5-1975

Assessing the Effects of a Supervised, Experimental Program of Instruction on the Self-Concept and Grade Point Average of Students on Academic Probation

Joseph F. Tracy
East Tennessee State University

ASSESSING THE EFFECTS OF A SUPERVISED, EXPERIMENTAL PROGRAM OF INSTRUCTION ON THE SELF-CONCEPT AND GRADE POINT AVERAGE OF STUDENTS ON ACADEMIC PROBATION

A Dissertation

Presented to

the Faculty of the Department of Education

East Tennessee State University

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

---

by

Joseph Francis Leonard Tracy

June 1975

APPROVAL

This is to certify that the Advanced Graduate Committee of

JOSEPH FRANCIS LEONARD TRACY

met on the

16th day of April, 1975.

The committee read and examined his dissertation, supervised his defense of it in an oral examination, and decided to recommend that his study be submitted to the Graduate Council and the Dean of the School of Graduate Studies in partial fulfillment of the requirements for the degree Doctor of Education.

A. Keith Dunkel
Chairman, Advanced Graduate Committee

Jean Kate Taylor Swanger

Harold Measel

Norton Carpenter

Robert G. Shepard

Elizabeth C. McMahan
Dean, School of Graduate Studies

ASSESSING THE EFFECTS OF A SUPERVISED, EXPERIMENTAL PROGRAM OF INSTRUCTION ON THE SELF-CONCEPT AND GRADE POINT AVERAGE OF STUDENTS ON ACADEMIC PROBATION

An Abstract

Presented to

the Graduate Faculty

East Tennessee State University

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

---

by

Joseph Francis Leonard Tracy

June 1975

Joseph Francis Leonard Tracy, B. A., Providence College, June 1955.
M. S., Indiana University, September 1971.
Ed.D., East Tennessee State University, June 1975.

ASSESSING THE EFFECTS OF A SUPERVISED, EXPERIMENTAL PROGRAM OF INSTRUCTION ON THE SELF-CONCEPT AND GRADE POINT AVERAGE OF STUDENTS ON ACADEMIC PROBATION

Problem. The problem was to determine whether an experimental, supervised program of instruction was successful in changing a probationary student's academic standing, as measured by grade point average and scores from the Tennessee Self-Concept Scale.

Method. The following hypotheses, as stated in null form, were tested.

1. There will be no significant difference between the Identity Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

2. There will be no significant difference between the Self-Satisfaction Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

3. There will be no significant difference between the Physical Self Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

4. There will be no significant difference between the Family Self Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

5. There will be no significant difference between the Social Self Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

6. There will be no significant difference between the Total Positive Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

7. There will be no significant difference between the Self-Criticism Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

8. There will be no significant difference in the academic grade point averages of the experimental group and those of the control group.

Findings and Conclusions. In summary, the following findings and conclusions were drawn:

1. Identity Score

Finding. The members of the experimental group tended to have a higher perception of their own identity after the program had ended.
Conclusion. This change resulted from the fact that at the time of the pre-test all the students were on probation, but at the time of the post-test a considerable number had achieved "good standing" status (GPA above 2.00). This change in academic status, therefore, brought about a change in the way each subject perceived himself.

2. Self-Satisfaction Score

Finding. The members of the experimental group tended to feel more positively about the self they perceived after the program had ended.
Conclusion. This change resulted from the fact that during the experimental, supervised program of instruction, the instructor frequently indicated to the subjects that they were persons of worth. This technique was based upon the premise that when persons are totally accepted by others, they come to the realization that they are persons of value.

3. Physical Self Score

Finding. The members of the experimental group did not tend to reflect any real change in the way they viewed their body, state of health, physical appearance, sexuality, or appearance after the program had ended. This same finding was reported by Karen Moses in her study with probationary students at Brigham Young University.
Conclusion. No change resulted from the fact that this experimental, supervised program of instruction was unable to produce a change in a value as permanent as the physical self. The physical self was so strong that it could not be substantively modified in nine weeks.

4. Family Self Score

Finding. The members of the experimental group tended to reflect a higher sense of worth and value as family members after the program had ended. A different finding was reported by Clements, who discovered no significant differences in family self as a result of his program with able under-achievers.
Conclusion. This change resulted from the fact that students were psychologically supported by their families during the time of the program, thereby increasing their family self-concept. Parents were aware of the program in most cases because copies of the letters asking students to participate were mailed directly to the homes of each student before the program began.

5. Social Self Score

Finding. The members of the experimental group tended to reflect a higher sense of adequacy and worth in their social interaction with other people after the program had ended. Jensen and Amberg found that social self scores in their experimental subjects increased slightly over their control subjects but they judged their results to be inconclusive.
Conclusion. This change resulted from the social nature of the program. Although the sessions were conducted in a structured atmosphere, the participants were encouraged to discuss their feelings freely. Most subjects exhibited considerable acceptance of one another, thereby reinforcing one another's social self.

6. Total Positive Score

Finding. The members of the experimental group tended to have an overall higher level of self-esteem after the program had ended. This same finding was obtained by Caplan in his study with junior high school boys.
Conclusion. This score resulted from the higher subscale scores, which when combined, form the Total Positive Score. The data showed that Identity, Family Self, Self-Satisfaction, and Social Self definitely changed; therefore, it was expected that the Total Positive Score would likewise change.

7. Self-Criticism Score

Finding. The members of the experimental group did not tend to be any more honest in their self description and capacity for self-criticism after the program had ended.

Conclusion. No change resulted from the fact that even before the program had begun, the individuals of the experimental group were shown to be very honest in their self-description and capacity for self-criticism. Therefore, before the program they were found to have a normal healthy openness.

8. Academic Grade Point Average

Finding. The members of the experimental group tended to achieve higher grades after the program had ended. These same results were obtained by Sheldon and Landsman, who found a significant improvement in academic grades among their experimental group after a program with students in academic difficulty.
Conclusion. This change appears to have resulted because the subjects learned to study and read more efficiently and thereby grasp material more thoroughly; however, the students who continued to participate in the study may have been more highly motivated to study than those who dropped out.

. . . . . .

Thesis prepared under the guidance of Dr. A. Keith Turkett, Dr. Gem Kate Greninger, Dr. Clayton L. Carpenter, Dr. C. Harold Measel, and Dr. Robert G. Shepard.

DEDICATION

For

my mother

Margaret Valentine Tracy

and

my father

Francis Joseph Tracy

whose love and encouragement was a significant factor in all stages of my study.

ACKNOWLEDGMENTS

The writer of this study acknowledges with grateful appreciation the cooperation and help of the following persons:

Doctoral Advising Committee--Dr. A. Keith Turkett, Chairman; Dr. Gem Kate Greninger, Dr. Clayton L. Carpenter, Dr. C. Harold Measel, and Dr. Robert G. Shepard.

Other--Dr. Elizabeth L. McMahan, Professor Ambrose N. Manning, Professor Mary D. Manning, Ms. Frances Smith, Ms. Shirley Pizziferri, Ms. Martha Hauff, Professor Robert L. Love, Mr. Harry Piniarski, and those students who participated in the research.

TABLE OF CONTENTS

LIST OF TABLES

Chapter 1

THE PROBLEM

INTRODUCTION

There has been such a growing interest in the alarming rate of academic deficiencies among college students that in many schools students who do not make sufficient academic progress are placed in some kind of probationary status which demands that they either improve or face dismissal. Many college administrators realize that it is not in the best interest of either the student or the institution for students to continue indefinitely in a probationary or failing status. They, likewise, feel that it is improper to dismiss students without offering them some personnel service. To try to remedy this situation, there has been an increase in the number of remedial programs in college and university settings as a possible means of providing more help to students having academic or adjustment difficulties.

The purpose of this study was to assess the effects of a remedial program of instruction on the self-concept and grade point average of students on academic probation. The program was conducted during the winter quarter 1973-1974 at the State University of New York Agricultural and Technical College at Alfred, a two-year institution awarding its graduates an associate degree in applied science. When this program began, the college had an enrollment of 3,650 full-time students and approximately 300 teaching faculty and professional staff.

Curricula in the areas of agricultural technologies, business technologies, engineering technologies, health technologies, liberal arts and vocational technologies were offered.[1]

STATEMENT OF THE PROBLEM

The problem was to determine whether an experimental, supervised program of instruction was successful in changing a probationary student's academic standing, as measured by grade point average and scores from the Tennessee Self-Concept Scale (See Appendix B).

The independent variable in the study was the experimental, supervised program of instruction. Hayman defined the independent variable as:

> . . . the attribute, property, or characteristic which, when changed in some way is thought to cause a change in some other attribute, property, or characteristic. . . . The independent variable is the condition or characteristic which is manipulated in the experimental study.[2]

In this study the grade point average and self-concept of each individual were the dependent variables. Hayman defined the dependent variable as follows:

> The dependent variable may be thought of as the effect in the cause-effect relationship; it is the attribute, property, or characteristic which manipulation of the independent variable is meant to change.[3]

---

[1]Alfred State College, Campus Handbook, SUNY Agricultural and Technical College at Alfred (Alfred, New York: Printing and Duplicating, Alfred State College, 1973), p. 33.

[2]John L. Hayman, Research in Education (Columbus, Ohio: Merrill, 1968), p. 42.

[3]Ibid., p. 43.

This study was experimental because the independent variable--the supervised program of instruction--was manipulated by the researcher.

Limitations of the Study

The study was limited in the following ways:

1. The students involved were enrolled in very specialized curricula from the Division of Health Technologies (Medical Laboratory Technology, Medical Record Technology, Nursing, Medical Office Assistance, and Chemistry Technology), and from the Division of Business Technologies (Business Administration, Data Processing, Executive Secretarial Science, and Accounting).

2. The duration of this study was limited to one academic quarter (nine class meetings).

3. The expressed motivation of the students participating in this study was considered a limitation.

4. The capability of the Tennessee Self-Concept Scale to measure specific outcomes was a limitation of this study.

5. Seven of the fifteen scores provided through application of the Counseling Form of the Tennessee Self-Concept Scale were considered and used.

6. Other minor limitations imposed through the use of demographic and personal data were acknowledged and considered in the performance of this study.

Hypotheses

The following hypotheses, as stated in null form, were tested. They were formulated using selected scores derived from the Tennessee Self-Concept Scale and the grade point average.

1. There will be no significant difference between the Identity Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

2. There will be no significant difference between the Self-Satisfaction Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

3. There will be no significant difference between the Physical Self Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

4. There will be no significant difference between the Family Self Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

5. There will be no significant difference between the Social Self Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

6. There will be no significant difference between the Total Positive Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

7. There will be no significant difference between the Self-Criticism Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

8. There will be no significant difference in the academic grade point averages of the experimental group and those of the control group.

JUSTIFICATION AND RATIONALE

The concerns which have been mentioned prompted the question of whether there is a connection between academic probationary status and low self-concept. It seems likely that an experimental, supervised program of instruction may increase the academic standing and the self-concept of students who are on academic probation. Hopefully, the information derived from this study will provide insights for preventing possible academic failure. Any information which may add to the understanding of the self-concept will benefit not only the students at State University of New York Agricultural and Technical College at Alfred, but all post-secondary education.

THEORETICAL FRAMEWORK

Basic Assumptions

This study of the self-concept of students at the State University of New York Agricultural and Technical College at Alfred was undertaken with two major assumptions: first, that a positive concept of self is a vital factor in human adjustment and essential for personal and social effectiveness; and second, that academic performance depends upon the already existing concept which every person has of himself.

The first assumption was based upon the theory that a person with a strong self-concept seems to be able to manage his life more

successfully and thereby seems to derive considerably more happiness from life. A person with a strong self-concept accordingly has a stable and comfortable "I-Thou" relationship with others. Such a person does not feel the need to reach out to others for assurance, nor does he need to keep people at a distance because of fear or insecurity. Such a person can be himself without anxiety and apprehension. When a person has a reasonably realistic concept of self, he is free to be himself. William H. Fitts says, "The individual's concept of himself has been demonstrated to be highly influential in much of his behavior, and also to be directly related to his general personality and state of mental health."[4]

The second assumption was derived from the theory that many difficulties which persons experience in their lives are closely connected with how they see themselves and the world in which they live.[5] People who see themselves as undesirable, worthless, or failing tend to act accordingly. Those who have a highly unrealistic concept of self tend to approach life and other people in unrealistic ways. Those with deviant self-concepts tend to behave in deviant ways. Those who see themselves as contributing tend to be creative and productive.

When individuals see themselves as academic failures, they tend to act accordingly. For a person to succeed academically, he has to be at home in his own house--that is, the person has to discover the value

---

[4]William H. Fitts, Manual: Tennessee Self-Concept Scale (Nashville: Counselor Recordings and Tests, 1965), p. 1.

[5]William W. Purkey, Self Concept and School Achievement (Englewood Cliffs: Prentice Hall, 1970), p. 2.

of the self and be comfortable with the self.[6] If a student is uneasy about himself, if he is worried about the opinions of others, academic performance will undoubtedly be affected. An adequate self-concept is a necessary prerequisite for academic success.

These basic assumptions gave rise to the following questions: Do students who are on academic probation have low self-concepts? If their self-concepts are low, what can be done to strengthen them? Will their academic achievement and self-concepts be increased by involvement in an experimental, supervised program of instruction designed to resolve academic deficiencies? These questions prompted the present research.

Definition of Terms

For purposes of consistency and clarity, the following definitions applied whenever the items were used.

Self-concept. Self-concept has been defined in a number of ways, but for the purpose of this study it is presented in operational terms as defined by D. M. Peters who, in turn, developed her definition from A. T. Jersild.[7]

> Self-concept is a psychological construct used to describe a person's private perception of himself and of his perceptions of his relationship to others in his environment. This self-concept includes three components: perceptual--way in which the person sees himself, the idea of body image and idea he has of impression he makes on others; conceptual--person's idea of

---

[6]Arthur W. Combs, Donald L. Avila, and William W. Purkey, Helping Relationships, Basic Concepts for the Helping Professions (Boston: Allyn and Bacon, 1973), p. 42.

[7]A. T. Jersild, Child Psychology (Englewood Cliffs: Prentice Hall, 1960), p. 116.

> his own peculiarly distinctive characteristics, abilities, limitations; and attitudinal--own feelings of identity in environment, attitude regarding present and future, and degree of self-esteem.[8]

This definition was designed to include the following items, all considered to form an integral part of self-concept: self-criticism, identity, self-satisfaction, physical self, family self, social self, and the total positive self.

Grade point average. Grade point average (GPA) refers to the grading system at the State University of New York Agricultural and Technical College at Alfred. It is based upon a four-point scale: A is equivalent to 4.00, B to 3.00, C to 2.00, and D to 1.00. F is failing.

