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THE EFFECTIVENESS OF A COMPREHENSIVE PEER COUNSELING
PROGRAM ON ACADEMIC ADJUSTMENT

by

Bevan Todd Graybill

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Psychology

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1979

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Bevan Todd Graybill

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ABSTRACT

The Effectiveness of a Comprehensive Peer Counseling
Program on Academic Adjustment

by

Bevan Todd Graybill, Master of Science
Utah State University, 1979

Major Professor: Dr. Elwin C. Nielsen
Department: Psychology

The purpose of this study was to evaluate the effectiveness of a peer counseling program in improving undergraduate students' academic adjustment. Six upperclassmen were carefully selected and systematically trained in the use of a study skills instruction program and certain supportive, therapeutic techniques. These six served as peer counselors. The peer counseling program provided individualized study skills instruction, informal personal/motivational counseling, and general educational information and advising for volunteer students in academic difficulty.

Twenty-one volunteer students each completed a minimum of four sessions with a peer counselor. The first objective of the study was to determine if the students who participated in the peer counseling program improved in their study skills and

attitudes. A t-test for correlated means was used to analyze differences in the pretest and posttest means of the Survey of Study Habits and Attitudes and the Effective Study Test. The second objective of the study was to determine if students who participated in the peer counseling program made a better academic adjustment to college than a matched group of students who did not participate in the program. Three measures of academic adjustment were examined. First, grade point average for the quarter following participation for the treatment and control groups was compared using a t-test for correlated means. Secondly, the proportion of students who dropped in academic standing during the quarter following participation in the treatment group was compared with the proportion of students who dropped in academic standing in the control group by means of the sign test. Finally, the proportion of students who dropped out of school the quarter following participation and two quarters after participation in the treatment group was compared with the proportion of students in the control group who dropped out of school at corresponding times by utilizing the Cochran Q test.

The peer counseling program was effective in improving the study skills and attitudes of students in academic difficulty. The 21 students showed a mean improvement of approximately one standard deviation from the pretest to the posttest on the Survey of Study Habits and Attitudes and on the Effective Study Test. No significant difference was found between students who

participated in the program and a matched group who did not participate on grade point average, academic standing, or dropout rate. It was recommended that further research utilize a experimental design with random assignment of students to the two groups and examine the impact that the program has on the individual peer counselors.

(90 pages)

CHAPTER I

INTRODUCTION

In the past fifteen years, university counseling centers have increasingly utilized undergraduates as paraprofessionals (Zunker, 1975). Steenland (1973) polled 135 colleges and universities, and of those responding, sixty percent report the use of undergraduates as paraprofessionals in counseling centers. Both of the above mentioned surveys found that (1) study skills help, (2) peer personal/social problems counseling, and (3) general educational advising and information were among the most common services performed by undergraduates. This study evaluated the effectiveness of a single student-to-student counseling program which utilizes all three services mentioned above (study skills instruction, peer personal/social problems counseling, and general educational information and advising) in providing academic adjustment counseling.

The relaxed admissions standards in today's colleges and universities have changed the philosophy toward students from one of "sink or swim" to one of actively seeking out and helping students in academic difficulty to become successful. Regular college orientation programs have been found to help little in student adjustment. In the present day of tight budgets,

student counselors can possibly provide a vital service and simultaneously free professional counselors for more in-depth services.

There seem to be many advantages to using peer or student counselors. Gruver (1971) points out that college students are likely to be perceived as more empathetic in therapeutic situations. Also there is likely to be less stigma attached to seeking help from a peer as opposed to a professional. Another advantage is that the use of paraprofessionals taps a large reservoir of talent.

In addition, inspection of the current situation on many campuses provides another practical advantage for using student counselors. Existing study skills and orientation programs seem rarely utilized by students; instead it appears that most seek advice and counsel from experienced peers. The information they receive is sometimes practical but probably often faulty and inefficient. There appears to be a need for a program which will train peers to provide an accurate, efficient, and helpful service to students.

Statement of Problem

There has been a call for more scientifically based research on the effectiveness of peer counseling from many fronts. In Gruver's (1971) article on college students as therapeutic agents he stated "most of those investigations which have been conducted are so methodologically inadequate that it is impossible to draw firm conclusions about (their) relative

effectiveness." He noted the lack of use of control groups and objective measures and also noted that "few of the studies are similar enough in any respect to warrant conclusions in a given area." He called for sound research to establish justification for the use of college students as paraprofessionals.

Scott and Warner (1974) in their review of peer counseling were critical of the lack of objective evaluation. They stated that the present research suggested some beneficial uses of peer counseling, but they hoped to stimulate more, better designed research on the subject.

Brown (1974) reviewed the effectiveness of paraprofessionals in various settings and found favorable results in mental health and college counseling center settings. He found that "most of these studies, however, are plagued by design inadequacies." He specifically mentioned the lack of control groups, objective criteria, follow-up data, and isolating of control variables.

Hoffman and Warner (1976) conducted a review of paraprofessional effectiveness and also noted the generally positive results but stated that "paraprofessional effectiveness needs to be documented." They stated that the research suggested paraprofessionals should be used more extensively by counseling and guidance personnel in areas of study skills and academic counseling but stated that "this area needs further study" and suggested that "careful design evaluation procedures" were needed.

This present study was conducted in response to a call in the literature for further scientifically designed research

on the effectiveness of peer counseling in improving academic adjustment for college students.

Purpose

The purpose of this study was to evaluate the effectiveness of a peer counseling program designed to improve students' academic adjustment by providing study skills instruction, informal personal/motivational counseling, and general educational information and advising.

The counseling in this program was provided by six systematically trained upperclassmen counselors. The treatment group was composed of volunteer students who were in academic difficulty and who participated in the peer counseling program. This treatment group was compared to a matched control group who did not participate in the peer counseling program on three measures of academic adjustment: grade point average, academic standing, and dropout rate. This study compared the adjustment of the treatment and control groups in the academic quarter following participation because the cumulative effect of the treatment program is more accurately reflected in the academic performance of the subjects in subsequent quarters.

Objectives

The objectives of this study were:

1. To determine if the students who participated in the peer counseling program improved in their study skills and attitudes.

2. To determine if the students who participated in the peer counseling program made a better academic adjustment to college than a matched group of students who did not participate in the program.

Hypotheses

1. There is no difference between the mean pretest and the posttest scores on the Study Orientation scale of the Survey of Study Habits and Attitudes for students who participate in the student-to-student academic adjustment counseling program.
2. There is no difference between the mean pretest and posttest scores on the Total Study Effectiveness scale of the Effective Study Test for students who participate in the student-to-student academic adjustment counseling program.
3. There is no difference in mean grade point average for the following quarter between students who participate in the student-to-student academic adjustment counseling program and a matched group of students who did not participate.
4. There is no difference in the proportion of students placed on academic probation within the following quarter who have participated in the student-to-student academic adjustment counseling program and a matched group of students who have not.

5. There is no difference in the proportion of students remaining in school the following quarter between students who have participated in the student-to-student academic counseling program and a matched group of students who did not participate.

6. There is no difference in the proportion of students remaining in school two quarters later between students who have participated in the student-to-student academic counseling program and a matched group of students who did not participate.

Definition of Terms

Academic adjustment. A student's scholastic adaptation to college as measured by grade point average, academic standing, and dropout rate.

Academic standing. A student's scholastic status with the university; the four classes of academic standing are good standing, warned status, probationary status, and suspension from school.

Peer counselor. An upperclassman undergraduate student who is carefully selected and systematically trained in a study skills instruction program and certain supportive, therapeutic techniques; he works individually with students in academic difficulty attempting to improve the student's academic adjustment.

Peer counseling program. Peer counselors provide individualized study skills instruction, informal personal/motivational

counseling, and general educational information and advising for volunteer students in academic difficulty.

Student-to-student counseling program. Used synonymously with peer counseling program.

Study skills instruction. A programmed course of instruction aimed at improving a student's study methods, motivation for studying, and scholastic attitudes; topics dealt with include managing time, improving memory, taking lecture notes, reading textbooks, taking objective and essay tests, writing themes and reports, making oral reports, improving scholastic motivation, improving interpersonal relations, and improving concentration.

Subject. An undergraduate student in academic difficulty who volunteers for the peer counseling program and completes four sessions with a peer counselor.

CHAPTER II

A REVIEW OF THE LITERATURE

Several areas of research related to the present study have been reviewed and will be presented in this chapter. The area of peer counseling is a new field, and the literature is relatively scarce. The articles which were selected for review from the literature were either representative of a certain area or directly related to the peer counseling program evaluated in this study.

The subject which is most closely related to the present study and which is presented first is the literature on the effectiveness of using peers in college counseling centers. Since in most cases peer counselors will be supplanting a service supplied previously by a professional, another area reviewed in the literature is the comparison of peer and professional counselors. The core of the presently studied student-to-student counseling program is study skills instruction. Consequently, the next subject reviewed is the effectiveness of study skills training programs. Finally, in promoting academic adjustment, the student-to-student counseling program provides more than just study skills instruction; therefore, a review of the literature examines the importance of factors other than study skills which have impact on academic adjustment.

Peer Counselors in College Counseling Centers

Brown (1965) evaluated a student-to-student counseling program for productivity and acceptability in one of the few well controlled studies. A group of 216 freshmen were selected for the experimental group, and the treatment consisted of academic adjustment counseling in three areas: an initial survival orientation; an interpretation session of various scholastic, achievement, and study skills tests, and a study skills guidance session. The peer counselor worked with a group of four same sex students for a total of six hours in this program. The experimental group was compared with a matched group of 216 freshmen on pretests and posttests of the Survey of Study Habits and Attitudes and Effective Study Test and on grade point average. The group which received academic adjustment counseling by peers scored significantly higher on the posttest of the two study skills tests than the control group and earned significantly higher grade point averages. Also, the students involved reacted positively to a questionnaire about the peer counseling program. It should be pointed out that the treatment included only freshmen and involvement was required, not voluntary.

The special problem of the potential college dropout was examined in another well controlled study by Brown, Wethe, Zunker, and Haslam (1971). They evaluated the effectiveness of a student-to-student counseling program on the academic adjustment and survival of college freshmen identified as potential dropouts. A group of 111 freshmen identified as potential dropouts was

selected for the program and was matched with 111 freshmen who were denied treatment. The experimental treatment consisted of survival orientation, test interpretation, study skill instruction, and study habits evaluation. The treatment was conducted in small group settings. The peer counseling program was effective in making significant positive changes for the treatment group over the control group in study orientation and knowledge (as measured by the Survey of Study Habits and Attitudes and the Effective Study Test), in reducing the number of study problems (as measured by the Study Skills Surveys), and in improving first semester grade point average. A questionnaire also showed that students rated all aspects of the program as positive. In this study again, participation was not completely voluntary and was limited to only freshmen.

