

THE EFFECTS OF STRUCTURED AND
UNSTRUCTURED GROUP COUNSELING
ON MALE COLLEGE STUDENTS,
UNDERACHIEVEMENT

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
William J. Chestnut
1964

This is to certify that the
thesis entitled
THE EFFECTS OF STRUCTURED AND UNSTRUCTURED
GROUP COUNSELING ON MALE COLLEGE STUDENTS UNDERACHIEVEMENT

presented by

William J. Chestnut

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Education

William V. Farguehan
Major professor

Date July 20, 1964

~~DEC 14 1966~~

~~DEC 20 1966~~

~~DEC 20 1966~~ R p 138

~~FEB 26 1968~~ 104

~~MAR 14 1968~~ 17

~~APR 7 1968~~

~~APR 29 1968~~ 152

~~MAY 6 1968~~ 6

~~JUN 18 1968~~ 119

~~SEP 28 1968~~ 157

~~DEC 14 1968~~ R 56

~~FEB 29 1969~~ 119

ABSTRACT

THE EFFECTS OF STRUCTURED AND UNSTRUCTURED GROUP COUNSELING ON MALE COLLEGE STUDENTS, UNDERACHIEVEMENT

by William J. Chestnut

The study was concerned with the effects of a specifically designed group counseling experience on the academic achievement of male, college underachievers. The specifically designed group counseling experience, termed counselor structured was designed to help the male college underachiever bring to awareness those underlying dynamic aspects of his personality which previous research indicates were related to his low-achievement. A second group counseling experience, termed group structured, was employed which was concerned with helping male college underachievers discuss topics that the group felt was important in contributing to underachievement.

The rationale for employing the two types of group experiences was derived from two theoretical positions: (1) the underlying dynamics which contribute to the formation of patterns of underachievement, and (2) directive and non-directive as they refer to the counselors role in the operation of therapy or counseling groups.

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The analysis sample was 81 volunteers from a population of 683 freshmen and sophomore students who were judged to have ability for college achievement but who received less than a C average during the fall term of 1964 at Michigan State University.

The design of the study was based on a two-factor treatment plan. Eight groups were randomly divided between two counselors who each led two groups in a counselor structured experience and two groups in a group structured experience. A third group was included in the experiment to serve as a control. Replication was achieved by duplicating the experimental methods. Students in the two treatment groups who were included in the analysis attended five to eight group sessions which were held for an hour and a half once a week.

An analysis, prior to treatment, of the grade point averages and the scores of the College Qualification Test revealed no differences between the three treatment groups. A post-treatment questionnaire given to determine the students' ratings about the type of treatment they had received revealed significant differences between the counselor structured and group structured experience in accord with the design of the experiment.

An analysis of variance and covariance was conducted on the criterion measure of grade point average for winter and spring term to determine the effects of the two types of

group experiences immediately following and three months after the completion of the experiment. Analysis of variance was conducted on the criterion measures of study habits and attitudes and achievement need to determine the effects of the experiences. The five per cent level of confidence was chosen for accepting or rejecting the null hypotheses.

The findings from the analyses indicate that the students who attended five to eight sessions of the counselor structured group experience had a significantly greater rate of change in grade point average than the students in either the group structured or control groups. The group structured experience had a greater rate of change than the control, immediately after the completion of the experiment. Significant differences in rate of change of grade point averages were found between the counselor structured experience group and the control group three months following the completion of the experiment. No significant differences were found between the counselor structured and group structured experience groups three months following the completion of the experiment. There were no significant differences between the group structured and control group three months following the completion of the experiment. No significant differences were found among the counselor structured, group structured, and control groups on the criterion measures of study habits and attitudes and achievement need.

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Upon examination of the results it was concluded that a counselor structured group experience can have both an immediate and a delayed, even if somewhat limited, effect on improving the rate of change of grade point averages with male, college underachievers.

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By

William J. Chestnut

A THESIS

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

DOCTOR OF PHILOSOPHY

College of Education

1964

Q 33161
7-9-85

ACKNOWLEDGMENT

I would like to express my appreciation to the many people who have made the following study possible.

To Dr. William W. Farquhar, my major advisor, for his invaluable assistance and support and for his helpful criticism of the manuscript.

To Dr. Norman Abeles for his helpful suggestions and criticisms of the manuscript.

To Dr. Josephine Morse for her supervision and support during the experimental period.

To Dr. Jean LePere for her assistance with the many statistical problems of the study.

To Dr. Donald L. Grummon and the staff of the Counseling Center at Michigan State University who helped with the many details and clerical aspects of the study.

To Stuart H. Gilbreath a good friend and co-researcher for his skills and talents as co-counselor in the experiment and his ideas and talents in developing this research project.

To the 81 participants in the experiment who hopefully profited by their experiences as I did.

To a loving and understanding wife, Bette, for her support and encouragement throughout our marriage and my education, and to my children, Cynthia and Michael, for their patience and love.

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CHAPTER I

THE PROBLEM

Group counseling and/or psychotherapy is generally conceded to be of recent origin. In America, it can be traced to the work of Pratt with Tubercular patients. Since his work, there has been a gradual accumulation of experience with a variety of treatment populations and group methods. Such diverse populations as alcoholics, delinquents, undernourished children and their parents, psychotics and relatively normal individuals have been treated in a group setting. Group methods and techniques range from the psychoanalytic and client-centered, through psycho-drama to lecture and inspirational approaches.¹

In the last ten to 15 years, there has been a growing interest in the role of group counseling in college settings and its implication for more economically assisting large numbers of students who have personal and academic problems. Of particular interest, are those students who have the measured aptitude to achieve a level of academic success significantly above that which they actually do achieve.

¹J. W. Klapman, Group Psychotherapy: Theory and Practice (2nd ed.; New York and London: Grune & Stratton, 1959).

Research efforts investigating group counseling with underachievers have primarily focused on the evaluation of the effectiveness of the experience. The criteria frequently used have been increased personal adjustment and self-awareness as measured by personality inventories or rating scales and behavior change as indicated by academic achievement or reduced drop-out rate. The nature of the particular group counseling experience designed to produce the changes, however, has received only limited attention. The dynamic characteristics of underachievers in relation to the group counseling experience and the differential effect which they may have upon the outcome, has generally been neglected by researchers. The present investigation is designed to provide information about this important relationship by analyzing the effects of two types of group counseling experiences as they influence male, college underachievers on certain outcomes of achievement.

Statement of the Problem

The study is an investigation of the effects, on certain outcomes of achievement, for two types of group counseling experiences with male, college underachievers. One experience places emphasis on material structured specifically for the underlying dynamic dimensions of the male college underachiever's genesis of poor scholastic performance, and the other group counseling experience emphasizes the discussion of material which originates within the

group, but which may or may not be concerned with the dynamic dimensions of the male college underachiever as reported in the literature.

The Importance of the Study

Current national and international circumstances have focused attention upon the waste of existing talents and abilities of a vital portion of the population of the United States--the underachieving students.² It is becoming increasingly essential that educational institutions develop effective methods and programs to help these students reach their fullest potential. One approach to the problem used by most educational institutions is that of counseling where psychologically trained personnel provide assistance in the areas of academic adjustment, educational-vocational planning, and personal-social difficulties. However, with a rapidly growing student population and a corresponding increase in student problems, the demands upon counseling services are increasing to the point where the conventional one to one relationship between student and counselor is not always possible. As a partial solution, group counseling has been initiated. Many such programs have begun to investigate the ramifications of their experiences.

² Educational Policies Commission, Manpower and Education (Washington, D.C.: National Education Association of the United States of America, Association of School Administration, 1956).

Because the initiation of group counseling, in a college setting, is in its infancy, full effectiveness from the group processes cannot be expected without appropriate experimental evaluation of the available methods, techniques, and theories.

This study is designed to give information about different kinds of group counseling experiences and their effect on certain achievement outcomes with underachieving male college students. The fact that no study of the relative effectiveness of different affectively oriented group counseling approaches based on the dynamic characteristics of men alone has yet been reported in the literature further emphasizes the need for such research.

Theoretical Background

The etiology of the academic underachiever has been the subject of considerable research and theorizing. Much attention has been given to developing an accurate description of his characteristics, needs, underlying dynamics, and behavioral patterns. Further effort has been directed toward development of theories which integrate these findings to provide an adequate understanding of this particular human behavior. A review of the literature suggests two general areas which have been explored as possibly relating to underachievement: (1) more obvious symptomatic factors, such as aptitude, study habits, reading ability, part-time work schedules, and curriculum choice; and (2) those of an

underlying personal-social nature characterized by self-concept, relationship to parents, expression of impulses, social adjustment, academic motivation, and anxiety level.^{3,4&5} Each of these two areas will be reviewed briefly.

Concern about underachievement became evident in the 1920's when the "how to study" courses were introduced into the college curriculum to deal with the symptomatic aspects of poor academic performance.⁶ As early as 1935 Wrenn⁷ found that underachievers wrote lengthy class notes, failed to get the main points of material to be studied, budgeted their time poorly, read slowly, outlined the text inadequately, and failed to review for examinations properly. He noted that these factors distinguished high ability achieving students from equally high ability, but underachieving college students.

³Charles L. Diener, "Similarities and Differences Between Overachieving and Underachieving Students," Personnel and Guidance Journal XXXVIII (1960), 396-400.

⁴Charles D. Spielberger, "The Effects of Manifest Anxiety on the Academic Achievement of College Students," Mental Hygiene, XLVI (1962), 420-26.

⁵William W. Farquhar, Motivation Factors Related to Academic Achievement, Cooperative Research Project 846, January, 1963 (East Lansing: Office of Research and Publications, College of Education, Michigan State University).

⁶Francis P. Robinson, Effective Study (Rev. ed.; New York: Harper and Brothers, 1961).

⁷G. Gilbert Wrenn, "Aiding the Fit," Journal of Higher Education, VI (1935) 357-63.

More recently the trend in research in the study-skills area has been directed toward developing study habit inventories which reflect characteristics of achievers and aid in predicting academic success. The significance of study mechanics and adequate planning has been emphasized by the findings of Carter⁸ and Chahbazi⁹ in their work with study habit inventories.

The increasing tendency in the past decade for colleges to offer courses in study techniques further attests to the theory that there is a relationship between academic achievement and study skills. A survey conducted in 1953 by Blake¹⁰ indicated that over 90 per cent of the colleges in the United States offered some kind of study-skills course.

The second general approach to the etiology of underachievement is that which is concerned primarily with the underlying personal-social factors. In a study of academic performance in malfunctioning students, Kirk¹¹ hypothesized

⁸H. D. Carter, "Mechanics of Study Procedure," California Journal of Educational Research, IX (1958), 8-13.

⁹P. Chahbazi, "Analysis of Cornell Orientation Inventory Items of Study Habits and Their Relative Value in Prediction of College Achievement," Journal of Educational Research, LI (1957), 117-28.

¹⁰W. S. Blake, Jr., "Study-Skills Programs," Journal of Higher Education, XXVI (1955), 97-9.

¹¹Barbara Kirk, "Test Versus Academic Performance in Malfunctioning Students," Journal Consulting Psychology, XVI (1952), 213-16.

an unconscious motivation among underachievers. She suggests that the underachiever is unable to express negative feelings toward appropriate authority figures and thus retains his hostility. His underachievement satisfies an unconscious motive which is often directed toward the family member who demands success of him.

The most recent theorizing which has been published¹² on underachievement has been the work of Roth and Meyersburg.¹² They have postulated a "non-achievement syndrome" which is revealed through the following symptoms: poor academic achievement, general self-depreciation, lack of recognition of pleasure of "being," no clear system of personal goals and values, vulnerability to disparagement by others, immature relations with parents, frequent depressions, lack of insight about self and others, and free-floating anxiety. In their formulation of the problem, poor achievement does not arise from an incapacity to achieve but is an expression of the student's choice. His choice for poor achievement relates back to inadequate parent-child relationships where parents paid no attention at all to the accomplishments or failures of the child or where they attended only to his failures and rarely to his successes.

¹²R. M. Roth and H. A. Meyersburg, "The Non-Achievement Syndrome," Personnel and Guidance Journal, XLI (1963), 535-46.

Taylor¹³ made an exhaustive review of the general personality characteristics of over and underachievers. His findings lend support to the theorizing of Kirk and Roth and Meyersburg. From the review, the underachiever might be characterized by a lack of realistic purposes and goals, a high need for affiliation, dependent relationships (although consciously denied), a sense of self that is experienced as grossly inadequate and inferior, an inability to directly express anger, a fear of the loss of impulse control (leading to over-control, periodic displacement and/or intrapunitive behavior), a high degree of anxiety, frequent moods of depression, as well as poor study habits, poor motivation, and inappropriate attitudes relating to academic endeavors.

Farquhar,¹⁴ in an investigation of over and underachievement, directed a comprehensive study of the motivational factors underlying achievement of eleventh grade high school students. He found that underachieving students have low self-concept, a generalized free-floating anxiety which is reflected in activity level or hostility, incapacity for time delay, values of conformity to a group, and involvement with simple tasks from which the chances for success are limited.

It is evident that considerable work has been done in studying the relationship between underachievement and

¹³Ronald C. Taylor, "Personality Traits and Discrepant Achievement: A Review," Journal of Counseling Psychology, I (1964), 76-82.