Academic probation. Academic probation refers to the status of those students whose intellectual performance is below that of a student in good standing as determined by the Academic Status Board of the College. This is based upon the recommendation of the faculty of the department in which the student is majoring. Usually a 2.00 grade point average is expected of all students, but this may be lowered or raised in individual cases.[9]

Subjects. Subjects are full-time students enrolled in the Division of Health Technologies or in the Division of Business Technologies at the State University of New York Agricultural and Technical College at Alfred, New York, during the Winter Quarter, 1973-1974.

---

[8]D. M. Peters, "The Self-concept as a Factor in Over- and Under-achievers" (unpublished Doctoral dissertation, Indiana University, 1968), p. 13.

[9]Alfred State College, op. cit., p. 16.

Tennessee Self-Concept Scale. The Tennessee Self-Concept Scale (TSCS) is a self-administering instrument consisting of one hundred self-descriptive statements which the subject uses to portray his own picture of himself.[10]

Experimental, supervised program of instruction. The experimental, supervised program of instruction is a series of lectures and informal discussions aimed primarily at improving the academic achievement and resolving the academic deficiencies of all who participate.

Instructor. The instructor is the person conducting the supervised program of instruction. As Associate for Research and Advisement in the Division of Health Technologies during the academic year 1973-1974, he worked in cooperation with the staff of the Reading and Study Skills Center at the State University of New York Agricultural and Technical College at Alfred.

Self-Criticism Score. The Self-Criticism Score is derived from a ten-item scale of mildly derogatory statements (which most people admit as being true of them). It measures defensiveness, openness, honesty in self-description and capacity for self-criticism.[11]

Total Positive Score. The Total Positive Score is the score which reflects a person's total appraisal of his appearance, background and

---

[10]D. G. Demetriades, "A Study to Identify Some Personality Characteristics of Freshmen Academic Underachievers at Appalachian State University" (unpublished Master's thesis, Appalachian State University, 1967), p. 8.

[11]William H. Fitts, The Self Concept and Performance (Nashville: Counselor Recordings and Tests, 1972), p. 6.

origins, abilities and resources, attitudes and feelings which culminate as a directing force in behavior. It is the score which reflects the overall level of self-esteem.[12]

Identity Score. Identity Score indicates how an individual describes his basic identity--what he is as he sees himself.[13]

Self-Satisfaction Score. Self-Satisfaction Score is the individual's description of how he feels about the self he perceives.[14]

Physical Self Score. Physical Self Score is the indication of how the individual views his own body, his state of health, his physical appearance, skills, sexuality and appearance.[15]

Family Self Score. Family Self Score reflects the person's sense of adequacy, worth, and value as a family member. It refers to the individual's perception of self in reference to his closest and most immediate circle of associates.[16]

Social Self Score. Social Self Score is the construct which reflects one's sense of adequacy and worth in his social interaction with other people in general. This is another "self as perceived in relation to

---

[12]Wallace D. La Benne and Bert I. Greene, Educational Implications of Self-Concept Theory (Pacific Palisades, California: Goodyear, 1969), p. 10.

[13]Fitts, Manual, p. 2.

[14]Ibid.

[15]Ibid., p. 3.

[16]Warren Thompson, Correlates of the Self-Concept, Monograph VI (Nashville: Counselor Recordings and Tests, 1972), p. 3.

others" category, but it pertains to "others" in a more general way.[17]

RESEARCH PROCEDURE

The subjects for this study consisted of fifty-five Health Technologies and Business Technologies students enrolled at State University of New York Agricultural and Technical College at Alfred during the academic year 1973-1974. Twenty-five students from the Division of Health Technologies formed the final experimental group, while thirty students from the Division of Business Technologies formed the final control group.

Each student who was involved in the study was given a pre-test of the Tennessee Self-Concept Scale. The experimental group met once each week for a period of nine weeks to explore various reading and study skills problems. During the same time, the control group did not receive any special treatment. At the end of the scheduled nine meetings, the students of the experimental group who had attended all nine of the sessions were given a post-test. Letters were sent to the control group asking them to return to take the post-test also. The data were examined, using the analysis of variance. Detailed information about the design and exact procedures will be discussed in Chapter 3.

SUMMARY

This chapter has introduced the problem, significance, justification, and rationale for the study. The hypotheses were stated.

---

[17]Fitts, Manual, p. 3.

The goals were to attempt to demonstrate that the academic performance and self-concept of the subjects could be increased through application of an experimental, supervised program of instruction. The subjects involved in the study consisted of fifty-five probationary students enrolled in Health and Business curricula at State University Agricultural and Technical College at Alfred. The terms were defined, and the research procedure, limitations, and setting were identified.

A review of relevant literature will be explored in Chapter 2. The methodology will be stated in Chapter 3. The statistical analysis of the study will be presented in Chapter 4. The summary, findings, conclusions, and recommendations will follow in Chapter 5.

Chapter 2

RELATED RESEARCH AND LITERATURE

INTRODUCTION

This chapter presents a review of research and literature relevant to this study. The chapter is organized to accomplish three objectives: first, to present a brief overview of the early literature on the development of the self-concept; second, to provide a review of specific research findings about the relationship of certain kinds of remedial programs to self-concept and academic achievement; and third, to give a detailed account of recent studies of college remedial programs which assess self-concept change and academic achievement change in probationary students.

DEVELOPMENT OF SELF-CONCEPT

The psychological and educational literature includes numerous articles and research studies dealing with the effects of the self-concept on a variety of behaviors including failure in school, levels of aspiration or goal setting, athletic prowess, mental health, intelligence, delinquency, criminality, ethnic groups, and the socially disadvantaged.[1] One of the most important early synthesizers of

---

[1]Arthur W. Combs, Donald L. Avila, and William W. Purkey, Helping Relationships, Basic Concepts for the Helping Professions (Boston: Allyn & Bacon, Inc., 1973), p. 44.

research on self-concept was Ruth C. Wylie, who examined the pertinent theoretical and empirical literature.[2] After she compiled a comprehensive review of hundreds of studies conducted prior to 1960, she became optimistic about the possibilities of research into the self-concept, but pessimistic over the general quality of the work up to that time. The following is a summary of Wylie's findings:

> . . . constructs concerning the self cannot be classified according to theoretically relevant categories because the theories are vague, incomplete, and overlapping; and because no one theory has received extensive empirical exploration. On the whole, we have found that there are enough positive trends to be tantalizing. On the other hand, there is a good deal of ambiguity in the results, considerable apparent contradiction among the findings of various studies, and a tendency for different methods to produce different results. In short, the total accumulation of substantive finds is disappointing . . . .[3]

Donald J. Strong and Daniel Feder, in an article entitled "Measurement of the Self-Concept: A Critique of the Literature," found at least fifteen different instruments which had been devised to measure some form of an individual's concept of himself.[4] The writers undertook a factorial analysis study in an effort to make meaningful appraisals of the common and differential factors which may be measured by some of these instruments. These included Q techniques, various Likert-type rating scales, free response methods, and check lists.

---

[2]Ruth C. Wylie, The Self-Concept. A Critical Survey of Pertinent Research Literature (Lincoln: University of Nebraska Press, 1961), p. vii.

[3]Ibid., p. 317.

[4]Donald J. Strong and Daniel Feder, "Measurement of the Self-Concept: A Critique of the Literature," Journal of Counseling Psychology, 8:175, Summer, 1961.

Strong and Feder claimed that some of the instruments which they reviewed left much to be desired, particularly in the realm of validity; but what was most promising was the tendency to approach personality adjustment in terms of a totality of response. They found that the other characteristic which makes the measurements of self-concepts highly promising as diagnostic devices was the apparently reliable objectification of what had been considered heretofore as essentially projective techniques subject only to interview appraisal.

In an extensive study on the academic achievement syndrome, John P. Gilmore found that prior research indicated that nearly all high achievers at all educational levels have one common personality characteristic--a positive self-concept. The low achiever, by contrast, had a consistently less positive image.[5]

SPECIFIC STUDIES OF THE SELF-CONCEPT AND ACHIEVEMENT

Since 1961 there has been a phenomenal amount of research into the relationship between group counseling and self-concept and group counseling and academic achievement. Although no specific studies on directed supervisory programs were located, many studies were found which utilized group counseling techniques to measure change in either self-concept or academic achievement or both self-concept and academic achievement. The following studies are representative of those undertaken:

---

[5]John P. Gilmore, "The Productive Personality," Journal of Education, 154:9, October, 1971.

One of the earlier studies for helping underachievers was reported by William D. Sheldon and Theodore Landsman. Their study involved group counseling with students in academic difficulties, with a matched-pair technique used to divide the sample into experimental and control groups. The experimental group spent two periods a week in "non-directive" group therapy, while the control group met in "conventional" lecture and discussion meetings. In the experimental group, discussion centered around the students' attitudes toward home, family, instructors, feelings of personal inadequacy, school problems, and social and personal adjustment. The authors found a significantly different grade point average at the end of the semester in the experimental group.[6]

K. A. Maroney and B. Winborn conducted a study to determine the effectiveness of short-term group guidance on improving academic achievement with transfer students admitted on scholastic probation. They found that students who participated in the short-term counseling program made higher grade point averages than those who did not participate, but the grade point averages were not high enough to be significant. They concluded that group guidance may be a possibility in assisting the student toward improved academic performance.[7]

Walter A. Dickenson and Charles B. Truax reported that with adequate counseling of even brief duration, the attrition rate in

---

[6]William D. Sheldon and Theodore Landsman, "An Investigation of Non-Directive Group Therapy with Students in Academic Difficulty," Journal of Consulting Psychology, 14:215, June, 1950.

[7]K. A. Maroney and B. Winborn, "Effectiveness of Short-Term Guidance with a Group of Transfer Students Admitted on Academic Probation," Journal of Educational Research, 47:465, August, 1965.

college could be cut by one half at relatively low cost and without any lowering of academic standards. If high therapeutic conditions were provided, the college attrition rate could be even more considerably reduced.[8]

J. H. Suehr found that counseling in nonstructured groups produced significant improvement in grade point average. The method which he used was an incomplete sentence test. Significant improvement in students' self-concept and teachers' concept of students resulted.[9]

Stanley W. Caplan, in his study of the effect of counseling on junior high school boys' concept of themselves in school, found that an increase in the congruence of the self and the ideal self took place in the experimental counseling groups but not in the control group.[10]

In order to assess the effects of manifest anxiety on academic performance, Charles D. Spielberger examined the grades achieved by anxious and non-anxious college students at Duke University. He found that anxious students in the middle ranges of ability obtained lower grades and a higher percentage of academic failures than non-anxious students of comparable ability. Students of low ability earned poor grades irrespective of the anxiety level; however, a greater percentage of the students with high anxiety were academic failures than were the non-anxious students of limited ability. For the very superior

---

[8]Walter A. Dickenson and Charles B. Truax, "Group Counseling with College Underachievers," Personnel and Guidance Journal, 45:247, November, 1966.

[9]J. H. Suehr, "Counseling in Nonstructured Groups: A Case Study," Personnel and Guidance Journal, 43:305, November, 1964.

[10]Stanley W. Caplan, "The Effect of Group Counseling on Junior High School Boys' Concept of Themselves," Journal of Counseling Psychology, 4:128, Summer, 1957.

students (those with American College Test scores about 150), it appeared that anxiety may have actually facilitated academic performance. He summarized his findings in this way:

> To the extent that anxious students--likely to be underachievers or academic failures--can be identified early and offered effective therapeutic assistance, academic mortality rates resulting from emotional factors can be reduced.[11]

John Broedel, Merle Ohlsen, Fred Proff, and Charles Southard used remedial sessions with gifted underachieving high school freshmen. They divided their sample of twenty-nine students into an experimental and a control group. The experimental group received sixteen group counseling sessions during an eight-week period. The results were largely inconclusive, although the experimental group achieved significantly greater gains between pre-testing and post-testing, in acceptance of self and others, than did the control group.[12]

In a study designed to compare the effectiveness of individual and group counseling approaches with able underachievers, Thomas H. Clements found no significant improvements in the grade point average or self-concept of either the individually or group counseled students. However, those in the group process showed significantly greater increase in ability to express feelings to one another verbally within the home, as revealed by both parents and students.[13]

---

[11]Charles D. Spielberger, "The Effects of Manifest Anxiety on the Academic Achievement of College Students," Mental Hygiene, 46:426, July, 1962.

[12]John Broedel, Merle Ohlsen, Fred Proff, and Charles Southard, "The Effects of Group Counseling on Gifted Underachieving Adolescents," Journal of Counseling Psychology, 7:170, Fall, 1960.

[13]Thomas H. Clements, "A Study to Compare the Effectiveness of Individual and Group Counseling Approaches with Able Underachievers when Counselor Time is Held Constant," Dissertation Abstracts, 24:1920, July, 1964.

In a study designed to determine the effects of required group counseling with college students in academic difficulty, Donn R. Duncan found that grade point average was not affected and that there was little attitude change; hence, he judged the results of his study to be inconclusive. His sample consisted of fifty-six students on probation. He found that there was not a significant increase in grade point average that could be attributed to the effects of one semester of required remedial group counseling sessions.[14]

DETAILED ACCOUNTS OF RECENT STUDIES

An extensive project with undergraduate college students on academic probation was completed in 1968 under the leadership of Darrell Moses at Brigham Young University. The project studied the effect of a large-scale counseling program upon probationary students; it produced a series of six studies relevant to this topic.

The first of these studies was done by Karen J. Moses, whose research was designed to determine the effects of group counseling on the self-concept, beliefs, academic achievement and study habits and attitudes of probationary students. She employed fourteen TSCS scores, and her findings showed the total sample of 182 probationary students to have quite normal self-concepts. She reported that all fourteen scores were within four T-Score units, or less than one half standard deviation from the TSCS norms.

---

[14]Donn R. Duncan, "Effects of Required Group Counseling with College Students in Academic Difficulty," Dissertation Abstracts, 23:3773, March, 1963.

Karen J. Moses hypothesized (1) that no significant differences exist in the performance of probationary students before and after a series of group counseling sessions when considering achievement, study habits and attitudes, self-concept and beliefs; and (2) that, given the above criteria, no significant difference exists between changes in performance over a semester when probationary students who received small group counseling are compared with those who received no group counseling.

> Hypothesis one was tested by employing the matched-pair to test in comparing pre-counseling and post-counseling mean scores. Hypothesis two was tested by comparing the pre-test and post-test mean changes between the counseled and non-counseled groups by employing a t test of mean difference.[15]

The following conclusions pertaining to Moses' first hypothesis seemed justified. Both the counseled and non-counseled students significantly increased their grade point average, at the .01 level of confidence, over the period of a semester. The counseling sessions did affect the various aspects of the self-concept as measured by the TSCS. On all scales the counseled groups made greater mean changes in the direction of better adjustment than did the non-counseled group. On seven of the fourteen scales the change was statistically significant, yet no significant changes were found for the non-counseled group.