A compilation of the procedures developed in the above mentioned studies is presented in a book by Brown (1972). Hower (1974), in a review of Brown's book, described it as "excellent" and "recommends" it for those involved in academic adjustment counseling. The present study does use a student-to-student counseling program similar to the one described in Brown (1972).

Upcraft (1971) described a program in which undergraduates served as academic advisers at a small liberal arts college. Their roles were mainly helping students with course scheduling, providing informal personal counseling, and providing information about the college. The peer advisers worked with students on an individual basis and referred students to other departments

when appropriate. No systematic evaluation was completed. However, students who participated were satisfied with the program, especially with the adviser as a friend and referral agent. The faculty also reportedly liked the program and felt that their own time with students was spent on more professional matters.

Undergraduates have also been employed as therapists in college counseling centers. Persons, et al. (1973) described such a program which was utilized for three years. Peer training was lengthy and elaborate, involving a two week seminar, personal growth therapy, doing co-therapy, readings, etc. The trained peer therapists were involved in crisis intervention, group therapy, and individual therapy with college students. Again, no systematic, objective evaluation was conducted. Clients did rate the peer therapists positively however. Wasserman, McCarthy, and Ferree (1975) also described the roles and training model of a peer counseling service. In this "companion program" the paraprofessionals acted as models in assertive training groups, worked individually with students to develop appropriate study skills, and served as counselors in pregnancy and hot line/crisis intervention classes. There was no evaluation presented of this program's effectiveness.

Bridges (1972) did conduct a controlled study of the effectiveness of peer counselors working in small groups with underachieving freshmen. The peer counselors were sophomores trained in human relations and small group skills. There were

52 freshmen in both the treatment and control groups. The treatment group received 40 hours of group personal counseling from the peer counselors. Bridges found that there was no significant differences between the groups in grade point average or number on probation. This study seems to indicate that peer personal counseling alone does not improve academic adjustment.

The impact of peer counseling upon the attrition of freshmen in a small, private college was evaluated by McElroy (1976). In this program, the counselors met the freshmen the first day they arrived on campus and helped them in personal, social, and academic adjustment. Participation was mandatory for the 224 freshmen involved in the program. The treatment group was compared with a non-counseled group and achieved a significantly better grade point average and significantly lower attrition rate.

There is a developing consensus that there is a place for the paraprofessional in the college counseling center. Crane (1975) surveyed major college counseling center directors and their attitudes toward paraprofessionals. The counseling center directors who responded foresaw four major functions for peer counselors: freshmen orientation, study skills instruction, college adjustment counseling, and drug abuse counseling. McKee, et al. (1977) surveyed community college counselors' perceptions of the functions of paraprofessionals. The 119 community college counselors who responded saw peers assuming a significant degree of responsibility in academic advising,

career development, and recruitment. They foresaw little involvement in individual therapy or crisis intervention counseling.

Other research has found peer counselors to be effective in settings other than the college counseling center. Schweisheiner and Walberg (1976) found that peer counseling in small groups had a favorable effect upon high school potential dropouts, improving both their academic performance and general adjustment. Truax and Lister (1970) found that vocational rehabilitation counselor aids were more effective than professional counselors in promoting client improvement.

The literature indicates that peer counselors are being used in a number of college counseling centers in a number of different functions. Of the few controlled studies reported, peer effectiveness in improving grade point average and academic adjustment is generally favorable. The successful programs seem to possess as few common elements: student participation is not voluntary, subjects are incoming freshmen, some minimal form of study skills instruction is included, and the treatment is conducted in small groups. Student reaction to all of the peer programs has been positive. The question of the effectiveness of an individualized, completely voluntary program which is open to students of any class rank has not been investigated.

Comparison of Peer and Professional Counselors

The effectiveness of peer counselors as compared with certified professional counselors was investigated for the first

time by Zunker and Brown (1966). The four professional and eight student counselors completed identical pre-counseling training in a structured academic adjustment guidance program. Participation in the program was required for all beginning freshmen at the college, and a sample of 160 freshmen who received guidance from the professional counselors was compared with a matched sample of 160 freshmen who worked with student counselors. Treatment consisted of survival orientation, test interpretation, study habits guidance, and a study skills survey, for a total of six and one-half hours of guidance. They found that student counselors were of equal effectiveness with professional counselors in increasing the freshmen's knowledge of correct study habits and in all other measures. However, student counselors did receive greater acceptance from students than did professional counselors. Also, the freshmen appeared to make better use of the counseling by making higher grades when counseled by peers.

Several studies have compared student and faculty effectiveness in academic advisement programs. Murray (1972) examined whether upperclassmen could perform routine advising functions as well as experienced faculty members. Eighteen senior student counselors were randomly selected, received 15 hours of training, and were assigned five freshmen. The advising was conducted during preenrollment for fall and spring quarters. Murray found that peer advisers were equally competent with the faculty,

and there were no differences between the groups in maintenance of students' progress toward graduation. The student counselors did spend significantly more time advising students, and the advisees rated the peer counselors higher than the faculty in general satisfaction with the program and in human interest conveyed.

MacNeese (1975) conducted a similar study comparing faculty and student paraprofessional academic advisement programs. The evaluation consisted of the advisee's subjective impressions of the advisement program. The advisees found no significant differences between the peer and faculty adviser's knowledge of the academic program. The student counselors were rated more favorably on the quality of the adviser-advisee relationship, interest in counseling activities, and general satisfaction with the advisement program. The author found a significant relationship between the quality of the adviser-advisee relationship and general advisee satisfaction. Ruth (1976) compared the effectiveness of peer counselors and certificated counselors in reducing student withdrawals in a community college. He found that the peers were more effective than the certificated counselors in reducing the number of credits dropped by students, and he attributed this success partly to the peer counselors' tendency to be noncritical.

Lamb and Clark (1974) compared professional and paraprofessional approaches to freshmen orientation. They found that both approaches led to immediate positive reactions by the

freshmen but that significantly more freshmen consequently visited the counseling center from the paraprofessional group. The authors concluded that paraprofessionals lend greater credibility and make the counseling center more attractive to freshmen.

It appears from the literature that trained peer counselors are as equally competent as professional counselors in performing academic advisement, freshmen orientation, and academic adjustment counseling. It does seem that peer counseling programs are more accepted and generally seen as more satisfactory by students. Also, the use of paraprofessionals seems to make the counseling center more attractive to students. There is also some indication that peer academic counseling programs can result in greater improvement in grades and credits earned than equivalent professional guidance.

Study Skills Training in Improving Academic Adjustment

One major component of the presently studied peer counseling program is study skills instruction. This section will discuss various study skills training programs which did not utilize peers as counselors. Reading and study skills programs are becoming a common fixture on college campuses; Warren (1975) surveyed colleges and universities in the Rocky Mountain region and found that 84 percent had existing reading/study skills courses.

Training in study skills has traditionally followed along two separate theoretical lines: one being an instructional/counseling approach, and the other involving behavioral/self control techniques. Research on both of these theoretical approaches will be presented in this section.

Ritter (1971) investigated a university study skills program which consisted of five lessons: note taking, underlining, skimming, compiling study sheets, and exam taking. Treatment consisted of a one hour session on each lesson. Ritter found a significant improvement in upperclassmen's grade point averages four to seven months after taking the program as compared to before the program. This study did not control for the fact that all upperclassmen's grades probably improve over time.

Several studies have examined the effect of study skills training on potential dropouts. Silverman and Riorden (1974) evaluated a program of study skills training for "high risk" freshmen, and treatment involved two hours per week in a study skills class and one hour per week in a reading lab. The treatment was conducted as a twelve week non-credit course. The treatment group showed significant improvement on the Study Orientation scale of the Survey of Study Habits and Attitudes and were significantly improved over a matched control group. However, the treatment group achieved only nonsignificant improvement in grade point average over the control group. Church (1970) evaluated the effectiveness of a voluntary academic rehabilitation program on probationary students. Twenty-eight

sophomore probation students were divided into treatment and no treatment control groups; the treatment consisted of eight hours of a structured academic rehabilitation seminar. Church found that there were no significant differences between the groups on grade point average, Survey of Study Habits and Attitudes score, or a personal adjustment scale score. Driskell (1976) studied the effectiveness of a study skills system upon the academic success of entering freshmen at a major state university. Twenty-eight predicted low achieving freshmen were required to participate and divided into the treatment and control groups. Twelve lessons of guided notetaking and study skills instruction composed the treatment procedure. He found that this study skills system had a significant positive effect upon the achievement of the freshmen.

A more comprehensive counseling-study skills program for failing college freshmen was investigated by Kaye (1972). This required program utilized a combined treatment consisting of individual counseling, group academic guidance, and study skills instruction. A sample of 36 failing freshmen were divided into an experimental and a no treatment control group. The treatment was conducted by three counselors from a master's program and consisted of one hour per week in each of the three areas for ten weeks. In this study, the treatment group achieved significantly higher grade point averages and were significantly more likely to remain in school. This study supports the notion

that some sort of combined counseling and study skills instruction program is effective in improving academic adjustment.

Behavioral self control methods of improving study behavior have been investigated in several research studies. Ziesat (1976) examined several self control methods of increasing efficiency of studying. The experimental subjects were exposed to either stimulus control training, self-reward training, or a combination training of those two. A non-directive, attention placebo control was also included. All of the treatments resulted in significant improvement in amount of study time and attitudes toward studying. There were no significant differences between the different experimental treatments. No difference was found in grade point average between the treatment and the control groups, however.

McReynolds and Church (1973) compared several different approaches to the improvement of study behavior. Thirty-nine sophomores or juniors with low grade point averages and high ACT scores were randomly assigned to one of four groups: self-contracting, study skills development, study counseling, and no treatment control. The treatment for all the groups was implemented over ten to twelve sessions. All of the treatment groups showed significant improvement in their scores on the Survey of Study Habits and Attitudes, but the study skills development group showed the most improvement. There was no significant difference in grade point average between any of the treatment groups and the control group. Students in the

study skills development group did earn more credits though. The authors noted that they had problems with students honoring their contracts in the self control group.

