Title: PEER COUNSELOR EFFECT ON THE SELF CONCEPT AND ACADEMIC ADJUSTMENT OF EDUCATIONAL OPPORTUNITY STUDENTS WHO PARTICIPATED IN GROUP COUNSELING

Abstract approved: Redacted for Privacy

Dr. Glenn Clark

The basic problem of this investigation was to determine if peer counselors could be effective as group counselors for Educational Opportunity Program (EOP), freshman students. This effectiveness would be demonstrated by changes in self concept and academic adjustment for those students who participated in the group counseling process. This investigation was designed to examine students with peers as group counselors (Group I), students with an EOP staff counselor as the leader of the group counseling process (Group II) and students who did not participate in either group counseling procedure (Group III).

The sample of the study consisted of 29 freshman students who entered Oregon State University through the Office of Educational Opportunity during the fall term of the 1973 school year. These
students were divided among three groups in such a way as to insure 
a balance according to sex and ethnic group membership.

The Tennessee Self Concept Scale (TSCS) served as a measure 
of change in self concept and the College Inventory of Academic 
Adjustment (CIAA) was used to measure changes in adjustment. 
The Group Behavior Rating Scale (GBRS) was used with the experi-
mental groups only and served to measure changes in group 
behavior. These instruments were administered under pre and post-
test conditions during the fall quarter. The total scores were used 
for testing the statistical hypotheses.

Seven hypotheses related to the effects of group counseling 
and peers on self concept and academic adjustment were tested, 
using a t test, analysis of variance and covariance and a test for 
correlation. Hypotheses were designed to compare pre and post-test 
mean scores for each group in order to determine if significant 
changes occurred within groups. Comparisons were made between 
groups I and II to examine whether changes occurred more fre-
quently with peers or staff counselors as the group facilitators.

Further comparisons were made between the Treatments 
(Groups I and II) and Controls (Group III) to examine the effects of 
the group counseling procedure.

The group participants (Groups I and II) changed positively 
though not significantly on all subscores on the TSCS while the group
of individuals who did not participate in the group procedure did not show such changes.

There were significant differences on certain subscores of the instruments used. These subscores were Identity on the TSCS, Personal Relations on the CIAA, and Self Confidence and Cooperation on the GBRS. However, the general hypotheses were rejected in terms of total scores.
Peer Counselor Effect on the Self Concept and Academic Adjustment of Educational Opportunity Students Who Participated in Group Counseling

by

Elaine Johnson Copeland

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CHAPTER I

INTRODUCTION

In recent years many attempts have been made to bring students into the university who come from low income, culturally different backgrounds, and who do not meet the regular standards for admission. Some of these students will have many of the same difficulties that regular students have, along with those caused by other factors such as inadequate academic preparation and a different social environment.

The Educational Opportunities Program (EOP), under the auspices of the Office of Educational Opportunities began its operation at Oregon State University at the beginning of the fall term of 1969. This program's primary function being to bring lower income, culturally different and/or academically deficient students into the university milieu and to provide support services.

Generally, students who are admitted through EOP are academically deficient and/or financially in need. A small percentage of the students who avail themselves of the support services provided, transitional courses, counseling and tutorial services, enter the program by volunteering for at least one of the services.
These students who volunteer to be a part of the EOP are generally ethnic minorities who do not need financial assistance.

If Educational Opportunity Program (EOP) students are to succeed in the academic community, experiences must be provided to help them make the transition into a different environment easier. A personal adjustment group counseling course has been offered by the Office of Educational Opportunities at Oregon State University for several years, its purpose being to help students in the transitional process. In this study the investigator has attempted to determine the types of outcomes produced by specific experiences.

Students from diverse ethnic groups, according to Russell (1970) have felt a certain amount of distrust when dealing with the "establishment". Sue (1973) expressed a similar view and recommended that other minority students be utilized as counselors in order to combat the attitude of distrust.

In this study the investigator examined the effects of group counseling tailored to fit the needs of the EOP students at Oregon State University as well as the effects of the utilization of peers (older EOP students) as group leaders.

**Statement of the Problem**

The problem was one of determining the effects of a personal adjustment group facilitated by peer counselors on self concept and
academic adjustment of EOP students as compared to the effects of the group procedure conducted by an EOP staff counselor. Students who participated in either of these group procedures were compared to those freshman students who were not participants in the group counseling process.

Psychologists and educators (Hamachek, 1971) are becoming increasingly aware of the fact that a person's idea of himself, or self concept is closely connected to how he behaves and learns.