¹⁴Farquhar, op. cit.

such factors as scholastic skills and personality variables. The literature suggests two general approaches which are being taken by educational institutions to provide constructive aid for the underachieving student. The first is the study-skills or orientation course where the major emphasis is upon the more obvious symptomatic problem areas related to academic underachievement. The second approach is the individual and group counseling opportunities which are often designed to provide assistance with the underlying personality dynamics of underachievement. There is, of course, overlapping of material in each of these programs.

The question arising, is whether a group counseling approach that is probing and which dynamically relates scholastic skills with personality dynamics is relatively more effective than a more conventional approach which is supportive and uses material spontaneously derived from the group.

Will high ability underachieving students benefit more from an approach that directively presents topics that dynamically relate scholastic skills and personality dynamics or from an approach that is group centered and which uses that material that spontaneously arises from the group itself? Will students receiving either of these experiences benefit more than a group that has received no comparable experience? In this investigation, answers to these questions will be sought in a group counseling design which provides for a comparison of the effects of two different treatments

and a comparison of the effects of either treatment with a control group receiving no treatment, on certain outcomes of achievement.

The Hypotheses

This study was designed to investigate the following basic research hypotheses:

1. The academic achievement of students who have experienced a counselor structured group experience will be greater than those in either a group structured experience or for those who did not participate in group counseling at the completion of the experiment and three months following the completion of the experiment.
2. The study habits and attitude scores of students who have experienced a counselor structured experience will be greater than those in either a group structured experience or for those who did not participate in group counseling at the completion of the experiment.
3. The achievement need of students who have experienced a counselor structured group experience will be greater than those in either a group structured experience or for those who did not participate in group counseling at the completion of the experiment.

Definition of Terms

For purposes of clarification, three terms which are frequently used throughout the report of this investigation are defined.

1. Underachiever: An individual who scores at or above the 50th percentile on the College Qualification Test and receives less than a C average in his college work.
2. Group Structured Group Counseling: An experience, shared by a group of students and a counselor, which places emphasis on material spontaneously originating within the group. The counselor is an active participant in the group discussion. However, topics to be discussed, group movement, digression, and time spent on particular topics and problems are determined by the group as a whole, not the counselor.
3. Counselor Structured Group Counseling: An experience, shared by a group of students and a counselor, which places emphasis on material based upon a priori diagnostic assumptions and presented by the counselor for discussion. Purposes and goals, dependence-independence, expression of anger, and feelings about self are examples of the topics presented by the counselor and discussed by the group. The Counselor presents each topic with a realistic example, and the group freely discusses their experiences and feelings as they relate to the particular

topic introduced. During the discussion the counselor actively relates personality variables with scholastic difficulties and achievement to hasten group movement and increase awareness.

Organization of the Study

The general plan of the study is to present in the following chapter a review of research which is related to the problem of aiding underachievers through group procedures. In Chapter III the design of the study will be described with reference to sampling procedure, method of treatment, the null hypotheses, and the type of analysis. The results of the analysis is reported in Chapter IV. Chapter V will include the summary, conclusions, discussion, and recommendations.

CHAPTER II

REVIEW OF LITERATURE

Group methods for improving academic achievement range from the cognitive, lecturing emphasis to the affectively oriented therapy approach. A review of the literature is a complex task due to several factors; one, the problem itself is rather vague and not completely understood, two, the research is scattered throughout the areas of education and psychology, and three, the area is one which covers a wide spectrum of concern. For the purposes of this review, only those studies which are closely related to the problem of this investigation will be considered. These have been rather generally categorized into the following classifications:

1. Outcome studies that have investigated the effects of group counseling on academic achievement.
2. Comparative studies that have investigated the differential effects of different methods and/or techniques of counseling on academic achievement.

Outcome Studies: The Effects of Group Counseling on Academic Underachievement

One of the first investigations of the effects of group counseling on academic achievement was reported by

Anderson¹ in 1956. The purpose of the study was to enhance academic performance and to facilitate the solution of personal problems. Sixty freshmen in a women's college were randomly assigned to experimental and control groups. The homogeneity of the two groups was assessed by statistical analysis prior to counseling. The treatment was unstructured, with the direction of the discussion left, for the most part, to the wishes of the participants. The treatment period consisted of eight sessions. Rating scales were used to evaluate the effects of counseling on the solution of problems, and grades were compared for an assessment of academic performance.

An analysis of the results led Anderson to conclude that group counseling of no more than eight sessions can be effective in helping students with personal-social and college adjustment problems. However, there was no evidence that it enhances academic performance.

The main criticism of Anderson's report and its conclusions is that the positive findings reported were based upon the accuracy of non-validated rating scales and the students judgements concerning the effects of treatment. The latter could be particularly contaminated with halo effects.

¹R. L. Anderson, "An Experimental Investigation of Group Counseling with Freshmen in a Woman's College" (unpublished Ph.D. dissertation, New York University, 1956).

Caplan² reported an investigation of the effects of group counseling on the self-concept and academic achievement of junior-high boys who had long-term records of frequent conflict with school authorities and regulations. Thirty-four boys were divided into six groups, three experimental and three controls. The three experimental groups met with regular school counselors for ten weekly, 50 minute sessions. These group meetings were conducted in a permissive atmosphere with only minimal limits on behavior. The counselors were non-evaluating sounding boards for feelings of hostility against school in general, particular teachers, and parents.

The design of the study included pre- and post-treatment Q-sorts for the assessment of changes in self-concepts and ideal self-concept. Honor point ratios were used to evaluate the academic performance of the subjects. Caplan reports that changes between the pre- and post-treatment Q-sorts of self-concept and ideal self-concept were significant for each experimental sub-group and within the total experimental group; whereas, no such changes took place within any of the control sub-groups not within the total control group. An analysis of the post-treatment honor point ratios of both the treatment and control groups were inconclusive about the effectiveness of group counseling on academic achievement.

²S. W. Caplan, "The Effects of Group Counseling on Junior High School Boys' Concepts of Themselves in School," Journal of Counseling Psychology, IV (1957), 124-28.

The following criticisms are made of Caplan's investigation: he does not report how his subjects were selected nor how subjects were assigned to the respective groups, no pre-treatment assessment was made of the homogeneity of the groups on ability and previous grades, the effects of the three counselors on the criteria was not controlled, and the subjects were allowed to participate in other experiences such as individual counseling during the experimental period.

The two previously cited studies have been concerned with personality change as well as academic achievement and its enhancement. The next report to be cited is one which is particularly concerned with the academic achievement of bright, underachieving adolescent boys. McCarthy³ was interested in evaluating the effects of a modified, non-directive group counseling approach on the grade improvement and attitude change of such a population. Twenty-four boys with the greatest discrepancy between aptitude and academic achievement from 17 Boston high schools were non-randomly assigned to two experimental and two control groups of six boys each. A check on the equivalence of the groups prior to treatment revealed equal variances in ability, achievement, and personality variables.

The counselor in the treatment groups began each session by introducing a disguised case study resembling an

³M. V. McCarthy, The Effectiveness of a Modified Counseling Procedure in Promoting Learning Among Bright Underachieving Adolescents, Research Project ASE-6401 (Washington, D.C.: Department of Health, Education, and Welfare, 1959).

underlying problem of one of the students in the group. Once the material was presented, the counselor assumed a non-directive role and left the direction of the session to the students. The experimental groups met once a week for six weeks. Changes in attitude were assessed by a Q-sort and a sentence completion test. Improvement in academic achievement was determined by grade point averages. McCarthy concluded that the type of group counseling used with the experimental subjects was ineffectual in improving academic performance or changing attitudes. The control group did not differ from the experimental groups on these criteria.

The conclusions of the study are rather tenuous concerning the effectiveness of group counseling due to the small sample, non-random assignment of subjects to treatment, no control for motivation for counseling, and failure to replicate the experimental treatment by using more than one counselor. However, this report is commendable in that a clear description of the treatment was made.

In another study with adolescents, Broedel⁴ and associates investigated the effects of group counseling on 29 freshmen high school underachievers. The students were selected on the basis of high ability for scholastic work as measured by the California Test of Mental Maturity and low grade point averages. The students were assigned to two

⁴J. Broedel, et al., "The Effects of Group Counseling on Gifted Underachieving Adolescents," Journal of Counseling Psychology, VII (1960), 163-70.

experimental and two control groups by use of random numbers. During the experimental period the treatment groups received 16 sessions of group counseling and the control group received no treatment. At the completion of the experimental period, the control groups were counseled for 16 sessions. The experimental design provided a control for both treatment and time effects.

The criteria for evaluating the effects of the group counseling were grade point averages, scores on the California Achievement Test, and personal adjustment as assessed by a special picture story test and the Mooney Problems Check List. It was concluded from an analysis of these criteria after treatment that group counseling did not improve academic achievement. However, the experience did aid the students in acceptance of self and others. Two follow-up studies conducted four and 18 months after treatment revealed no changes in the original outcomes.

Broedel's investigation presents two strengths not often found in the research literature on group counseling. For one, the design controls for both treatment and time effects. Secondly, it provides for a follow-up evaluation of the effects of treatment. Unfortunately the study did not apply appropriate sampling techniques in the selection of subjects by including some students in the experiment who objected to the experience. There was also a failure to include a description of the treatment conditions.

The review at this point will turn to those studies of the effectiveness of group counseling on academic achievement that are primarily concerned with individuals in a college population. More particularly, these studies will be concerned with students who are in academic difficulty due to poor academic performance, but who have potential for relatively high academic achievement.

Winborn and Schmidt⁵ reported on an investigation of the effectiveness of short-term group counseling on the academic achievement of potentially superior but underachieving college freshmen. They selected a population of 135 students on the basis of high aptitude scores but low first semester grade point averages. From this population a random sample of 68 students was drawn and then randomly assigned to experimental and control groups. The groups were found to be homogeneous prior to treatment. The experimental group was then divided into six sub-groups and each group of the experimental section then received six counseling sessions by two counselors who were considered skilled in techniques of counseling.

Criteria for evaluating the effectiveness of the experience were grade point averages, and selected scales of the Psychological Inventory. After treatment, differences

⁵B. Winborn and L. G. Schmidt, "The Effectiveness of Short-Term Group Counseling Upon the Academic Achievement of Potentially Superior but Underachieving College Freshmen," Journal of Educational Research, LV (1962), 169-73.

in mean grade point averages between the experimental and control groups were found to be significant. The subjects in the control group however, were found to have higher grade point averages than those in the experimental group. There were no differences between the experimental and control groups on any of the scales measuring personality change.

To understand these negative findings of the Winborn and Schmidt investigation a careful description of the nature of the treatment is needed, as well as an assessment of the motivation of the students participating in the experiment. This criticism of course, can be justifiably made of the majority of the studies included in this review.

Duncan⁶ reports an investigation of the effects of required group counseling with college students in academic difficulty. He selected 62 students who were on academic probation at the University of Florida and assigned them randomly to experimental and control groups. The students were required to attend 12 sessions of group counseling conducted by three doctoral students. Each counselor had a group of nine to 11 students.

The criteria for evaluating the effectiveness of required group counseling was changes in grade point averages and attitude change as reflected on a self-rating scale. In analyzing his data, Duncan found no differences between the

⁶D. R. Duncan, "Effects of Required Group Counseling with College Students in Academic Difficulty" (unpublished Ed.D. dissertation, University of Florida, 1962).

experimental and control groups on either of the criteria. He concluded that there was little if any effect from requiring group counseling with students in academic difficulty. Duncan's investigation lends further support to the assumption that in order for counseling to be effective, the participants must desire or be motivated for the experience. This consideration has been neglected in many research designs by not equating the motivation of experimental and control groups.

In his dissertation, Maroney⁷ investigated the effectiveness of short-term group guidance with transfer students admitted on academic probation. He randomly assigned fifty-two transfer students who were on academic probation, to an experimental and a control group. In a pre-treatment assessment of homogeneity, both groups were found to be equal in ability and academic achievement. The experimental group was divided into four sub-groups. One counselor led all sub-groups in semi-structured group discussions of educational and vocational information, study techniques, and information regarding the mechanics of academic probation. The treatment period lasted six weeks with each experimental sub-group completing 13 sessions.

The criteria used to evaluate the effectiveness of the study were grade point averages and the scales on the

⁷K. A. Maroney, "Effectiveness of Short-Term Group Guidance with a Group of Transfer Students Admitted on Academic Probation" (unpublished Ed.D. dissertation, North Texas State University, 1962).

Edwards Personal Preference Schedule. Maroney's analysis revealed greater, but non-significant increases in grade point averages for the experimental group than the control group. Minor changes on the Personal Preference Schedule were interpreted as not significant.

Maroney's study presents several research problems. For one, the students in this study were a whole population which was unique in its characteristics, hence any generalizations of the results of the study are limited to a similar population. Another problem encountered in this study was that the competency of the single counselor was not taken into account in interpreting the results. Also, while there were thirteen sessions for each group, the range of sessions attended by the various group members was large. An extraneous variable was introduced into the study because both the experimental and control groups were informed of the experiment prior to the treatment. These research problems tend to make the conclusions of the study tenuous.