In another study of behavioral techniques, Richards (1975) attempted to determine the efficacy of two self control procedures as additions to the typical treatment for study problems - study skills advice. Ninety undergraduate volunteers of an introduction to psychology class were divided into two control groups and four treatment groups: study skills advice, study skills advice plus stimulus control, study skills advice plus self-monitoring, and study skills advice plus stimulus control and self-monitoring. The treatment was delivered by handout in four sessions. The dependent variable was the course grade in the psychology class. Richards found that all of the treatment groups made significantly higher grades than the control groups, and there were no significant differences between the treatments. The study does suggest that self-monitoring is an effective addition to study skills advice. This study is plagued by some serious weaknesses; specifically, treatment is by handout, and the results were based on only one course grade.

Groveman (1976) also compared the effects of study skills counseling and self control methods on academic performance of college students. He compared the effectiveness of six groups: study skills counseling, lengthened study skills counseling, self control, study skills plus self control, placebo control,

and a no treatment control group. The lengthened study skills counseling and the study skills counseling plus self control groups met for 16 hours; all of the other groups met for eight hours. Scores on the Survey of Study Habits and Attitudes improved for all the treatment groups, but there were no significant differences between the treatment groups. There were no significant differences in grade point average changes among the treatment and the control groups.

One study sought to delineate the dimensions of successful treatment programs for underachievers. Bednar and Weinberg (1970) reviewed 23 studies which evaluated programs for underachievers. All of these studies used grade point average as the dependent variable. They found that programs which improved academic performance were characterized by: (a) structured as opposed to unstructured treatment, (b) lengthy treatment rather than brief, (c) counseling aimed at the dynamics of underachievement used in conjunction with academic study programs, (d) possess high levels of therapeutic conditions (empathy, warmth, genuineness), and (e) treatments are appropriate to the needs of the students. The authors also recommend that future studies use matched control groups for greater precision in significance tests.

The literature indicates that it is unlikely that either study skills instruction alone or self control procedures alone will have a positive impact upon academic adjustment. Both

approaches do seem to be effective in teaching students effective study habits, but their effectiveness in improving grade point average has not been demonstrated. Successful programs do seem to be characterized by having both study skills instruction and individual personal counseling.

Additional Factors Which Influence Academic Adjustment

Although study skills are a major factor in academic achievement, other factors, such as scholastic ability, motivation, social relations, and personality traits, would also seem to have a significant impact. This section will examine those factors other than inherent scholastic ability, which have been indicated in the literature to be vital and will investigate programs which have utilized social or motivational factors in their approach.

Rutkowski and Domino (1975) examined the interrelationship between study skills and personality. A sample of 201 college freshmen took the California Psychological Inventory and the Survey of Study Habits and Attitudes. The authors found a significant interrelationship between the personality and the study skills tests. A high score on the Survey of Study Habits and Attitudes was especially correlated with high scores on three California Psychological Inventory scales: responsibility, self-control, and achievement via conformance.

The relationship between personality, study attitudes, and academic performance of technical college students was studied by Cowell and Entwistle (1971). Three tests, an intelligence test, the Eysenck Personality Inventory, and the Survey of

Study Habits and Attitudes, were given to a group of 117 male technical college students. They found that stable introverts had significantly better study methods than other personality types.

Gadzella and Goldston (1977) investigated the effects of study guides and classroom discussions on students' perceptions of study habits. A class of 98 students was exposed to study guides on effective study habits, quizzed over the contents, and urged to participate in class discussions. Significant improvement was made on the Effective Study Test by all students except three groups: freshmen, students with a grade point average below 2.00, and students scoring low on a mental abilities test. It is suggested that these three groups need a more individualized approach than classroom discussion.

Several studies have examined the personality variables associated with college academic difficulty. Barclay and Cervantes (1969) looked at the personality characteristics which distinguish dropouts from nondropouts. They administered the Thematic Apperception Test to 50 high school graduates and 50 high school dropouts. Independent judges ranked the test protocols on various categories. They found that dropouts (1) felt helpless in coping with their environment, (2) were concerned with security needs rather than achievement needs, (3) were more inner-directed than concerned with the needs of others, (4) had loosely structured value systems, and (5) had rigid and stereotypical thought processes.

Byrd (1971) explored the concept of identity confusion and related variables as factors in college dropout. A group of 787 freshmen were evaluated, of which 60 dropped out and composed the sample. Byrd found that for males identity confusion was a significant factor with respect to dropouts. This study suggests that Erickson's developmental theories can provide a psychological perspective for counseling the potential dropout. Payne (1973) examined the relationship between emotional difficulty and underachievement. Evaluations were conducted on three groups of university students: psychiatric patients, those in academic difficulty, and a control group. The results showed that, although psychological and academic problems are manifested differently, they may be presentations of similar core problems. Payne concluded that counseling would be an appropriate response to a proportion of students in academic difficulty.

A number of treatment programs for underachieving college students have utilized social or emotional factors in their approaches. McGuire and Noble (1973) investigated the relationship between academic achievement motivation and response to academic encouragement via two different counseling letters. Students with failing grades were sent one of two letters of encouragement: one expressed concern, and the other expressed concern and gave information about sources of academic difficulty. The authors found no significant differences between the treatment groups and a no-contact control group on grade point average or subsequent contacts with helping sources. High motivation

subjects did earn significantly higher grade point averages than low motivation subjects in the treatment groups, and there was no difference in grade point average between high and low motivation in the control group. This study suggests that low achieving, highly motivated students are likely to respond to some sort of encouragement or contact.

Two studies used a strictly psychological approach to the problem of underachievement. Trotter (1971) evaluated the effectiveness of group psychotherapy in the treatment of academic underachievement in college freshmen. In the course of the term, there was considerable attrition from the group therapy; at the end, only eight subjects remained in the therapy group. Trotter found that the group psychotherapy did not significantly improve the grade point averages of the underachieving freshmen. McCarthy (1971) compared the effectiveness of several group counseling procedures. Subjects who stated that they wanted to improve their academic performance were divided into four groups: personal/emotional problem group, study skills group, volunteer control group, non-volunteer control group. There were no significant differences among any of the groups on grade point average, self-concept, or knowledge of study habits and attitudes. These two studies indicate that group therapy alone is not effective in improving academic achievement.

Jenkins and Guthrie (1976) studied the effect of role-playing as a resocialization strategy for high risk college freshmen. In working with 288 high risk freshmen on a major college campus,

one half of the students received a behavior rehearsal treatment in addition to the regular remedial program. Students role-played in five socially difficult areas: (1) becoming acquainted enough with professors and students to learn the unique requirements of a course, (2) handling common campus situations such as cashing checks, (3) managing time, (4) dealing with the social pressures of dormitory living, and (5) seeking help from professors or tutors as soon as difficulty is encountered. This study showed that the treatment group which received role-playing as a rehearsal for socially difficult situations achieved significantly higher grade point averages than the control group which received the remediation program only. This study seems to show the importance of nonacademic, socialization factors in academic achievement.

The literature seems to indicate that there are social and motivational variables other than study skills which influence academic adjustment. Certain personality traits have been identified as associated with underachievement. Other personality variables accompany efficient study methods and attitudes. Freshmen and low achievers appear to need individualized treatment, and here motivation is an important key to the student's responsiveness. Nonacademic, socialization issues appear to be vital in influencing academic achievement. The studies in this section coupled with Kaye's (1972), which combined individual counseling and study skills instruction, and Brown's (1965, 1971), which emphasized the motivational factors, indicate that an

effective study skills instruction program must take into account the student's motivational and social adjustment level.

Summary

It appears from the literature that individually both study skills training and personal/social counseling are necessary but neither alone is sufficient for improving academic adjustment. The literature indicates that study skills training alone is not effective in improving grade point average, although it does successfully improve study methods. On the other hand, certain personality traits, such as helplessness, security needs, and identity confusion, are associated with college dropouts. Successful study methods and achievement are associated with other personality characteristics: responsibility, self-control, and stability. To date, psychotherapy and personal counseling aimed at these personal and social factors have not been effective in improving academic adjustment. There is some indication in the literature that a successful intervention program must incorporate both the study skills training and the personal, motivational factors. The present study does utilize these two components by using trained peer counselors.

The use of undergraduate peers in college counseling centers is widespread, but their effectiveness is largely undocumented. Peers have been utilized in the roles of academic advisers, therapists, and academic adjustment counselors, and the results have been favorable although largely based on studies which

lacked control groups and objective criteria. Two controlled studies did suggest that peer counselors working in small groups can be effective in improving the academic adjustment of freshmen who were required to participate in the program. It appears that peer counselors are as equally competent as professionals in performing academic advisement and academic adjustment counseling. In addition, the peer counselor seems to bring the special asset of rapport to the relationship. Students feel more accepted and understood by the peer counselors. In every peer program, student reaction has been positive, and the service rated as satisfactory.

This study evaluated the effectiveness of a peer counseling program which utilized study skills instruction, peer personal counseling, and general educational advisement in providing individualized academic adjustment counseling for volunteer students of any class rank.

CHAPTER III

METHODOLOGY

Subjects

The population from which the sample was composed consisted of all undergraduate students enrolled in Utah State University during the 1977-78 academic year. Participation in the student-to-student counseling program was completely voluntary. Davis (1974) suggested that study improvement programs work best when participation is voluntary. Because participation was voluntary, this study differed in this respect from Brown's studies (1965, 1966, 1971) in which the initial phase of the student-to-student counseling program was required for a certain group. Subjects were accepted from any class rank: freshmen, sophomore, junior, or senior. In this respect also, this study differed from most previous ones which concentrated almost exclusively on freshmen. The reason that all classifications of students were welcomed was that the service was available to all who want help and not just a select group.

Subjects were recruited in a number of different ways. Students in potential academic difficulty were sought by sending letters explaining the program and referral forms to all deans, department heads, academic service centers for each college, and resident hall heads. A copy of this letter is included in

Appendix A. Subjects were also obtained by placing advertisements in the university newspaper and working cooperatively with other related student government programs. It was also expected that the Division of General Registration would serve as a primary referral source. This Division functions to aid potential academic dropouts. In this way, the program hoped to recruit potential dropouts and students in need of help and provide them with immediate assistance and support in order to prevent major academic difficulties or withdrawal from school.

Letters explaining the program and urging participation were sent to all freshmen entering Utah State University for the first time Winter quarter and Spring quarter 1978. A copy of the letter is located in Appendix B. A similar letter was sent to all Division of General Registration students on warned or probationary academic status as of Winter quarter or Spring quarter 1978 (Appendix C). Also all veteran students on warned or probationary status at the beginning of Spring quarter 1978 received a letter urging participation from the Academic Service Center (Appendix D).