Findings pertaining to Moses' second hypothesis indicated that in comparing students receiving group counseling with those not

---

[15]Karen J. Moses, "The Effect of Group Counseling on Probationary Students at Brigham Young University" (unpublished Master's thesis, Brigham Young University, 1967), p. 29.

receiving it, no significant difference in the amount of change each group made over a ten-week period existed for any of the variables employed in her study except on self-concept.

W. F. Amberg's parallel study was designed to assess the effects of group counseling on probation students and to compare probation students with non-probation students in regard to their study habits and attitudes, self-concept, and beliefs. Amberg utilized the same subjects as those in Moses' study and also employed a comparison group of 138 subjects from compulsory religion classes at Brigham Young University. The students forming the comparison group were not on academic probation. Pre- and post-test scores on the Brown-Holtzman Survey of Study Habits and Attitudes, Tennessee Self-Concept Scale, and Test of Beliefs were obtained for these groups. Multiple "t tests" were used to assess the similarities and differences between the probation and non-probation students and between pre- and post-test scores.

In self-concept, forty-nine of fifty-six comparisons between probation and non-probation students were found to be significantly different. Amberg found that self-concept change scores favored counseled probation students over non-counseled probation students. However, a later analysis of data revealed significant differences in pre-test scores between the two groups, so that no entirely valid conclusions could be drawn from these results.

An attempt was made to discover whether counseled probation students would become more like non-probation students than non-counseled probation students would, but the results were inconclusive on all test measures. Amberg concluded that no real changes occurred

that would provide evidence in support of group counseling as a method of favorably influencing study habits and attitudes, self-concept, and beliefs.[16]

K. N. Jackson conducted a parallel study with a different sample of fifty students who were on academic probation at Brigham Young and a non-probationary sample of 102 students at the same institution. The results indicated that both samples were relatively normal on TSCS scores with non-probationary students showing slightly more adjustment. Thus, Jackson failed to replicate Amberg's findings.

Jackson used the same criteria for comparison as Moses and Amberg, and he likewise hypothesized that when the four same areas--academic achievement, study habits and attitudes, self-concept, and beliefs--were measured, post-counseled students would show a change over pre-counseled students. He hypothesized further that when counseled students were compared with non-counseled probationary students, they would show significant differences. The hypothesis was carried still further by stating that counseled probationary students would show mean changes when compared with non-probationary students.[17]

On many scales none of the distributions differentiated significantly except the study habit results, where all changes were significant. The counseled group almost always improved, while the non-counseled groups often reduced the mean score from pre- to post-test

---

[16]W. F. Amberg, "A Comparison of Probationary Students, Before and After Group Counseling, with Non-Probationary Students at Brigham Young University" (unpublished Master's thesis, Brigham Young University, 1967), p. 20.

[17]K. N. Jackson, "The Probationary Student in Group Counseling" (unpublished Master's thesis, Brigham Young University, 1967), p. 44.

results. On the basis of these findings, Jackson concluded that group counseling procedures do result in important differences in the lives of probationary students.[18]

As a part of the same series of studies under the direction of Darrell Moses, R. L. Jensen subdivided a group of probationary students into achievers and underachievers on the basis of discrepancies between grade point average and predicted grade point average from the American College Test.[19] His study was designed to assess the effects of group counseling; however, in additional analyses of his data, Jensen compared the self-concepts of the achievers with those of the underachievers. Contrary to expectation, the underachievers scored better than the achievers on thirteen of the fourteen TSCS scores reported. However, according to Fitts, statistical significance tests of these differences were not performed, but for some scores they were fairly sizable and the trend was quite clear.[20]

Jensen formulated hypotheses to compare the results of counseled achieving and underachieving probation students with achieving and underachieving probation students who did not receive counseling. Counseled achieving students were also compared with counseled underachieving students. The criteria for evaluation were the same used in the other Brigham Young studies. Counseled achieving

---

[18]Ibid.

[19]R. L. Jensen, "The Effects of Group Counseling on Achieving and Underachieving Probation College Students" (unpublished Master's thesis, Brigham Young University, 1967), p. 25.

[20]William H. Fitts, The Self-Concept and Performance Monograph V (Nashville: Counselor Recordings and Tests, 1972), p. 30.

and nonachieving probation students were tested before and after a twelve-week period of group counseling. A control group of achieving and underachieving probation students received no counseling but were given the pre- and post-tests at approximately the same time that counseled students were tested. Comparisons were made between the groups by means of "t tests" of mean differences and "t tests" of mean differences in change between pre-criterion and post-criterion performance.

Jensen's results indicated that the counseled underachievers made significantly greater improvement in grades than did the counseled achievers. The same result, however, was also found between the non-counseled underachieving group and the non-counseled achieving group. There was no significant difference in the amount of grade improvement between the counseled underachieving group and the non-counseled achieving groups on the amount of grade change made. Jensen found, however, that a significantly greater percentage of the counseled underachieving group members were eligible to return to school the following semester than were non-counseled underachieving group members.

Although Jensen's results were inconclusive as to the value of group counseling for improving the self-concept of the counseled underachieving students, there was an indication that the self-concepts of all counseled group members were improved. The most notable positive change in self-concept was made by the counseled achieving group.[21]

---

[21]Jensen, op. cit., p. 77.

W. E. Lundberg's study, in this same series, did not involve the self-concept as such, but consisted of a follow-up study from the same general population. The results of a comparison of counseled and non-counseled students in terms of subsequent grade point averages and dropout rates favored the counseled subjects. Lundberg's sample was drawn from 211 probation students who agreed to participate in small group counseling sessions. Hypotheses were tested by employing "t tests" in comparing the grade point average of each group for each semester. Means, standard deviations, and "t tests" were calculated.

Lundberg found that both the counseled and non-counseled students significantly increased their grade point average at the .01 level of confidence over the three-semester period. When comparing the mean changes of the probationary counseled students with those of the probationary non-counseled students covering a three-semester period, he observed that the counseled group increased their grade point average more than the non-counseled probationary students, but the increase was not statistically significant. He also found fewer dropouts among the counseled probationary students than among the non-counseled probationary students, but the decrease was not statistically significant.[22]

In a similar study, H. D. Groom sought to predict subsequent academic performance for students on academic probation. Predictor variables included study habits, grade point average, personality factors, as well as TSCS scores. Groom tried to predict whether

---

[22]W. E. Lundberg, "The Effect of Group Counseling on Probationary Students: Follow-up Study" (unpublished Master's thesis, Brigham Young University, 1968), p. 37.

subjects would get off probation, continue on probation, or drop out of school.

Groom's project followed students on probation from the fall semester, 1966, to the end of the spring semester, 1967. There were 113 subjects used in the study. The Tennessee Self-Concept Scale and the Brown-Holtzman Survey of Study Habits and Attitudes were two of the measuring devices used to assess personality factors and study habits. The American College Test (ACT) was used to assess past achievement and the grades, self-reported at the time the student took the ACT, were used to represent high school grades in English, mathematics, social science, and natural science. The scores on these measuring devices were considered as predictor variables which made a total of sixty-two variables in the original prediction. A multiple linear regression routine on the 7040 IBM Computer was used to make the predictions.

College grade point average was found to be the best single predictor. Other factors which did allow for prediction were self-concept and beliefs. The ACT scores, high school grades, and study habits and attitudes were not significant predictors at any time.[23]

In addition to the work at Brigham Young, several other studies are relevant here. C. L. Iglinsky studied college freshmen on academic probation at Stephen F. Austin State College. His study related academic success of freshmen to the following: (1) three intellectual factors (high school curriculum, high school grade

---

[23]H. D. Groom, "Predicting Achievement Behavior of Academic Probation Students" (unpublished Master's thesis, Brigham Young University, 1968), p. 42.

point average and ACT scores); and (2) three non-intellectual factors (size of high school, Tennessee Self-Concept Scale, and Interpersonal Orientation Scale scores of students and their parents).[24] He compared students (both men and women) in three categories: (1) those not on probation, (2) those on probation at the end of the first semester but removed from probation at the end of the second semester, and (3) those on probation at the end of the first semester and suspended following the second semester. Only eight TSCS scores were used. The second group had the best scores on these measures, but in no instance were the magnitudes of the differences significant.

Groups did not differ significantly in seven of the eight sub-scales of the TSCS, but women scored significantly higher than men on the variability sub-scale. Iglinsky concluded that self-concept as measured by the TSCS appears to be unrelated to academic success. He also found that the more successful college students had higher high school grade averages than the less successful college students, and women had significantly higher high school averages than men. He found that students who pursued the college preparatory curriculum in high school had significantly higher high school grade averages than those who took the non-college preparatory curriculum.[25]

During 1967, D. G. Demetriades conducted a study at Appalachian State University and found no significant differences between achievers and underachievers. Demetriades administered the

---

[24]C. L. Iglinsky, "Intellectual and Non-Intellectual Factors Affecting Academic Success of College Freshmen" (unpublished Doctoral dissertation, East Texas State University, 1968), p. 93.

[25]Ibid., p. 93.

Edwards Personal Preference Schedule (EPPS) and the Tennessee Self-Concept Scale to twenty-five matched pairs of student achievers and underachievers. Hypotheses stated that no significant difference would occur between total scores made by achievers and underachievers on the total score of the TSCS and fifteen variables of the EPPS.

The data derived from Demetriades' study indicated that the mean score differences on the EPPS and the TSCS were not significant. In fact, underachievers scored higher on the TSCS than did achievers.[26]

In a related study, A. L. Parker found that the TSCS did not contribute to the prediction of overachievement or underachievement for college freshmen at West Virginia University. She investigated the self-concept as one possible source of variance in the prediction of grade point average from ACT scores. Her main hypotheses stated that those students who achieve higher than predicted grade point averages will have high self-concepts, those achieving at the predicted level will have self-concepts consonant with their ability, and those who fail to achieve at the predicted level will have low self-concepts.

Parker used freshman ACT scores to predict college grade point average. Groups representing equivalent higher and lower earned grade point average for grade predictions of C and D were formed. Random groups of thirty men and thirty women were selected from these groups and tested by two self-concept measures, the Tennessee Self-Concept Scale and the Self-Concept of Ability. The latter is concerned with

---

[26]D. G. Demetriades, "A Study to Identify Some Personality Characteristics of Freshmen Academic Underachievers at Appalachian State University" (unpublished Master's thesis, Appalachian State University, 1967), p. 52.

self-concept by way of academic performance; the former is concerned with self-concept in a more generalized way.

The findings indicated that differential achievement is related specifically to academic self-concept, but with no significant relationship to total self-concept. Parker's major hypotheses were confirmed only by the measure of academic self-concept.[27]

SUMMARY

This chapter has presented a brief overview of the development of the self-concept literature, and it has provided a review of specific studies of the relationship of certain kinds of remedial programs to self-concept and academic achievement. Finally, it has given a detailed account of recent studies of college remedial programs which assess self-concept change and academic achievement change in probationary students.

Although no research studies were found on supervised programs of instruction designed to resolve academic deficiencies and increase self-concept, there was a superabundance of programs which utilized the group counseling approach. The evidence from most of the studies, as regards the relationship of group counseling to academic grades and self-concept, was inconclusive.

The general trend in the research studies which have been cited is toward some improvement in self-concept and grade point average after exposure to some type of remedial program. The findings,

---

[27]A. L. Parker, "The Relationship of Self-Concept to the Prediction of Freshman GPA from Admission ACT Scores" (unpublished Master's thesis, West Virginia University, 1965), p. 54.

however, are inconclusive. It would seem, then, that still more research is needed to evaluate self-concept change and academic achievement in college students. In the remainder of this paper, the problem is considered from this background of relevant research and literature.

Chapter 3

METHODOLOGY

INTRODUCTION

As previously stated, the problem was to use measures of self-concept and grade point average as variables in analyzing the effectiveness of an experimental, supervised program of instruction for college students who were placed on academic probation. This chapter presents the procedures followed and the methodology employed to process the data.

DATA NEEDED

In order to conduct this study, the following procedures were considered essential:

1. The necessary permission and approval to conduct the study had to be obtained.

2. The selection of subjects who would participate had to be determined, and the procedures for selecting and contacting the experimental and control groups had to be planned.

3. A suitable instrument for measuring self-criticism and self-concept with its various sub-scales had to be selected. This instrument had to include sub-scales considered to be integral parts of the self-concept: total positive score, physical self, family self, social self, self satisfaction and identity.

4. A remedial program of instruction for overcoming academic deficiencies and increasing learning performance for the experimental group had to be designed.

5. Procedures for collecting, recording and analyzing the data had to be developed.

SOURCES OF THE DATA

Population

All the full-time Health and Business Technologies students who were placed on academic probation at State University of New York Agricultural and Technical College at Alfred at the beginning of the 1973-1974 winter quarter served as the population for this study. The names of these students were supplied by the academic status report prepared by the Office of the Registrar.

Health students were chosen because they were the special responsibility of the instructor in his capacity as Associate for Research and Advisement in the Division of Health Technologies. One of the responsibilities listed in his job description was the arrangement of remedial programs for health students who were on probation. Business students were included as a control group because they closely resembled the Health students in demographic data and in academic grades.

Approval

The necessary approval and permission to conduct the study was readily obtained because both the faculty and the administration of the Health Technologies Division and Business Technologies Division had been concerned with the increasing numbers of students who are

placed on academic probation each quarter. Various remedies and procedures for correcting the problem had been discussed in prior years, but no comprehensive program had ever been implemented. The Chairman of the Division of Health Technologies and the Chairman of the Division of Business Technologies sent letters to their students inviting them to participate. Copies of the letters are found in Appendix A.

PROCEDURE FOR SELECTING THE GROUPS

All 137 Health and Business students who were listed as probationary at the end of the fall quarter were contacted by mail during the term break. The letters asked that they attend an important meeting for students with academic deficiencies. The original letter was sent to the home address of each student and a copy was sent to his campus address. Letters were sent to the home with the expectation that greater participation might be forthcoming if parents were aware of the project. A second copy was sent to the campus post office box to serve as an additional reminder if the student had already received the letter at home. If by chance the original copy did not reach its destination, or if the student was not at home over the break to receive it, the copy awaiting the student in his campus mail box provided the necessary information.

The letters indicated that the students' attendance was requested at an important meeting for those on academic probation, and that during the meeting an explanation of the project would be given. Letters also specified that the project would be beneficial to the individual students and to the College. The advisor of each

student was notified about the program, and he was asked for cooperation in encouraging students to attend the sessions.

