEACHER ACCEPTANCE - "F" VALUES FOR DIFFERENCES BETWEEN MEANS ON SUCCESSIVE TEST APPLICATIONS.

	Grade Point Average	Ethnic Background	Study Skills Instruction
Tests 1-2	.04	2.41	.06
Tests 2-3	2.36	.07	5.26*
Tests 1-3	2.25	.35	4.52*

*"F" values which are significant at the .05 level when computed with one degree of freedom for the greater mean square and forty degrees of freedom for the lesser mean square.

The null hypothesis may be rejected at the .05 level of confidence for the Teacher Acceptance subscale when the total period of the study is examined. The significant variant in these cases is the program of study skills instruction. Neither the high school grade point averages nor the ethnic background of the students demonstrated a significant effect on the direction and amount of attitude change evidenced on this subscale.

The study skills instruction did not result in a significant effect in the direction and amount of attitude change during the actual instruction but did show a persistent later effect. When the differences between Test 2 and Test 3 were computed and adjusted for the effects of high school grade point average and student ethnic background, the difference mean of Group I (2.23) was significantly higher than the adjusted mean of either Group II (-.56) or Group III (.33). When the results of the differences of subscale means between Test 1 and Test 3 were compared, the adjusted difference mean of Group I (.49) was still higher than the adjusted difference mean of Group II (-1.67) or that of Group III (.14).

Values of the "F" test for equality of variance for mean differences of scores on successive applications of the Educational Acceptance subscale are entered in Table VIII.

TABLE VIII: EDUCATIONAL ACCEPTANCE - "F" VALUES FOR DIFFERENCES

	Grade Point Average	Ethnic Background	Study Skills Instruction
Tests 1-2	1.08	1.67	2.10
Tests 2-3	.15	1.30	.51
Tests 1-3	.34	.04	.46

It is readily apparent that neither of the variates nor the co-variate had any significant effect on the direction and amount of change between test applications on the Educational Acceptance subscale.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of this study was to examine the attitudes of a disadvantaged group of college freshmen enrolled in a program of study skills instruction. The students included had indicated no previous college experience when first enrolled at Oregon State University during the Fall term of 1972.

Two groups who were not enrolled in study skills instruction were included in the study for purposes of comparison. Two subscales of the Survey of Study Habits and Attitudes were utilized as measurement criteria for the determination of attitudes.

The "t" test of significance was used to test the hypothesis:

The measured attitudes of any given group
in the study will not be significantly
different from the measured attitudes of
the same group on subsequent administrations.

This hypothesis failed to be rejected at the .05 level of confidence in any instance (Table I, Table II). The study therefore failed to establish evidence that significant changes in attitudes occurred within any group over the period of study.

The "F" test of significance was used to test the hypothesis:

No significant differences exist between the measured attitudes of a given group and the corresponding measured attitudes of any other group in the study.

Mean scores for each application of the instrument for each group were analyzed using an analysis of co-variance with missing observations.

The grade point average of the students was found to have an effect different from zero at the .05 level of confidence on the initial administration of the Educational Acceptance subscale. Further, it was found that the ethnic backgrounds of the students in the groups had an effect different from zero at the .05 level of confidence for the second administration of both subscales. This implies that at the end of the first term, two distinct groups were formulated, the distinguishing characteristic being the ethnic background of the students included in the groups. This situation was evident on both subscales at this time but was not in evidence at any other point in the study.

The "F" test of significance was used to test the hypothesis:

Any changes in measured attitude for a given group will not be significantly different from temporarily corresponding changes in measured attitude for any other group in the study.

This hypothesis deals with the magnitude and direction of attitude change evidenced when scores of two differing test administrations are compared. The relative attitude changes were compared between groups for the same set of test administrations.

Mean differences for each pair of test applications were analyzed for each group, again using an analysis of co-variance with missing observations. On the Teacher Approval subscale, it was found that the study skills instruction had an effect different from zero at the .05 level of confidence when the changes over the second term of the study and the changes over the whole period of the study were considered. The rejection of the null hypothesis was not possible on the Educational Acceptance subscale.

These results indicate that the only factor which significantly influenced changes in the area of Teacher Approval was the program of study skills instruction. The influence of this variate was most apparent during the second term of the study, after the instruction had been completed.