Only those students who decided to participate in the student-to-student counseling program were included in the treatment group. Participation was defined as attending at least four sessions with a peer counselor. In this time, it was expected that an introduction, evaluation, and pertinent training or counseling would be accomplished. The student-to-student counseling program was offered through the 1977-78

academic school year. All students who chose to participate were asked to sign an informed consent agreement. A copy of this form is found in Appendix E.

The treatment group consisted of 21 subjects. This group ranged in age from 18 years to 29 years, with a mean age of 22.1 years. There were 15 males and 6 females, making up 71 and 29% of the sample respectively. Over 90% of the treatment subjects were either freshmen or sophomores. Table 1 gives a complete breakdown of the group by class rank. During the 1977-78 academic year, four students participated in the student-to-student counseling program during the Fall quarter, seven during Winter quarter, and ten during the Spring quarter.

Table 1
Treatment Group Breakdown by Class Rank

Class Rank	N	% of Total Group
Freshmen	14	66.7
Sophomore	5	23.8
Junior	0	0.0
Senior	2	9.5
Total	21	100.0

In order to determine the effectiveness of the program, all students who participated in the program were matched with students from the same academic quarter who did not participate. The students were matched on three criteria: sex, cumulative college grade point average, and cumulative credits earned. The matched group was selected from a roll of all university students' grades which was provided the staff of the Counseling and Testing Center by the Registrar, Office of Admissions and Records. All names and records of the treatment and the matched control groups were treated in strictest confidence.

In terms of meeting the predetermined criteria, the matching of the control group with the treatment group seemed to have been successful. All treatment subjects were matched with same sex students. A complete comparison of the treatment and control groups on the matching criteria is found in Table 2. The treatment group had a mean cumulative grade point average of 1.81, and the control group a mean cumulative grade point average of 1.86 prior to the academic quarter of participation. In comparing cumulative credits earned prior to the quarter of participation, the treatment group had a mean of 56.1 credits and the control group a mean of 53.8 credits.

Three subjects in the treatment group were freshmen enrolling for their first quarter and could not be matched using the above criteria. These subjects were therefore matched on American College Testing overall grade point average prediction percentile

Table 2
A Comparison of the Treatment and Control Groups
on the Matching Criteria

Subjects	Treatment Group		Matched Control Group	
	Cumulative GPA	Cumulative Credits	Cumulative GPA	Cumulative Credits
s1	2.56	51	2.53	49
s2	1.90	52	2.01	57
s3	0.44	27	0.81	33
s4	2.80	20	2.75	16
s5	2.25	36	2.20	43
s6	0.85	13	0.62	13
s7	2.00	21	2.03	30
s8	2.05	250	2.19	226
s9	1.72	18	1.72	18
s10	1.98	220	2.10	213
s11	3.76	34	3.65	34
s12	1.50	14	1.75	16
s13	0.89	18	0.81	16
s14	1.43	53	1.54	52
s15	1.82	76	1.82	69
s16	1.17	54	1.19	31
s17	2.03	34	2.09	33
s18	1.44	18	1.60	20
Average	1.81	56.1	1.86	53.8

rank. One subject was predicted to be at the first percentile and was matched with a new student also at the first percentile. The second subject was predicted to be at the 89th percentile and was matched with a beginning student also at the 89th percentile. The third subject was predicted to be at the first percentile and was matched with a student at the seventh percentile.

It is realized that there may have been a difference in motivation between the treatment and the control group. This question is discussed at the end of the treatment section.

Measures

Academic adjustment was evaluated by using three measures: grade point average, university academic standing, and continued attendance in college. It is proposed that these three measures reflected the acquisition of effective study skills and increased motivation and social adjustment.

The measure used to test for differences in grade point was the grade point average for the academic quarter following the one in which the student participated in the peer counseling program. Grade point average is a continuous ratio scale from 0.0 to 4.0. A 4.0 signifies grades of "A" in all credits completed.

The measure used in the fourth hypothesis was in the form of ordinal data. In measuring the proportion of students placed on probation within a quarter following their participation, students were categorized into those who dropped in academic standing (probation), those who remained the same, and those who improved

their academic standing. The measure used in the fifth hypothesis was nominal or categorical in nature. In measuring the proportion of students remaining in school either the quarter following participation or two quarters following participation, students were categorized into those enrolled in school the pertinent quarter and those who were not enrolled in school the pertinent quarter.

The Survey of Study Habits and Attitudes (Brown and Holtzman, 1964) was used to evaluate changes in students' study skills and motivation over the course of the peer counseling program. The Survey of Study Habits and Attitudes (SSHA) measures study methods, motivation for studying, and certain attitudes toward scholastic activities which are important in the classroom. Form C, the college version, was used; it is composed of 100 items. Form C has scores on four basic scales, two subtotals, and a total score. The Delay Avoidance scale (DA) assesses one's promptness in completing academic assignments, lack of procrastination, and freedom from wasteful delay and distraction. The Work Methods scale (WM) measures one's use of effective study procedures, efficiency in doing academic assignments, and how-to-study skills. The Study Habits subtotal (SH) combines the scores on the DA and WM scales to provide a measure of academic behavior. The Teacher Approval scale (TA) assesses one's opinion of teachers and their classroom behavior and methods. The Educational Acceptance scale (EA) measures one's approval of educational objectives, practices, and requirements. The Study

Attitudes subtotal (SA) combines scores on TA and EA scales to provide a measure of scholastic beliefs. The Study Orientation scale combines all six other scales and provides an overall measure of study habits and attitudes. The Study Orientation scale was the specific measure utilized in this study.

The SSHA was normed on a group of 3,054 first semester freshmen enrolled at nine geographically dispersed colleges. Brown and Holtzman report coefficients of internal consistency for the four subscales from .87 to .89. They also report coefficients of stability of .94 with a four week interest interval and .88 with a fourteen week interest interval. The authors report concurrent validity between SSHA and grade point average for six of the colleges on which it was normed. The validity coefficients vary from .25 to .45, with a weighted average of .36. Gardner (1967) duplicated Brown and Holtzman's validity research on a group of in-training nursing students. He found a correlation coefficient of .58 between the SSHA and grade point average. He also found a correlation coefficient of .53 between the SSHA and the locally used Study Skills Counseling Evaluation. This study seems to conform the concurrent validity research of Brown and Holtzman. McCausland and Stewart (1974) evaluated 154 freshmen on several measures and preferred the SSHA for diagnostic and counseling purposes over two other tests of academic skills and attitudes. They also found that the Study Orientation scale explained as much variance alone as the four subscales.

The Effective Study Test (Brown, 1964) was also used to evaluate change in the students' study behavior over the course of treatment. The Effective Study Test (EST) has scores on five basic scales and one total score. The Reality Orientation Scale measures a student's realistic understanding of the problems connected with developing effective study habits. The Study Organization Scale assesses one's knowledge about effective methods for budgeting one's study time and organizing one's study area. The Writing Behavior Scale measures one's knowledge of effective methods of taking class notes and writing themes and reports. The Reading Behavior Scale assesses a student's knowledge of effective methods of reading textbooks and remembering the material read. The Examination Behavior Scale measures one's knowledge of effective methods of preparing for and taking objective and essay tests. Finally, the Total Study Effectiveness Score combines all five scales to provide a single overall measure of a student's knowledge of effective study methods and the factors influencing their development; this total score was used as a measure of knowledge of study methods in this study.

The EST is composed of 125 items and was normed on 2,047 entering college freshmen at three Texas colleges. Brown reports concurrent validity between the EST and grade point average at two different colleges of .54 and .57. No reliability statistics are reported.

Procedures

Research Design. A single group pretest-posttest design was used to evaluate the acquisition of knowledge of effective study skills and attitudes among participants in the treatment group. This design involved three steps. First, all volunteer students were administered the Survey of Study Habits and Attitudes and the Effective Study Test. Secondly, all subjects received the treatment as outlined below. Thirdly, all subjects were administered the Survey of Study Habits and Attitudes and the Effective Study Test again.

The second research design in this study, used to evaluate the effect of the experimental treatment on academic adjustment, was a nonequivalent control-group design. A quasi-experimental design was employed because random assignment was not possible. There was one treatment group and one matched control group. Preliminary matching on sex, grade point average, and cumulative credits earned served to equalize the treatment and control groups.

Treatment. The treatment in this study was a student-to-student counseling program aimed toward improving the academic adjustment of college students in academic and/or social difficulty. Counseling was provided by six systematically trained upper-classmen academic counselors. These peer counselors were selected at the beginning of the 1977-78 academic school year on the basis of: (1) their interest, (2) academic background, and (3) a personal interview assessing their potential to learn

and utilize interpersonal counseling skills. The six upper-classmen selected for training were outstanding in their ability to relate to others with ease and confidence.

The selected upperclassmen participated in a Student-to-Student Counselor Training Workshop for two days immediately prior to the beginning of Fall quarter 1977. A complete outline of the training procedure is located in Appendix F. Training of the peer counselors was primarily experiential in nature; they experienced the evaluation, guidance, and instruction just as the counselee would. Initially the peer counselors were exposed to an introduction and an explanation of the objectives and theoretical basis of the program. They were then acquainted with the university academic program, i.e. academic warning, probation, suspension, and graduation requirements. Next they experienced the taking, and then the formal administration, scoring, and interpretation of the Survey of Study Habits and Attitudes and the Effective Study Test. Then the trainees became formally acquainted with the programmed study skills instruction materials. Finally the trainees were informed of their specific duties and exposed to rather fundamental counseling techniques. The techniques explored included reflection of feelings, acceptance, non-directive lead, reassurance or praise, advice or suggestion, and information giving. Their limitations as counselors were stressed, and they were informed of referral resources such as the Counseling and Testing Center, Academic Service Center, and Division of General Registration. Training in all these aspects consisted of first experiencing the program

as the counselee would, receiving formal explanation and instruction, and finally role-playing the different specific situations. Throughout the academic year, the peer counselors participated in weekly group consultation sessions with the investigator in which individual cases were discussed and problems with students were explored and resolved.

The treatment proper for the volunteer subjects consisted of four sequential counseling activities. The students were seen individually by a peer counselor in the Counseling and Testing Center. Gadzella and Goldston (1977) found that freshmen and students in academic difficulty need a more individualized involvement than a group discussion. In the initial interview, the peer counselor introduced the program to the student and became familiar with the student by going over a student information form. A copy of the information form is located in Appendix G. The peer counselor briefly explained the university academic program and various referral services which the student can utilize when appropriate. One of the main purposes of the initial session was to set a comfortable, informal atmosphere in which the student felt free to ask questions and express his particular needs and personal problems. At the close of the session, provided that the student decided that the program met his needs, he took the Survey of Study Habits and Attitudes and the Effective Study Test.