Experimental Group

Of the ninety-seven students who attended the first session, forty-eight were Health students and, therefore, because they were the direct responsibility of the instructor, they were assigned to the experimental group. Twenty-three of these students were eventually excluded from the final tabulation either because they dropped out of the program or they attended too sporadically to be considered for evaluation. Twenty-five students, therefore, were in the final experimental group.

Control Group

Forty-nine students attending the first session were Business students and, therefore, because they were not the direct responsibility of the instructor, they were assigned to the control group. As previously stated Business students were chosen as a control group because they closely resembled the Health students. Two of these students withdrew during the quarter and seventeen others did not take the post-test. The final number included in the control group was thirty.

PROCEDURE FOR GATHERING DATA

Treatment of the Groups

When the subjects convened at the specified time and place, introductory remarks were given and immediately the pre-test of the TSCS was administered. The standard instructions for administering

the test were followed strictly. After the tests were completed and collected, the members of the control group were informed that their part in the project was half-finished. They were then dismissed not to be contacted again until the end of the quarter when they were asked to take a post-test.

The experimental group attended a series of informal remedial classes designed to correct academic deficiencies. These sessions were conducted in cooperation with the staff of the Reading and Study Skills Center.

Choice of Instrument

During recent years, numerous instruments were developed to measure self-concept. The Sixties gave rise to many of these, one of the most popular of which is still the TSCS, first published by Fitts in 1965. He felt that there was a need for a scale which is simple for the subject, widely applicable, well standardized and multi-functional in its description of the self-concept.[1] The TSCS was selected for this study because it provides scores in the areas which have been specified as essential elements in the operational definition of self-concept already cited. These elements are as follows: identity, self satisfaction, physical self, social self, family self, total positive score, and self-criticism. The TSCS is useful for a variety of purposes--counseling, clinical assessment and diagnosis, research in behavioral science, personnel selection, and the like. It consists of one hundred self-descriptive terms, ninety of which assess the self-

---

[1]William H. Fitts, Manual: Tennessee Self-Concept Scale (Nashville: Counselor Recordings and Tests, 1965), p. 1.

concept and ten of which assess self-criticism. These latter items were taken from the Minnesota Multiphasic Personality Inventory (MMPI) by special arrangements.[2] For each item, the respondent chooses one of five response options labeled from "completely false" to "completely true." The Scale is available in two forms, a Counseling Form and a Clinical and Research Form. The Counseling Form deals with fewer variables in the scoring, although the questions on both forms of the test are exactly the same (see Appendix B). The Clinical and Research Form is more complex in terms of scoring, profiling system, analysis and interpretation, and it yields more information on each subject.

The Counseling Form was used in this study, although the Clinical and Research Form was originally intended. The latter was abandoned when it was discovered that most of the additional items found in the Clinical and Research Form were not meaningful to this study. The test had no time limit; however, most people in this group completed the scale within ten to twenty minutes.

The standardization group from which the norms were developed was a broad sample of 626 people who came from geographical locations throughout the United States, and who ranged in age from twelve to sixty-eight. It included an approximately equal representation of men and women, all socio-economic classes, and all educational levels from the sixth grade through the doctorate.[3] The TSCS is self-administering for either individuals or groups and can be used with subjects who have reached at least age twelve or who have sixth grade

---

[2]Warren Thompson, Correlates of the Self-Concept, Monograph VI (Nashville: Counselor Recordings and Tests, 1972), p. 2.

[3]Fitts, op. cit., p. 13.

reading level ability. Fitts claimed that it is applicable to the whole range of psychological adjustment from healthy, well-adjusted people to psychotic patients.[4]

Items for the Scale were written according to a type of two-dimensional facet design, involving the following aspects of the self: identity, self-satisfaction, behavior, physical self, moral-ethical self, personal self, family self, social self, total positive score, and self-criticism, Each of these aspects of the self received a sub-score based on relevant items.[5] Behavior, moral-ethical self and personal self were not considered in this research.

The test-retest reliability coefficients for the various scores used in the study are generally in the .80's and .90's with two scale as low as the .60's. Fitts stated "Other evidence of reliability is found in the remarkable similarity of profile patterns found through repeated measures of the same individuals over long periods of time."[6]

No validity studies have been published on the TSCS. Fitts reported the following four kinds of validation procedures: (1) content validity, (2) discrimination between groups, (3) correlation with other personality measures, and (4) personality changes under particular conditions.[7] Fitts developed the TSCS by taking items from other self-concept inventories, as well as items from written self-descriptions

---

[4]Ibid., p. 1.

[5]Oscar Krisen Buros, The Seventh Mental Measurements Yearbook Vol. 1 (Highland Park, N. J.: The Gryphon Press, 1972), p. 366.

[6]Fitts, op. cit., p. 15.

[7]Ibid., pp. 17-30.

of patients and non-patients. He assured content validity by including only items that certain judges unanimously agreed upon as to their usefulness for his stated purpose.

Validity was also assessed by the way the scores correlate with other measures in the direction one would predict from the nature of the scores. Fitts reported that there is considerable evidence that self-concepts do change as a result of significant experiences. A study by Carolyn Ashcraft and Fitts is briefly described as follows:

> It is the most thorough work yet completed with the Scale on changes through psychotherapy. The design included an experimental group consisting of 30 patients who had been in therapy for an average of 6 months and a no-therapy control group of 24 patients who had been waiting for therapy for an average of 24 months. All subjects were measured on a test-retest basis with the Scale. The therapy group changed significantly and in the expected direction on 18 of the 22 variables while the control group changed in 2 variables.[8]

Fitts described several other studies showing similar results and he concluded: "The Tennessee Self-Concept Scale reflects these changes in predicted ways, thus constituting additional evidence for the validity of the instruments."[9]

Several scores have significantly high correlations with other instruments. For example, the Taylor Anxiety Score correlates -.70 with the Total Positive Score. Correlations from .50 to .70 are common with the Cornell Medical Index and an unpublished Inventory of Feelings. Correlations with the various MMPI scales are frequently in the 50's and 60's. Bentler says: "It seems safe to conclude that the scale overlaps sufficiently with well-known measures to consider it a

---

[8]Ibid., p. 28.

[9]Ibid., p. 30.

possible alternative for these measures in various applied situations."[10]

PROCESSING THE DATA

In order that individual students would not be recognized, names were changed to numbers throughout this study. The Computer Center supplied the following information: age, sex, educational level of father and mother, and marital status. The Registrar provided the academic grade (years of school completed), curriculum, fall GPA, fall status, winter GPA, and winter status. The Office of Financial Aid and the Office of Student Accounts provided financial aid data. The Student Directory 1973-1974 provided both the local addresses and home addresses.

The Computing Center of the State University of New York at Buffalo was employed to process the collected data for the formulation of all the tables and for the calculation of the analysis of variance models. The facilities of the National Scanning Company of Columbus, Ohio, were used to score the TSCS. At the time the study was conducted, that company held a contract with the publisher, Counselor Recordings and Tests, Nashville, Tennessee, for scoring all TSCS tests.

The data were examined using analysis of variance. To test change in academic grades and to study the sub-scale scores and the self-criticism score repeated measure models were employed. Each of these repeated measure designs had a "between sums of squares" variable and a "within sums of squares" variable.[11] This program has been used

---

[10]Buros, op. cit., p. 366.

[11]B. J. Winer, Statistical Principles in Experimental Design (New York: McGraw-Hill Book Company, 1962), p. 303.

extensively at the Computing Center of the State University of New York at Buffalo where it has been validated.[12]

DESCRIPTION OF THE ANALYSIS PROCESS

The experimental, supervised program of instruction was held one hour each week for a series of nine weeks. The program was based upon the belief that students are not primarily interested in theory. Instead, they needed practical study techniques which were found to work in overcoming special difficulties. Whenever it was possible, the techniques were demonstrated and the students practiced them in class so that the connection between techniques and success would be more evident. Lesson plans are found in Appendix C.

Considerable emphasis was placed upon the proper use of time. The students were required to keep a detailed record of their activities for an entire week so that they would have an actual picture of how they used their time. It was demonstrated that extra time could be gained chiefly in two ways: first, by doing a job in less time than usual, and second, by taking advantage of short blocks of time which usually are wasted. Definite rules for setting up a study schedule were shown to have a high priority. Each student had the opportunity of actually setting up a model schedule. These schedules were discussed freely in class and the discussions resulted in the general realization that planning is the key to efficiency, but that each individual must choose the type of schedule that best fits his circumstances.

---

[12]Statement by Harry Piniarski, computer scientist, in a personal interview, Buffalo, New York, August 4, 1974.

A list of suggestions for aiding concentration was provided. Both external and internal distractions were examined in detail, including noise, lighting, background music, day dreaming, fatigue, sleep, diet, and exercise. Some students related the methods of study which worked best for them. Suggestions were made and problem areas pointed out by the instructor. Students were alerted to the importance of maintaining good physical condition with the proper kind of food, sleep, and exercise.

The Brown-Holtzman Survey of Study Habits and Attitudes was administered to the group by a staff member of the Reading and Study Skills Center. Students with severe difficulties with study habits were asked to come to meet either individually or in smaller groups at the Reading and Study Skills Center.

A session was spent on the importance of order, organization, and selectivity in learning. First, students were given a reading exercise of one paragraph followed then by a short chapter from which they were to gather the main facts and ideas. Next, they were to look over the facts and ideas for the purpose of clustering them under categories so that they would be ready to outline the material. The outlines were discussed in class and suggestions and comments were offered by the instructor.

During another session, techniques in vocabulary building were stressed, and a vocabulary quiz was administered to the students. The phrases on the test were actually taken from books, magazines, and newspapers in general circulation. Many of the words were seldom heard in general conversation although they were often used in good writing. Most of the students received relatively low scores on the

quiz, demonstrating the necessity of using a dictionary when they were reading their assignments. The instructor cited common roots, examples of words using the roots, and definitions of the examples. Classroom discussion centered around the practice of defining words containing common prefixes and roots.

Considerable attention was devoted to the improvement of reading skills. The Nelson-Denny Reading Test was administered to the students by a staff member of the Reading and Study Skills Center. When the test results warranted it, students with poor reading ability were required to attend concentrated and extensive reading sessions at the Reading and Study Skills Center.

The procedures of effective note-taking were stressed so that each student would learn to put into his own words what the professor had said. It was pointed out that notes must be in words which the student can understand or they will make no sense to him when they are studied later. In order to help them to develop meaningful notes, students were shown techniques of drawing diagrams and recording examples. It was recommended that loose-leaf notebooks be used so that mimeographed "hand-outs" and assignment sheets could be inserted in topical or chronological order. Students were shown the disadvantages of later typing classroom notes, or first taking down the ideas in shorthand or using tape recorders and cassettes. Such methods were discouraged because of the length of time required to transcribe them. A listing of abbreviations was provided, but students were cautioned about using too many abbreviations since over-use might leave the students with notes that are too difficult to read. Above all, students were shown that selectivity in note-taking is crucial to the

whole system of mastering a textbook. It was emphasized that it is usually the unsure student who takes too many notes because he does not know how to discriminate between the essential and the non-essential.

In another session, textbook marking techniques were considered to alert students on the importance of noting the essential and key ideas. The instructor cautioned that no marking or underlining should be done before a full paragraph or a headed section had been read, as this procedure prevents underlining everything that looks important at first glance. In class various practice materials were used so that each student could have actual experience in seeing what he could do. Students were reminded that, in any of the techniques, a system which is right for one student may not be right for another.

Finally, since examinations are necessary in most courses, students were coached in procedures to be followed in studying for them. It was pointed out that each textbook chapter should be skimmed and searched to discover the main ideas and pertinent supporting materials and that these should be written in the student's own words. It was suggested, furthermore, that in preparing for exams, the same procedure should be followed so that the student may concentrate on organizing and consolidating the material.

SUMMARY

This chapter has presented the procedures used in the study and the procedures used in analyzing the data. Fifty-five students at the State University of New York Agricultural and Technical College participated in the study. The experimental group of twenty-five students participated in nine experimental, supervised sessions designed

to resolve academic deficiencies. The thirty students in the control group did not take part in the program of instruction. A pre-test and post-test of the TSCS were administered to all of the fifty-five students, and the data were tested by analysis of variance technique.

Chapter 4

STATISTICAL ANALYSIS

INTRODUCTION

The purpose of this chapter is to present the statistical analysis of the data. The chapter includes an analysis of the academic grades and demographic data, the rationale for the statistical process, and the application of the process to all the hypotheses. Ninety-seven students were initially involved in the study. Forty-two subjects were excluded from the final analysis because they did not complete the requirements of the study. Two members of the original control groups withdrew during the program of instruction and seventeen others did not take the post-test. Twenty-three members of the original experimental groups were not included in the final tabulation, either because they dropped out of the group or they attended too sporadically to be considered for evaluation. The final experimental group, therefore, numbered twenty-five Health Technologies students, while the control group nuubered thirty Business Technologies students.

ACADEMIC GRADES

Initially, both the experimental and control groups were found to have comparable academic grades. All fifty-five students were on probation (GPA below 2.00). The mean GPA for the experimental group was 1.89 and the mean for the control group was 1.67. After the

supervised program of instruction, the mean GPA for the experimental group was 2.34, while the mean GPA for the control group was 1.97. All grades were based on a scale of 4.00. When the program was completed, sixteen members of the experimental group and twelve members of the control group were listed as having achieved "good standing" status (GPA above 2.00). Eight members of the experimental group and sixteen members of the control group remained on probation. One member of the experimental group was dismissed from the college for non-academic reasons and two members of the control group voluntarily withdrew from the college. Table 9, page 108, shows these findings. Table 10, page 109, and Table 11, page 110, indicate GPA and academic status for each student of the experimental and control groups, respectively.

DEMOGRAPHIC DATA

Subjects were examined for similarities in the following demographic data: age, sex, marital status, academic classification, educational level of parents, and financial aid status.

Subjects in this study ranged in age from seventeen to twenty-two years. The mean age for the experimental group was nineteen years and six months; the mean age for the control group was twenty years and two months. The data revealed that only one student in each group was married at the time the program was initiated. Since the State University of New York Agricultural Technical College at Alfred is a two-year institution, subjects were limited to the Freshman class and the Senior class. The experimental group numbered fifteen freshmen and fifteen seniors.

Sex was a noteworthy demographic difference because the experimental group numbered three men and twenty-two women, while the control group numbered twenty-three men and seven women. The experimental group numbered more women because allied health fields have traditionally attracted more women than men. The control group numbered more men because business fields have normally attracted more men than women. Table 12, page 111, shows the data for age, sex, marital status, and academic classification.