Conclusions

The high school grade point average of the students had a significant effect on the mean score of student groups on the Educational Acceptance subscale when that subscale was administered for the first time. The correspondence between acceptance of educational goals and past educational experience is readily discerned, but the significant effects as measured by this instrument did not persist. This suggests that effects of high school grade point averages are temporary in nature and are not a determining factor at times later than initial entry. The results of the responses to this subscale relate to the social value system of the students tested, and imply levels of individual acceptance of academic constraints. It would appear that these attitudes are most clearly influenced by recent history of success or failure in the educational situation. Grade point averages from an immediately preceding term can therefore be considered of greater significance than overall grade point average in situations where assessment of student attitudes and motivation is desirable for counseling or other program purposes.

The Teacher Approval subscale was not sensitive to differences in student grade point average on any application of the survey. This result suggests that the relationship between the student and the teacher is of a more personal nature, and is relatively unaffected by the results of academic evaluations.

Both the Educational Acceptance and the Teacher Approval subscales showed significant differences on the second application of the survey when scores were grouped and adjusted for differences in ethnic background. Sewer (1967) reported that disadvantaged students exhibit a tendency to displace feelings of inadequacy by focusing hostile feelings on school work and school authorities. The significantly lower adjusted mean score for the minority student group supports a conclusion that acceptance of the measured aspects of the educational system was more seriously questioned by these students at the mid-point of the study.

The mean scores of both minority groups rose over the first term of the study. The rise was not statistically significant, but is interesting when contrasted with the fact that the scores of the majority student group tended to either fall or remain constant. This latter group more closely approximated the findings of Englander (1960) than did the minority student group.

The ethnic minority student clearly is influenced by a number of diverse influences in the academic and social situation of the University. These students frequently expressed a need to establish meaningful social relationships at the University. The results of this study indicate that the initial term includes a great deal of individual reorientation, the results of which are demonstrated by the less positive adjusted scores for the group of minority students at the mid-point of the study.

University life contains its own realities. An indication of the power of those realities in the reinforcement of norm behaviors is found in the data indicating that minority student attitudes are not statistically different from those of the random sample of freshmen at the end of the second term.

Phillips (1970) found that an individualized approach to study skills instruction did result in significant positive changes in the attitudes of student groups as measured by the Survey of Study Habits and Attitudes. The results of this study, however, indicated no significant differences in responses on the Educational Acceptance subscale which could be attributed to the study skills instruction.

The results of an analysis designed to detect the patterns of attitude change (Table VII) indicated that the study skills instruction was effective in producing a significant effect on the pattern of changes between Test 1 and Test 3, and between Test 2 and Test 3 on the Teacher Approval subscale. An examination of Table I indicated that the deviation of the test norms from test to test was of lower magnitude for Group I students. It was remarkably less than the deviation of the test norms of Group II students. The mean scores of both Group II and Group III diminished somewhat over the period of study, while the scores of Group I rose slightly. It is reasonable to conclude that the study skills instruction did result in a positive influence in the area of teacher approval on students completing that instruction.

Recommendations

The program of study skills instruction for the Educational Opportunities Program should be re-evaluated due to the lack of any significant positive change in attitude evidenced by student responses included in this study. It is possible that completely voluntary participation in the study skills program would be of benefit in developing positive attitudes, a proposition supported in the work of Brehm and Cohen (1959) who found that attitudes were more likely to change in situations of high rather than low choice. In addition, the work of Warge (1966) should be considered for its valuable evaluation of the effectiveness of various program sequences. In the case that further statistical work is necessary, expert consultation should be obtained in order to devise models which will be effective in evaluating the small numbers and select group of students represented.

Under the Educational Opportunities Program, regular and intensive contact should be maintained with the students throughout the first term for purposes of counseling and guidance. Dabbs (1964) found that his subjects appeared to accept persuasive influence from communicators comparable to themselves, regardless of how the subject consciously felt toward that communicator. This supports the recommendation that greater use of student counselors, particularly those from the ranks of the Educational Opportunities Program, would be of great benefit to students under the Experimental Modified

Admissions Requirements Program. It may be possible to also have the study skills program taught on a tutorial basis using upper-class students from the program. All possible efforts should be made to minimize the general remedial aura of study skills instruction (Blake, 1955) and provide instructors with whom the students can readily identify. The results of this study would also indicate that student evaluation for program purposes should be based on the most recent academic performance results available.