The effect of the school upon an individual's self concept is enormous. The school dispenses praise and reproof, acceptance and rejection. In addition to the amount of time a person spends in school during the formative years of his life, one must consider the fact that the school contains the severest critics—peers and teachers. Again and again the student is reminded of his failings and shortcomings or his strengths and possibilities (Hamachek, 1970, p. 321).

One might assume then that students who enter school through the Office of Educational Opportunities have had experiences which have tended to give them a negative self concept in regard to educational pursuits. According to Hawk (1967), these experiences influence their academic success or failure in many cases. Some students feel that they have been generally misguided by former teachers, counselors, and other individuals associated with the educational system (Russell, 1970).

Peterson (1973) found that the disadvantaged student's self concept seemed to be congruent with his success (or lack of success)
in college. The implication is that students must find something in their college experiences that will help them improve the perceptions that they have about themselves if they are to function effectively in the university environment. An attempt was made in this study to determine the influences of specific variables on certain desired positive outcomes, i.e., more positive self concept. The variables given the most emphasis in this study were the effects of peer counseling in personal adjustment groups.

The Need for the Study

If programs such as the EOP are to succeed, ways must be found to help students in their academic endeavors and their social adjustment. It is not enough to bring students into the university and/or to provide them financial assistance. A number of specific services must be provided and these services must be evaluated to see if they are helping students in such a way as to contribute to their success. The investigator evaluated only a small segment of the services provided by the Office of Educational Opportunities, that segment being the effects of group counseling with peers as facilitators. The investigation was designed to estimate whether:

1. There would be a significant change in self concept for Group I (participants with peers as counselors), Group II (participants with an EOP staff member as the counselor), and Group III (non-participants) by comparing pre and post-test mean scores on the Tennessee Self Concept Scale.
2. There would be a significant change in academic adjustment for Group I, Group II, and Group III as measured by comparing pre and post-test mean scores on the College Inventory of Academic Adjustment.

3. There would be a significant change in group behavior for Group I and Group II as measured by comparing pre and post-test scores on the Group Behavior Rating Scale.

4. There would be a significant difference in change in self concept between Group I and Group II and Treatments (Group I and Group II) and Controls (Group III) as measured by comparing change scores in the Tennessee Self Concept Scale.

5. There would be a significant difference in change in academic adjustment between Group I and Group II and Treatments and Controls as measured by comparing change scores on the College Inventory of Academic Adjustment.

6. There would be a significant difference in change in group behavior between Group I and Group II as measured by comparing change scores on the Group Behavior Rating Scale.

7. There would be a significant correlation between change scores on the TSCS and the CIAA.

Background and Theoretical Framework

Early in the history of American psychology considerable interest was shown in the use of the self concept as a basic construct in understanding personality. William James (1890) accorded this topic an important place in his psychological thinking and his understanding of behavior. The conscious self to him implied the characteristics, possessions, and processes of the person and the reactions received from others and perceived by the person. He set the stage
for contemporary theorizing, and much of what is written today about the self concept derives directly or indirectly from James (Hall and Lindzey, 1970).

Early in the twentieth century, the self concept paradigm fell into disrepute and this trend continued for a number of years. The advent of behaviorism as a result of the ideas of Watson and others, Thorndikes' refinements with connectionism and other attempts to quantify and consider only observable acts in the analysis of human behavior, are thought to have fostered this trend (Hawk, 1967).

In the mid-thirties the self concept again came to be considered as crucial in the understanding of behavior. This came about under the leadership of such men as Carl Rogers, Donald Snygg, Arthur Combs, Abraham Maslow, George Mead and several other well known psychologists.

According to Hall and Lindzey (1970), the term self has come to have two distinct meanings. On the one hand it is defined as the person's attitudes and feelings about himself, and on the other hand it is regarded as a group of psychological processes which govern behavior and adjustment.

Carl Rogers (1951) stated:

The self concept or self structure may be thought of as an organized configuration of perceptions of the self which are admissable to awareness. It is composed of such elements as the perceptions of characteristics and abilities; the percepts and concepts of the
self in relation to others and the environment; the values and qualities which are perceived as associated with experiences and objects; and goals and ideals which are perceived as having positive or negative valence (p. 360).

Bertocci (1965) expressed a similar view when he stated that the "self is a dynamic unity of the activities of sensing, remembering, imagining, perceiving, wanting, feeling, and thinking." The self also includes the individual's idea of what he looks like and his idea of how he affects others. The self includes the meaning of one's distinctive characteristics, abilities, and unique resources, as well as the attitudes, feelings and values one holds about one's self, one's self esteem or one's self reproach, or both (Jersild, 1960).