One of the most elaborate and well done studies concerning the effectiveness of group counseling was conducted by Spielberger, Weitz, and Denny.⁸ They investigated the effects of group counseling on the academic performance of anxious freshmen. From a population of 565 male, liberal arts freshmen, 112 met the selection criteria of high anxiety

⁸C. D. Spielberger, et al., "Group Counseling and the Academic Performance of Anxious College Freshmen," Journal of Counseling Psychology, IX (1962), 54-61.

and high ability as determined by standardized personality and aptitude tests. Fifty-six of the criterion population volunteered for group counseling. The volunteers were matched on factors such as ability, major field of study, and type of high school attended, and then were assigned to an experimental and control group. The experimental group was then divided into four sub-groups.

The group sessions were conducted by two counselors experienced in counseling and clinical work. The group participants were encouraged to discuss problems of any sort; the topics most favored were methods of study, vocational goals, and academic difficulties. The treatment groups attendance, ranged from eight to eleven sessions.

The criterion for evaluating the effectiveness of group counseling were: grade point averages, class attendance, results of the Survey of Study Habits and Attitudes, and personality patterns as determined by the Minnesota Multiphasic Personality Inventory. These criteria provide alternate explanations for factors that are related to scholastic performance.

The results of the Spielberger et al. investigation, in comparison with the non-significant findings of the previously cited studies, revealed that the counseled students' scholastic performance demonstrated significantly greater improvement than the non-counseled students. Spielberger and his associates also found that it was possible to isolate a personality pattern which uniquely characterized

the students who attended the counseling sessions regularly. However, a check of the students in the control group with the same personality patterns did not show a similar degree of academic achievement.

The Spielberger et al. investigation demonstrates three experimental procedures seldom found in the research of group counseling. The motivation of the participants in both the experimental and control groups was controlled by only including those subjects who volunteered. The influence of personality patterns which may have influenced the results were also examined, as was the variable of length of treatment.

Comparative Studies: The Effects of
Different Methods of Counseling
on Academic Achievement

Baymur and Patterson⁹ compared the effects of three methods of assisting underachieving high school students. They selected as subjects for their study, 32 high school juniors who were considered underachievers on the basis of a large discrepancy between scores on an aptitude test and school grades. The subjects were matched on selected variables and assigned to one of four groups. Complete randomization of assignment was impossible due to scheduling difficulties.

⁹F. A. Baymur and C. H. Patterson, "A Comparison of Three Methods of Assisting Underachieving High School Students," Journal of Counseling Psychology, VII (1960), 83-9.

The three methods under investigation were as follows: individual counseling on a weekly basis for a maximum of twelve weeks, group counseling for nine sessions, and a one-session motivational group meeting. The fourth group served as a control and received no treatment. The counseling approach used in the individual and group counseling was described as client-centered. The one-session motivational treatment was designed to bring the students to an awareness of their underachievement and the value of applying themselves to their school work. One counselor served all three groups.

The criteria for evaluating the effectiveness of the three different methods were grade point averages, scores on the Brown-Holtzman Survey of Study Habits and Attitudes, and personal adjustment as measured by carefully prepared Q-sort. An analysis of variance of the grade point averages was not significant. However, when the two counseling groups were combined and compared with the one-session motivational group and the control group, the grade point averages of the counseling groups was found to be significantly higher than that of the non-counseled groups. The same two step analysis produced similar results with personal adjustment scores from the Q-sort. The authors recognized the weakness in the analysis procedure and hence made no conclusions about the effectiveness of any of the treatment conditions.

Limitations of the investigation are like those found in many studies previously cited in this review. They are

(1) small sample size, (2) no control for motivation, (3) lack of follow-up beyond the experimental period, (4) failure to include a detailed description of the treatment variables and (5) dependence upon the skills and personality of one counselor.

In his dissertation Clements¹⁰ compared the effectiveness of individual and group counseling with able underachievers, when counselor time was held constant. All fifth, eighth, and tenth grade male students of a school district were screened to ascertain if they met the criteria of able underachievers based on group test results. These criteria were a group intelligence test score of 110 or above and a grade point average of C or less. Those who passed the initial screening were then tested by a school psychologist. Students were accepted on the basis of Wechsler full-scale scores of 110 or higher. The investigator matched two group counseling groups, two individual counseling groups, and two control groups of eight students each on each grade level in the study, using eleven factors. These 144 subjects were given the initial Butler Self-Concept Q-sort prior to counseling.

The group counseling groups met one hour per week for sixteen weeks. During this period of time each group

¹⁰Thomas H. Clements, "A Study to Compare the Effectiveness of Individual and Group Counseling Approaches with Able Underachievers When Counselor Time is Held Constant" (unpublished Ph.D. dissertation, University of Southern California, 1963).

counselee received two half-hour adjunctive counseling interviews. In the same period of time individual counselee's received three one-hour counseling interviews. The groups and the individual interviews were conducted by two school psychologists. The control group received no counseling.

Clements assumed that the sixteen one hour meetings of the groups plus the two half-hour interviews equaled the three hours received by the subjects in the individual counseling group. Comparable topics of discussion were covered in the group and individual counseling.

The criteria for evaluating the effectiveness of the group and individual counseling were pre and post-treatment changes of self-concept as measured by Butler Self-concept Q-sort, grade point averages, and separate interviews of the students and their parents by a counselor. Clements found no changes in self-concept or in grade point averages. However, he reports that the interviews with both the students and parents indicates that the group counselee's showed a greater increase in their verbal expressions of feeling within the home.

There are several limitations of this study due to the lack of control for motivation, each treatment was dependent on the skill and personality of one counselor, and there was no follow-up after a span of time. A further weakness is the assumption that equal amounts of time were expended with subjects in both the group counseling and in the individually counseled group.

The last two studies reviewed have been with population samples drawn from high school students, and in the last instance, with students at a pre-adolescent level of development. The studies to follow, are primarily focused on subjects at the college level and as such are of primary interest to the present investigation.

Sheldon and Landsman¹¹ investigated the comparative effects of non-directive group counseling and conventional classroom instruction on academic achievement, reading skills and personality change of college students. They selected twenty-eight freshmen whose academic performance during their first semester of college was below expectations, and invited them to participate in a course. Using a matched pair technique, these students were divided into two classes. The classes were judged to be homogeneous in aptitude, reading skills and personality.

The treatment consisted of a lecture on study-skills and reading improvement which was given to the combined classes three times a week. Twice a week the two classes were separated with one continuing to be taught by the same lecturer in a conventional lecture discussion session, while the other class participated in non-directive group therapy sessions conducted by a competent non-directive therapist. The therapy group often explored personal and social problems

¹¹W. D. Sheldon and T. Landsman, "An Investigation of Non-directive Group Therapy with Students in Academic Difficulty," Journal of Consulting Psychology, XIV (1950), 210-15.

introduced by the group members. The treatment lasted for one term.

The criteria for evaluating the effectiveness of the two treatment methods were grade point averages, reading skills as measured by the Iowa Silent Reading Test, and personality characteristics as measured by the California Test of Personality.

The investigators reported that the members of the non-directive therapy groups had significantly higher grade point averages at the conclusion of the treatment period than the students taught in a conventional manner. They found no differences between the groups on either the reading or the personality measures.

There are several weaknesses in the design of this study that lend tenuousness to the results. No mention was made in the report concerning the motivation of the students for assistance, nor how they were selected. The counseled group received both types of treatment thus hindering the isolation of treatment variables. There was no control for the group leaders; one was a skilled therapist while the other was not. These factors tend to load the design in favor of the non-directive counseling method and hence the results are not as clear as might be expected. Finally, the matched pair technique has fairly severe limitations as it tends to increase Type II error.

In his doctoral study, DeWeese¹² investigated the scholastic achievement of students receiving group counseling as compared to students taking a remedial reading course. His report includes two experiments, the first was a pilot study and the second was an attempt to clarify the results of the first. DeWeese selected low achieving first semester college students as subjects for both experiments. In both cases he controlled for motivation, assigned students randomly to treatment and control groups, and verified the homogeneity of the groups on ability and grades.

The students in the counseling groups discussed such topics as study skills, reading habits, and educational planning. Those assigned to the remedial reading groups, were included in a regularly taught reading class offered by the Reading Institute of the university.

DeWeese found that there were no statistically significant differences in grade point averages in either experiment between the counseling and reading groups. However, students in the counseling groups improved their grades enough so that significantly more were permitted to remain in college than students in the reading group.

Although this study is more carefully controlled and designed than others previously reviewed, the following

¹²H. L. DeWeese, "The Extent to Which Group Counseling Influences the Academic Achievement, Academic Potential, and Personal Adjustment of Predicted Low-Achieving First Semester College Freshmen" (unpublished Ed.D. dissertation, University of Illinois, 1959).

limitations are noted: (1) sample size was small, ranging from six to sixteen, (2) the length of treatment varied within and between experimental groups, and (3) the reading groups treatment effects were contaminated by being included in a regular class rather than being dealt with separately.

Marx¹³ completed a doctoral study in which he compared the effectiveness of individual and group counseling on the academic performance of underachieving college students. A sample of 181 freshmen were identified as underachievers on the basis of a large discrepancy between ability and first semester grade point averages. From this population 46 students were selected to receive group counseling, 58 were to be seen as individual counseling clients, and 24 served as a control group. The experimental subjects volunteered to receive counseling, but the control group was given no chance to volunteer. Another group of 53 students who declined the opportunity to receive counseling were included in the design as a second control group.

The criteria used for evaluating the effectiveness of the two counseling methods were increases in grade point averages and the number of credit hours which were completed during the semester in which the counseling was offered. The counseling in both groups focused on study skills, and educational-vocational planning and was conducted by three

¹³G. L. Marx, "A Comparison of the Effectiveness of Two Methods of Counseling with Academic Underachievers" (unpublished Ph.D. dissertation, State University of Iowa, 1959).

doctoral students. The number of sessions attended, in either of the two treatment groups, ranged from one to four.

Upon analysis of his post-treatment data, Marx concluded that the results pertaining to the effectiveness of counseling with underachieving students must be considered inconclusive. He found no differences between either of the counseled groups and the control group that had no opportunity to volunteer. The control group that refused counseling received significantly lower grade point averages than the students who received individual counseling. In a comparison of the two counseled groups, Marx noted significant differences in the grade point increases between students who received individual counseling and students who participated in group counseling. These differences were in favor of the individually counseled subjects.

The results of the Marx investigation would be more conclusive if there had been a more stringent control on motivation, the number of interviews were increased, and the variance of attendance had been reduced.

In his doctoral study, Speegle¹⁴ evaluated the effectiveness of individual and group counseling with students on academic probation. The sample for this study was selected from a population of 180 second semester college freshmen who were on academic probation. The students

¹⁴P. T. Speegle, "The Effectiveness of Two Techniques of Counseling with Students on Academic Probation" (unpublished Ed.D. dissertation, North Texas State University, 1962).

selected were assigned to one of three groups; one received group counseling, another individual counseling, and the third served as a control group.

The treatment consisted, for both groups, of two to five contacts with a counselor in which study habits and skills were discussed. Grade point average increases and eligibility to remain in school were the two principle criteria used in the study.

The results of the experiment show no statistically significant differences in grade point average among any of the three groups. However, more students who received group counseling were able to remain in school because of acceptable grades than students participating in individual counseling or those in the control group.

A number of weaknesses can be found in Speegle's dissertation after a careful review. The control group was not selected from the students who volunteered for counseling. Although the students receiving treatment were sorted into two general categories according to high and low ability, no evaluation was made of the pre-treatment homogeneity of the treatment and control groups on ability or first term grade point averages. Two counselors were used in the experiment, but no estimate was made of their effect on the treatment. The number of treatment interviews was small and the variability of the students' attendance at the counseling sessions was large.

A recently completed doctoral study by Hart¹⁵ investigated the effects of two types of group experience on the academic achievement of freshmen college students. A group of 561 freshmen were identified as having high ability for college achievement, but who received unsatisfactory grades in their first term. Out of this population, 96 volunteered for the program. This sample was then randomized into three groups; an affective group, a cognitive group, and a control. The cognitive group placed emphasis on material concerned with specific intellectual problem areas related directly to scholastic achievement. The affective group emphasized material stressing topics dealing with personal problems and personality dynamics. Two experienced counselors conducted the group meetings thus replicating the experimental methods. Group sessions were held for one hour once a week for seven weeks.

A pre-treatment analysis of grade point averages and aptitude scores revealed no differences between the three treatment groups. A post-treatment survey conducted to determine students' opinions about the type of group experience they had received revealed complete agreement concerning the type of treatment they received, i.e. either cognitive or affective. Only students who had attended between five and seven sessions were included in the analysis.

¹⁵D. H. Hart, "A Study of the Effects of Two Types of Group Experiences on the Academic Achievement of College Underachievers" (unpublished Ph.D. dissertation, Michigan State University, 1963).

An analysis of the data indicated that on the main criterion of grade point averages, that for the treatment period the students who experienced the group counseling, of either type, earned significantly higher grade point averages than did the no treatment control group. In a follow-up, three months after the treatment period, no significant differences in grade point averages were found among the students in either of the treatment groups or the control group. Hart concluded that group experiences can have an immediate effect in improving scholastic achievement, but continued increases after termination of the experience is questionable.