The second session was a test interpretation session in which the subject's study skills and attitudes were evaluated. The

peer counselor interpreted the Survey of Study Habits and Attitudes, the Effective Study Test, and the ACT Student Profile Report with the student. Interpersonal difficulties which might have been inhibiting the student's motivation were explored. The peer counselor then integrated the results of these tests with the student's report of areas of personal difficulty to emphasize to the student his strengths and weaknesses in the area of study skills and motivation. A plan to improve the student's weaknesses and motivation was then formulated.

The next two to six sessions consisted of study skills instruction and informal, personal counseling. The programmed materials used were the Student's Guide to Effective Study (Brown, 1970) and the Effective Study Workbook (Brown, 1976). The Student's Guide instructional materials discusses ten topics: managing time, improving memory, taking lecture notes, reading textbooks, taking objective and essay examinations, writing themes and reports, making oral reports, improving scholastic motivation, improving interpersonal relations, and improving concentration. The workbook required the student to outline the major points in each of the ten lessons. One or two topics were covered per week with an average of one session per week. Instruction began with those topics identified as weaknesses in the test interpretation session. The peer counselor reviewed with the student the specified study topic or topics and the corresponding assignments in the workbook. He also initiated a discussion as to how the student could apply these study principles to his actual study behavior.

Along with the program instruction described above, the peer counselors served as a special friend to the students they saw. They informally counseled students with social, interpersonal, motivational, and vocational problems. They functioned as a sort of sounding board for the student. The peer counselors made appropriate referrals when necessary to the Counseling and Testing Center (personal or vocational counseling) or to the tutoring service on campus. Along this line, the peer counselors provided the student with information on academic requirements as needed and served as a link between the student and the university administration.

The final session involved a study habits and motivational evaluation. It was a review and recapitulation of the student's remaining difficulties; the final evaluation normally occurred shortly before the final examination week. The counselor sought to correct any residual study problems that were still hampering the student and encouraged the student to apply the skills he had learned in preparing for his final exams. The student then took the Survey of Study Habits and Attitudes and the Effective Study Test for the second time.

The control group was composed of students who were matched with students in the treatment group on three criteria: sex, cumulative college grade point average, and cumulative credits earned. The control group was composed of students attending school the same academic quarter as students in the treatment

group. The members of the control group were not contacted at any time during the treatment.

It is realized that there may have been a difference in motivational level between the treatment group, the volunteers for the program, and the control group, the matched sample who did not volunteer. A randomly selected control group of volunteers was not possible on the ethical grounds that the student-to-student counseling program had an obligation to provide its service to all students who were willing and had the need. Also, it was vital that the student-to-student counseling program be set up as a voluntary service, and the low number of volunteers did not lend itself to experimental random assignment.

Analysis

In order to determine if there is a difference in knowledge of effective study skills and attitudes as a result of the experimental treatment, a t-test for correlated means was used to analyze differences between the pretest and the posttest on the Survey of Study Habits and Attitudes and on the Effective Study Test.

Since the treatment and the control groups were closely matched, a t-test for correlated means was used to determine if there was a significant difference in the mean grade point average of the two groups.

Siegel (1956) suggests that the sign test be used to analyze data for designs which use two related samples and use ordinal measures within matched pairs. The sign test

was used to test the hypothesis dealing with academic standing because the data are ordinal in nature.

Siegel (1956) also recommends that the Cochran Q test be used to analyze data for designs which use multiple matched samples and use nominal or dichotomized measurement. Therefore, the Cochran Q test was used to test the hypothesis dealing with dropout rate because the data on dropouts are dichotomous in nature.

In all statistical computations, the .05 level of significance was used.

CHAPTER IV

RESULTS

This study evaluated the peer counseling program in terms of two objectives. The first objective was to evaluate the effectiveness of the peer counseling program in improving students' study skills and attitudes. This was evaluated by analyzing the differences between the pretest and the posttest on the Survey of Study Habits and Attitudes and the Effective Study Test. The second objective of this study was to determine if the students who participated in the peer counseling program made a better academic adjustment to college than a matched control group of students who did not participate in the program. Academic adjustment was evaluated by comparing the treatment and control group on grade point average, academic standing, and dropout rate.

Study Methods

The first hypothesis tested was that there is no difference between the pretest and the posttest scores on the Survey of Study Habits and Attitudes for students who participate in a peer counseling program. The mean pretest and posttest scores on the Study Orientation scale of the Survey of Study Habits and Attitudes were analyzed by using a directional t-test for

correlated means (Table 3). For the 13 students who took both the pretest and the posttest, there was a statistically significant improvement in the posttest scores, $t(12) = -4.00$, $p < .005$. Therefore, the null hypothesis was rejected. The level of significance exceeded the predicted level of .05. In terms of practical significance, there was a mean improvement of 36 points for the posttest over the pretest. This is a difference of over one standard deviation.

The second hypothesis stated that there is no difference in the pretest and posttest scores on the Effective Study Test for students who participate in a peer counseling program. The mean pretest and posttest scores on the Total Study Effectiveness scale of the Effective Study Test were analyzed by a directional t-test for correlated means. Of the nine students who took both the pretest and the posttest, there was a statistically significant improvement on the posttest, $t(8) = -5.62$, $p < .0005$. Therefore, the null hypothesis was rejected. The level of significance again exceeded the predetermined .05 level. In terms of practical significance, all nine students showed improvement on the posttest, and there was a mean improvement of 7.67 points, which again is a difference of almost one standard deviation. The results are presented in Table 4.

These results indicate that the peer counseling program was effective in improving students' study skills, motivation, and scholastic attitudes over the course of the program or treatment.

Table 3
 Pretest and Posttest Scores on the Survey
 of Study Habits and Attitudes

Measure	\bar{x}	s	df	t-score
Pretest	77.85	24.62	12	-4.00*
Posttest	113.85	32.26		

* $p < .005$.

Table 4
 Pretest and Posttest Scores on
 the Effective Study Test

Measure	\bar{x}	s	df	t-score
Pretest	95.33	11.40	8	-5.62*
Posttest	103.00	8.63		

* $p < .0005$.

Table 5

Grade Point Average for the Treatment and Control Groups

Group	\bar{x}	s	df	t-score
Treatment	2.54	.76	9	.089
Control	2.51	1.13		

Table 6

Change in Academic Standing for the
Treatment and Control Groups

Change	Treatment Group		Matched Control Group	
	Number	% of Total	Number	% of Total
Improved	2	9.5	1	4.8
No Change	14	66.7	13	61.9
Dropped	5	23.8	7	33.3
Total	21	100.0	21	100.0

Academic Adjustment

The first measure of academic adjustment to be evaluated is grade point average for the academic quarter following the student's participation in the peer counseling program. The third hypothesis stated that there is no difference in grade point average between students who participate in a peer counseling program and a matched group of students who did not participate. There were ten matched pairs of students who remained in school the quarter following participation. To analyze the differences in the mean grade point average of the treatment and control groups, a directional t-test for correlated means was used. There is no statistically significant difference between the treatment and the control group, $t(9) = .089$, $p > .10$. Therefore, the null hypothesis was retained. The results are summarized in Table 5.

The second measure of academic adjustment was change in academic standing from the time students joined the program through the quarter following participation. The fourth hypothesis stated that there is no difference in the proportion of students placed on academic probation between students who participate in a peer counseling program and a matched group of students who did not participate. Siegel (1956) suggests that the sign test be used to analyze data for designs which use two related samples and use ordinal measures within matched pairs. The data on academic standing is ordinal in nature in that some students dropped in academic standing, some remained the same, and others improved their academic standing. Therefore, the

differences between the pairs can be represented by plus and minus signs. Table 6 shows the changes in academic standing for the treatment and control groups. All tied cases, in which there is no difference between the pairs, are dropped from the analysis of the sign test. For the six pairs in which there was a difference in change in academic standing, two had a positive difference in favor of the control group, $p = .344$. Thus the null hypothesis was retained, and there is no statistically significant difference in the proportion of students who dropped in academic standing between the treatment and the control groups.

The third measure of academic adjustment was dropout rate. The hypothesis stated that there is no difference in the proportion of students remaining in school the following quarter between those who participate in a peer counseling program and a matched group of students who did not participate. Siegel (1956) recommends that the Cochran Q test be used to analyze data for designs which use multiple matched samples and use nominal or dichotomized measurement. In analyzing the dropout rate, there are two matched sets, the treatment group and control groups, and the data on dropout is dichotomous in nature. There were five students in the treatment group who dropped out, and there were ten students in the control group who did not remain in school the following quarter. Table 7 summarizes the dropout results. There is no statistically significant difference in the proportion of students remaining

Table 7
Dropout Rate of the Treatment and Control Groups
One Quarter After Participation

Group	Number of Dropouts	% of Total Group
Treatment	5	23.8
Control	10	47.6

Table 8
Dropout Rate of the Treatment and Control Groups
Two Quarters After Participation

Group	Number of Dropouts	% of Total Group
Treatment	9	42.9
Control	14	66.7

in school between the treatment and the control groups, $Q(1) = 3.57$, $.05 < p < .10$. Therefore, the null hypothesis was retained.

It was also hypothesized that there is no difference in the proportion of students remaining in school two quarters later between those who participated in a peer counseling program and a matched group of students who did not participate. Again, the Cochran Q test was used to analyze the data for this design because it used multiple matched samples and nominal or dichotomized measurement. Two quarters after participation in the program, there were nine students in the treatment group who dropped out, and there were 14 students in the control group who did not remain in school. Table 8 summarizes these dropout results. There is no statistically significant difference in the proportion of students remaining in school two quarters later between the treatment and the control groups, $Q(1) = 2.27$, $.10 < p < .20$. Thus, the null hypothesis was retained.

These results indicate that there was no significant difference between students who participated in the program and a matched group of students who did not participate on the three measures of academic adjustment (grade point average, academic standing, and dropout rate).

It is noted that only nine and thirteen of the total 21 students completed the posttest of the Effective Study Test and the Survey of Study Habits and Attitudes, respectively. Although it was not hypothesized originally, the investigator thought that it might be productive to see if there was a

difference in grade point average between those students who completed the posttests and their matched control students.

Therefore, it was hypothesized that there is no difference in grade point average between those nine students in the treatment group who completed the posttest of the Effective Study Test and those nine matched control students. To analyze the differences in the mean grade point average of these treatment and control groups, a directional t-test for correlated means was used (Table 8). There is no statistically significant difference between the nine students who completed the Effective Study Test and their matched controls, $t(8) = .483, p > .10$. Thus the null hypothesis was retained.