Fitts (1965) mentioned that there are parts or subselves of the self; they are the self-as-object (Identity Self); self-as-observer and judge (Judging Self); and self-as-doer (Behavioral Self). He included these subselves in the Tennessee Self Concept Scale. All three subselves were examined by the investigator in this study. These subselves were examined by observing individual participant's responses on all subscores.

According to self theorists, the self is not present at birth, but emerges from earlier learning experiences through social interactions with others. Strauss (1962) reported:

The self has character which is different than that of the psychological organism proper. The self is something which has a development; it is
not initially there at birth, but arise through the process of social experiences and activity, that is developed in the given individual as a result of his relations to the process as a whole and to other individuals within that process (p. 212).

Syngg and Combs (1959) pointed out that the individual...learns about himself not just from exploring but through the mirror of himself represented by the actions of those about him. These reflections of his actions are incorporated as a part of his self concept.

Other proponents of the self concept theory expressed similar views. Jersild (1960) stated that the development of the self concept at first evolves through a process of differentiation. Soon after birth he begins testing his own capacities and limits by interacting with his environment. Taylor (1953) implied that after the early differentiation of self from the rest of the world has taken place, the remainder of the process of self development is generally believed to be largely social in nature, involving identification with others. Ruth Wylie (1967, p. 740) attempted to synthesize areas she feels that self theorists have in common.

1. A person as an entity separated from others is experienced.

2. A sense of being the same person continues over time.

3. Physical characteristics as experienced are included in the concept.

4. One's behavior as experienced and remembered are included especially if associated with feelings of intent or being under the control of the experiencing person.
5. A degree of organization or unity among items included in the self concept is experienced.

6. Self percepts and self concepts are not distinguished by most theorists.

7. The self concept includes a person's evaluations as well as his cognitions.

8. The self concept is described as involving degrees of conscious or unconscious.

9. The self perceptions of an individual influence his behavior.

As indicated earlier in this section, many theorists view the self concept paradigm as a viable one for understanding the process of adjustment and for predicting to a great extent the behavior of individuals. According to self concept theory, individuals develop a concept of self through their interactions with others. The feedback perceived influences how they perceive themselves. Many times these perceptions are internalized and result in changes in behavior. Individuals who think of themselves as negative to others may tend to react negatively to their environment. Those persons who feel positive about themselves and their relationships with others will react accordingly.

If this theory is accepted, it would seem appropriate to examine the self concept of students who might have had negative feedback or have perceived negative feedback from both the educational system and society. This theoretical framework serves as the basis for the present investigation. Small group counseling experiences and peer
counselors are used as variables of the study in an attempt to find ways to effect changes in self concept and academic adjustment.

**Definition of Terms**

1. **Academic adjustment** refers to the ability to develop coping behaviors in order to function adequately in the academic community.

2. **Control group** is defined as subjects for this study who were not participants in the personal adjustment group counseling sessions.

3. **Disadvantaged** is a term used in current literature and refers to individuals who are educationally and/or economically deprived.

4. **EOP staff counselor** refers to a staff member of the Office of Educational Opportunities and who functioned as a group facilitator.

5. **EOP students** are students who enter the university through the Office of Educational Opportunities for academic and/or financial reasons.

6. The term **experimental group** applies to those students who participated in the personal adjustment group counseling sessions.

7. **Peer counselors** are individuals who are currently a part of the EOP and have completed at least three terms of college courses at Oregon State University. These individuals will have been exposed to specific training through a class which emphasized developing skills in perception and awareness, and resources for finding relevant information on campus.

8. **Self concept** connotes an area of essentially private experience and self evaluation. It is private even though it is in part translated into action by most of the things we say and do, by the attitudes we hold, and the beliefs we express. The self concept may be defined as those perceptions, beliefs, feelings, attitudes and values which the individual views as describing himself.
Basic Assumptions of the Study

The following assumptions are recognized in this investigation:

1. The instruments used in the study adequately measure what they purport to measure, i.e. self concept, academic adjustment, and group behavior.

2. According to self theorists, man incorporates experiences and perceptions from his environment into a self concept.

3. The self concept directs and influences behavior.

Limitations

The following limitations are recognized in this investigation:

1. The small number of students involved in the study make it difficult to generalize to other students.

2. Time has been an important factor in affective changes and twenty small group meetings, one and one half hours in length each over ten weeks may have had a limiting influence in the study.

3. Students could not be randomly selected. The experimental groups consisted of students who enrolled in the personal adjustment group counseling course fall term of 1973.

4. It is strongly recommended that students with high school grade point averages (g.p.a.) of less than 2.25 take the personal adjustment group counseling course, therefore students who served as the control may have had higher high school grade point averages.