Analysis of the financial aid status of each student revealed that both groups received similar types of financial aid in the form of grants and loans. The grants required neither repayment nor specific service to be performed by the student; the loans required repayment in whole or in part, with or without the payment of interest. The average aid awarded to each student in the experimental group was $962.76, while the average aid awarded to the control group was $749.33. Twenty-six percent more financial aid was available to the experimental group because this group was eligible for Federal Nursing Scholarships and Nursing Student Loans amounting to $3,816. Table 13, page 112, shows the financial aid data for the experimental group, and Table 14, page 113, shows these data for the control group.

The data showed that students of both groups came from families in which the parents had similar educational backgrounds. To measure the educational level of parents, August B. Hollingshead's seven-category education scale was used.[1] The categories are listed as follows: (1) University or College-plus Professional Training,

---

[1]August B. Hollingshead, "The Two-Factor Index of Social Position" (New Haven: Yale University, 1957). (Mimeographed.)

(2) University or College Graduate, (3) Partial College, (4) High School Graduate, (5) Partial High School, (6) Junior High School, and (7) less than seven years of school.

The data indicated fathers of the control students had received slightly more education than the fathers of the experimental group students. Eleven of the fathers of the control group and eight of the experimental group received in excess of a high school education. Five of the fathers of the experimental group did not complete high school, while six did. Six of the fathers of the control group did not complete high school, whereas ten did. Six members of the experimental group and three of the control group did not specify the educational level of their fathers.

A consideration of the educational level of the mothers showed that nine of the mothers of the experimental group and twelve of the mothers of the control group received at least some education after high school. Four mothers of the experimental students did not complete high school and seven did. Two mothers of the control group did not complete high school while thirteen did. Five members of the experimental group and three members of the control group did not specify the education level of their mothers. Table 15, page 114, shows the breakdown for the parents' level of education for both the experimental and control groups.

RATIONALE FOR STATISTICAL TECHNIQUE

The data were statistically analyzed at the Computing Center of the State University of New York at Buffalo. The CDC 6400 Computer was used to examine the data. An Analysis of Variance Repeated

Measure Design with one "between sums of squares" variable and one "within sums of squares" variable seemed most appropriate for indicating the effect of the independent variable upon the dependent variables. This technique was used to test change in academic grades, self-concept subscales, and self-criticism. This process permitted individual differences to be held constant and counter-balanced so that the effects of these individual differences were completely equalized in all comparisons. Without this program, the possibility of controlling individual differences would have been limited so that many factors could have influenced the probability level. The scores, for example, could have been influenced by such variables as sex, age, mother's education, father's education, ethnic origin, and other variables. Any of these variables could have been confounded with the main variable so that the results could have been due to any of these uncontrollable variables, the main variable, or some interaction of these two. Without this technique, confounding would have made statistical testing for main effects impossible.

To avoid this dilemma, each subject was treated as his own control. Individual differences were eliminated from the variables under hypothesis, thereby preventing confounding which would otherwise have been present. The repeated measure designs permitted the study of all variables of interest without the introduction of uncontrollable variables or extraneous results.

Since the experimental group had twenty-five subjects and the control group had thirty subjects, respectively, a "weighted least squares" solution was utilized. This necessitated some adjustment in the degrees of freedom.

APPLICATION OF TECHNIQUE TO HYPOTHESES

Each null hypothesis and its F value is listed. The probability that each hypothesis will be accepted or rejected is also indicated. These data are shown in Tables 1-8, pages 51 through 61.

Hypothesis One.

There will be no significant difference between the Identity Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

The determined F ratio was 11.11, exceeding the F ratio of 4.02 with one and fifty-three degrees of freedom, which was previously established as necessary for significance at the .05 level. The null hypothesis was rejected and the research hypothesis was accepted. Table 1 shows the Identity Score data.

Hypothesis Two

There will be no significant difference between the Self-Satisfaction Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

The determined F ratio was 6.13, exceeding the F ratio of 4.02 with one and fifty-three degrees of freedom, which was previously established as necessary for significance at the .05 level. The null hypothesis was rejected and the research hypothesis was accepted. Table 2 shows the Self-Satisfaction Score data. Table 2 appears on page 52.

Table 1

Analysis of Variance of Identity Score

Source of Variation	Sum of Squares	df	Mean Square	F Ratio	Probability
BETWEEN SUBJECTS					
A	47.52	1	47.52		
S A	6951.08	53	131.15		
WITHIN SUBJECTS					
B	427.68	1	427.68	11.11	.002*
B A	151.90	1	151.90		
S A B	2039.32	53	38.48		

A = (1) Experimental
(2) Control

B = (1) Identity - Pre-
(2) Identity - Post-

B A = Interaction of experimental and control groups and identity sub-scale

S A = Error (1)

S A B = Error (2)

* = Significant at the .05 level

Table 2

Analysis of Variance of Self-Satisfaction Score

Source of Variation	Sum of Squares	df	Mean Square	F Ratio	Probability
BETWEEN SUBJECTS					
A	107.64	1	107.64		
S A	11509.41	53	217.16		
WITHIN SUBJECTS					
B	288.66	1	288.66	6.13	.016*
B A	87.06		87.06		
S A B	2494.21	53	47.06		

A = (1) Experimental
(2) Control

B = (1) Self-Satisfaction - Pre-
(2) Self-Satisfaction - Post-

B A = Interaction of experimental and control groups and self-satisfaction sub-scale

S A = Error (1)

S A B = Error (2)

* = Significant at the .05 level

Hypothesis Three

There will be no significant difference between the Physical Self Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

The determined F ratio of 3.43 failed to meet the needed F ratio of 4.02 with one and fifty-three degrees of freedom, which was previously established as necessary for significance at the .05 level. From the analysis of data there appears to have been no significant difference between the Physical Self Scores testing at the .05 level of significance. Therefore, the null hypothesis was not rejected. Table 3 shows the Physical Self Score data.

Hypothesis Four

There will be no significant difference between the Family Self Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

The determined F ratio was 10.90, exceeding the F ratio of 4.02 with one and fifty-three degrees of freedom, which was previously established as necessary for significance at the .05 level. The null hypothesis was rejected and the research hypothesis was accepted. Table 4, page 55, shows the Family Self Score data.

Hypothesis Five

There will be no significant difference between the Social Self Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

The determined F ratio was 10.34, exceeding the F ratio of 4.02 with one and fifty-three degrees of freedom, which was previously

Table 3

Analysis of Variance of Physical Self Score

Source of Variation	Sum of Squares	df	Mean Square	F Ratio	Probability
BETWEEN SUBJECTS					
A	30.45	1	30.45		
S A	3155.00	53	59.53		
WITHIN SUBJECTS					
B	32.80	1	32.80	3.43	.066*
B A	.11	1	.11		
S A B	507.16	53	9.57		

A = (1) Experimental
(2) Control

B = (1) Physical Self - Pre-
(2) Physical Self - Post-

B A = Interaction of experimental and control groups and physical self sub-scale

S A = Error (1)

S A B = Error (2)

* = Not significant at the .05 level

Table 4

Analysis of Variance of Family Self Score

Source of Variation	Sum of Squares	df	Mean Square	F Ratio	Probability
BETWEEN SUBJECTS					
A	82.89	1	82.89		
S A	5063.80	53	95.54		
WITHIN SUBJECTS					
B	261.53	1	261.53	10.90	.002*
B A	1.89	1	1.89		
S A B	1271.95	53	24.00		

A = (1) Experimental
(2) Control

B = (1) Family Self - Pre-
(2) Family Self - Post-

B A = Interaction of experimental and control groups and family self sub-scale

S A = Error (1)

S A B = Error (2)

* = Significant at the .05 level

established as necessary for significance at the .05 level. The null hypothesis was rejected and the research hypothesis was accepted. Table 5 shows the Social Self Score data.

Hypothesis Six

There will be no significant difference between the Total Positive Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

The determined F ratio was 7.99, exceeding the F ratio of 4.02 with one and fifty-three degrees of freedom, which was previously established as necessary for significance at the .05 level. Therefore, the null hypothesis was rejected and the research hypothesis was accepted. Table 6, page 58, shows the Total Positive Score data.

Hypothesis Seven

There will be no significant difference between the Self-Criticism Scores of the experimental group and those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

The determined F ratio of .83 failed to meet the F ratio of 4.02 with one and fifty-three degrees of freedom, which was previously established as necessary for significance at the .05 level. From the analysis of data there appears to have been no significant difference between the Self-Criticism Scores testing at the .05 level of significance. Therefore, the null hypothesis was not rejected.
Table 7, page 59, shows the Self-Criticism Score data.

Table 5

Analysis of Variance of Social Self Score

Source of Variation	Sum of Squares	df	Mean Square	F Ratio	Probability
BETWEEN SUBJECTS					
A	.79	1	.79		
S A	4323.43	53	81.57		
WITHIN SUBJECTS					
B	95.37	1	95.37	10.34	.002*
B A	128.42	1	128.42		
S A B	488.63	53	9.22		

A = (1) Experimental
(2) Control

B = (1) Social Self - Pre-
(2) Social Self - Post-

B A = Interaction of experimental and control groups and social self sub-scale

S A = Error (1)

S A B = Error (2)

* = Significant at the .05 level

Table 6

Analysis of Variance of Total Positive Score

Source of Variation	Sum of Squares	df	Mean Square	F Ratio	Probability
BETWEEN SUBJECTS					
A	1077.88	1	1077.88		
S A	66184.21	53	1248.76		
WITHIN SUBJECTS					
B	1771.73	1	1771.73	7.99	.007*
B A	1209.70	1	1209.70		
S A B	11747.12	53	221.64		

A = (1) Experimental
(2) Control

B = (1) Positive - Pre-
(2) Positive - Post-

B A = Interaction of experimental and control groups and total positive sub-scale

S A = Error (1)

S A B = Error (2)

* = Significant at the .05 level

Table 7

Analysis of Variance of Self-Criticism Score

Source of Variation	Sum of Squares	df	Mean Square	F Ratio	Probability
BETWEEN SUBJECTS					
A	250.39	1	250.39		
S A	1871.03	53	35.30		
WITHIN SUBJECTS					
B	4.58	1	4.58	.83	.632*
B A	.33	1	.33		
S A B	291.27	53	5.50		

A = (1) Experimental
(2) Control

B = (1) Self-Criticism - Pre-
(2) Self-Criticism - Post-

B A = Interaction of experimental and control groups and self-criticism

S A = Error (1)

S A B = Error (2)

* = Not significant at the .05 level

Hypothesis Eight

There will be no significant difference in the academic grade point average of the experimental group and those of the control group.

The determined F ratio was 8.10, exceeding the F ratio of 4.02 with one and fifty-three degrees of freedom, which was previously established as necessary for significance at the .05 level. The null hypothesis was rejected and the research hypothesis was accepted. Table 8 shows the Academic Grade Point data.

SUMMARY

This chapter has presented the statistical analysis of data including the rationale for using the Analysis of Variance Repeated Measure Design with one "within sums of squares" variable and one "between sums of squares" variable. Without this analysis, the effects of the experimental, supervised program of instruction upon grade point average and self-concept would have been undetermined. Without this statistical design, many other factors might have influenced the results.

The analysis of the academic grades revealed that initially the experimental group and the control group had comparable academic grades. When the program was completed, however, the experimental group had improved their grades considerably.

Analysis of the demographic data showed similarities in the following areas: age, marital status, academic classification, educational level of parents, and financial aid status. The sex of the subjects was a noteworthy difference.

Table 8

Analysis of Variance of Academic Grade Point Average

Source of Variation	Sum of Squares	df	Mean Square	F Ratio	Probability
BETWEEN SUBJECTS					
A	45.52	1	45.52		
S A	1934.43	53	36.50		
WITHIN SUBJECTS					
B	180.27	1	180.27	8.10	.007*
B A	1.29	1	1.29		
S A B	1171.95	53	22.16		

A = (1) Experimental
(2) Control

B = (1) Grade Point Average - Pre-
(2) Grade Point Average - Post-

B A = Interaction of experimental and control groups and grade point average

S A = Error (1)

S A B = Error (2)

* = Significant at the .05 level

The null hypotheses were listed together with the F value and probability of each being rejected or not rejected at the .05 level using one and fifty-three degrees of freedom. Tables 1-8 show the data for each of the self-concept sub-scales, self-criticism, and academic grades.

Chapter 5

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

INTRODUCTION

This chapter presents the summary, findings, conclusions, and recommendations of the study. The findings were determined by analyzing the scores of the TSCS, the academic grades and the demographic data. Conclusions based on the findings were drawn and are herewith presented. The recommendations listed primarily involve ideas for future research.

SUMMARY

This study was designed to examine the effects of an experimental, supervised program of instruction on the academic achievement and the self-concept of students who were placed on probation at the State University of New York Agricultural and Technical College at Alfred during the Winter Quarter, 1973-1974. The program was initiated because of the concern of faculty and administrators over the increasing number of students who were being placed on academic probation. Although various remedies had been discussed, none had ever been attempted before this program was implemented.

The dependent variables were grade point average and self-concept scores measured by the TSCS. Complete results were obtained on fifty-five subjects who completed all the requirements of the

program. The experimental subjects numbered twenty-five Health Technologies students, and the control group numbered thirty Business Technologies students. The experimental group attended a series of informal remedial classes once a week for a period of nine weeks. The control group did not participate in the supervised, experimental program.

The data were analyzed using Analysis of Variance Repeated Measures. Each of the repeated measure designs had a "between sums of squares" variable and a "within sums of squares" variable. This statistical technique allowed for the study of certain chosen variables without the introduction of uncontrollable variables.

The following is a summary of the six hypotheses which were rejected: There was a significant difference between the Total Positive Scores, Identity Scores, Self-Satisfaction Scores, Family Self Scores, or Social Self Scores of the experimental group and those of the control group on the pre-test and the post-test of the TSCS. There was a significant difference in the academic grade point averages of the experimental group and those of the control group.

The following is a summary of the two hypotheses which were not rejected: There was no significant difference between the Physical Self Scores or the Self-Criticism Scores of the experimental group or those of the control group on the pre-test and the post-test of the Tennessee Self-Concept Scale.

FINDINGS AND CONCLUSIONS

The findings and conclusions of the study are listed as follows:

Identity Score

Finding. The members of the experimental group tended to have a higher perception of their own identity after the program had ended.

Conclusion. This change resulted from the fact that at the time of the pre-test all the students were on probation, but at the time of the post-test a considerable number had achieved "good standing" status (GPA above 2.00). This change in academic status, therefore, brought about a change in the way each subject perceived himself.

Self-Satisfaction Score

Finding. The members of the experimental group tended to feel more positively about the self they perceived after the program had ended.