The Survey of Study Habits and Attitudes should be re-examined before further use is made of the instrument. The rather obvious "correct" answers to many of the questions reinforce the constraint that the survey will be most valid when students responding to the questions are both truthful and aware of their own attitudes and behaviors. Students who may have high anxiety levels about personal scholastic achievement will be less likely to return valid results (DeSena, 1964). The use of some instrument with more subtle lines of questioning and some internal check on deliberate misrepresentation is indicated when these students are tested.

BIBLIOGRAPHY

- Association for Supervision and Curriculum Development. 1962.
Perceiving, behaving, becoming: a new focus for education.
National Education Association. Washington, D.C. 256 p.
- Blake, W.S. 1955. Study-skills programs. Journal of Higher
Education 26:97-99, 114.
- Brehm, J.W. and A.R. Cohen. 1959. Choice and chance, relative
deprivation as a determinant of cognitive dissonance.
Journal of Abnormal and Social Psychology 58:383-387.
- Brown, C.W. 1941. The study habits of failing and successful
students in the first two years of college. Journal of
Experimental Education 9:205-208.
- Brown, Frederick G. 1964. Study habits and attitudes, college
experience, and college success. Personnel and Guidance
Journal 43:287-292.
- Brown, William F. and Wayne H. Holtzman. 1955. Study attitudes
questionnaire for predicting academic success. Journal of
Educational Psychology 46:75-84
- Brown, William F. and Wayne H. Holtzman. 1967. SSHA manual.
New York, the Psychological Corporation. 30 p.
- Buckhout, Robert. 1965. Need for social approval and attitude
change. Journal of Psychology 16:123-128.
- Carew, Donald. 1957. Informal observations in guidance: a
comparison of activities, social acceptance, and scholastic
achievement. Personnel and Guidance Journal 36:121-124.

- Creaser, James W. 1963. Evaluation of a college study habits course using scores on a q-sort test as a criterion. *Journal of Educational Research* 56:272-274.
- Dabbs, James M. Jr. 1964. Self-esteem, communicator characteristics and attitude change. *Journal of Abnormal and Social Psychology* 69:173-181.
- DeSena, Paul. 1964. The effectiveness of two study habits inventories in predicting consistent over-, under-, and normal achievement in college. *Journal of counseling psychology* 11 (no. 4):388-394.
- Ellish, Arthur Donald. 1968. The effect of attitude on academic achievement. Doctoral thesis. (Abstracted in *Dissertation Abstracts* 29:57A)
- Englander, Merly E. 1960. Changes in affect attributable to instruction in reading improvement at the college level. *Journal of Educational Research* 53:231-236.
- Entwisle, Doris R. 1960. Evaluation of study skills courses; a review. *Journal of Educational Research* 53:243-251.
- Erb, Everett D. 1961. Conformity and achievement in college. *Personnel and Guidance Journal* 39:361-366.
- Gibbs, T.N. 1965. Student failure and social maladjustment. *Personnel and Guidance Journal* 43:580-585.
- Hronek, Mary Linda. 1969. Career values, social structure and the college dropout. Doctoral thesis. (Abstracted in *Dissertation Abstracts* 69:1663A)

- Huser, Mary K. 1967. Reading and more reading. Elementary English 44:378-382, 385.
- Ikenberry,, Stanley O., and others. 1966. Effects of reading, study skills improvement, and reduced credit load on achievement and persistance of failure-prone college freshmen; a pilot study. Morgantown, Virginia, West Virginia University. 84 p. (Educational Resources Information Center ED 022 654) (microfiche)
- Kiesler, Charles A., Barry E. Collins and Norman Miller. 1969. Attitude change, New York, John Wiley & Sons. 386 p.
- Kim, Ki Suk. 1957. The use of certain measurements of academic aptitude, study habits, motivation, and personality in the prediction of academic achievement. Doctoral thesis. (Abstracted in Dissertation Abstracts 18 (part 1):150)
- Magoon, Thomas M. 1965. Demographic differences between high and low achieving university students. Journal of College Student Personnel 6:367-373.
- Marquette, George Reynolds. 1967. The relationship of measured and estimated attitudes to academic achievement. Doctoral thesis. (Abstracted in Dissertation Abstracts 28:2098A)
- Maxwell, Martha J. 1968. Assisting skimming and science skills improvement. Los Angeles, California, Paper presented at the 1968 National Reading Conference. 9 p. (Educational Resources Information Center ED 027 175) (microfiche)