5. The extent to which the instruments used accurately measure what they purport to measure may have had a limiting influence on the study.

6. One instrument used in this study was not standardized, that being the Group Behavior Rating Scale.
7. A time lag often occurs before observable differences can result.

8. Research has indicated a need for developing effective ways of counseling students of culturally different backgrounds. Therefore the study was limited to EOP students.

**Organization of the Remainder of the Study**

The remainder of the study is divided into four chapters with supplemental appendices. Chapter II is devoted to the background and related literature and includes sections: Self concept theory and adjustment, cultural and economic influences on the self concept, effects of Educational Opportunities Programs and the effectiveness of peers as helpers. Chapter III reviews the methods and procedures followed in conducting the study as well as a description of the instruments used. Chapter IV presents the statistical data for testing each hypothesis. The final chapter, Chapter V, includes the summary, conclusions and implications and the recommendations for this study.
CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter is divided into four sections. Section one deals with the general theory of self concept and its relationship to behavior and adjustment. Section two examines the effects of culture and economic status on self concept. Section three views information concerning the success or lack of success associated with programs which perform functions similar to those functions performed by EOP. Section four concerns itself with the effectiveness of using peers as helpers in the educational process.

Self Concept Theory and Adjustment

A number of psychologists have expressed the idea that the self concept is formed by the interactions of an individual with other significant human beings (Cooley, 1902; Mead, 1934; Rogers, 1951; Sullivan, 1953; and Coopersmith, 1967). Cooley (1902) described a social self since then labeled "the looking glass self". Cooley's basic premise was that the self imagines a perception of itself in the mind of another and this affects behavior. Cooley's self idea has three basic elements: (1) the imagination of one's appearance to the other person; (2) the imagination of the other person's appraisal of that appearance; and (3) some kind of self-value feeling such as
pride or shame.

George Mead (1934) described the features of the self conception from the stance of a social interactionist. Mead's theory proposed that an individual will conceive of himself as he believes significant others conceive of him, and that he will tend to act in accord with expectations which he projects to significant others.

Rogers (1951) emphasized the significance of self concept in determining human behavior. His definition of psychological adjustment hinged on the notion of congruence of sensory and visceral experiences with the concept of self. He states:

Psychological adjustment exists when the concept of self is such that all the sensory and visceral experiences of the organism are or may be similated on a symbolic level into consistent relationship with the concept of self (p. 513).

Levy (1956) demonstrated that an individual may view his town, church, school, etc. in much the same manner as he tends to view himself. This would imply that an individual low in self esteem may tend to view the school in the same manner and may have difficulty adapting to an academic setting.

Hughes (1967) conducted an investigation with sixth grade boys. He showed that boys who demonstrated a more positive self concept showed less anxiety and greater coping strengths in handling stress-inducing experimental situations.

Williams and Cole (1968) in a study involving eighty sixth grade
students attempted to relate self concept to several other dimensions that influence academic adjustment to the school milieu. The following hypothesis was examined: A child's concept of school would relate to his conception of himself and might be construed as an extension of his self concept. Significant positive correlations were obtained between self concept and measures of the following variables: conception of school, social status at school, emotional adjustment, mental ability, reading achievement, and mathematical achievement.

John Kinch (1968), in formalizing a self concept theory summarized the basic principles of the functioning individual in relation to his concept of self. He stated:

In very general terms the basic notions of the theory can be stated in one sentence: The individual's conception of himself emerges from social interaction and, in turn, guides or influences the behavior of that individual (p. 481).

The basic postulates of Kinch's theory are:

1. The individual's self concept is based on his perception of the way others are responding to him.

2. The individual's self concept functions to direct his behavior.

3. The individual's perception of the responses of others toward him reflects the actual responses of others toward him. The implication is that individuals can perceive how others are reacting to them.
In reviewing the literature the investigator attempted to emphasize the extent to which the social and ethnic group membership of a particular individual influences how he perceives himself. An attempt was made to determine how self perceptions affect behavior and adjustment and how the environment may be altered so as to enhance the possibilities for success of individuals, especially those belonging to a selected social and ethnic group.

Combs (1952) stated that perceptions are restricted to the environmental conditions surrounding the individual. Perceptions are formed in relation to that particular environment.

Sullivan (1953) seemed to concur when he stated that the socio-cultural identities influence how a person perceives himself, and the way he views himself. With this in mind one might expect culture and ethnic group membership to play an important role in the formation of the self and the perceptions that one continues to have of himself.