The Hart study represents a considerable improvement over other studies reviewed in terms of design. By including three principles essential to modern research; randomization, replication, and control, he has developed a design which corrects many of the frequent weaknesses found in research on the effectiveness of group counseling. The results of this study may be the consequence of the particular sample used in the study. Freshmen often have difficulties adjusting to college and it is well known that anxiety is often the result of this difficulty in adjusting. Hart may have reduced anxiety in the treatment group sooner than those in the control but over time the effects of anxiety were reduced in the controls and they were thus able to catch up to the others at the end of their first year of college work.

Summary

The review of the literature pertinent to the present investigation was focused on studies which evaluated (1) outcomes of group counseling on scholastic achievement, and (2) comparative studies that have primarily investigated the differential effects of different methods and/or techniques of counseling on academic achievement. The pertinent findings of the review are summarized in the following paragraphs.

Investigations of the hypothesis that group counseling has a measurable effect upon scholastic achievement have been negative in twelve of the fifteen studies reviewed. However, due to the design limitations of the Sheldon and Landsman¹⁶ study, only the experiment of Spielberger, Weitz, and Denny¹⁷ and the research of Hart¹⁸ have clearly indicated that group counseling can facilitate academic achievement.

Six of the 15 studies reviewed reported higher grade point averages for counseled groups in comparison to controls, even though the differences were not necessarily statistically significant. Only one study reported that the control group achieved better grade point averages than the counseled group. Speegle¹⁹ and DeWeese²⁰ both reported that

¹⁶Sheldon and Landsman, op. cit.

¹⁷Spielberger, et al., op. cit.

¹⁸Hart, op. cit.

¹⁹Speegle, op. cit.

²⁰DeWeese, op. cit.

significantly more of the counseled group were allowed to remain in school because of improving grade point averages than those in the control group.

It is possible that the "Hawthorne Effect" may operate in the studies such as those reviewed and increase motivation and effort on the part of the participants in the investigation. This may be the reason for the slight but non-significant results reported in the preceeding paragraph.

No studies have been conducted which evaluate the effects of group counseling where the source of content for group discussion, i.e. content originates either spontaneously within the group or with the group counselor, has been the treatment variable. Only Hart²¹ has compared the effects of two types of group counseling, but these were different not only in content but also on the experiential level.

Research in group counseling is hindered by numerous limitations in design and methodology which impede consistent results. The most common limitations are:

1. Unsatisfactory sampling techniques.
2. Failure to use large enough sample size from which generalizations can be made.
3. Unsatisfactory control for motivation.
4. Unclearly defined treatment variables.
5. Unsatisfactory isolation of treatment conditions.
6. Failure to reduce the variance among students in the number of sessions attended.

²¹Hart, op. cit.

7. Failure to provide treatment of reasonable length for changes to occur.
8. Unsatisfactory or non-existent follow-up evaluations.
9. Lack of appreciation for the specific aspects of academic underachievement.

None of the studies reviewed are comparable to the present investigation. Little attention has been given to the variable of group structure and content as determined by either the group itself or by the counselor. Furthermore, there has been no evaluation of a probing type of counseling as opposed to a more supportive type of counseling. This investigation is designed to make such a comparison. Finally, in designing and conducting the experiment an attempt has been made to correct the frequent limitations which are found in many of the studies reviewed.

CHAPTER III

DESIGN AND METHODOLOGY

The experiment is designed to test the relative effectiveness of two types of group counseling on the academic achievement of underachieving male, college students as measured by grade point average, study habits and attitudes, and achievement need. Three essentials of modern design are incorporated in the experiment: Randomization, replication, and control.

Design

The design of the experiment is a two-factor treatment plan¹ consisting of a two-way classification with unequal frequencies within sub-classes, but retaining proportionality between columns. (summarized in Table 3.1).

The eight counseling groups were divided equally between two counselors and two types of group counseling, counselor structured and group structured. (The two types of counseling are described later in this chapter.) Subjects were assigned on a random basis to treatment groups and counselor. Replication was obtained by duplicating the counseling methods. The third level of the design, the

¹William S. Ray, An Introduction to Experimental Design (New York: Macmillan Company, 1960).

control group, received no treatment, but served to provide data for testing the research hypotheses that group counseling did in fact improve the student's scholastic performance.

Table 3.1. Summary of basic design of the experiment.

Counselor	Method		Control
	Counselor Structured	Group Structured	
Counselor A	Two Groups	Two Groups	No Treatment
Counselor B	Two Groups	Two Groups	

Three criterion were used to measure the outcome of the experiment. Measures for achievement need were obtained from both experimental and control subjects at the end of the treatment period with the Stern Activities Index. Measures of study habits and attitudes were obtained with the Brown-Holtzman Survey of Study Habits and Attitudes. Both of these instruments were used to determine the effects of group counseling during the term in which treatment was administered. Grade point averages for winter and spring terms of the 1963-1964 school year were used to provide an assessment of treatment effectiveness during the experimental period and a follow-up assessment three months after completion of the experiment.

The Population

There were 683 male students at Michigan State University, in either the freshman or sophomore class, who had obtained a raw score on the total scale of the College Qualification Test of 138 or higher and who had received a fall term grade point average which was 2.00 or below. For these particular subjects, a raw score of 138 falls at the 50th percentile. The grading system used at Michigan State University is based on a four point scale. An average grade of C is equivalent to a 2.00. For the purposes of this investigation, any freshman or sophomore male student scoring at or above the 50th percentile on the C.Q.T. and receiving a grade point average of less than a C is considered an underachiever.

Letters were sent to the 683 underachieving male students during the winter term registration period inviting them to come to the Michigan State University Counseling Center and participate in a group discussion experience (a copy of the letter is included in Appendix A). They were told that the experience was designed to help students in scholastic difficulty and would take place once a week during the winter term. There were 96 students who indicated a willingness to participate in the program. Ten letters of the original 683 were returned because the students had withdrawn from school. An additional 15 students indicated a willingness to participate in the program, but not until after the counseling had begun, hence they were not included in the groups.

Random Assignment

The random assignment of subjects to treatment and counselor was executed in the following way: time schedule forms which were returned by the students to indicate their willingness to participate in the program and which included the times they had available for group meetings, were sorted into 12 groups on the basis of common times available for meetings. From the 12 groups, four were selected at random and designated as controls. The remaining eight groups were assigned to either counselor structured groups or to group structured groups by the flip of a coin. The counselors were each assigned two group structured and two counselor structured groups by the flip of a coin.

At the beginning of the experiment the students were divided in the following way: 30 were assigned to the group structured experience, 29 were assigned to the counselor structured experience, and 37 were assigned to the no-treatment control group. The control group was informed that due to the large response from students who desired to participate in the program, that not all could be accommodated in the group sessions. However, they would have an opportunity to participate in a testing program later in the term and would not be withdrawn from the university for academic reasons. Both stipulations were also true for the experimental groups. (a copy of the letter sent to the control group is included in Appendix A). This procedure with the

control group was followed so that the individuals in the group might not react negatively to being excluded from the group counseling program.

Sample

Before describing the characteristics of the 81 students used in the experimental analysis, it is appropriate to account for the 15 students who were initially included in the groups but not included in the analysis.

The experiment was designed to include eight group sessions of an hour and a half each. The students who are included in the analysis attended a minimum of five sessions. This acceptable range of attendance was chosen for several reasons. The first was that it allowed for unavoidable circumstances such as illness, that might occur during the treatment period. Another factor is that those students who dropped out of the experience prior to its conclusion as a whole attended less than the five session minimum. Further, if only those students who had attended the eight sessions were included in the analysis, the number would have been below the point where a reasonable analysis could have been made.

The two counselor structured groups assigned to Counselor A at the beginning of the experiment contained a total of 15 students, eight in one group and seven in the other. Three failed to attend the minimum of five sessions and one did not report for the first session. This left a

total of 11 students in the cell for analysis. Counselor B was assigned two counselor structured groups with a total of 14 students, seven in each group. There were eleven of these who were available for analysis and who attended the five session minimum. Of the three excluded from the analysis, two did not attend the five session minimum, and one was asked to withdraw from school by the Office of Vocational Rehabilitation, under whose sponsorship he was attending.

The two group structured groups assigned to Counselor A began the experiment with a combined total of 16 students; 13 were available for analysis. Three students failed to attend the five session minimum. There were 13 students available for analysis from the group structured groups of Counselor B. He began the experimental period with two groups of seven each. However, one was dropped to facilitate the analysis by making the frequencies proportional between the counselors. The student dropped had a mean C.Q.T.-T score and GPA for fall term, hence his being dropped did not disturb the group mean or variance.

A summary of the number of students who met the five session criterion reveals 11 students receiving counselor structured group counseling from Counselor A, 11 students receiving counselor structured group counseling from Counselor B, 13 students receiving group structured group counseling from Counselor A, and 13 students receiving group structured group counseling from Counselor B. Because of the small numbers in each of the cells, it was decided to do the

analysis with proportional frequencies between counselors so that more of the data available might be retained.

There were 37 students who had been assigned to the control group at the beginning of the experiment. Of these students, one was enrolled in the "Methods of Study" class, one was participating in a special university project and received individual and group counseling during both the preceding term and during the experimental period. Two students dropped out of school before the end of the term. Thus, 33 students were finally available for analysis in the control group.

While assignment of the various treatment groups and counselors was on a random basis and pre-experimental equivalence may be assumed, data in Tables 3.2 through 3.6 give further support to this assumption.

In Table 3.2 is summarized the number and class of the students in each treatment group who are included in the analysis. Although there is a disproportion in the number of freshman and sophomore students, these differences were not considered of primary importance.

Because the basic criterion used in the experiment is the student's grade point average, the similarity of academic aptitude of the students in each treatment group is essential. Table 3.3 is a summary of the group means of the total raw scores obtained on the College Qualification Test.

Table 3.2. Number and class of students in each treatment group who are included in the analysis.

N=81

Counselor	Counselor Structured	Group Structured	Control
A	5 freshman 6 sophomore	8 freshman 5 sophomore	27 freshman 6 sophomore
B	8 freshman 3 sophomore	9 freshman 4 sophomore	
Total	13 freshman 9 sophomore	17 freshman 9 sophomore	27 freshman 6 sophomore

Table 3.3. Total raw score means for the College Qualification Test for each group and counselor.

N=81

Counselor	Counselor Structured	Group Structured	Control
A	150.36	149.46	155.24
B	153.18	152.31	
Total	151.77	150.88	155.24

Inspection of the data in Table 3.3 reveals differences among the three treatment groups which, because of random assignment, are assumed to have occurred by chance. To test this assumption, the null hypothesis that there is no

difference between treatment groups on academic aptitude was tested by analysis of variance.²

The results of the analysis of variance of the three treatment groups are summarized in Table 3.4. The null hypothesis was accepted, and it was concluded that there were no statistically significant differences among the three treatment groups on academic aptitude. The differences that appear in Table 3.3 are of a magnitude that could be expected by chance variation.

Table 3.4. Analysis of variance of the College Qualification Test raw scores of the randomly assigned students.

Source of Variation	S.S.	D.F.	M.S.	F	Hypothesis Tested
Between Treatment	314.64	2	157.32	1.09	Accepted
Within Treatment	11252.57	78	144.26		
Total	11567.21	80			

A second consideration in determining the pre-experimental equivalence of the groups is the fall term grade point averages. If post-experimental conclusions are to be drawn attributing the differences between groups to a particular treatment, then the groups must be similar at the

²Allen L. Edwards, Experimental Design in Psychological Research (Rev. ed.; New York: Holt, Rinehart and Winston, 1960).

outset of the experiment. The mean fall term grade point averages for each group is reported in Table 3.5.

Table 3.5. Mean fall term grade point averages for each group and counselor.

N=81			
Counselor	Counselor Structured	Group Structured	Control
A	1.6118	1.7146	1.5836
B	1.2263	1.5992	
Total	1.419	1.6569	1.5836

The data in Table 3.5 reveals differences among the three treatment groups which, because of random assignment, are assumed to have occurred by chance. To test this assumption, the null hypothesis that there is no difference among treatment groups on grade point averages was tested by analysis of variance.

The results of the analysis of variance of the three treatment groups are summarized in Table 3.6. The null hypothesis was accepted, and it was concluded that there were no statistically significant differences among the three treatment groups on grade point average. Apparently the differences that do appear in Table 3.5 are of a magnitude that could be expected by chance variation.

Table 3.6. Analysis of variance of fall term grade point averages of the randomly assigned students.

Source of Variation	S.S.	D.F.	M.S.	F	Hypothesis Tested
Between Treatment	.6989	2	.3495	3.057	Accepted
Within Treatment	8.9130	78	.1143		
Total	9.6119	80			

Treatment

The two types of treatment used in this investigation have been derived from rather broad theoretical positions. One concerns the technique of group counseling and encompasses theoretical assumptions concerning the operation of groups for counseling purposes. These assumptions are broadly conceived as directive and non-directive, as they refer to the role of the counselor in the operation of therapy or counseling groups. Hence, one type of treatment has been labeled, for the purposes of this investigation, counselor structured and is concerned with helping underachieving, male college students bring to awareness those underlying dynamic aspects of their personalities that are related to the behavior that manifests itself in underachievement.

The second type of treatment is designated as group structured and is concerned with helping students with material that they themselves feel is important in

contributing to their underachievement. Both treatments are affectively oriented, but differ in that the former is a directive, uncovering, integrating approach, while the latter is primarily non-directive, supportive and cathartic.