Conclusion. This change resulted from the fact that during the experimental, supervised program of instruction, the instructor frequently indicated to the subjects that they were persons of worth. This technique was based upon the premise that when persons are totally accepted by others, they come to the realization that they are persons of value.

Physical Self Score

Finding. The members of the experimental group did not tend to reflect any real change in the way they viewed their body, state of health, physical appearance, sexuality, or appearance after the program had ended. This same finding was reported by Karen Moses in her study with probationary students at Brigham Young University.[1]

---

[1]Karen J. Moses, "The Effect of Group Counseling on Probationary Students at Brigham Young University" (unpublished Master's thesis, Brigham Young University, 1967), abstract, p. 2.

Conclusion. No change resulted from the fact that this experimental, supervised program of instruction was unable to produce a change in a value as permanent as the physical self. The physical self was so strong that it could not be substantively modified in nine weeks.

Family Self Score

Finding. The members of the experimental group tended to reflect a higher sense of worth and value as family members after the program had ended. A different finding was reported by Clements, who discovered no significant differences in family self as a result of his program with able under-achievers.[2]

Conclusion. This change resulted from the fact that students were psychologically supported by their families during the time of the program, thereby increasing their family self concept. Parents were aware of the program in most cases because copies of the letters asking students to participate were mailed directly to the homes of each student before the program began.

Social Self Score

Finding. The members of the experimental group tended to reflect a higher sense of adequacy and worth in their social interaction with other people after the program had ended. Jensen and Amberg found that social self scores in their experimental subjects increased

---

[2]Thomas H. Clements, "A Study to Compare the Effectiveness of Individual and Group Counseling Approaches with Able Underachievers when Counselor Time is Held Constant," Dissertation Abstracts, 24: 1919-20, July, 1964, abstract, p. 2.

slightly over their control subjects but they judged their results to be inconclusive.[3]

Conclusion. This change resulted from the social nature of the program. Although the sessions were conducted in a structured atmosphere, the participants were encouraged to discuss their feelings freely. Most subjects exhibited considerable acceptance of one another, thereby reinforcing one another's social self.

Total Positive Score

Finding. The members of the experimental group tended to have an overall higher level of self-esteem after the program had ended. This same finding was obtained by Caplan in his study with junior high school boys.[4]

Conclusion. This score resulted from the higher sub-scale scores, which when combined, form the Total Positive Score. The data showed that Identity, Family Self, Self-Satisfaction, and Social Self definitely changed; therefore, it was expected that the Total Positive Score would likewise change.

---

[3]R. L. Jensen, "The Effects of Group Counseling on Achieving and Underachieving Probation College Students" (unpublished Master's thesis, Brigham Young University, 1967, abstract, p. 2; and W. F. Amberg, "A Comparison of Probationary Students, Before and After Counseling, with Non-Probationary Students at Brigham Young University" (unpublished Master's thesis, Brigham Young University, 1967), abstract, p. 2.

[4]Stanley W. Caplan, "The Effect of Group Counseling on Junior High Boys' Concept of Themselves," Journal of Counseling Psychology, 4:126, Summer, 1957.

Self-Criticism Score

Finding. The members of the experimental group did not tend to be any more honest in their self description and capacity for self-criticism after the program had ended.

Conclusion. No change resulted from the fact that even before the program had begun, the individuals of the experimental group were shown to be very honest in their self-description and capacity for self-criticism. Therefore, before the program they were found to have a normal healthy openness.

Academic Grade Point Average

Finding. The members of the experimental group tended to achieve higher grades after the program had ended. These same results were obtained by Sheldon and Landsman, who found a significant improvement in academic grades among their experimental group after a program with students in academic difficulty.[5]

Conclusion. This change appears to have resulted because the subjects learned to study and read more efficiently and thereby grasp material more thoroughly; however, the students who continued to participate in the study may have been more highly motivated to study than those who dropped out.

---

[5]William D. Sheldon and Theodore Landsman, "An Investigation of Non-Directive Group Therapy with Students in Academic Difficulty," Journal of Consulting Psychology, 14:215, June, 1950.

RECOMMENDATIONS

The conclusions of this study seem to indicate the following recommendations for further experimental research:

1. A study continuing the experimental, supervised program of instruction over a longer period of time might be conducted. The likelihood of measurable change as a result of this added program would seem to increase with more sessions.

2. A follow-up study at least six months or one year after the termination of the sessions might be conducted to evaluate the possibility of "delayed effect" of the program.

3. The relationship of sex differences to grade point average and self concept would appear to warrant further research. The fact that the experimental subjects were predominantly women and the control subjects predominantly men leads to some speculation as to the role of sex in influencing the results of the study. Another project using a nearly equal ratio of men and women in each group might produce different results.

4. It is further recommended that a larger sample be used to determine the effects of the program of instruction on the self-concept and grade point average of students who are on academic probation.

BIBLIOGRAPHY

BIBLIOGRAPHY

A. BOOKS

Brown, William F., and Wayne H. Holtzman. Survey of Study Habits and Attitudes Manual. New York: The Psychological Corporation, 1967.

Buros, Oscar Krisen. The Seventh Mental Measurements Yearbook, Vol. I and Vol. II. Highland Park, New Jersey: The Gryphon Press, 1972.

Campbell, William Giles, and Stephen Vaughan Ballou. Form and Style: Theses, Reports, Term Papers. 4th ed. Boston: Houghton-Mifflin Company, 1974.

Champion, Dean. Basic Statistics for Social Research. Scranton, Pennsylvania: Chandler, 1970.

Chapman, Elwood N. College Survival. Palo Alto, California: Science Research Associates, Inc., 1974.

Combs, Arthur W., Donald L. Avila, and William W. Purkey. Helping Relationships, Basic Concepts for the Helping Professions. Boston: Allyn and Bacon, 1973.

Coopersmith, William H. The Antecedents of Self-Esteem. San Francisco: W. H. Freeman, 1967.

Fitts, William H. Manual: Tennessee Self-Concept Scale. Nashville: Counselor Recordings and Tests, 1965.

_____. The Self-Concept and Behavior: Overview and Supplement. Monograph VII. Nashville: Counselor Recordings and Tests, 1972.

_____. The Self-Concept and Performance. Monograph V. Nashville: Counselor Recordings and Tests, 1972.

_____. The Self-Concept as a Variable in Vocational Rehabilitation. Progress Report Number I. Nashville: Nashville Mental Health Center Research Department, 1967.

_____. The Self-Concept as a Variable in Vocational Rehabilitation. Progress Report Number II. Nashville: Nashville Mental Health Center Research Department, 1968.

_____, and Gus K. Bell. An Evaluation of Group Counseling for Nursing Students. Nashville: Nashville Mental Health Center, 1969.

_____, O. C. Stewart, and Merwyn K. Wagner. Three Studies of Self-Concept Change. Nashville: Nashville Mental Health Center, 1969.

Fox, David J. The Research Process in Education. New York: Holt, Rinehart and Winston, 1969.

Hayman, John L. Research in Education. Columbus, Ohio: Merrill, 1968.

Hritz, Elaine B. The First Sixty Years--A History of the State University Agricultural and Technical College at Alfred, 1909-1969. Alfred, New York: Printing and Duplicating, Alfred State College, 1971.

Jersild, A. T. Child Psychology. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1960.

La Benne, Wallace D., and Bert I. Greene. Educational Implications of Self-Concept Theory. Pacific Palisades, California: Goodyear, 1969.

Lavin, David E. The Prediction of Academic Performance: A Theoretical Analysis and Review of Research. New York: Russell Sage Foundation, 1965.

Lindgren, Henry Clay. The Psychology of College Success. New York: John Wiley and Sons, Inc., 1969.

Morgan, Clifford T., and James Deese. How to Study. New York: McGraw-Hill Company, 1969.

Pauk, Walter. How to Study in College. 2d ed. Boston: Houghton-Mifflin Company, 1974.

Purkey, William W. The Self and Academic Achievement. Gainesville, Florida: The Florida Educational Research and Development Council, 1967.

_____. Self-Concept and School Achievement. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970.

Snedecor, George W. Statistical Methods. 5th ed. Ames, Iowa: The Iowa State College Press, 1959.

State University of New York Agricultural and Technical College at Alfred. Alfred Catalog, 1972-1974. Alfred, New York: Printing and Duplicating, Alfred State College, 1972.

_____. Campus Handbook. Alfred, New York: Printing and Duplicating, Alfred State College, 1973.

Thompson, Warren. Correlates of the Self-Concept. Monograph VI. Nashville: Counselor Recordings and Tests, 1972.

Winer, B. J. Statistical Principles in Experimental Design. New York: McGraw-Hill Book Company, 1962.

Wylie, Ruth C. The Self-Concept: A Critical Survey of Pertinent Research Literature. Lincoln: University of Nebraska Press, 1961.

C. PERIODICALS

Abel, Walter H. "Group Counseling and Academic Rehabilitation of Probationary Transfer Students," Journal of College Student Personnel, 8:185-88, May, 1967.

Broedel, John, Merle Ohlsen, Fred Proff, and Charles Southard. "The Effects of Group Counseling on Gifted Underachieving Adolescents," Journal of Counseling Psychology, 7:163-70, Fall, 1960.

Brown, William F., and W. H. Holtzmann. "The Importance of Study Habits and Attitudes in the Scholastic Achievement of High School and College Students," American Psychologist, 9:341-42, August, 1954.

Bruck, M., and R. F. Bodwin. "The Relationship Between Self-Concept and the Presence and Absence of Scholastic Underachievement," Journal of Clinical Psychology, 18:181-82, April, 1962.

Caplan, Stanley W. "The Effect of Group Counseling on Junior High Boys' Concept of Themselves," Journal of Counseling Psychology, 4:124-28, Summer, 1957.

Cartwright, Rosalind D. "Self-conception Patterns of College Students and Adjustment to College Life," Journal of Counseling Psychology, 10:47-52, Spring, 1963.

Chestnut, William J. "The Effects of Structured and Unstructured Group Counseling on Male College Students' Underachievement," Journal of Counseling Psychology, 12:388-94, Winter, 1965.

Clements, Thomas H. "A Study to Compare the Effectiveness of Individual and Group Counseling Approaches with Able Underachievers when Counselor Time is Held Constant," Dissertation Abstracts, 24:1919-20, July, 1964.

Combs, Arthur W. "The Self in Chaos," (A review of "The Self-Concept: A Critical Survey of Pertinent Research Literature," by Ruth C. Wylie), Contemporary Psychology, 7:53-54, February, 1962.

_____. "Perception of Self and Scholastic Underachievement in the Academically Capable," Peronnel and Guidance Journal, 43:47-51, September, 1964.

Coopersmith, Stanley. "A Method for Determining Types of Self-Esteem," Journal of Abnormal Psychology, 59:87-94, July, 1959.

Dee, Frances Schutt, Clara Arndt, and Burton Meyer. "Self-Acceptance of Nurses and Acceptance of Patients: An Exploratory Investigation," Nursing Research, 14:346-50, Fall, 1965.

Dickenson, Walter A., and Charles B. Truax. "Group Counseling with College Underachievers," Personnel and Guidance Journal, 45:243-47, November, 1966.

Duncan, Donn R. "Effects of Required Group Counseling with College Students in Academic Difficulty," Dissertation Abstracts, 23:3772-73, March, 1963.

Gilmore, John P. "The Productive Personality," Journal of Education, 154:5-38, October, 1971.

Gowan, J. C. "Factors of Achievement in High School and College," Journal of Counseling Psychology, 7:91-95, Summer, 1960.

Harris, Pearl, and Frank Trotta. "An Experiment with Underachievers," Education, 82:347-49, February, 1962.

Klingelhoffer, Edwin L. "The Relationship of Academic Advisement to the Scholastic Performance of Failing College Students," Journal of Counseling Psychology, 1:125-31, Fall, 1954.

Lum, Mabel K. M. "A Comparison of Under- and Overachieving Female College Students," Journal of Educational Psychology, 51:109-14, June, 1960.

Maroney, K. A., and B. Winborn. "Effectiveness of Short-Term Guidance with a Group of Transfer Students Admitted on Academic Probation," Journal of Educational Research, 47:463-65, August, 1965.

McQuary, John P. "Some Differences Between Under- and Overachievers in College," Educational Administration and Supervision, 40:117-20, February, 1954.

Richardson, LaVange H. "Grade Patterns of Counseled and Non-counseled College Students," Journal of Counseling Psychology, 11:160-63, Spring, 1964.

Roth, Robert M. "The Role of Self-Concept in Achievement," Journal of Experimental Education, 27:265-81, June, 1959.

Schultz, R. E. "The Impact of Academic Probation and Suspension Practices on Junior College Students," Junior College Journal, 32:271, January, 1961-1962.

Searles, A., Jr. "The Effectiveness of Limited Counseling in Improving the Academic Achievement of Superior College Freshmen," Personnel and Guidance Journal, 40:630-33, March, 1962.

Shaw, Merville C., and G. J. Alves. "The Self-Concept of Bright Academic Underachievers," Personnel and Guidance Journal, 43:401-03, December, 1963.

Sheldon, William D., and Theodore Landsman. "An Investigation of Non-Directive Group Therapy with Students in Academic Difficulty," Journal of Consulting Psychology, 14:210-15, June, 1950.

Smith, Bernard N. "Small Group Meetings of College Freshmen and Frequency of Withdrawals," Journal of College Student Personnel, 4:165-70, March, 1963.

Soffen, Faye. "Teaching for Improvement of Self-Concept," Dissertation Abstracts, 29:1468A, November, 1968.

Spielberger, Charles D., Henry Weitz, and J. Peter Denny. "Group Counseling and the Academic Performance of Anxious College Freshmen," Journal of Counseling Psychology, 9:195-204, Fall, 1962.

Spielberger, Charles D. "The Effects of Manifest Anxiety on the Academic Achievement of College Students," Mental Hygiene, 46:420-26, July, 1962.

Strong, Donald J., and Daniel Feder. "Measurement of the Self-Concept: A Critique of the Literature," Journal of Counseling Psychology, 8:170-80, Summer, 1961.

Suehr, J. H. "Counseling in Nonstructured Groups: A Case Study," Personnel and Guidance Journal, 43:304-05, November, 1964.

C. UNPUBLISHED WORKS

Amberg, W. F. "A Comparison of Probationary Students, Before and After Group Counseling, with Non-Probationary Students at Brigham Young University." Unpublished Master's thesis, Brigham Young University, 1967.

Axmaker, Larry William. "The Effect of Group Counseling on the Self-Concept, on the Motivation to Achieve and on the Proportion of Dropouts Among Unselected Community College Students at Southwestern Oregon Community College." Unpublished Doctoral dissertation, Oregon State University, 1970.