Gordon's research indicated that the subculture of an individual has much to do with the development of the self concept. The idea of the "American Way of Life" is stressed at the expense of the diverse subcultures in our society. "Contrary to the notion of a melting pot, in which all become one, each ethnic group, in fact, preserves
certain aspects of its own particular heritage..." (Gordon, 1962, p. 13).

Ethnic group or class membership is a heightened awareness of oneself as different and corresponding perceptual defense for interpreting vicissitudes of fortune. The child learns to expect unequal treatment and develops concepts of himself that often tend to reinforce the stereotype... each group, which is either a minority or perceives itself to be one, mobilizes its energies and defenses in keeping with its concept of itself as a group (Gordon, 1962, p. 137-38).

Strauss (1962) expressed the idea that the individual experiences himself as such, not directly, but only indirectly from the particular standpoint of the other individual members of the same social group, or from the generalized standpoint of the social group as a whole to which he belongs.

Numerous studies have been undertaken in order to verify (Gordon, 1962; Havighurst and Moorefield, 1967) others to refute (Bartee, 1967; Soares and Soares, 1967) this assumption. At the present time, some studies appear to contradict others. Difficulties seem to stem from differences in meaning of psychological constants such as self concept and related terms.

In examining the research, the investigator found a number of studies which concerned themselves with individuals whom they referred to as "disadvantaged" (Frazier, 1965; Morgan, 1970; Herskovitz; 1969). Frazier (1965) listed the characteristics related
to disadvantagement as limited family income, low value and low-standard housing, high density of population per dwelling, dependency of family on public housing, limited educational background of parents and limited school achievement of older siblings. All of the studies cited use several of the factors or characteristics as criteria.

Most of the studies cited were concerned with the self concept of the disadvantaged at the primary and secondary level. Few studies have dealt with the self concept of college level, culturally different low income students. Thompson (1972) reported that the paucity of research at this level is due to the fact that previously few minorities and disadvantaged individuals have entered the university.

Gordon (1966) stressed the fact that adequate living conditions coupled with perceptions of the status and opportunities which society has afforded has resulted in the occurrence of numerous social, attitudinal and intellectual obstacles to easy adjustment of disadvantaged individuals. Negative perceptions made adjustment difficult. Ausubel and Ausubel (1963) and Battle and Rotter (1963) connected low self concept and self depreciation with economic, social, and cultural deprivation.

Culturally disadvantaged children (Havighurst and Moorefield, 1967; Tannebaum, 1967) seem to mirror the negative attitudes of others and reflect the discrimination in their own self images. Handicapped by poverty and grossly unstimulating conditions, they
are characterized by a denigration of their potentials as persons and as learners, by low aspiration levels in academic areas, by need for immediate self-gratification rather than for future goals and a spirit of resignation.

Studies conducted by Flemister (1967), Martin (1967), and Walton (1966) reported lower overall positive scores when utilizing the TSCS with Neighborhood Youth Corps participants as compared to the norm group. Flemister's subjects were 60 individuals both male and female participants whose family annual income was less than $3000.00. The racial composition was not specified. Martin's investigation included 131 participants. The sample consisted of 78 males and 53 females with an age range of 16 to 20. All were classified as Mexican Americans. Walton obtained self concept scores of 24 high school girls and boys, five were American Indians and 19 Caucasians.

Soares and Soares (1969) however, found no significant difference in self concept of disadvantaged when compared to advantaged ones. They did find evidence that disadvantaged females had lower self concepts, when compared to disadvantaged males and disadvantaged students of both sexes.

Bartee (1967) compared the self concept of 100 disadvantaged white students during the freshman college year with 100 disadvantaged black students. Students were classified as disadvantaged if:
at least one of their parents had not graduated from high school, neither parent had gone beyond high school and if the family income qualified the students for financial aid to education. This study showed that self concept as measured by the positive score on the Tennessee Self Concept Scale was similar for the two groups. There was no significant difference. Both groups however had a lower positive score than that of the norm group. This may have been due to the possibility that fewer "disadvantaged" individuals were used as the norm group in the standardization of the TSCS.

Trowbridge (1970) when examining children from low income groups found these children had a more positive self concept when compared to children designated as advantaged. One conclusion that might be drawn is that the disadvantaged children had not had experiences to contribute to the formation of a negative self concept.

From the literature reviewed by the investigator, inferences can be made that social class and ethnic group membership influences the self concept of the individual. The perceptions of self are formed by the interactions of the organism with his environment. The Educational Opportunities Program at Oregon State University is made up of blacks, Chicanos, Indians and low income whites. All of these students may have had negative interactions with the environment, since they generally do not meet the standards of the middle class norm.
Effects of Educational Opportunity Programs

Recent data indicates that probably more than 50 per cent of the institution of higher learning in this country now have special programs for such students, who are frequently described as disadvantaged or high risk. Most of these programs, however are currently little more than token efforts... (Williams, 1969, p. 274).