It was also hypothesized that there is no difference in the grade point average of the 13 students who completed the Survey of Study Habits and Attitudes and the 13 matched control students. Again, a directional t-test for correlated means was used to analyze the differences between the means of the treatment and control groups. The results are presented in Table 9. There is no statistically significant difference between the treatment and the control groups, $t(12) = .381, p > .10$. Therefore, the null hypothesis was retained.

Summary

This study evaluated a peer counseling program in terms of two objectives. Concerning the first objective, the peer counseling program was effective in improving students' study

Table 9
 Grade Point Average for the Treatment Group Who
 Completed the Posttest of the Effective
 Study Test and a Matched Control Group

Group	\bar{x}	s	df	t-score
Treatment	2.33	.665	8	.483
Control	2.16	1.203		

Table 10
 Grade Point Average for the Treatment Group Who Completed
 the Posttest of the Survey of Study Habits and
 Attitudes and a Matched Control Group

Group	\bar{x}	s	df	t-score
Treatment	2.29	.655	12	.381
Control	2.19	1.034		

skills and attitudes. However, there was no significant difference in the academic adjustment of students who participated in the program and a matched group who did not participate. Academic adjustment was measured by grade point average, academic standing, and dropout rate.

In a supplemental finding, students in the treatment group who completed both the pretest and the posttest of the Effective Study Test and the Survey of Study Habits and Attitudes did not make a better academic adjustment in terms of grade point average than a matched control group. The possible explanations for all of these results will be discussed in the following chapter.

CHAPTER V

DISCUSSION

The purpose of this study was to evaluate the effectiveness of a peer counseling program in improving undergraduate students' academic adjustment. Six upperclassmen were carefully selected and systematically trained in a study skills instruction program and certain supportive, therapeutic techniques. These six served as peer counselors. The peer counseling program provided individualized study skills instruction, informal personal/motivational counseling, and general educational information and advising for volunteer students in academic difficulty.

Twenty-one volunteer students each completed a minimum of four sessions with a peer counselor. The first objective of the study was to determine if the students who participated in the peer counseling program improved in their study skills and attitudes. A t-test for correlated means was used to analyze differences in the pretest and posttest means of the Survey of Study Habits and Attitudes and the Effective Study Test. The second objective of the study was to determine if students who participated in the peer counseling program made a better academic adjustment to college than a matched group of students who did not participate in the program. Three measures of academic adjustment were examined. First, grade point average for the

quarter following participation for the treatment and control groups was compared using a t-test for correlated means. Secondly, the proportion of students who dropped in academic standing the following quarter in the treatment group was compared with the proportion of students who dropped in academic standing in the control group by means of the sign test. Finally, the proportion of students who dropped out of school the following quarter and two quarters following participation in the treatment group was compared with the proportion of students in the control group who dropped out of school by utilizing the Cochran Q test.

Evaluation of Findings

It was expected that the students who participated in the peer counseling program would improve in their study skills, motivation, and scholastic attitudes. This expectation was fulfilled as the students showed a mean improvement of over one standard deviation from the pretest to the posttest on the Survey of Study Habits and Attitudes. The students also showed a mean improvement of almost one standard deviation from the pretest to the posttest on the Effective Study Test.

It was also expected that students who participated in the peer counseling program would show a better academic adjustment to college (as measured by grade point average, academic standing, and dropout rate) than a matched group of students who did not participate. However, there was no statistically significant difference in the mean grade point averages of the treatment and

matched control groups for the academic quarter following participation. Also there was no statistically significant difference in the proportion of students who dropped or improved their academic standing between the treatment and the control group. And on the third measure of academic adjustment, there was also no statistically significant difference in the dropout rate of the treatment and the control group for either the quarter following participation or two quarters after participation. The expectation that the students who participated in the peer counseling program would show a significant improvement on these three measures of academic adjustment was, therefore, not fulfilled.

Implications

The findings indicate that, while there was evidence that the peer counseling program was effective in improving the study skills, motivation, and scholastic attitudes of the participants, there was not evidence that it was effective in improving participants' grade point average, academic standing, and dropout rate over that of a matched group. There are a number of factors which need to be examined concerning the lack of evidence in this study to demonstrate the effectiveness of the peer counseling program in improving the three measures of academic adjustment.

Subjects. The subjects in this study were volunteers, and the volunteer subjects were free to withdraw from the program at any time. Subjects were defined in this study as those students

who attended at least four sessions with a peer counselor; the commitment of these subjects appears to have varied substantially, however. Some subjects met with the peer counselor throughout the quarter, while others met with the counselor for only the two weeks prior to final exams. There were also some students who left the program at midterm because they either had their needs met or were dissatisfied with the program. The problem of the variability of commitment to the program was also expressed by the number of students who failed to take the posttest of the two study methods tests. This problem of subjects' commitment to the program was seen by Upcraft (1971) and Silverman and Riorden (1974) in their volunteer programs. Silverman and Riorden eventually changed their program and offered course credit in an attempt to increase motivation and participation. Warren (1975) in his survey found that the unwillingness of institutions to offer credit for study skills programs discouraged students from participating. The successful counseling-study skills program by Kaye (1972) was a required program for failing college freshmen. It is speculated that some form of incentive which increases the volunteer subject's motivation and commitment would have a positive impact on the effectiveness of the peer counseling program.

It is generally assumed that volunteer subjects are more highly motivated than nonvolunteer matched control subjects. This assumption needs to be examined and qualified in respect to this study. A number of the treatment subjects seemed to have

been situationally motivated by a sort of "panic" either after midterm exams or shortly before finals. Such a situational motivation is likely to diminish as the situational stress lessens. This phenomena may explain some of the lack of commitment by the treatment subjects. In addition, about fifty percent of the subjects were in academic difficulty prior to their participation in the peer counseling program. In these cases, their volunteer participation may have been a last "plea for help" from the system. On the other hand, the matched subject who did not volunteer may have for the first time become serious and really applied his talents to the academics of college. For example, one matched subject with a cumulative grade point average of 1.60 for 20 credits earned a grade point average of 4.00 for eleven credits for the quarter in which he was matched with the treatment subject.

There is always a concern when matching is utilized to equalize the treatment and control groups that the two groups are actually comparable. In this study matching occurred using three criteria: cumulative grade point average, cumulative credit earned, and sex. Other variables not controlled for which may or may not have been crucial and differentiated the groups included age, major or field of study, difficulty of courses carried during the quarter, and number of credits carried during the pertinent quarter. As an example of the variability not controlled by the matching criteria, one treatment subject, a forestry major, completed eleven credits at a 1.09 grade point

average, while his matched subject completed twelve credits of physical and recreational education for a 2.58 grade point average. In another example, a treatment subject completed 15 credits for a 2.33 grade point average, while his matched subject completed only ten credits for a 2.70 grade point average. It appears evident that in future studies the value of a multifaceted matched control group must be weighed against the enormous amount of time and effort that would be required to select such a closely matched group.

Treatment. The finding that a peer counseling program is effective in improving study skills and attitudes of college students confirms the studies of Brown (1965, 1971) and Zunker and Brown (1966) that peers are effective in such a capacity. It is recommended by the investigator that peers be utilized by counseling centers to improve the study methods of students in academic difficulty.

The difficulty involved in making a positive impact upon academic achievement is well documented. Church (1970), McCarthy (1971), and Trotter (1971) are a few examples of different treatment programs which have failed to significantly improve the mean grade point average of the treatment group over the control group. More specifically, McReynolds and Church (1973), Groveman (1976), and Ziesat (1976) have all, through various self control and study skills programs, improved significantly scores on the Survey of Study Habits and Attitudes but have all failed to improve the grade point average of the treatment as

compared to the control group. This study follows in this pattern of being effective in improving study skills and attitudes but being ineffective in improving grade point average over that of a control group. One implication of this finding is that, although there is a correlation between the Survey of Study Habits and Attitudes and grade point average, the relationship between these two measures is not a causal one. An improvement in study skills does not lead to an improvement in grade point average.

An inspection of the data indicates that some subjects made substantial improvement over their previous grade point average and over the matched control subject while other subjects showed little improvement or even dropped in their grade point average. It is speculated that there could be crucial, unknown variables, such as personality, intelligence, and motivation, which differentiated those who benefitted from the program from those who did not. It is recommended that further research evaluate students across such variables as motivation, personality, and intelligence and delineate those students who will use and benefit from such a treatment program. Also, by isolating those students who do not benefit from a peer counseling program, the characteristics of this group could be examined, and modifications made in the program to meet their particular needs.

One positive but unevaluated aspect of the peer counseling program is the effect upon the peer counselor. The peer counselors voluntarily expressed that their experience was a maturing,

growth producing one which will help them in dealing with people in later life situations. It is recommended that changes in the personality of the peer counselor be evaluated in further research.

Limitations

There are several limitations evident in this study. A larger sample size would be advantageous in that it would insure that some of the uncontrolled variables (difficulty of courses, number of credits taken) would be distributed randomly and not have a systematic effect upon the results. Also, the results of the study could be generalized with more certainty if the sample had been larger.

A second weakness of this study is the length of treatment and/or the variability of the commitment of the students to the program. Bednar and Weinberg (1970) found that one of the ingredients of successful programs for underachievers was lengthy rather than brief treatments. Some incentive for the student to become committed to the program, such as offering credit or signing a semi-formal contract, might be effective in insuring a more lengthy treatment program.

Another limitation of this study is the weak predictive validity of the two study methods measures, the Survey of Study Habits and Attitudes and the Effective Study Test. Also, there were no reliability data reported for the Effective Study Test, and this lessens the value of the pretest-posttest difference

which was found in this study. In general, if better measures of study methods had been available, the generalizability of this study would have been more certain.

Finally, the differences in the motivation of the volunteer treatment group and the nonvolunteer control group were not clear in this study. Groups of directly comparable motivation which are randomly assigned to the two groups would better serve to equalize the treatment and the control groups and would more clearly show the effect of the treatment.

Recommendations

It is recommended that the effectiveness of peer counseling in improving academic adjustment be further researched. Some changes in the present experiment should be implemented.

Specifically, it is recommended that:

1. The present study be replicated with a larger sample size, a firm commitment from the subjects, and a longer treatment program.
2. The present study be replicated with the treatment and control groups composed of randomly assigned volunteer subjects.
3. An evaluation be conducted to identify any common personal characteristics among those students who substantially benefit from the program.
4. The effects of the program on the peer counselor be examined.