Brook, Robert Charles. "Self-Concept Changes as a Function of Participation in Sensitivity Training as Measured by the Tennessee Self-Concept Scale." Unpublished Doctoral dissertation, Michigan State University, 1968.

Demetriades, D. G. "A Study to Identify Some Personality Characteristics of Freshmen Academic Underachievers at Appalachian State University." Unpublished Master's thesis, Appalachian State University, 1967.

Groom, H. D. "Predicting Achievement Behavior of Academic Probation Students." Unpublished Master's thesis, Brigham Young University, 1968.

Hollingshead, August B. "The Two-Factor Index of Social Position." New Haven: Yale University, 1957. (Mimeographed.)

Iglinsky, C. L. "Intellectual and Non-Intellectual Factors Affecting Academic Success of College Freshmen." Unpublished Doctoral dissertation, East Texas State University, 1968.

Jackson, K. N. "The Probationary Student in Group Counseling." Unpublished Master's thesis, Brigham Young University, 1967.

Jensen, R. L. "The Effects of Group Counseling on Achieving and Underachieving Probation College Students." Unpublished Master's thesis, Brigham Young University, 1967.

Letner, Rodney Charles. "The Effect of Group Counseling on the Self-Concept as Measured by the Tennessee Self-Concept Scale." Unpublished Doctoral dissertation, Ball State University, 1969.

Lundberg, W. E. "The Effect of Group Counseling on Probationary Students: Follow-up Study." Unpublished Master's thesis, Brigham Young University, 1968.

Moses, Karen J. "The Effect of Group Counseling on Probationary Students at Brigham Young University." Unpublished Master's thesis, Brigham Young University, 1967.

Parker, A. L. "The Relationship of Self-Concept to the Prediction of Freshman GPA from Admission ACT Scores." Unpublished Master's thesis, West Virginia University, 1965.

Peters, Dorothy M. "The Self-concept as a Factor in Over- and Under-achievers." Unpublished Doctoral dissertation, Indiana University, 1968.

Piniarski, Harry. Computer Scientist. Personal interview, August 4, 1974.

APPENDIXES

APPENDIX A

CORRESPONDENCE

November 29, 1973

Dear

We have been informed by the Academic Status Board at Alfred State College that you have been placed on probation for the quarter beginning December 3, 1973. This status indicates that you are not making satisfactory academic progress.

We realize that the reasons for probation are usually complex--difficulties with study skills, understanding a textbook, or understanding a professor, personal problems, etc.

Because the Division of Business Technologies is anxious to do everything possible to help you to become a student in good standing, we are asking you to attend an important meeting for students who are on academic probation. During this meeting an explanation of a special project will be given. We hope that this project will benefit you and Alfred State College.

As Chairman of the Division of Business Technologies, I would urge you to participate, but you may choose not to take part if you so wish.

The meeting will be held in the Allied Health Building on Wednesday December 5th at 7 P.M. in Room 120. We are looking forward to seeing you at that time. If you wish to participate but cannot attend on that evening, please see Mr. Joseph L. Tracy in Room 204 of the Allied Health Building before Tuesday December 4 or phone him at 871-6171.

Sincerely,

E. John Gradoni
Professor-Chairman
Division of Business Technologies

November 29, 1973

Dear

We have been informed by the Academic Status Board at Alfred State College that you have been placed on probation for the quarter beginning December 3, 1973. This status indicates that you are not making satisfactory academic progress.

We realize that the reasons for probation are usually complex--difficulties with study skills, understanding a textbook, or understanding a professor, personal problems, etc.

Because the Division of Health Technologies is anxious to do everything possible to help you to become a student in good standing, we are asking you to attend an important meeting for students who are on academic probation. During this meeting an explanation of a special project will be given. We hope that this project will benefit you and Alfred State College.

As Chairman of the Division of Health Technologies, I would urge you to participate, but you may choose not to take part if you so wish.

The meeting will be held in the Allied Health Building on Wednesday December 5th at 7 P.M. in Room 120. We are looking forward to seeing you at that time. If you wish to participate but cannot attend on that evening, please see Mr. Joseph L. Tracy in Room 204 of the Allied Health Building before Tuesday December 4 or phone him at 871-6171.

Sincerely,

Robert L. Love
Professor, Chairman
Division of Health Technologies

APPENDIX B

TENNESSEE SELF CONCEPT SCALE

COUNSELOR RECORDINGS AND TESTS

Box 6184 - Acklen Station

Nashville, Tennessee 37212

January 14, 1975

Mr. Joseph L. Tracy
Assistant Professor of Education
Commonwealth of Massachusetts
Worcester State College
486 Chandler Street
Worcester, Massachusetts 01602

Dear Mr. Tracy:

You have the permission of the publisher to reproduce the Tennessee Self Concept Scale in the Appendix of your dissertation.

Good luck with your writing.

Sincerely,

Nancy S. Pupke
Executive Secretary

TENNESSEE
SELF CONCEPT SCALE

MACHINE SCORED EDITION

by

William H. Fitts, PhD.

Published by

Counselor Recordings and Tests

Box 6184 - Acklen Station

Nashville, Tennessee 37212

TENNESSEE SELF CONCEPT SCALE

Answer Sheet

PRINT YOUR NAME IN THE BOXES PROVIDED, THEN BLACKEN THE CIRCLE BELOW WHICH MATCHES EACH LETTER OF YOUR NAME.

LAST NAME | FI | MI

STUDENT NAME

STUDENT ADDRESS

SCHOOL

SEX M F

TEST FORM C

DATE MO DAY YR

AGE

GRADE

TOTAL MINUTES

TIME STARTED

TIME FINISHED

TOTAL TIME

	C F	M F	PF-PT	M T	C T		C F	M F	PF-PT	M T	C T		C F	M F	PF-PT	M T	C T		C F	M F	PF-PT	M T	C T
1						21						41						61						81	
2						22						42						62						82	
3						23						43						63						83	
4						24						44						64						84	
5						25						45						65						85	
6						26						46						66						86	
7						27						47						67						87	
8						28						48						68						88	
9						29						49						69						89	
10						30						50						70						90	
11						31						51						71						91	
12						32						52						72						92	
13						33						53						73						93	
14						34						54						74						94	
15						35						55						75						95	
16						36						56						76						96	
17						37						57						77						97	
18						38						58						78						98	
19						39						59						79						99	
20						40						60						80						100	

USE PENCIL ONLY – NOT INK OR BALLPOINT PEN

INSTRUCTIONS: On the separate answer sheet, fill in your name, sex, age, grade and today's date. Then code the appropriate letter or number according to the sample below. Be sure your marks are heavy and completely fill the spaces.

SAMPLE:

SEX	
Male	●
Female	O

The statements in this inventory 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. Erase completely any answer you wish to change and mark your new answer.

RESPONSES	Completely false	Mostly false	Partly false and Partly true	Mostly true	Completely true
	C	M		M	C
	F	F	PF - PT	T	T
	1	2	3	4	5

When you are ready to start, find the box on your answer sheet marked Time Started and record the time. When you have finished, record the time finished in the box on your answer sheet marked Time Finished. Erase any stray marks on your answer sheet.

TENNESSEE SELF CONCEPT SCALE

1. I have a healthy body 1
2. I am an attractive person 2
3. I consider myself a sloppy person 3
4. I am a decent sort of person 4
5. I am an honest person 5
6. I am a bad person 6
7. I am a cheerful person 7
8. I am a calm and easy going person 8
9. I am a nobody 9
10. I have a family that would always help me in any kind of trouble 10
11. I am a member of a happy family 11
12. My friends have no confidence in me 12
13. I am a friendly person 13
14. I am popular with men 14
15. I am not interested in what other people do 15
16. I do not always tell the truth 16
17. I get angry sometimes 17
18. I like to look nice and neat all the time 18
19. I am full of aches and pains 19
20. I am a sick person 20
21. I am a religious person 21
22. I am a moral failure 22
23. I am a morally weak person 23
24. I have a lot of self-control 24
25. I am a hateful person 25
26. I am losing my mind 26
27. I am an important person to my friends and family 27
28. I am not loved by my family 28
29. I feel that my family doesn't trust me 29
30. I am popular with women 30
31. I am mad at the whole world 31
32. I am hard to be friendly with 32
33. Once in a while I think of things too bad to talk about 33
34. Sometimes, when I am not feeling well, I am cross 34
35. I am neither too fat nor too thin 35
36. I like my looks just the way they are 36
37. I would like to change some parts of my body 37
38. I am satisfied with my moral behavior 38
39. I am satisfied with my relationship to God 39
40. I ought to go to church more 40

41. I am satisfied to be just what I am 41
42. I am just as nice as I should be 42
43. I despise myself 43
44. I am satisfied with my family relationships 44
45. I understand my family as well as I should 45
46. I should trust my family more 46
47. I am as sociable as I want to be 47
48. I try to please others, but I don't overdo it 48
49. I am no good at all from a social standpoint 49
50. I do not like everyone I know 50
51. Once in a while, I laugh at a dirty joke 51
52. I am neither too tall nor too short 52
53. I don't feel as well as I should 53
54. I should have more sex appeal 54
55. I am as religious as I want to be 55
56. I wish I could be more trustworthy 56
57. I shouldn't tell so many lies 57
58. I am as smart as I want to be 58
59. I am not the person I would like to be 59
60. I wish I didn't give up as easily as I do 60
61. I treat my parents as well as I should (Use past tense if parents are not living) 61
62. I am too sensitive to things my family say 62
63. I should love my family more 63
64. I am satisfied with the way I treat other people 64
65. I should be more polite to others 65
66. I ought to get along better with other people 66
67. I gossip a little at times 67
68. At times I feel like swearing 68
69. I take good care of myself physically 69
70. I try to be careful about my appearance 70
71. I often act like I am "all thumbs" 71
72. I am true to my religion in my everyday life 72
73. I try to change when I know I'm doing things that are wrong 73
74. I sometimes do very bad things 74
75. I can always take care of myself in any situation 75
76. I take the blame for things without getting mad 76
77. I do things without thinking about them first 77
78. I try to play fair with my friends and family 78
79. I take a real interest in my family 79
80. I give in to my parents. (Use past tense if parents are not living) 80
81. I try to understand the other fellow's point of view 81
82. I get along well with other people 82
83. I do not forgive others easily 83
84. I would rather win than lose in a game 84
85. I feel good most of the time 85
86. I do poorly in sports and games 86
87. I am a poor sleeper 87
88. I do what is right most of the time 88
89. I sometimes use unfair means to get ahead 89
90. I have trouble doing the things that are right 90
91. I solve my problems quite easily 91
92. I change my mind a lot 92
93. I try to run away from my problems 93
94. I do my share of work at home 94
95. I quarrel with my family 95
96. I do not act like my family thinks I should 96
97. I see good points in all the people I meet 97
98. I do not feel at ease with other people 98
99. I find it hard to talk with strangers 99
100. Once in a while I put off until tomorrow what I ought to do today 100

APPENDIX C

EXPERIMENTAL, SUPERVISED PROGRAM OF INSTRUCTION

LESSON OUTLINES

Session I

STUDYING FOR SUCCESS

I. Objectives:

A. To determine the self-concept of each subject of the experimental and control groups.

B. To determine for each individual of the experimental group his strengths and weaknesses in study skills.

II. Media:

A. Tennessee Self-Concept Scale, Counselor Recordings and Tests, Box 6184, Acklen Station, Nashville, Tennessee 37212.

B. Survey of Study Habits and Attitudes, W. F. Brown and W. H. Holtzman, The Psychological Corporation, 304 E. 45th St., New York, New York 10017.

C. Overhead Transparency--Characteristics of a successful college student.

III. Procedure:

A. Administer the Tennessee Self-Concept Scale to determine the self-concept before any remedial program has been initiated. (All students completed the test in ten to twenty minutes.)

B. Administer the Brown-Holtzman Survey of Study Habits and Skills to identify the students who have difficulties with study habits. (This untimed test took from twenty to twenty-five minutes.)

C. Indicate in a brief statement the importance of this specially designed program.

D. Discuss the transparency depicting the characteristics of a successful college student. Explain that students have been invited to participate in this program because they have the potential to achieve in their courses.

IV. Evaluation:

A. Score the Tennessee Self-Concept Scale, paying particular attention to Total Positive Score, Identity Score, Self-Satisfaction Score, Physical Self Score, Family Self Score, Social Self Score, and Self-Criticism Score.

B. Score the Brown-Holtzman Survey of Study Habits and Skills, paying particular attention to weaknesses which can be improved through this special program of instruction.

Session II

IMPROVING READING SKILLS

I. Objectives:

A. To identify the students who need to improve their reading skills.

B. To determine each individual's strengths and weaknesses in reading.

C. To establish the need for an identifiable purpose for every reading assignment.

D. To acquaint each individual with library references.

II. Media:

A. Nelson-Denney Reading Test, Houghton-Mifflin Company, 110 Tremont St., Boston, Massachusetts 02107.

B. Overhead Transparency: Purposes for reading.

III. Procedure:

A. Discuss the relationship between expertise in using reading skills and achieving success in college courses.

B. Administer the Nelson-Denny Reading Test.

C. Solicit personal comments from students about their own reading.

D. Discuss the overhead transparency.

E. Acquaint students with reference materials which are invaluable aids in locating information in the library.

F. Demonstrate the need for looking over facts and ideas for the purpose of clustering them under categories so that the material can be outlined more effectively.

IV. Evaluation:

A. Score the Nelson-Denny Reading Test.

B. Schedule a conference with each student to assess his strengths and weaknesses in reading and study skills.

C. Schedule special sessions for students with severe difficulties.

Session III

USING TIME EFFICIENTLY

I. Objectives:

A. To demonstrate that the proper management of time provides opportunities for study, work, and play.

B. To help students realize that management of time determines success or failure in college.

C. To show students how to program time by arranging a schedule.

II. Media:

A. Overhead Transparencies:

1. Reasons for programming time.

2. Master schedule with hours of the week divided into blocks of time; overlay of this transparency showing a detailed weekly schedule.

III. Procedure:

A. Ask students to list in order of occurrence their activities for a normal day.

B. Discuss (the following):

1. How a person studies is more important than how long he studies.

2. Occasions when much learning occurred in a short time.

C. Demonstrate with the aid of the overhead transparency how the hours of a week are divided into time blocks.

D. Use overlay to show a detailed weekly schedule.

IV. Evaluation:

A. Require the students to keep a detailed record of their activities for the next entire week, so that they can have an actual picture of how they use their time.

B. Ask students to scrutinize the record which they made, so that they may be aware of the time which they wasted.

C. Ask students to make a model schedule for a week. Discuss these plans and stress that they must fulfill personal needs.