Williams (1969) mentioned the kinds of factors that are needed in order to effect change in achievement patterns of high risk students. They are:

1. Scholastic Motivation
2. Adequate Study Skills
3. A Supportive Social Environment

The primary objective of university programs should be to create the kind of environment that will enhance the chances of success of these students.

Snider (1970) has stated that during the freshman year much can be done to aid in the total adjustment of beginning students.

The college orientation course could be the opportune time for the student's delving into his self development or intrinsic motivation... courses in personal adjustment or orientation to college could help fill the gap created by uncertainties about career choice and personal values or life goals (p. 139).

Emphasis is placed on the need for a leader or instructor who sees his position as being a catalyst who accepts the viewpoints of other people and encourages different points of view.
Several studies have been undertaken to determine if Educational Opportunities and other similar programs have been successful and what can be done to improve these programs. The investigator reviewed only those programs set up to meet the needs of senior high school and potential college students and those existing programs on the university campus, many of which are known by different names but are established to provide the same or similar kinds of services that Educational Opportunities programs are designed to provide.

Hunt and Hardt (1969) found a total Upward Bound Program designed to meet the needs of high school juniors and seniors significantly increased the self-esteem and internal control of both black and white students over a two year period. The effect of an Upward Bound Program was also investigated by Paschal (1970). A six week program increased the motivation of 31 students when measured by the Maryland Self Concept as a Learner Scale. A significant difference was found in problem solving task orientation. Recommendations were made to increase the length of time of the summer session.

Bowlin (1964) found that a summer orientation and counseling program for entering high risk freshman students contributed to their overall future success at the university. All students involved in the study came from high school with a G.P.A. of less than 2.00.

Evaluative research (1971) has been conducted at the University of New Mexico on their College Enrichment Program (CEP) which was
designed to meet the needs of disadvantaged students. Findings indicated that by providing counseling, tutoring, and other supportive services the CEP has had significant influence on the retention of disadvantaged students and has provided impetus in motivating participating students to attain a college degree.

Astin (1970) studied the total effects of special programs for college students. The study included 36,581 students from 180 institutions. These students were given tests and questionnaires concerning educational aspirations, occupational and life objectives, etc., at the beginning of the freshman year. A comparison of the student's self ratings and life objectives at the beginning of college and at the end of one year in college indicated that disadvantaged students enhanced their self esteem and increased their educational and occupational aspirations as they completed one year of their college work.

For those programs that have been evaluated in most instances, the academic mortality rate for disadvantaged students has been no greater than regular students. Data from few institutions with equivalent control groups indicate that the drop-out/flunk-out rate is higher for the control subjects than those in high risk programs (Berger, 1968, p. 8).

Many programs have not yet been evaluated because of the short time that these programs have been in existence. The amount of research should increase as programs that serve "special students" grow and establish themselves as an integral part of the institutions they serve.
Since the Educational Opportunities Program at Oregon State University is only five years old, it is difficult to evaluate at this point whether it has been successful. Approximately 12 students have graduated. The program currently serves 150 students, regular and volunteer. The investigator would encourage evaluation of all services rendered to EOP students.

**Peer Effectiveness**

A number of recent studies have indicated that the utilization of peers can be effective when dealing with a variety of students. Several studies are cited in the following paragraphs which indicate that peers may function effectively at all levels of the educational process, as tutors, advisors, and counselors. The investigator found it necessary to include studies dealing with elementary and high school level students because of the paucity of research using college level subjects.

Studies at both the elementary and secondary level have indicated that peers may be utilized effectively as helpers. The following studies concern themselves with the elementary and secondary peer helper.

Vriend (1968) utilized peers to function as group leaders in an inner-city high school setting within an academic environment. The study was conducted with a group of selected eleventh grade students at a Detroit, Michigan high school. The demonstration high school
ranked in the lowest quintile when compared to other Detroit communities in regard to socio-economic level.

An achievement typology was used to identify and categorize second-semester eleventh grade students into achievement types. The typology used teacher recommendations to supplement grade point averages and standardized test scores in the identification of achievement groups. Students who were high in at least three categories were selected to function as leaders. Participants for demonstration groups were randomly selected from the low achieving group. One peer leader and three participants met once a week for a period of two semesters of twenty weeks each. Evaluation criteria to determine changes in academic achievement classroom skills and vocational educational aspirations and expectations were applied to both experimental and control groups. Pretests and post-tests were evaluated on the following instruments, School and College Ability Test (SCAT), Sequential Tests of Educational Progress (STEP), grade point averages and Vocational Planning Questionnaire.