An additional theoretical approach that has contributed to the development of the counselor structured treatment technique is the position that specific underlying dynamics contribute to the formation of patterns of underachievement and that these may be generalized for all underachievers in one complex or another. Here is the framework for which specific underlying dynamics have been selected for consideration in the counselor structured technique.

Six topics were selected from the literature on underachievement and were organized in a hierarchical form for presentation in the counselor structured groups. These topics are presented here with a brief description of the material deemed as important for discussion.

1. Academic Underachievement

A discussion of the feelings surrounding academic underachievement in general and more specifically the feelings associated with study habits and attitudes, and discipline for effective study.^{3,4&5}

³R. M. Roth and H. A. Meyersburg, "The Non-Achievement Syndrome," Personnel and Guidance Journal, XLI (1963), 535-46.

⁴Ronald G. Taylor, "Personality Traits and Discrepant Achievement: A Review," Journal of Counseling Psychology, I (1964), 76-82.

⁵William W. Farquhar, Motivation Factors Related to Academic Achievement, Cooperative Research Project 846, January, 1963 (East Lansing: Office of Research and Publications, College of Education, Michigan State University).

2. Goals and Purposes

Under this topic, feelings associated with purposes and goals are discussed and questions raised concerning the reasons behind the particular goals and purposes of the group members. Feelings surrounding the expectations of others, particularly parents, are also discussed under this topic.^{6&7}

3. Dependence-Independence

Here the discussion is focused on conflict over dependence and independence and its effect on the achievement of the group members.^{8&9}

4. Self-feelings

Both self-concept and self-experience are discussed under this topic. Under self-concept the students explore their self-concepts and beliefs about adequacy and potency. Under self-experience feelings of anxiety and guilt are discussed as well as depressed feelings. These are then related to achievement and

⁶Barbara Kirk, "Test Versus Academic Performance in Malfunctioning Students," Journal of Consulting Psychology, XVI (1952), 312-16.

⁷Taylor, op. cit.

⁸Taylor, Ibid.

⁹Roth and Meyersburg, op. cit.

their role in interfering with scholastic endeavors.^{10,11&12}

5. Expression of Anger and Hostility

Feelings about the expression of anger and hostility are discussed and an exploration is made of their particularly interfering influence on academic achievement.^{13&14}

6. Impluses and Controls

Feelings of fear about impulses and their control are discussed and the role they have in the life of the individual and on his achievement are explored.¹⁵

In contrast with the counselor structured groups, the group structured technique based on material presented by the students themselves, focused primarily on study habits and attitudes, feelings associated with their poor performance, and some consideration of purposes and goals as they might relate to their underachievement. Some discussion was associated with the expectations of others and the consequent pressures experienced by the members of the group.

¹⁰Farquhar, op. cit.

¹¹Taylor, op. cit.

¹²Roth and Meyersburg, op. cit.

¹³Kirk, op. cit.

¹⁴Taylor, op. cit.

¹⁵Taylor, Ibid.

Due to the nature of the two counseling techniques embodied in the two types of treatment, a few broad guidelines were developed to assist the counselor in understanding his role in the group and assuring the accomplishment of the treatment objectives.

In the group structured technique:

1. The topics for discussion originated with the group rather than with the counselor.
2. The frequency and degree of digression, the examination of what seems important for discussion and the time spent with topics was left to the decision of the group and not the counselor.
3. The counselor primarily reflects and synthesizes the feelings of the group and the interactions that occur.
4. Interpretation and questions designed to uncover deeper lying material is held to a minimum by the counselor.

By contrast, in the counselor structured technique:

1. The topics for discussion are introduced by the counselor with a realistic example of the material to be discussed.
2. The frequency and degree of digression, the examination of what seems to be important areas for exploration, and the time spent with topics was the decision of the counselor and not the group. Of

course, the counselor's decisions were directly related to the needs of the group.

3. The counselor attempts to promote insight directly, not only by reflecting and synthesizing the group and individual feelings but also by interpretation and probing exploration of feelings and past experiences of the students.
4. The counselor continually relates the underlying dynamics under discussion to academic achievement so as to clarify the role of the underlying dynamic on the underachievement of the students in the group.

Counseling Setting

All eight of the counseling groups held their group sessions in the Student Services Building at Michigan State University. Four of the groups, two group structured and two counselor structured, held their sessions in a office in the Counseling Center, available for group counseling meetings. The other four groups held their meetings in the basement of the building in a room available for general purposes. Both rooms were free from outside distraction.

The students in all groups sat in a circle facing one another. Seats were not assigned, but most students sat in the same chairs each week. The counselor might sit in any chair of his liking or in the same chair each session, particularly in the counselor structured groups.

During almost all of the group sessions of either type, a tape recorder was present. These recordings were used by the two group counselors to evaluate their roles in the group sessions and to hold constant the approach used by each counselor in the respective treatments.

The Counselors

Both of the counselors of the investigation were doctoral candidates with majors in counseling psychology. At the time of the experiment both were assistant instructors at the Michigan State University Counseling Center. Both were using the same population and the same experimental procedures with different variables for their doctoral dissertations. Both counselors have similar backgrounds.

Consistency and Verification of Counseling

An essential element of the design is replication, hence it was necessary that the two types of group counseling be followed by both counselors. In addition, the design demands that the source of content of the group sessions be different between the two counseling treatment groups.

While the counselors were in agreement that the counselor structured and group structured groups actually received the prescribed treatment, an assessment of the students' opinions about the type of experience they had had was obtained by administering a 24 item questionnaire at the end of the eighth group session. (A copy of the questionnaire may be found in Appendix B.)

The questionnaire consisted of 24 items designed to discriminate between the two types of treatment and their sources of material for discussion and the role of the counselor in either of the treatments. The questionnaire was presented to the students with instructions to respond to the items as they felt they represented the experience they had been involved in. A yes response by the counselor structured groups was then scored 1 and a no response was scored zero. In this manner a total score was derived for both groups.

Table 3.7 is a summary of the results of the questionnaire. Inspection of the data reveals slight differences within the treatment groups, but differences between the two different treatment groups.

Table 3.7. Participants ratings of the authenticity of type of treatment.

Counselor	Type of Treatment	
	Counselor Structured	Group Structured
Counselor A	14.818	8.307
Counselor B	16.727	7.923
Total Means	15.7727	8.1154

The differences between the two treatment groups was tested by means of the t test. The results of this analysis indicate that the means of the two groups are statistically

different at the .01 level of confidence. These differences then confirm the counselors judgement that the two groups actually received different treatments.

The Null Hypotheses

The basic research hypotheses of the investigation are broadly stated in Chapter I. A more specific formulation of these hypotheses as they relate to the design of the experiment considers the counselor variable and interaction factor.

One-way Analysis of Variance of Winter Term Grades. The analysis of the winter term grade point averages of the students in the counselor structured, group structured, and control groups is made by a one-way analysis of variance.

Null Hypothesis One: There are no differences in academic achievement at the completion of the experiment among the students in the counselor structured experience (CS), group structured experience (GS), and the students who did not participate in group counseling (C).

$$H_0: CS = GS = C$$

Alternate Hypothesis One: The academic achievement of the students at the completion of the experiment will be greater for the counselor structured experience (CS) than the group structured experience (GS) which will be greater than the student who did not participate in group counseling (C).

$$H_1: CS > GS > C$$

Two by Two Analysis of Variance of Winter Term Grades. The analysis of the effects of two types of counseling, two counselors, and an interaction between type of counseling

and counselor on the winter term grade point averages of the students receiving counseling is made by a two by two analysis of variance.

Null Hypothesis Two: There are no differences in the academic achievement of the students at the completion of the experiment attributable to different types of counseling.

$$H_0: CS = GS$$

Alternate Hypothesis Two: The academic achievement of the students in the counselor structured experience (CS) will be greater than the students in the group structured experience (GS) at the completion of the experiment.

$$H_1: CS > GS$$

Null Hypothesis Three: There are no differences in the academic achievement of the students at the completion of the experiment attributable to different counselors.

$$H_0: C_A = C_B$$

Null Hypothesis Four: There are no differences in the academic achievement of the students at the completion of the experiment attributable to an interaction between type of counseling and counselor.

$$H_0: CS_A = CS_B \text{ or } GS_A = GS_B$$

Both counselor and interaction effects tend to confuse interpretations of treatment effects. While significant counselor effects do not pose as serious a problem for interpretation, as they are additive, interaction effects are not additive and thus constitute a serious problem for interpretation. The assumption was made that no significant interaction effects will be evidenced.

One-way Analysis of Variance of the Survey of Study Habits and Attitudes. The analysis of the Survey of Study Habits and Attitudes scores for the students in the counselor structured, group structured and control groups is made by a one-way analysis of variance.

Null Hypothesis Five: There are no differences in the Survey of Study Habits and Attitude scores at the completion of the experiment among the students in the counselor structured experience (CS), group structured experience (GS), and the students who did not participate in group counseling (C).

$$H_0: CS = GS = C$$

Alternate Hypothesis Five: The Survey of Study Habits and Attitudes scores of the students at the completion of the experiment will be greater for the students in the counselor structured experience (CS) than the group structured experience (GS) which will be greater than the students who did not participate in group counseling (C).

$$H_1: CS > GS > C$$

Two by Two Analysis of Variance of the Survey of Study Habits and Attitudes. The analysis of the effects of the two types of counseling, two counselors, and an interaction between type of counseling and counselor on the Survey of Study Habits and Attitude scores of the students is made by a two by two analysis of variance.

Null Hypothesis Six: There are no differences in the Survey of Study Habits and Attitude scores of the students at the completion of the experiment attributable to different types of counseling.

$$H_0: CS = GS$$

Alternate Hypothesis Six: The Survey of Study Habits and Attitude scores of the students in the counselor structured experience will be greater than the students in the group structured experience at the completion of the experiment.

$$H_1: CS > GS$$

Null Hypothesis Seven: There are no differences in the Survey of Study Habits and Attitude scores of the students at the completion of the experiment attributable to different counselors.

$$H_0: C_A = C_B$$

Null Hypothesis Eight: There are no differences in the Survey of Study Habits and Attitude scores of the students at the completion of the experiment attributable to an interaction between different types of counseling and counselors.

$$H_0: CS_A = CS_B \text{ or } GS_A = GS_B$$

Both counselor and interaction effects tend to confuse interpretations of treatment effects. While significant counselor effects do not pose as serious a problem for interpretation, as they are additive, interaction effects are not additive and thus constitute a serious problem for interpretation. The assumption was made that no significant interaction effects will be evidenced.

One-way Analysis of Variance of Achievement Need. The analysis of achievement need scores of the students in the counselor structured, group structured and control groups is made by a one-way analysis of variance.

Null Hypothesis Nine: There are no differences in Achievement need scores at the completion of the experiment among the students in the counselor structured experience (CS), group structured

experience (GS), and the students who did not participate in group counseling (C).

$$H_0: CS = GS = C$$

Alternate Hypothesis Nine: The Achievement need scores of the students at the completion of the experiment will be greater for the students in the counselor structured experience (CS) than the group structured experience (GS) which will be greater than the students who did not participate in group counseling (C).

$$H_1: CS > GS > C$$

Two by Two Analysis of Variance of Achievement Need. The analysis of the effects of the two types of counseling, two counselors, and an interaction between type of counseling and counselor on Achievement need of the students is made by a two by two analysis of variance.

Null Hypothesis Ten: There are no differences in Achievement need of the students at the completion of the experiment attributable to different types of counseling.

$$H_0: CS = GS$$

Alternate Hypothesis Ten: The Achievement need of students in the counselor structured experience will be greater than for the students in the group structured experience at the completion of the experiment.

$$H_1: CS > GS$$

Null Hypothesis Eleven: There are no differences in Achievement need of students at the completion of the experiment attributable to different counselors.

$$H_0: C_A = C_B$$

Null Hypothesis Twelve: There are no differences in Achievement need of the students at the completion

of the experiment attributable to an interaction between type of counseling and counselor.

$$H_0: CS_A = CS_B \text{ or } GS_A = GS_B$$

Both counselor and interaction effects tend to confuse interpretations of treatment effects. While significant counselor effects do not pose as serious a problem for interpretation, as they are additive, interaction effects are not additive and thus constitute a serious problem for interpretation. The assumption was made that no significant interaction effects will be evidenced.

One-way Analysis of Variance of Spring Term Grades. The analysis of spring term grades for the students in the counselor structured, group structured and control groups is made by a one-way analysis of variance.

Null Hypothesis Thirteen: There are no differences in academic achievement three months following the completion of the experiment among the students in the counselor structured experience (CS), group structured experience (GS) and the students who did not participate in group counseling (C).

$$H_0: CS = GS = C$$

Alternate Hypothesis Thirteen: The academic achievement of the students three months following the completion of the experiment will be greater for the students in the counselor structured experience (CS) than for the students in the group structured experience (GS) which will be greater than the students who did not participate in group counseling (C).

$$H_1: CS \quad GS \quad C$$

Two by Two Analysis of Variance of Spring Term Grades. The analysis of the effects of the two types of counseling, two counselors and the interaction between type of treatment and

counselor on the spring term grades of the students is made by a two by two analysis of variance.