- Neidt, Charles O. 1966. The Use of Video Tape Instructional Television for Teaching Study Skills in a University Setting. Fort Collins, Colorado. Colorado State University. (Educational Center ED 012 373) (microfiche)
- Phillips, George O. 1970. Performance of disadvantaged college students on the Survey of Study Habits and Attitudes. Philadelphia, Pennsylvania, Paper presented at the 1970 College Reading Association Conference. 10 p. (Educational Resources Information Center ED 040 022) (microfiche)
- Preston, Ralph C. and Morton Botel. 1952. The relation of reading skill and other factors to the academic achievement of 2048 college students. Journal of Experimental Education 20:363-371
- Riessman, Frank, 1962. The culturally deprived child. New York, Harper & Row. 140 p.
- Scheller, Thomas G: 1967. The effects on academic grades of enrollment in a reading course. Minneapolis, Minnesota, Minnesota University. 10 p. (Educational Resources Information Center ED 013 118) (microfiche)
- Serwer, Blanche L. 1967. The relationship between parentchild interaction and inadequacy in college reading and study. Cambridge, Massachusetts, Harvard University. 10 p. (Educational Resources Information Center Ed 016 589) (microfiche)
- Stout, Dorman G. 1966. Relationship of selected cognitive study skills and achievement increases in freshman level courses. Doctoral thesis. (Abstracted in Dissertation Abstracts 27:889A)

Warga, Richard George. 1966. Determination of an optimum time to teach freshmen students basic study skills. Doctoral thesis.

(Abstracted in Dissertation Abstracts 27:1675A)

Zimmerman, John James. 1969. Relationships among scholastic aptitude, attitudes towards various facets of college life, and academic performance of students at Lycoming college.

Doctoral thesis. (Abstracted in Dissertation Abstracts 30:4792A)

APPENDICES

EXPERIMENTAL MODIFICATION ADMISSION REQUIREMENTS

(EMAR or 3%)

1. For students admitted under Experimental Modification of Admission Requirements (EMAR), the following steps will be taken:
 - A. Determination of basic academic deficiencies with particular emphasis on study skills and skills in reading and writing.
 - B. Establishment of special courses to deal immediately with these deficiencies. Several options are open for this remedial work. Courses might be offered on campus through the DCE (Division of Continuing Education); some use might be made of the English Language Laboratory now used for foreign students; experimental courses might be developed within the School of Education; or, if absolutely necessary, the resources of Linn-Benton Community College might serve as a possible alternative.
 - C. EMAR students taking remedial courses shall be given course credit toward their status as full-time students. However, these courses would not carry academic credit in fulfillment of University degree requirements.
 - D. EMAR students taking remedial work but being qualified as full-time students shall be eligible for financial aid.
 - E. EMAR students shall be given priority in course registration to afford them full opportunity to take desired and acceptable programs of study.
 - F. Advising of EMAR students shall be done carefully and on a continuous basis. Advisors will be required to monitor the progress of their assigned students to maintain awareness of academic difficulties that may arise and to assist the Director in correcting unsuitable performance. Advisors should be drawn from the faculty of schools and departments appropriate for the particular course of study.

II. Eligible for admittance:

- A. High School GPA and/or SAT scores that do not satisfy the minimum entrance requirements.
- B. Show potential for academic success at the college level.

III. Requirements:

- A. Submit Application for Admittance
- B. Three (3) Letter of recommendation.
- C. Write a letter stating reasons why you feel you should be accepted under the EMAR Program.

IV. Financial Aid

- A. Financial aid will be provided according to the needs of student.

Survey of Study Habits and Attitudes

(This instrument is not reproduced at the request
of the Psychological Corporation)