Analysis of covariance was used to analyze the pretest and post-test data on the standardized instruments. The results indicated that academic achievement of the demonstration group was greater than that of the students in the control group.

Mohan (1971) found that students who appeared to be unmotivated could change on certain desirable variables when tutored by their
peers. The reading rate of the tutors also increased.

In a study conducted by Cairns (1971) the effects of older disadvantaged students assisting younger disadvantaged students in reading skills was examined. The preliminary findings indicated that both the tutor and the individuals tutored gained valuable reading skills as a result of the experience.

Richmond (1972) conducted a study to determine if an effective classroom model could be devised where peers would work together on a specified learning unit in an elementary classroom setting. The model was initiated in both midwest and southern states with minority students. Each pupil was given responsibility to contribute to the total group accomplishment. The majority of the experiences in the classrooms were favorable. Noticeable improvement in communication and self confidence were two positive outcomes.

Kern and Kirby (1972) attempted to utilize peers as group leaders in an elementary school. Twelve classes of fifth and sixth grades from three schools comprised the population of the study. Instruments used to select peer helpers were the Walker Behavior Identification Checklist and Social Power Inventory. Instrument used to measure change in participants was the California Test of Personality. A comparison was made between the effects of peers and the effects of elementary school counselors. The results indicated that although there was not a significant change on the criterion
instrument, teachers felt that participants who were facilitated by peers changed more in overall adjustment.

During recent years concern has arisen in terms of how to best meet the needs of students entering "special college programs," through counseling and other supportive services. One suggestion has been to use students from the ethnic and/or cultural group of the student, in a helping capacity.

Froman (1971) conducted an investigation to determine the effects of peer tutoring and brief individual group counseling and reinforcement on the academic achievement of risk college students (students below regular academic standards for admission). One hundred and four risk students were involved in the study. High ability students enrolled in an introductory mathematics course tutored risk students enrolled in the same course. Part of these students met either individually or in small groups with a counselor once weekly through one term for brief counseling. Some of these students received praise during their counseling sessions contingent on achievement on weekly in-class quizzes. Those risk students who received tutoring and reinforced individual counseling earned higher weekly quiz grades than risk students on other treatment groups however, they failed to obtain significantly higher final grades than other treatments. Counseling was found to be an effective deterrent to freshman default. The drop-out rate for students receiving
counseling was one-third the rate for non-counseled and peer tutoring.

Ware and Gold (1970) attempted to evaluate the effectiveness of a student-counselor-assistant program. The objectives of the program were to determine if peer counselors could influence the academic success and motivation of socio-economically disadvantaged students to complete a two-year program, and if they might ultimately help recruit youths into the program. Results after the first semester indicated that students who received counseling from student advisors remained in school at a statistically significant higher rate than students who did not receive counseling.

Lynch (1970) found that when upperclassmen volunteers acted as "big sisters", to small groups of incoming freshmen women, that the freshmen made a better social and academic adjustment during the first year. This seemed to appear more frequently when the freshmen women rated their advisers high.

Upcraft's (1971) views appeared to be congruent with those of Lynch. He expressed the idea that older students should be actively involved in the orientation of incoming students. One implication of the study is to challenge the traditional concept that faculty or special advising staff must carry out academic advising. Undergraduate students, given adequate training and roles, can effectively advise other students.

Benz (1970) conducted a study to examine the effects that high
achieving college students had on low achieving freshmen by instructing them in reading and study skill techniques. Although these students had been provided with training before conducting the classes, there was not a statistically significant difference between grade point averages of the experimental and control groups when the study was completed.

Wright's (1971) findings however indicated that a similar type program can be effective. His investigation was an attempt to discover if tutoring and advising by upperclassmen could change academically unsuccessful freshmen into more successful students. The results of the study indicated that:

...this method is a relatively effective means for raising achievement levels of a substantial number of freshmen and/or sophomores in certain required courses. Students predicted lowest in achievement appeared to profit least from tutoring, or did not take advantage of it. Those predicting in the average range appeared to profit most from tutoring and participated most (Wright, p. 39).