Null Hypothesis Fourteen: There are no differences in academic achievement of students three months following the completion of the experiment attributable to different types of counseling.

$$H_0: CS = GS$$

Alternate Hypothesis Fourteen: The academic achievement of the students in the counselor structured experience will be greater than for the students in the group structured experience three months following the completion of the experiment.

$$H_1: CS > GS$$

Null Hypothesis Fifteen: There are no differences in academic achievement of students three months following the completion of the experiment attributable to different counselors.

$$H_0: C_A = C_B$$

Null Hypothesis Sixteen: There are no differences in academic achievement of the students three months following the completion of the experiment attributable to an interaction between type of counseling and counselor.

$$H_0: CS_A = CS_B \text{ or } GS_A = GS_B$$

Both counselor and interaction effects tend to confuse interpretation of treatment effects. While significant counselor effects do not pose as serious a problem for interpretation, as they are additive, interaction effects are not additive and thus constitute a serious problem for interpretation. The assumption was made that no significant interaction effects will be evidenced.

Statistical Treatment

The analysis of variance is the appropriate technique to test the null hypotheses of the present study. It is designed to differentiate variation between the number of means according to different causes and to interpret the significance of the variation.¹⁶

It was decided that, because of the limited sample size, a more meaningful test of the first, fifth, ninth, and thirteenth hypotheses could be made if the four counseling groups within each treatment were combined to make a total of 22 and 26 students in each group. A one-way analysis of variance is employed to compare the three treatment level effects. The data for the other twelve hypotheses were obtained by combining the two counseling groups receiving similar treatment from the same counselor. This procedure gives four cells with 11 or 13 students in each cell. A two by two analysis of variance is employed for comparison of the effects of treatment, counselor and interaction. The control group is not included in the analysis of hypotheses two, three, four, six, seven, eight, ten, eleven, twelve, fourteen, fifteen, and sixteen.

Because unequal frequencies within cells tends to inflate the interaction effect, it was decided to randomly drop four cases from the group structured cells to make equal frequencies for the two by two analysis of variance.

¹⁶Edwards, op. cit.

However, these four cases will be used in the one-way analysis of variance.

When the experiment was designed, the level of significance for rejecting or accepting the null hypotheses was set at the five per cent level of confidence.

Summary

The experiment is based on a two-factor treatment plan. Eight counseling groups were equally divided between two counselors who each led two groups in a counselor structured experience and two groups in a group structured experience. The design contained three essentials of modern design; randomization, replication, and control.

The analysis of variance is the statistical technique used to analyze the data. By this method it is possible to assess the variation due to specific causes and to analyze the effects of two variables and their interaction at one time. The five per cent level of confidence was chosen for accepting or rejecting the null hypotheses.

CHAPTER IV

ANALYSIS OF EXPERIMENTAL RESULTS

Chapter IV is a report of the analysis of the winter and spring term grade point averages of each of the 81 students in the sample. Also included in the report is the analysis of Brown-Holtzman Survey of Study Habits and Attitudes scores and Stern's Activities Index achievement need scores, both of which were obtained at the completion of the treatment period. Each of the 16 experimental null hypotheses are tested by an analysis of variance technique which was reported in Chapter III. In addition, the grade point averages for both winter and spring terms were tested by the analysis of covariance technique.

Analysis of Variance of the Winter Term Grade Point Averages

The first four null hypotheses, which were concerned with the immediate effects of treatment, were tested by the analysis of variance of the winter term grade point averages.

Hypothesis One

Hypothesis one is restated in null form:

1. There are no differences in academic achievement at the completion of the experiment among the students in the counselor structured experience, group

structured experience, and the students who did not participate in group counseling.

The students in the four counseling groups within each treatment were combined to make a total of 22 students in the counselor structured treatment, 26 students in the group structured treatment, and 33 students in the control group. The first hypothesis was tested by comparing winter term grade point average means of the two treatment groups and the no-treatment control. The results of the analysis are summarized in Table 4.1.

Table 4.1. Analysis of variance of winter term grade point averages for the counselor structured, group structured and control groups.

Source of Variation	Sum of Squares	d.f.	Mean Squares	F	Hypothesis Tested
Between Treatments	1.6880	2	.8840	2.655	Accepted
Within Treatments	24.7996	78	.3179		
Total	26.4876	80			

Inspection of the table reveals an F value of 2.655 which is not significant. The differences in grade point averages between the students in the counselor structured, group structured and control groups are likely to have occurred by chance. Therefore, the null hypothesis that there were no differences in academic achievement between the

students who participated in group counseling and the students who did not participate in group counseling was accepted.

Hypotheses Two, Three, and Four

These hypotheses are restated in null form:

2. There are no differences in academic achievement of the students at the completion of the experiment attributable to different types of counseling.
3. There are no differences in the academic achievement of the students at the completion of the experiment attributable to different counselors.
4. There are no differences in the academic achievement of the students at the completion of the experiment attributable to an interaction between type of counseling and counselor.

These three hypotheses are tested by a two by two analysis of variance design. The two-sub groups receiving similar treatment from the same counselor were combined. Because unequal frequencies within the cells tends to inflate the interaction effect, four students, two within each of the counselors group structured groups were randomly dropped. This procedure gave four cells in the design with 11 students in each cell. The control group was not included in the analysis. The results of the analysis are summarized in Table 4.2.

The null hypotheses two, three, and four were accepted. The F values reported in Table 4.2 for the three variables are smaller than the criterion value of 4.08 and it is concluded that any differences which exist between the

grade point averages of the students in the various treatment conditions are attributable to chance variation.

Table 4.2. Analysis of Variance of winter term grade point averages for treatment, counselor, and interaction effects.

Source of Variation	Sum of Squares	d.f.	Mean Squares	F	Hypotheses Tested
Between Treatment	.61	1	.61	1.85	Accepted
Between Counselor	.89	1	.89	2.69	Accepted
Interaction	.08	1	.08	.24	Accepted
Error	13.07	40	.33		
Total	14.65	43			

Because the value of F reported in Chapter III in the test for equivalence of pre-treatment grades was close to the criterion value of 3.11, it was decided that the covariance technique might reveal differences not possible with the analysis of variance. In this situation, the test of differences of winter term grade point averages and the effect of treatment are controlled for Fall term grade point averages.

As a consequence of the selection limitations placed on the fall term grade point averages, this distribution was skewed. It was necessary, before proceeding with the analysis of covariance, to normalize the distribution by means of an

area transformation. The fall term grade point averages were subsequently transformed to T scores with a mean of 50 and standard deviation of 10. The same transformation was conducted on the winter term grade point averages so that the assumptions underlying the analysis of covariance would be met.

As a part of the analysis of covariance it was necessary to determine whether the group regression coefficients differ significantly. The F test with 2 and 75 degrees of freedom resulted in an F value of 3.29. The value was significant, and it was concluded that the separate regression lines were not parallel within the limits of random sampling. Because the application of the analysis of covariance does assume that the regression lines for the various treatment groups all have a common slope, it was not possible to continue with the analysis of covariance.

Inspection of the three separate regression coefficients indicated a considerable departure from common linearity. A test of the significance of the regression coefficients was made and the results are reported in Table 4.3.

The significant values of t reported in Table 4.3 substantiates the previous test and indicates that the rate of change for the three treatment groups were significantly different. In addition both the counselor structured group regression coefficient and the regression coefficient for the control differ significantly from zero. The group

structured regression coefficient was not significantly different from zero.

Table 4.3. Test of the significance of the regression coefficients for the counselor structured, group structured, and control groups.

Group	sy.x	Hypothesis	t	
Counselor Structured (1)	.419	$sy_1.x \geq sy_2.x$	1.845	Rejected
Group Structured (2)	.028	$sy_1.x \geq sy_3.x$	5.699	Rejected
Control (3)	-.339	$sy_2.x \geq sy_3.x$	3.35	Rejected

These results tend to indicate that the analysis of variance is not the appropriate model for testing the treatment effects in an experiment such as this. Analysis of variance assumes that the data under consideration is linear in nature. The findings reported here would seem to indicate that if different treatments are involved then linearity may not necessarily be assumed.

Analysis of Variance of the Brown-Holtzman
Survey of Study Habits and Attitudes

Hypotheses five, six, seven and eight, which are concerned with the immediate effects of treatment on study habits and attitudes are tested by the analysis of variance of the SSHA obtained at the completion of the treatment period.

Hypothesis Five

Hypothesis five is restated in null form:

5. There are no differences in the Survey of Study Habits and Attitude scores at the completion of the experiment among the students in the counselor structured experience, group structured experience, and the students who did not participate in group counseling.

The procedures followed in testing hypothesis five are identical to those used to test hypothesis one. The students in the four counseling groups within each treatment were combined to make a total of 22 students in the counselor structured treatment, 26 students in the group structured treatment, and 33 students in the control group. The fifth hypothesis was tested by comparing SSHA raw score average means of the two treatment groups and the no-treatment control. The results of the analysis are summarized in Table 4.4.

Table 4.4. Analysis of variance of Brown-Holtzman Survey of Study Habits and Attitudes raw scores for the counselor structured, group structured, and control groups.

Source of Variation	Sum of Squares	d.f.	Mean Squares	F	Hypothesis Tested
Between Treatments	426.34	2	213.17	2.1976	Accepted
Within Treatments	7584.20	78	97.23		
Total	8010.54	80			

Inspection of the table reveals an F value of 2.1976 which was not significant. The differences in SSHA scores between the students in the counselor structured, group structured and control groups were likely to have occurred by chance. Therefore, the null hypothesis that there are no differences in SSHA scores between the students who experienced group counseling and the students who did not participate in group counseling was accepted.

Hypotheses Six, Seven, and Eight

These hypotheses are restated in null form:

6. There are no differences in Study Habits and Attitude scores of the students at the completion of the experiment attributable to different types of counseling.
7. There are no differences in Study Habits and Attitude scores of the students at the completion of the experiment attributable to different counselors.
8. There are no differences in Study Habits and Attitude scores of the students at the completion of the experiment attributable to an interaction between type of treatment and counselor.

The procedure for testing hypotheses six, seven, and eight is identical to those used to test hypotheses two, three and four. These three hypotheses were tested by a two by two analysis of variance design. The two-sub groups receiving similar treatment from the same counselor were combined. Because unequal frequencies within the cells tends to inflate the interaction effect, four students, two within each of the counselors group structured groups were randomly dropped. This procedure gave four cells in the design with

11 students in each cell. The control group was not included in the analysis. The results of the analysis are summarized in Table 4.5.

Table 4.5. Analysis of variance of Brown-Holtzman Survey of Study Habits and Attitudes raw scores for treatment, counselor, and interaction effects.

Source of Variation	Sum of Squares	d.f.	Mean Squares	F	Hypotheses Tested
Between Treatment	26.27	1	26.27	N.S.	Accepted
Between Counselor	4.45	1	4.45	N.S.	Accepted
Interaction	52.36	1	52.36	N.S.	Accepted
Error	4851.64	40	121.29		
Total	4934.72	43			

The null hypotheses six, seven, and eight were accepted. The SSHA differences between students of different treatment conditions were so small that they are attributed to chance variation rather than to different types of treatment, to different counselors, or to an interaction between type of treatment and counselor.

Analysis of Variance of Activities Index Achievement Need

Hypotheses nine, ten, eleven, and twelve which are concerned with the effects of treatment on achievement need

are tested by the analysis of variance of the achievement need obtained at the completion of the treatment period.

Hypothesis Nine

Hypothesis nine is restated in null form:

9. There are no differences in achievement need scores at the completion of the experiment among the students in the counselor structured experience, group structured experience, and the students who did not participate in group counseling.

The procedures followed in testing hypothesis nine were identical to those used to test hypotheses one and five. The students in the four counseling groups within each treatment were combined to make a total of 22 students in the counselor structured treatment, 26 students in the group structured treatment and 33 students in the no-treatment control group. The ninth hypothesis was tested by comparing achievement need raw score average means of the two treatment groups and the no-treatment control group. The results of the analysis are summarized in Table 4.6.

Table 4.6. Analysis of variance of Activities Index Achievement need raw scores for the counselor structured, group structured, and control groups.

Source of Variation	Sum of Squares	d.f.	Mean Squares	F	Hypothesis Tested
Between Treatments	1.40	2	.70	N.S.	Accepted
Within Treatments	518.82	78	6.65		
Total	520.22	80			

Inspection of the table reveals an F value that was not significant. The differences in achievement need between the students in the counselor structured, group structured, and control groups were likely to have occurred by chance. Therefore, the null hypothesis that there were no differences in achievement need of the students in the different groups is accepted.

Hypotheses Ten, Eleven, and Twelve

The hypotheses are restated in null form:

10. There are no differences in achievement need of the students at the completion of the experiment attributable to different types of treatment.
11. There are no differences in achievement need of the students at the completion of the experiment attributable to different counselors.
12. There are no differences in achievement need of the students at the completion of the experiment attributable to an interaction between type of treatment and counselor.

The procedure for testing hypotheses ten, eleven, and twelve is identical to those used to test hypotheses two, three, four, six, seven, and eight, a two by two analysis of variance design. The two sub-groups receiving similar treatment from the same counselor were combined. Because unequal frequencies within the cells tends to inflate the interaction effect, four students, two within each of the counselors group structured groups were randomly dropped. This procedure gave four cells with 11 students in each cell. The control group was not included in the analysis. The results of the analysis are summarized in Table 4.7.