Summary

This chapter has evaluated the research findings, examined the implications and limitations of this experiment, and recommended areas of further research. In general, a peer counseling program was effective in improving the study skills and attitudes of students in academic difficulty. No significant difference was found between students who participated in the program and a matched group who did not participate on grade point average, academic standing, or dropout rate. It is recommended that further research utilize an experimental design with random assignment of students to the two groups and examine the impact that the program has on the individual peer counselors.

REFERENCES

- Barclay, A., & Cervantes, L. F. The Thematic Apperception Test as an index of personality attributes characterizing the adolescent academic dropout. Adolescence, 1969, 4, 525-540.
- Bednar, R. L., & Weinberg, S. L. Ingredients of successful programs for underachievers. Journal of Counseling Psychology, 1970, 17, 1-7.
- Bridges, W. W. The use of peers as facilitators in small group procedures with underachieving college freshmen. Dissertation Abstracts International, 1972, 32, 4936A.
- Brown, W. F. Effective Study Test: College Level. San Marcos, Texas: Effective Study Materials, 1964.
- Brown, W. F. Student-to-student counseling for academic adjustment. Personnel and Guidance Journal, 1965, 43, 811-817.
- Brown, W. F. Student's Guides to Effective Study. San Marcos, Texas: Effective Study Materials, 1970.
- Brown, W. F. Student-to-Student Counseling. Austin: University of Texas Press, 1972.
- Brown, W. F. Effectiveness of paraprofessionals: the evidence. Personnel and Guidance Journal, 1974, 53, 257-263.
- Brown, W. F. Effective Study Workbook. San Marcos, Texas: Effective Study Materials, 1976.
- Brown, W. F., & Holtzman, W. H. Survey of Study Habits and Attitudes. New York: The Psychological Corporation, 1964.
- Brown, W. F., Wethe, N. O., Zunker, V. G., Haslam, W. L. Effectiveness of student-to-student counseling on the academic adjustment of potential college dropouts. Journal of Educational Psychology, 1971, 62, 285-289.
- Byrd, R. C. Identity confusion and related variables as factors in college dropout: an exploratory study with implications for counseling. Dissertation Abstracts International, 1971, 32, 3615B-3616B.

- Church, S. R. The effects of an academic rehabilitation program on college academic probation students. Dissertation Abstracts International, 1970, 31, 1571A-1572A.
- Cowell, M. D., & Entwistle, N. J. The relationship between personality, study attitudes, and academic performance in a technical college. British Journal of Educational Psychology, 1971, 41, 85-90.
- Crane, J., Anderson, W., & Kirchner, K. Counseling center director's attitude toward paraprofessionals. Journal of College Student Personnel, 1975, 16, 119-122.
- Davis, G. A. Special sessions for study improvement. Improving College and University Teaching, 1974, 22, 61-62.
- Driskell, J. L. A study of the effectiveness of a guided note-taking and study skills system upon the level of academic success among entering University of Idaho freshmen. Dissertation Abstracts International, 1976, 37, 1305A.
- Gadzella, B. M., & Goldston, J. Effects of study guides and classroom discussions on students' perceptions of study habits. Perceptual and Motor Skills, 1977, 44, 901-902.
- Gardner, J. M. Validity of a study attitude questionnaire for predicting academic success. Psychological Reports, 1967, 21, 935-936.
- Groveman, A. M. The effects of study skills counseling and self-control methods on academic performance of college students. Dissertation Abstracts International, 1976, 36, 6471A.
- Gruver, G. G. College students as therapeutic agents. Psychological Bulletin, 1971, 76(2), 111-127.
- Hewer, V. H. Student-to-student counseling: an approach to motivating academic achievement (Review of Student-to-student counseling: an approach to motivating academic achievement by W. F. Brown). Contemporary Psychology, 1974, 19, 128.
- Hoffman, A. M., & Warner, R. W. Paraprofessional effectiveness. Personnel and Guidance Journal, 1976, 54, 494-497.
- Jenkins, L. E., & Guthrie, G. M. Behavior rehearsal for high risk freshmen. Journal of Psychology, 1976, 92, 147-154.
- Kaye, R. A. A required counseling-study skills program for failing college freshmen. Journal of College Student Personnel, 1972, 13, 159-162.

- Lamb, D. H., & Clack, R. J. Professional versus paraprofessional approaches to orientation and subsequent counseling contacts. Journal of Counseling Psychology, 1974, 21, 61-65.
- MacAleese, R. W. A comparative evaluation of faculty and student paraprofessional academic advisement programs at Florida State University. Dissertation Abstracts International, 1975, 35, 7063A.
- McCarthy, B. W. Comparison of effectiveness of group counseling procedures. Psychological Reports, 1971, 28, 283-286.
- McCausland, D. F., & Stewart, N. E. Academic aptitude, study skills, and attitudes and college GPA. Journal of Educational Research, 1974, 67, 354-357.
- McElroy, R. I. The impact of peer counseling upon the attrition of college freshmen. Dissertation Abstracts International, 1976, 36, 4264A.
- McGuire, J. M., & Noble, F. C. Motivational level and response to academic encouragement among low-achieving college males. Journal of Counseling Psychology, 1973, 20, 425-429.
- McKee, J. E., Harris, C. M., Rhodes, P., & York, L. Para-professionals in the community college. Journal of College Student Personnel, 1977, 18, 231-234.
- McReynolds, W. T., & Church, A. Self-control, study skills, development and counseling approaches to the improvement of study behavior. Behavior Research and Therapy, 1973, 11, 233-235.
- Murray, J. P. The comparative effectiveness of student-to-student and faculty advising programs. Journal of College Student Personnel, 1972, 13, 562-566.
- Payne, J. Counseling and academic achievement. British Journal of Guidance and Counseling, 1973, 1, 19-25.
- Persons, R. W., Clark, C., Persons, M., Kadish, M., & Patterson, W. Training and employing undergraduates as therapists in a college counseling service. Professional Psychology, 1973, 4, 170-178.
- Richards, C. S. Behavior modification of studying through study skills advice and self-control procedures. Journal of Counseling Psychology, 1975, 22, 431-436.

- Ritter, J. H. University study skills program. Journal of Reading, 1971, 14, 377-380.
- Ruth, P. C. The effectiveness of peer counselors and certificated counselors in reducing student withdrawals in a community college. Dissertation Abstracts International, 1976, 36, 7218A-7219A.
- Rutkowski, K., & Domino, G. Interrelationship of study skills and personality variables in college students. Journal of Educational Psychology, 1975, 67, 784-789.
- Schweisheimer, W., & Walberg, H. J. A peer counseling experiment: high school students as small group leaders. Journal of Counseling Psychology, 1976, 23, 398-400.
- Scott, S. H., & Warner, R. W. Peer counseling. Personnel and Guidance Journal, 1974, 53, 228-231.
- Siegel, S. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Company, Inc., 1956.
- Silverman, M. S., & Riorden, K. Study skills training for "high risk" freshmen. Journal of College Student Personnel, 1974, 15, 63.
- Steenland, R. Paraprofessionals in counseling centers. Personnel and Guidance Journal, 1973, 51, 417-418.
- Trotter, H. D. The effectiveness of group psychotherapy in the treatment of academic underachievement in college freshmen. Dissertation Abstracts International, 1971, 32, 573B-574B.
- Truax, C. B., & Lister, J. L. Effectiveness of counselors and counselor aids. Journal of Counseling Psychology, 1970, 17, 331-334.
- Upcraft, M. L. Undergraduate students as academic advisers. Personnel and Guidance Journal, 1971, 49, 827-831.
- Warren, M. O. A survey of reading and study skills programs in selected Rocky Mountain colleges and universities. Dissertation Abstracts International, 1975, 36, 720A.
- Wasserman, C. W., McCarthy, B. W., & Ferree, E. H. Student paraprofessionals as behavior change agents. Professional Psychology, 1975, 6, 217-223.
- Ziesat, H. A. Self-control methods of increasing efficiency of studying. Dissertation Abstracts International, 1976, 37, 3102B-3103B.

Zunker, V. G. Students as paraprofessionals in four-year colleges and universities. Journal of College Student Personnel, 1975, 16, 282-286.

Zunker, V. G., & Brown, W. F. Comparative effectiveness of student and professional counselors. Personnel and Guidance Journal, 1966, 64, 738-743.

APPENDICES

APPENDIX A



OFFICE OF THE
VICE PRESIDENT

October 7, 1977

Academic Service Office:

The Counseling and Testing Center is offering a new program which provides academic adjustment counseling for undergraduates by carefully trained and supervised upperclassmen. This program is funded through a grant from the Exxon Educational Foundation.

The program consists of three basic components. First, the peer counselors evaluate the student's current study habits and attitudes and his/her knowledge of effective study skills. Next, specific instruction is given where necessary. This instruction could include topics such as managing study time, taking lecture notes, writing themes and reports, taking exams, and improving scholastic motivation. Thirdly, the peer counselor is a friend who serves as a link between the student and the university administration and knows the university system. The peer counselors are trained to recognize their limitations and refer students to professionals when appropriate.

The primary purpose of the Student-to-Student Counseling Program is to have a positive impact upon the academic achievement of potential dropouts and thereby to increase their chances of academic survival. We are also interested in helping any students who want to improve their own study skills or are in need of an orientation to the college environment. Participation in this program by the student is voluntary.

We would appreciate your help in locating students who could benefit from this program. Enclosed are several referral forms which can be used to direct the student to us. You may also call us and we will get in touch with the student. Thank you for your help and participation. If you have any questions about the program feel free to contact Todd Graybill, Denise Richardson or me at University ext. 7591.

Thank you,

Keith T. Checketts

APPENDIX B

UTAH STATE UNIVERSITY · LOGAN, UTAH 84322

STUDENT AFFAIRS

OFFICE OF THE
VICE PRESIDENT

December 14, 1977

New Student:

Welcome to Utah State University! As a new student, I know that you will want your first quarter at USU to be a successful one. There is a program being offered through the Counseling and Testing Center to help you with your adjustment to college life. This program, the Student-to-Student Counseling Program, provides instruction concerning such study skills as taking tests, writing reports and themes, managing time, and taking notes. You work with an upperclassman counselor who is interested in helping you to make higher grades and to be more satisfied with college. The peer counselor also helps you with any problems of social or personal adjustment, and with any difficulties you experience working with the university system.

I recommend this program to you, and suggest that you take advantage of this program early in winter quarter. Come to Old Main, Room 2, or call USU ext. 7591 for more information or to register for this program.

Best wishes for a successful and productive University experience.