Session IV

CONCENTRATING ON STUDIES

I. Objectives:

A. To facilitate recognition of causes of poor concentration.

B. To assist in the technique of concentrating on one task at a time.

C. To instill confidence that every student can concentrate more effectively.

II. Media:

A. FM radio tuned to station playing continuous music.

B. Overhead Transparency:

Graphic explanation indicating that concentration implies narrowing the field of perception to the immediate task.

III. Procedure:

A. Have the radio playing music as the students arrive. Continue the playing of music and start class by reading a short selection about external distractions. When selection ends, turn off radio. Quiz group about the selection.

B. Repeat reading and quiz without the noise. Discuss and compare test results.

C. Give a short presentation on Concentration as a Study Skill. Stress that concentration improves as interest is created in a subject.

D. Ask students to discuss the feelings which they experienced while the selection was being read surrounded by audio distractions.

E. Provide list of suggestions for aiding concentration.

IV. Evaluation:

A. Ask each student to complete a form stating his best place for study, reasons for choice, and how it could be improved.

B. Ask each student to relate to a classmate five things which he remembers from this session.

C. Ask each student to submit a sketch of his study area.

D. Ask each student to relate the methods of study which work best for him.

Session V

ORDERING, ORGANIZING, AND SELECTING IDEAS

I. Objectives:

A. To emphasize the importance of the orderly arrangement of ideas.

B. To indicate the necessity of organizing information for retention.

C. To teach the value of selecting information pertinent to a predetermined topic, problem, or goal.

D. To instill confidence that each person has the ability to organize and select ideas.

II. Media:

A. 16mm film: Developing Comprehension Skills, Film Department, Syracuse University, Syracuse, New York 13210.

B. Overhead Transparency:

Five elements of good organization.

III. Procedure:

A. Discuss the importance of developing skills in the orderly arrangement of facts, events, and ideas.

B. Emphasize the category system of organization which clusters facts and ideas for remembering.

C. Demonstrate the five elements of good organization.

D. Provide practice in locating the main idea, supporting material, and transitional words in a paragraph.

E. Show the film, Developing Comprehension Skills.

IV. Evaluation:

A. Practice ordering, organizing, and selecting ideas from a mimeographed sheet distributed for this purpose.

B. Distribute several mimeographed sheets to be outlined as an assignment.

C. Ask students to discuss their outlines in class.

Session VI

DEVELOPING VOCABULARY AND MEMORY SKILLS

I. Objectives:

A. To demonstrate a systematic approach to vocabulary development.

B. To teach appreciation for the dictionary as an aid to increasing vocabulary.

C. To indicate the relationship between memory and information processing.

D. To emphasize that everyone's memory can stand improvement.

II. Media:

A. 16mm film: Information Processing, CRM Educational Films, Del Mar, California 92014

B. Overhead Transparencies:

1. Steps in vocabulary development.

2. Three rules for developing a strong memory.

III. Procedure:

A. Offer techniques in vocabulary building.

B. Administer vocabulary quiz on phrases taken from books, magazines, and newspapers in general circulation.

C. Discuss each of the steps for improving vocabulary.

D. Distribute sheets listing Latin and Greek word roots and their prefixes.

E. Show the film, Information Processing.

F. Discuss the two kinds of memory indicated in the film.

G. Show how ideas can be transferred into long-term memory devices and mnemonics.

H. Review the three rules for developing a strong memory, and apply this skill to recalling lecture notes.

IV. Evaluation:

A. Ask students to give additional words using common prefixes and roots, and list them on the board.

B. After showing the film, apply the memory skills to learning new words and their definitions.

Session VII

TAKING BETTER LECTURE NOTES

I. Objectives:

A. To exhibit a systematic approach to listening.

B. To teach the importance of organizing and reviewing notes.

C. To teach an organized method for taking better lecture notes.

II. Media:

A. Filmstrip: Lecture Notes: How to Take and How to Use Them, WW4-1519 with LP record, Audio-Visual Materials, Charles W. Clark Co., Inc., 564 Smith Street, Farmingdale, New York 11735.

B. Overhead Transparencies:

1. Steps for selective note taking.

2. Rules to improve listening.

C. Charts:

1. List of abbreviations and symbols useful in note-taking.

2. Reasons why notes should be taken during a lecture.

III. Procedure:

A. Show the filmstrip: Lecture Notes: How to Take and How to Use Them. Play accompanying record.

B. Discuss the method described in this visual.

C. Indicate the relationship between listening and good note-taking. Explain that careful note-taking enables a student to discover the skeleton of ideas upon which a lecture is built.

D. Explain the steps for effective note-taking.

E. Indicate that notes should be written in the student's own words.

F. Demonstrate how to divide each note sheet into sections for key ideas, notes, and reflections.

G. Explain the value of using abbreviations and symbols.

IV. Evaluation:

A. Ask the group to listen, take notes, and outline a five-minute micro-teaching session.

B. Compare notes and outlines.

C. Listen carefully for selectivity, because too many notes indicate that the student does not know how to discriminate between the essential and the non-essential.

Session VIII

MASTERING A TEXTBOOK

I. Objectives:

A. To teach a simple method of reading textbooks.

B. To illustrate an effective system for marking textbooks.

II. Media:

A. Overhead Transparencies:

1. Steps for mastering a textbook.

2. Steps for surveying a textbook chapter.

3. Steps for taking notes from a textbook.

B. Charts:

1. Guidelines for marking a textbook.

2. Sample pages from a textbook.

III. Procedures:

A. Present the five steps for mastering a textbook. Distribute identical Xeroxed copies of a short textbook chapter.

B. Demonstrate the method using the Xeroxed copies.

C. Explain the importance of marking a textbook systematically.

D. Use charts to show the guidelines for marking a textbook. Demonstrate this skill with a sample page.

E. Caution that a system which is right for one student may not be right for another.

IV. Evaluation:

A. Distribute two other sample pages and allow time for the students to demonstrate this skill of individually marking a textbook.

B. Ask student to submit, in the next session, a textbook which he marked while studying during the next week.

Session IX

TAKING EXAMINATIONS

I. Objectives:

A. To teach systematic procedures in studying for examinations.

B. To facilitate the achievement of higher scores on objective and essay examinations.

C. To strengthen confidence of students when taking examinations.

D. To measure the self-concept of each student.

II. Media:

A. 16mm film: How to Take Examinations, Technicolor Vidtronics Division, 855 North Cahuenga Boulevard, Hollywood, California 90038.

B. Overhead Transparencies:

1. Steps to follow in preparing for examinations.

2. Different types of examinations.

3. Advantages and disadvantages of cramming.

C. The Tennessee Self-Concept Scale.

III. Procedure:

A. Explain that many students fail exams because they lack an organized plan for studying and preparing for tests.

B. Discuss the advantages and disadvantages of cramming.

C. Review the importance of organization and selectivity of material, and necessity for physical, emotional, and intellectual preparation.

D. Show the film, How to Take Examinations.

E. Administer The Tennessee Self-Concept Scale.*

IV. Evaluation:

Ask students to list all ways they have improved in the development of better reading and study skills as a result of these sessions.

*At the end of this session, the post-test of the Tennessee Self-Concept Scale was administered to each student of the experimental group. The control group was contacted and asked to take the post-test also. They were given the test at a different time, however.

APPENDIX D

ACADEMIC GRADES AND DEMOGRAPHIC DATA

Table 9

Academic Standing of Experimental Group and Control Group for Fall and Winter Quarters 1973-1974

	Fall		Winter	
	Experimental Group	Control Group	Experimental Group	Control Group
Good Standing			16	12
Probation	25	30	8	16
Dismissal			1	
Withdrawal				2
Totals	25	30	25	30

Good Standing: GPA above 2.00

Probation: GPA below 2.00

Dismissal: Official suspension for non-academic reasons

Withdrawal: Voluntary separation from the college

Table 10

Grade Point Average and Status of Experimental Group for Fall and Winter Quarters 1973-1974

Student Identification	Fall Quarter GPA 1973	Academic Status Based on Cumulative GPA	Winter Quarter GPA 1974	Academic Status Based on Cumulative GPA
1	1.68	P (1.68)	1.36	D (1.52)
2	1.75	P (1.97)	2.50	GS (2.23)
3	1.92	P (1.85)	2.14	GS (2.00)
4	1.97	P (1.97)	1.56	P (1.77)
5	1.94	P (1.94)	2.57	GS (2.26)
6	1.56	P (1.91)	2.07	P (1.99)
7	1.53	P (1.53)	1.78	P (1.66)
8	1.72	P (1.72)	2.43	GS (2.08)
9	1.94	P (1.94)	1.75	P (1.85)
10	1.94	P (1.94)	2.19	GS (2.07)
11	2.12	P (1.98)	2.23	GS (2.11)
12	2.57	P (1.97)	3.75	GS (2.86)
13	1.90	P (1.90)	2.03	P (1.97)
14	2.35	P (1.97)	2.37	GS (2.17)
15	1.40	P (1.35)	2.65	P (1.78)
16	1.97	P (1.90)	2.88	GS (2.39)
17	2.23	P (1.95)	2.81	GS (2.38)
18	1.75	P (1.90)	2.46	GS (2.18)
19	1.78	P (1.78)	2.59	GS (2.19)
20	1.81	P (1.81)	1.91	P (1.86)
21	1.59	P (1.61)	2.38	GS (2.00)
22	2.21	P (1.87)	3.06	GS (2.47)
23	1.97	P (1.97)	2.38	GS (2.18)
24	1.79	P (1.92)	1.97	P (1.95)
25	1.90	P (1.90)	2.69	GS (2.30)

GPA and Status (derived from cumulative GPA): Based on 4:00 scale

P: Probation (GPA below 2.00)

GS: Good Standing (GPA 2.00 or above)

D: Dismissal (official suspension for non-academic reasons)

Table 11

Grade Point Average and Status of Control Group for Fall and Winter Quarters 1973-1974

Student Identification	Fall Quarter GPA 1973	Academic Status Based on Cumulative GPA	Winter Quarter GPA 1974	Academic Status Based on Cumulative GPA
1	1.83	P (1.83)	2.20	GS (2.02)
2	1.81	P (1.81)	2.82	GS (2.32)
3	1.06	P (1.54)	0.86	P (1.20)
4	1.72	P (1.80)	2.24	GS (2.02)
5	1.88	P (1.88)	2.10	GS (2.00)
6	1.91	P (1.91)	2.30	GS (2.11)
7	1.90	P (1.85)	2.47	GS (2.16)
8	1.34	P (1.34)	1.40	P (1.37)
9	1.44	P (1.52)	1.23	P (1.38)
10	1.84	P (1.84)	1.00	P (1.42)
11	1.97	P (1.94)	1.81	P (1.88)
12	1.22	P (1.40)	2.00	P (1.70)
13	1.09	P (1.09)	0.63	W (.86)
14	1.77	P (1.92)	2.10	GS (2.01)
15	1.47	P (1.47)	1.50	P (1.49)
16	1.72	P (1.80)	2.30	GS (2.05)
17	1.78	P (1.78)	2.20	GS (2.00)
18	1.72	P (1.72)	1.80	P (1.76)
19	2.13	P (1.75)	2.00	W (1.88)
20	1.09	P (1.50)	1.79	P (1.66)
21	1.13	P (1.70)	1.92	P (1.81)
22	1.85	P (1.83)	2.14	P (1.99)
23	1.93	P (1.90)	2.79	GS (2.35)
24	1.70	P (1.70)	1.87	P (1.79)
25	1.82	P (1.82)	2.40	GS (2.11)
26	1.63	P (1.68)	2.00	P (1.84)
27	1.63	P (1.70)	2.50	GS (2.10)
28	1.85	P (1.85)	2.08	P (1.97)
29	1.66	P (1.90)	2.30	GS (2.10)
30	2.13	P (1.97)	2.22	GS (2.10)

GPA and Status (derived from cumulative GPA): Based on 4.00 scale

P: Probation (GPA below 2.00)

GS: Good Standing (GPA 2.00 or above)

W: Withdrawal (Voluntary separation from the college)

Table 12

Age, Sex, Marital Status, Academic Classification of Experimental Group and Control Group

	Experimental	Control
Age		
Years		
17	2	
18	11	2
19	7	15
20	5	11
21		1
22		1
Total	25	30
Sex		
Men	3	23
Women	22	7
Total	25	30
Marital Status		
Single	24	29
Married	1	1
Total	25	30
Academic Classification*		
Freshman Class	15	15
Senior Class	10	15
Total	25	30

*State University of New York Agricultural and Technical College at Alfred is a two-year institution with the following classification of students: First Year (Freshmen) and Second Year (Seniors).

Table 13

Amounts and Types of Financial Aid of Experimental Group

Student Identification	Loans	Scholarships and Grants	Total
1	$1,550	$ 650	$2,200
2			
3		100	100
4			
5	1,500		1,500
6		650	650
7			
8		250	250
9			
10	1,500	300	1,800
11		2,200	2,200
12	1,500	675	2,175
13	166	1,593	1,759
14	1,200	200	1,400
15		1,935	1,935
16		400	400
17	1,500	300	1,800
18	800		800
19			
20	1,500	100	1,600
21	1,500		1,500
22	1,800	100	1,900
23			
24			
25		100	100
Total	$14,516	$9,553	$24,069

Table 14

Amounts and Types of Financial Aid of Control Group

Student Identification	Loans	Scholarships and Grants	Total
1	$	$ 650	$ 650
2			
3	775	100	875
4	800	100	900
5			
6		100	100
7			
8	1,500		1,500
9		300	300
10			
11	1,500	100	1,600
12			
13			
14	560	1,400	1,960
15	1,500	100	1,600
16	1,000	750	1,750
17	1,500		1,500
18		650	650
19		650	650
20			
21			
22	1,500	400	1,900
23	1,500		1,500
24	2,300	300	2,600
25	1,000	300	1,300
26			
27			
28			
29	1,500		1,500
30		600	600
Total	$16,935	$6,400	$23,435

Loans: Financial aid requiring repayment in whole or in part, with or without the payment of interest.

Grants and Scholarships: Financial aid requiring neither repayment nor specific service to be performed by the student.

Table 15

Parents' Level of Education for Experimental Group and Control Group

	Father		Mother	
	Experimental	Control	Experimental	Control
University or College plus Professional Training	2	3	2	1
University or College Graduate	2	5	2	2
Partial College	4	3	5	9
High School Graduate	6	10	7	13
Partial High School	2	2	2	1
Junior High School	3	4	2	1
Less than 7 Years of School	-	-	-	-
Unspecified	6	3	5	3
Total	25	30	25	30

Level of education based upon August B. Hollingshead, "The Two-Factor Index of Social Position" (New Haven: Yale University, 1957). (Mimeographed.)