Table 4.7. Analysis of Variance of Activities Index Achievement Need raw scores for treatment, counselor, and interaction effects.

Source of Variation	Sum of Squares	d.f.	Mean Squares	F	Hypothesis Tested
Between Treatment	.10	1	.10	N.S.	Accepted
Between Counselor	13.10	1	13.10	1.81	Accepted
Interaction	29.45	1	29.45	4.09	Rejected
Error	288.92	40	7.22		
Total	331.57	43			

The null hypotheses ten and eleven were accepted. The achievement need differences between students of different treatment conditions were so small that they were attributable to chance variation rather than to different types of treatment or to different counselors. However, the interaction effect was significant and null hypothesis twelve was rejected. This would indicate that for achievement need there was an interaction between type of treatment and counselor.

Analysis of Variance of the Spring Term
Grade Point Averages

Hypotheses thirteen, fourteen, fifteen, and sixteen, which were concerned with the effects of treatment three

months after the experiment, were tested by the analysis of variance of the spring term grade point averages.

Hypothesis Thirteen

Hypothesis thirteen is restated in null form:

13. There are no differences in academic achievement three months following the completion of the experiment among the students in the counselor structured experience, group structured experience, and the students who did not participate in group counseling.

The procedure for testing hypothesis thirteen is identical to those used to test hypotheses one, five, and nine. However, it was found that at the end of winter term four students had dropped out of school and thus were no longer available to the study. One of the students was a member of Counselor B's counselor structured group, a second was a member of counselor B's group structured group, and the last two were part of the control. The students in the four counseling groups within each treatment were combined to make a total of 21 students in the counselor structured group, 25 students in the group structured group, and 31 students in the control group. Hypothesis thirteen was tested by comparing spring term grade point average means of the two treatment groups and the no-treatment control group. The results of the analysis are summarized in Table 4.8.

An examination of the table indicates an F value which was so small that the differences in grade point averages between the students in the counselor structured,

group structured, and control groups were likely to have occurred by chance. Therefore, the null hypothesis that there are no differences in academic achievement three months following the completion of the experiment between the students who experienced group counseling and the students who did not participate in group counseling was accepted.

Table 4.8. Analysis of variance of spring term grade point averages for the counselor structured, group structured, and control groups.

Source of Variation	Sum of Squares	d.f.	Mean Squares	F	Hypothesis Tested
Between Treatments	1.0259	2	.5129	1.39	Accepted
Within Treatments	27.2711	74	.3685		
Total	28.2970	76			

Hypotheses Fourteen, Fifteen, and Sixteen

The hypotheses are restated in null form:

14. There are no differences in academic achievement of the students three months following the completion of the experiment attributable to different types of treatment.
15. There are no differences in academic achievement of the students three months following the completion of the experiment attributable to different counselors.
16. There are no differences in academic achievement of the students three months following the completion of the experiment attributable to an interaction between type of treatment and counselor.

These three hypotheses were tested by a two by two analysis of variance design. The two sub-groups receiving similar treatment from the same counselor were combined. Because two students, one from each of one counselors two treatment groups dropped out of school after winter term it was decided to do the analysis without equalizing the cell frequencies. Unless the interaction effect is significant this procedure should not bias the results. This procedure gave two cells with 11 each, and two cells with 10 each. The sample size for treatments remains the same, but the sample size for counselor A effects is 22 and 20 for counselor B. The control group was not included in the analysis. The results of the analysis are summarized in Table 4.9.

Table 4.9. Analysis of variance of spring term grade point averages for treatment, counselor, and interaction effects.

Source of Variation	Sum of Squares	d.f.	Mean Squares	F	Hypotheses Tested
Between Treatment	.1684	1	.1684	.66	Accepted
Between Counselors	2.6351	1	2.6351	10.39	Rejected
Interaction	.0721	1	.0721	N.S.	Accepted
Error	9.6312	38	.2534		
Total	12.5180	41			

Null hypotheses fourteen and sixteen were accepted. The F values reported in Table 4.9 for the treatment effect and interaction effect were smaller than the criterion value of 4.10. However, the F value for counselor effect was considerably greater than the criterion value noted above. It was concluded that the differences that exist between students for each of the counselors was significantly different. This finding would indicate that one counselor was more effective for both types of treatment than was the other counselor three months after the completion of the experiment.

As with the winter term grade point averages, it was decided that the analysis of covariance technique might reveal differences not possible with the analysis of variance. Here again the test of the differences of spring term grade point averages and the effect of treatment are controlled for fall term grade point averages.

Both fall and spring term grade point averages were transformed to T scores by means of an area transformation. This transformation resulted in a mean of 50 and a standard deviation of 10 for both fall and spring term grade point averages.

In the test of differences between the group regression coefficients, conducted as part of the analysis of covariance, the F test with 2 and 71 degrees of freedom resulted in a F value of 2.11, which was not significant. However, the separate group regression coefficients appeared on inspection to be different. As a consequence, a test of the

differences between the group regression coefficients was made and the results are reported in Table 4.10.

Table 4.10. Test of the differences of the spring term regression coefficients for the counselor structured, group structured, and control groups.

Group	sy.x	Hypothesis	t	
Counselor Structured (1)	.435	$sy_1.x = sy_2.x$	1.54	Accepted
Group Structured (2)	.102	$sy_1.x = sy_3.x$	3.20	Rejected
Control (3)	-.087	$sy_2.x = sy_3.x$	N.S.	Accepted

Inspection of Table 4.10 seemingly contradicts the results of the F test reported above. However, it must be remembered that in the F test the three regression coefficients are pooled thus minimizing the differences. The results of this analysis indicate that the counselor structured group is significantly different from the control, but not from the group structured group. The group structured group and the control group are not significantly different. While differences in rate of change persist between the counselor structured and control group three months following the experiment, the differences between the counselor structured group and the group structured group found winter term are not found three months following the

completion of the experiment. The counselor structured experience was significantly different from zero, but the group structured and control groups were not.

Fall, Winter, and Spring Term
Grade Point Average Means

The analyses of the winter and spring term grade point averages of the students in the three treatment groups have been reported in the preceding pages. The analysis of variance tables which are employed to report the results of the analyses preclude presentation of the grade point average means of the groups which are being examined. The fall, winter, and spring term grade point average means for the students in the counselor structured, group structured and control groups are reported in Table 4.11.

Table 4.11. Fall, winter, and spring term grade point average means for the students in the three treatment groups.

Term	Treatment		
	Counselor Structured	Group Structured	Control
Fall	1.419	1.6569	1.5836
Winter	1.9354	2.2027	1.8733
Spring	2.04	2.199	1.93

An inspection of the grade point average means reported in Table 4.11 reveals improvement in grade point

average means for all three treatment groups. While the differences noted were not significantly different as analyzed by the analysis of variance, the tests conducted on the group regression coefficients indicate that the rate of change winter term is significantly different for all groups but by spring term only the counselor structured and the control group had significantly different rates of change. It should also be noted that while the differences between the groups are not significant, that both the treatment groups at the end of spring term were over 2.00 while the control was below this critical point.

Summary

An analysis of variance was conducted on winter and spring term grade point averages, Brown-Holtzman Survey of Study Habits and Attitudes, and Activities Index achievement need in order to test the sixteen null hypotheses. Null hypotheses twelve and fifteen were rejected, and the remaining fourteen were accepted.

Certain questions were raised about the appropriateness of the analysis of variance technique for the data included in this study. The results of an analysis of covariance of winter term grade point averages controlled for fall term grade point averages indicated that non-linearity was present in the data under analysis. These results indicated that there were significantly different rates of change for each of the three treatment groups. The

counselor structured group was significantly different from both the group structured and control groups with a rate of change significantly different from zero. The rate of change for the group structured group was significantly different from the control group but not significantly different from zero. The rate of change demonstrated by the control group was negative and significantly different from zero.

The analysis of covariance for spring term grades, controlled for fall term grade point averages, revealed results which indicated that the counselor structured group was significantly different from the control group and from zero. The differences previously noted between the group structured and control groups were no longer evident, and neither of these two groups were significantly different from zero.

The rejection of null hypothesis twelve lead to the conclusion that an interaction between type of treatment and counselor must be considered in any interpretation of the difference between the groups for achievement need. It was concluded from the rejection of null hypothesis fifteen that one counselor was more effective three months following the completion of the experiment across both treatments. Both of these findings in conjunction with non-linearity would tend to negate the possibility of significant treatment differences with the analysis of variance technique.

CHAPTER V

SUMMARY, CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

Summary

The problem of this study was to investigate the effects, on certain outcomes of achievement, of two types of group counseling experiences with male, college underachievers.

The subjects of the investigation for analysis purposes were 81 volunteers from a population of 683 freshmen or sophomore male college students who were judged to have high ability for college achievement, but who received unsatisfactory grades fall term 1963 at the university.

The basic hypotheses of the study were:

Hypothesis I The academic achievement of students who have experienced a counselor structured group experience will be greater than those in either a group structured experience or those who did not participate in group counseling at the completion of the experiment and three months following the completion of the experiment.

Hypothesis II The study habits and attitudes scores of students who have experienced a counselor structured experience will be greater than those in either a group structured experience or for those who did not participate in group counseling at the completion of the experiment.

Hypothesis III The achievement need of students who have experienced a counselor structured group experience will be greater than those in either a group structured experience or for those who did not participate in group counseling at the completion of the experiment.

The two types of group counseling used to test the hypotheses of the investigation evolve from two theoretical positions regarding the form or structure of the group counseling experience. One type of treatment has been labeled, for the purpose of the study, counselor structured. This treatment was concerned with helping the male, college underachiever bring to awareness those underlying dynamic aspects of their personalities which previous research indicates were related to their underachievement. The counselor in this treatment actively presents topics such as purposes and goals, dependence-independence, expression of anger, and directed the discussion concerning these topics. The second type of treatment was labeled group structured and was concerned with helping students discuss topics that the students in the group felt were important in contributing to their underachievement. The counselor in this treatment did not direct the course of the discussion but allowed it to be determined by the group as a whole. Topics frequently discussed in the group structured experience were study habits and attitudes, expectations of self and others, and purposes and goals.

The design of the investigation was based on a two-factor treatment plan. Eight counseling groups were equally

divided between two counselors who each led two groups in the counselor structured experience and two groups in the group structured experience. In addition to the two treatment groups, a third group who received no help other than assurance that they would not be dropped from school was included in the experiment to serve as a control. This latter group also volunteered for group participation but were told that there were not enough group counselors to permit their immediate enrollment.

The random assignment of subjects to treatment and counselor was executed in the following way: time schedule forms which were returned by the students to indicate their willingness to participate in the program and which included the times they had available for group meetings, were sorted into 12 groups on the basis of common times available for group meetings. From the group of 12, four were selected at random and designated as controls. The remaining eight groups were assigned to either counselor structured experience, or to group structured experience by the flip of a coin. The counselors were each assigned two counselor structured and two group structured groups by the flip of a coin. The students in the control group received no counseling.

The students included in the analysis attended from five to eight group counseling sessions of an hour and a half each which were held winter term 1964. All eight of

the counseling groups met once a week for an hour and a half in the Michigan State University Counseling Center.

There were 15 students from the original 96 who were not included in the analysis. One student failed to attend the first session, eight students did not attend the five session minimum, one student was asked to leave school by the Office of Vocational Rehabilitation, under whose sponsorship he was attending, for analysis purposes one student was dropped from Counselor B group structured group so that there would be proportional frequencies in the cells. Of the 37 originally assigned to the control group, one student was enrolled in the "Methods of Study" class, one was participating in a special university project and was receiving both individual and group counseling, and two students dropped out of school before the end of the term. There were 81 students included in the analysis, 22 in the counselor structured experience, 26 in the group structured experience and 33 in the control group.

Three criterion were used to evaluate the experiment. Winter term grade point averages were the criterion of academic achievement at the completion of the experiment. Activities Index achievement need raw scores were the achievement need criterion, and Brown-Holtzman Survey of Study Habits and Attitude raw scores were the criterion of study habits and attitudes at the completion of the experiment. Spring term grade point averages were the criterion of academic achievement three months following the completion of

the experiment. In a check of the pre-treatment equivalence of the groups, an analysis of variance of the fall term grade point averages of the three groups revealed no significant differences between the groups on academic achievement. The means of the total raw scores on the College Qualification Test for the three groups tested by analysis of variance revealed no significant differences between the groups on academic aptitude.

In order to establish that those students receiving group counseling actually experienced the particular treatment to which they were assigned, a questionnaire was administered at the conclusion of the last group session. The results of the questionnaire revealed that the two types of treatment were appropriately followed by both counselors and there was agreement between the students within each treatment that their experiences were primarily counselor structured or group structured according to the design of the experiment.

Initially the analysis of variance was used to test the hypotheses of the investigation. It was decided when the investigation was designed that the null hypotheses would be rejected or accepted at the five per cent level of confidence. However, in the course of exploratory analysis of the data, it was found that the data under consideration was not linear. This finding raised the question of the appropriateness of the analysis of variance technique for analyzing the winter and spring term grade point averages.