Sincerely,



Claude J. Burtenshaw
Vice President of Student Affairs

APPENDIX C

UTAH STATE UNIVERSITY · LOGAN, UTAH 84322

STUDENT SERVICES

DIVISION OF
GENERAL REGISTRATION
UMC 18

April 17, 1978

Dear Student:

Because you are not in good academic standing at the University I should like to make you aware of a service available through the Counseling and Testing Center which is specifically designed to improve your academic standing.

This program provides instruction in study skills such as taking tests, writing reports and themes, managing your time, and taking notes in class. If you choose to participate, you will work with a trained upperclassman counselor who is interested in helping you improve your academic standing and thus gain more satisfaction from your collegiate experience.

I strongly recommend this program to you and suggest you take advantage of it. Come to Old Main, Room 2, or call USU Ext. 7591 for more information about the program.

Best wishes for a successful quarter.



Lewis A. Civile, Director
Division of General Registration

APPENDIX D



UTAH STATE UNIVERSITY · LOGAN, UTAH 84322

ADMISSIONS AND RECORDS

UNIVERSITY ACADEMIC SERVICE CENTER

April 3, 1978

We would like to let you know about a new service that is available to you as a student receiving veterans benefits. This program provides students with a variety of services to assist them with their education.

Let us explain these services to you during your next visit to our office, and answer any questions you may have.

We look forward to seeing you!

Sincerely,

Mel Larsen, Coordinator
Academic Service Center

APPENDIX E

UTAH STATE UNIVERSITY · LOGAN, UTAH 84322

STUDENT AFFAIRS

OFFICE OF THE
VICE PRESIDENTINFORMED CONSENT AGREEMENT

I hereby consent to participate in the Student-to-Student Counseling Program. I understand that certain academic records, such as my grade point average, may be used in evaluating the effectiveness of this Counseling Program. I understand that all records of my participation are confidential and that, if certain records should be utilized for research and evaluation purposes, my name would never appear. I understand that I am free to withdraw my consent at any time.

Signature_____
Date

APPENDIX F

STUDENT-TO-STUDENT COUNSELING TRAINING WORKSHOP

I. OBJECTIVES OF STUDENT-TO-STUDENT COUNSELING PROGRAM

1. Facilitate the student's orientation to college - including personal-social adjustment.
2. Help student's understand USU's academic program i.e. academic warning, probation, suspension, and graduation requirements.
3. Increase student awareness of problems by interpreting standardized tests, surveying current study behavior, and scholastic motivation; and planning corrective measures for problems.
4. Help students develop an efficient study program thru instruction in taking notes, managing time, reading textbooks, writing themes and reports, and passing exams.
5. Increase student's awareness of referrel resources available on campus.

II. FIRST MEETING WITH STUDENT - ORIENTATION AND TESTING

Guidelines:

Set informal atmosphere - show interest in student!

Have student complete information form. Discuss it!

Explain 4-A approach to Forecasting Scholastic Success:

- (1) Academic Ability - Learning Potential: intellectual capacity for learning the materials presented in college courses. Verbal Aptitude-operations involving words and Numerical Aptitude or operations involving numbers.
- (2) Academic Achievement - Learning Background: foundation of knowledges and skills already acquired through schooling. Reading and Writing Skills.

- (3) Academic Adjustment - Learning Behavior: mastery of basic study skills and efficiency in doing academic assignments. Study organization and study techniques.
- (4) Academic Attitudes - Learning Motivation: How do you feel about college and teachers, doing academic assignments? Study organization and study techniques.

Explain USU academic program: graduation requirements, academic warning, probation, suspension. Academic Service Center Handout.

Encourage questions and expression of problems with instructors, system, etc.

Overview of referral services:

Counseling and Testing Center - interest tests and personal counseling (Dr. Peterson)
 General Registration: advisors
 Academic Service Center-procedural matters (Mel Larsen)
 Tutors - to be arranged

Explain rest of program briefly - especially "Test Interpretation"

Set appointment for Test Interpretation session.

Have student take SSHA and EST.

III. SECOND SESSION WITH STUDENT - TEST INTERPRETATION

SSHA - Survey of Study Habits and Attitudes

Measures study methods, motivation for studying, attitudes for scholastic success.

Fill out answer sheet information.

Basically self-administered. Be sure student understands the directions! MARK ANSWERS ACROSS THE ANSWER SHEET!

No time limit. Usual test taking time: 20-35 minutes.

Scoring: If 3 or more items are omitted, validity is questionable.

Hand scoring - directions on the oversheet.

Percentiles are in SSHA Manual.

Diagnostic Profile on the back.

Interpretation: Explain measures - illustrate and give examples for each.

"High scores on SSHA are characteristic of students who get good grades, while low scores tend to be characteristic of those who get low grades."

Percentile means - % of freshman receiving lower scores.

Individual Interpretation: Score Counseling Key
 Items circled are different from high achievers.
 Discuss the student's reasons for answering as he did - will provide insight into study habits and attitudes.

EST - Effective Study Test

Measures student's knowledge about effective study methods and factors influencing their development.

Fill out answer sheet information.

Basically self-administered. Be sure student understands the directions! ANSWERS RECORDED ACROSS THE PAGE!

No time limit. Approximate test taking time: 40 minutes.

Scoring: Circle number empty answer spaces in each column. Hand score. Norms use table in Manual to convert raw score to percentile. If 5 or more are omitted, question validity.

Interpretation: Explain percentiles - norms based on college Freshmen. Go over meaning of basic scales. Plot profile - explain strengths and weakness. Have students summarize corrective measures!

ACT - Dr. Checketts

Role-playing interpretation and summary of three tests.

IV. STUDY SKILLS INSTRUCTION

Heart of Student-to-Student Counseling Program

Read and Know Student's Guide to Effective Study
8 "Guides" are essential; two per week average.
"Scholastic Motivation and Interpersonal Relations"
as needed by student.

Know student's Effective Study Workbook (answer guide
available). Go over with student!

Outlined lesson plan for each topic in Instructor's Manual.
USE ONLY AS GUIDE!

Do not let these materials limit the scope of your counseling -
be in touch with the student and his needs, his questions.

Do "Guide to Managing Time" Tips p. 26 in Student Coun-
selor's Handbook. Make out Daily Activity Schedule.

V. STUDY METHODS EVALUATION

Review remaining difficulties.

Discuss student-teacher relations.

Discuss anticipated grades for all courses.

Incorporate information gained from previous weeks into
sessions.

Take SSHA and EST.

VI. COUNSELING DUTIES:

1. Upperclassman friend.
2. Assist student growth toward maturity, responsibility
by pointing out right attitude, awareness of problems,
correct solutions.
3. Be familiar with background - each student is different!
4. Observe specific weaknesses and suggest corrective
measures.
5. Explain academic rules, regulations, and requirements.
6. Interpret standardized ability, achievement, and
attitude tests - emphasizing strengths and weaknesses.
7. Link between student and administration - make
appropriate referrals!

8. Provide instruction in specific areas of academic adjustment problems.
9. Keep summary records on each student, each meeting.

COUNSELING LIMITATIONS:

1. Do not make decisions for counselee!
2. Do not attempt to help counselee with serious mental disorders.
3. Do not allow personal biases and values to dictate handling of student's problem.
4. Do not criticize or evaluate the personality or behavior of any instructor.
- *5. Do not betray student's confidence in personal matters.
NO GOSSIP!
6. Do not encourage counselee that he can improve native intelligence - point out strengths and weaknesses.
7. Do not do all the talking in counseling session.

COUNSELING TECHNIQUES:

Communication - must be clear yourself, but also listen!
Notice nonverbal as well as verbal.

Discussion of Common Counseling Techniques -

1. Reflection of feeling: to express, in fresh words, the essential attitudes (not the content) expressed by the student; to mirror his attitudes for his own understanding; to show that he is understood by the counselor; builds trust.
2. Simple acceptance: any expression that does no more than indicate acceptance and understanding. This attitude is useful in avoiding any interruption of student's need and to encourage further statements by student. Expressed by facial expression, nod, tone of voice, distance and posture.
3. Non-directive lead: A very general question designed to open the conversation but not direct it; emphatically not a leading or loaded question; loosen up counselee.

4. Reassurance or praise: A positive evaluation of the student by the counselor. This is helpful with an insecure advisee or with one who has made a choice and needs reassurance. It reduces anxiety and reinforces new patterns of behavior.
5. Advice and suggestion: indicating, in any fashion, the steps or actions the student should take or the standards or attitudes he should adopt. This is most useful if steps or actions are suggested hypothetically and the attitudes or standards are suggested as representative. Remember that it is always the student's decision.
6. Information giving: giving facts in a neutral way that permits the student to make his own choice.
7. Identification: a response that says in effect, "I have had the same experience you are describing..." This may be useful to establish rapport or give perspective on a seemingly "unique" problem.

Role-play the different techniques.

APPENDIX G

PEER COUNSELING PROGRAM INFORMATION FORM

NAME _____ SEX ____ AGE ____ SS# _____

HAVE YOU TAKEN THE ACT? YES ____, NO ____ IF YES, WHEN _____

MARITAL STATUS _____ MAJOR _____ DATE _____

COLLEGE ADDRESS _____ PHONE _____

HIGH SCHOOL _____ DATE GRADUATED _____

COLLEGE CLASS: FRESH SOPH JR SR HIGH SCHOOL SIZE: B A AA AAA AAAA

MOST LIKED HIGH SCHOOL SUBJECTS

LEAST LIKED HIGH SCHOOL SUBJECTS

1. _____ 1. _____

2. _____ 2. _____

3. _____ 3. _____

Scholastic, Social or Athletic Awards and Honors

1. _____ 4. _____

2. _____ 5. _____

3. _____ 6. _____

PRESENT EMPLOYMENT _____ HOURS PER WEEK _____

Previous Employment Data

	<u>Job Description</u>	<u>Duration</u>	<u>Attitude</u>
1.	_____	_____	L ? D
2.	_____	_____	L ? D
3.	_____	_____	L ? D

AMERICAN COLLEGE TEST SURVEY OF STUDY HABITS AND ATTITUDES EFFECTIVE STUDY TEST

	<u>Score</u>	<u>Centile</u>		<u>Score</u>	<u>Centile</u>		<u>Score</u>	<u>Centile</u>
ENG.	_____	_____	DA	_____	_____	RO	_____	_____
MATH.	_____	_____	WM	_____	_____	SO	_____	_____
SOC. S.	_____	_____	SH	_____	_____	WB	_____	_____
N. SCI.	_____	_____	TA	_____	_____	RB	_____	_____
COMP.	_____	_____	EA	_____	_____	EB	_____	_____
			SA	_____	_____	TSE	_____	_____

TIP SSL VGL RIL OTHER

COUNSELOR: _____