When non-linear data is analyzed by the analysis of variance technique the chance of making a Type II error is increased. That is, there is an increased probability of failing to reject the null hypothesis when it is false. Therefore, both the analysis of variance and the exploratory analysis were presented so that they might be contrasted and thus the findings of both analyses might be more understandable.

The first four null hypotheses were designed to test the effect of treatment on academic achievement immediately after the completion of the experiment. The first null hypothesis that there were no differences in academic achievement at the completion of the experiment between the students who had experienced group counseling and the students who did not participate in group counseling was accepted. The second, third, and fourth hypotheses that there were no differences in the academic achievement of the students upon the completion of the experiment attributable to different types of treatment, different counselors or to an interaction between type of treatment and counselor were also accepted.

In an analysis of winter term grade point averages controlled for fall term grade point averages a significant difference was found between the separate regression coefficients of the three treatment groups. This indicated that the rate of change of winter term grade point averages with change in fall term grade point averages was significantly different for each of the three treatment groups. The

counselor structured experience resulted in a rate of change significantly different from either the group structured experience or from the control group. This rate of change was also significantly greater than zero. The group structured experience was significantly different from the other two treatments but not significantly different from zero. The rate of change for the control group was significantly different from the other two treatments and significantly different from zero, but in a negative direction.

The second set of four null hypotheses were designed to test the effects of treatment on study habit and attitude scores. Null hypothesis five that there are no differences in study habit and attitude scores at the completion of the experiment between the students who have experienced group counseling and the students who did not participate in group counseling was accepted. The sixth, seventh, and eighth null hypotheses that there are no differences in study habit and attitude scores at the completion of the experiment attributable to different types of treatment, different counselors, or to an interaction between type of treatment and counselor were accepted.

The third set of four null hypotheses were designed to test the effects of treatment on achievement need. The ninth null hypothesis that there are no differences in achievement need at the completion of the experiment between the students who experienced group counseling and the students who did not participate in group counseling was accepted.

The tenth and eleventh null hypotheses that there are no differences in achievement need at the completion of the experiment attributable to different types of treatment or to different counselors were accepted. The twelfth null hypothesis was rejected that there are no differences in achievement need at the completion of the experiment attributable to an interaction between type of treatment and counselor.

The fourth set of null hypotheses were designed to test the effects of treatment on academic achievement three months following the completion of the experiment. The thirteenth null hypothesis that there are no differences in academic achievement three months following the completion of the experiment between the students who experienced group counseling and the students who did not participate in group counseling was accepted. The fourteenth and sixteenth null hypotheses that there are no differences in academic achievement three months following the completion of the experiment attributable to different types of treatment or to an interaction between type of treatment and counselor were accepted. The fifteenth null hypothesis that there are no differences in academic achievement of the students three months following the completion of the experiment attributable to different counselors was rejected. It was concluded that there were counselor differences on academic achievement three months following the completion of the experiment.

In an analysis of spring term grade point averages controlled for fall term grade point averages a significant difference was found between the regression coefficients of the counselor structured experience and the control group. There were no significant differences between the counselor structured experience and the control group. The regression coefficient of the counselor structured group was significantly greater than zero, while both the group structured and control groups did not differ significantly from zero.

Conclusions

The analysis of the data permits the following conclusions:

1. Because of the sampling distributions, the analysis of variance technique is not the appropriate statistical technique for analyzing improvement in academic achievement in a design such as this.
2. No significant differences were found immediately following the experiment for study habit and attitude scores between the students in the counselor structured, group structured or control group.
3. No significant differences were found immediately after the experiment for achievement need between the students in the counselor structured, group structured or control groups.
4. There was a significant interaction between type of treatment and counselor for achievement need.

5. There was a significant difference between counselors on academic achievement three months following the completion of the experiment.
6. There was a significant difference in rate of change for the students in the counselor structured, group structured, and control groups for academic achievement immediately after group counseling.
7. The counselor structured experience resulted in a rate of change significantly greater than zero. The group structured experience resulted in a rate of change not significantly different from zero. The control groups rate of change was significantly different from zero, but in a negative direction.
8. There was a significant difference in rate of change between the students in the counselor structured experience and those in the control group, three months after the completion of the experiment. There were no significant differences between the counselor structured and group structured experiences in rate of change three months following the completion of the experiment.
9. The rate of change for the counselor structured experience was significantly greater than zero three months following the completion of the experiment. The group structured experience and the control group rate of change was not significantly different from

zero three months following the completion of the experiment.

Discussion

The study was designed to answer questions about the effectiveness of two different types of group counseling that might be used with underachievers. The use of the counselor structured experience was based upon the theory that the underachiever needs to bring to awareness his underlying dynamic personality characteristics and relate them to his patterns of underachievement. The group structured experience was based upon the theory that the underachiever needs to discuss areas of personal concern as he feels they are important to his underachievement.

The conclusions based upon the results of the experiment about the effectiveness of these two experiences are tentative and in need of replication.

An examination of the data reveals that the analysis of variance techniques is not appropriate for evaluating improvement in academic achievement when grade point averages are the criterion. The data in the present investigation was found to be non-linear. Under such circumstances, in the analysis of variance and covariance techniques, the differences between groups is lost when they are pooled, and the probability of making a Type II error is increased.

There is no evidence to support the assumption, in a study such as this, that different treatments will produce

changes in the same direction or within the same amount of time. No theorist in counseling and/or psychotherapy would predict that treatment would result in similar outcomes for all clients. The non-linear data found in the present investigation lends support to this contention.

There were no significant differences between the students in the different groups for study habits and attitude scores nor for achievement need. This finding tends to indicate that while group counseling may help increase grade point averages, that it does not have an immediate effect on factors that have developed through the life experiences of the individual. Possibly this might indicate that affectively oriented group counseling is more effective than cognitive approaches to helping the underachiever such as study skills courses and orientation courses.

The differences between counselors three months following the completion of the experiment raises interesting questions concerning the differential effects of counselors following the treatment period. Because the investigation was designed to study treatment effects only, no attempt was made in the present investigation to study this problem.

The differences found in rate of change of both winter and spring grade point averages when they are controlled for fall term grade point averages would appear to indicate that the counselor structured experience was more supportive and less ambiguous than either the group structured or control experience. Perhaps the group

structured experience was less supportive as it did not reduce ambiguity by relating the group discussion dynamically to patterns of underachievement. Furthermore, the experience of offering the control group an opportunity to participate in group counseling, and then withdrawing it may have influenced the negative rate of change on winter term grade point averages controlled for fall term grade point averages.

It may well have been that the nature of the counselor structured experience was more supportive and less ambiguous than the experience in the group structured experience. For freshmen and sophomore students at a large university, a counselor structured experience may provide limits and goals not possible when the students themselves are required to set their own limits and goals. The primary value of a more structured experience may be that it allows for a period of support that may be more readily carried over after the period of treatment. The group structured experience on the other hand, may not provide this kind of support and hence the students experiences are largely unchanged. Then too, the structured experience may have been particularly valuable to the underachiever whose motivation is primarily extrinsic.

A longer period of treatment, in itself, may have been more supportive to the group structured experience. A five to eight session treatment period is probably insufficient time to work through the problems which are hypothesized to be the cause of underachievement. It is interesting however, that the students in the counselor

structured groups generally expressed a desire to continue the experience throughout the following term, while the students in the group structured experience, while generally satisfied with their experiences, did not wish to continue. Perhaps the ambiguousness of their experience discouraged them from continuing.

Recommendations

It is suggested that the study be replicated to further test the effectiveness of the counselor structured and group structured experiences in improving academic achievement of college underachievers. Additions to the present study which are suggested for inclusion in the design of the replication study are:

1. A study of the effectiveness of counselor structured and group structured experiences with female, college underachievers.
2. A control or evaluation of counselor differences in relation to their effectiveness with group methods in general and with counselor structured and group structured experiences in particular.
3. The inclusion of another control group that is not promised a group counseling experience.
4. A period of treatment that exceeds the five to eight session minimum period of this study to determine if academic achievement of the students will continue to improve with extended treatment.

5. A long term follow-up of the sample to determine the overall effect of such treatment.
6. Combinations of treatments to include both individual and group processes. A Latin Square design would be appropriate to assess the additive effects of various treatments.

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APPENDIX A

LETTERS

MICHIGAN STATE UNIVERSITY EAST LANSING

COUNSELING CENTER

January 6, 1964

Dear Student:

The Counseling Center is initiating a special program to help students whose academic performance has not reached the level which would seem possible, judging from past performance and test scores. Many factors could account for this less-than-expected performance. Some of the reasons mentioned by other students in similar circumstances are: poor study techniques, inadequate reading skills, personal problems, and family relationships, to mention just a few. We at the Counseling Center believe we can be of significant aid in helping you alter these problem areas. We have therefore arranged to provide experiences which have been of value to students, not only at M.S.U., but at a number of other universities around the country.

The experience we are suggesting entails attending a small discussion group once a week during Winter term. Your group, composed of students having similar difficulties will meet at the Counseling Center and will be led by one of our counselors.

If you would like to participate in a group experience of this kind, please indicate on the enclosed form the hours you would not be available, and return it as soon as possible after you have completed registration. For those who live on campus the return envelope needs no postage; just hand it to the receptionist in your residence hall and have it placed in the 'Campus Mail'.

You will be contacted by us as to the hours which best meet both of our schedules.

If you have any questions concerning this program, please contact either Mr. Stuart Gilbreath or Mr. William Chestnut at the Counseling Center.

Sincerely yours,

Donald L. Grummon
Director

DLG/cs

Name _____ Student Number _____

Campus Address _____ Campus Telephone _____

Please draw an X through the hours that you would not be available for an appointment at the Counseling Center.

	8-9	9-10	10-11	11-12	1-2	2-3	3-4	4-5
M								
T								
W.								
T								
F								

Due to the difficulties that may arise in scheduling, would you please indicate those evenings which would be free for group meetings. These will be used only in the event that other appropriate times during the day are not available.

Monday

Tuesday

Wednesday

Thursday

Friday

MICHIGAN STATE UNIVERSITY EAST LANSING

COUNSELING CENTER

January 29, 1964

Dear :

We are pleased that you are interested in our program of group discussion for those having academic difficulties. So many of you have expressed this interest that we cannot accommodate all of you in the group sessions; however, we have arranged to have you participate in a testing program designed to reveal areas of difficulty for individuals having academic difficulties.

This program will involve an extensive period of testing, lasting approximately two hours. Following this, arrangements will be made for an interview with you to discuss the test results and to suggest areas for improvement or change. We feel that this program will be of significant aid to you in working out your academic problems.

I think you will be interested to learn that the University College Office is interested in this program and has decided that those of you who are participating will not be asked to withdraw from school for academic reasons, even if your grade should fall below the point where this is usually the procedure. This will apply until the end of Spring Term so that you will have time to profit from the potential benefits of the program.

If you have any questions concerning this change in program, please contact either Mr. Stuart Gilbreath or Mr. William Chestnut at the Counseling Center.

Sincerely yours,

Donald L. Grummon
Director

DLG/snl

APPENDIX B

AUTHENTICITY OF TYPE OF TREATMENT QUESTIONNAIRE

AUTHENTICITY OF TYPE OF TREATMENT QUESTIONNAIRE

1. The counselor determines the topics to be discussed for each meeting. Yes____ No____
2. The counselor would often remain silent until a group member would bring up a problem area to discuss. Yes____ No____
3. The things we discuss in the group meetings are clearly related to the academic difficulties I am experiencing. Yes____ No____
4. The counselor waited for the group to initiate its own topic of discussion. Yes____ No____
5. We talk often about problem areas not directly related to academic difficulties. Yes____ No____
6. The counselor seldom presented a topic for discussion at the beginning of the meeting. Yes____ No____
7. The group meetings seem organized around specific topics of discussion which the counselor initiates. Yes____ No____
8. The group meetings seem to start right off with something the counselor wants us to talk about. Yes____ No____
9. At times it was difficult for the meeting to get started because it was hard to find a topic to discuss. Yes____ No____
10. The counselor believes that the topics to be discussed should be brought up by the group members themselves. Yes____ No____
11. Each of the group meetings seems to have had a different subject for discussion. Yes____ No____
12. The counselor seems to believe that it is important for the group to bring up the problems we feel are important in causing our academic difficulties. Yes____ No____

13. The group meetings often seem very similar to one another in the things we discuss. Yes___ No___
14. Each meeting the counselor presented certain topics that he felt were possible causes of academic difficulty. Yes___ No___
15. The counselor believes there are certain problem areas that are important to my academic difficulties. He presents one of these as a topic for discussion at each meeting. Yes___ No___
16. The group meetings generally seem to take a while to get started as the counselor waits for us to bring up the problem we want to discuss. Yes___ No___
17. There was always something to talk about in the group meetings. Yes___ No___
18. The group meetings do not seem to have any particular organization about a central topic. Yes___ No___
19. The counselor usually described an area for discussion at the beginning of the meeting. Yes___ No___
20. We most often discuss study habits and attitudes in the group meetings. Yes___ No___
21. Sometimes the things discussed in the group meeting don't seem to have anything to do with my not doing well in school. Yes___ No___
22. The counselor usually initiated a topic for discussion in the group meetings. Yes___ No___
23. If the group was silent the counselor would often bring in new problem areas to discuss. Yes___ No___
24. The topics we discuss in the group just seem to come up as we talk. Yes___ No___

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