Kelly (1971) investigated the use of peers as facilitators with counselors in training. In the study the investigator attempted to ascertain whether counselors in training would differ significantly in attitude and in open and closed-mindedness after having received six weeks of structured group counseling dealing primarily with career information and theory, from other counselors not receiving the program. The study also examined whether the structured group
would differ in effectiveness in bringing about attitude change when the group leader was an authority figure (instructor) as compared to a peer from within the group. After the participants were back on the job for an extended period of time where they could make use of career information received from the group experience, an investigation was made of the persistence of attitude change. An open and closed mindedness scale, sex, and age served as the primary criteria. Three and one half years later a follow-up study was made. The data were gathered with the use of an opinionaire, the Concept Mastery Test and a short questionnaire concerning value of the program.

The findings indicated that the groups did not differ significantly initially after the experience but both groups were significantly more open-minded three and one half years later. There was no difference in change of individuals who had the instructor as compared to peers. The questionnaire indicated however, that both groups felt they benefitted from the experience. Conclusions were made that a program of this nature should be extended for a longer period of time.

The studies cited tend to indicate that peers can be a useful human resource when working with students in an educational setting. Until recently this resource has been ignored. Few studies existed which concerned themselves with peers as helpers until the 1960's. The overall results of the studies cited were positive. These studies would support the use of peers as counselors for EOP students.
In summary, the research cited in this chapter indicates that the self concept can be influenced by the cultural and economic status of individuals and that changes in the environment can gradually aid in creating changes in the way an individual perceives himself. Recent research related to the utilization of peers indicates that positive changes can occur when peers are used in a number of educational settings. Research studies cited included peers as helpers at the primary, secondary and college level due to the paucity of research available concerning college students. As more students from different cultural and economic backgrounds enter the college community, more research needs to be undertaken in an effort to gain some estimate of the kinds of experiences that can be provided in order to increase their chances for success.
Chapter III is devoted to the methods and procedures used in this investigation and is divided into four major sections. Section one is concerned with the sample of study and the design chosen. Section two deals primarily with the procedure followed in conducting this investigation. Section three is devoted to a description of the three instruments utilized. Section four examines the treatment of the data.

Sample and Design

The sample consisted of freshman students who entered Oregon State University through the Office of Educational Opportunities, as participants of the Educational Opportunities Program (EOP), fall term, 1973. Three specific groups: Experimental Group I, N=9, Experimental Group II, N=8, and the Control Group III, N=12, were involved in the study.

The Quasi-Experimental design was the design chosen for this investigation. This design is used with an experimental control procedure, when subjects cannot be randomly selected. All individuals involved in the study were given pre and post-tests utilizing the instruments chosen for this study.
**Procedures**

Freshman students who entered Oregon State University as first term freshmen through the Office of Educational Opportunities, fall term, 1973, were tested using the Tennessee Self Concept Scale (TSCS) in an attempt to measure how these students viewed themselves in relation to their environment. In addition, during the first week they were given The College Inventory of Academic Adjustment (CIAA), to provide some indication as to how they perceived themselves in a college community.

Students who participated in the personal adjustment activities were assigned to one of two experimental groups. Assignments to groups were made in such a way as to insure balance as to sex and ethnicity.

Freshman students (Experimental Group I) attended a personal adjustment group counseling procedure facilitated by three peer counselors. Other freshman students (Experimental Group II) attended a comparable group facilitated by an EOP staff counselor. The staff counselor who functioned as the facilitator for Experimental Group II, was an employee of the Office of Educational Opportunities. This counselor had been employed for one year and was a second year doctoral student majoring in Student Personnel Administration at Oregon State University, with a masters degree in counseling. Both
groups met for ten weeks, meeting twice weekly for one and one half
hours each time. The control group, (Group III), was made up of
freshman EOP students not participating in the group counseling
process during fall term. The purpose of the personal adjustment
group counseling was to aid students in their academic, social, and
psychological adjustment to the university community.

Peer counselors were given special training by enrolling in a
class, "Student Counselor Orientation", taught during the spring
term preceding this experimental study. This class was facilitated
by two EOP staff members, one of which was the writer.

The individuals who functioned as peer counselors had com-
pleted at least three terms at Oregon State University. They were
selected on the basis of two criteria: (1) academic success (grade
point average of 2.00 or better for the three preceding terms) and
(2) overall adjustment. Adjustment was determined by a personal
interview conducted by the Counseling Coordinator of the EOP. All
individuals chosen received recommendations from at least two
members of the EOP staff. Representatives from three ethnic
groups, white, black and Chicano, were chosen and individuals from
both sexes were selected. These peers were trained in three
specific areas:

1. **Self Exploration**: This area covered ways of helping

freshman students to examine their values, their life
styles and both their short term and long term goals.

2. **Information Gathering:** Peer counselors were given assistance in how to obtain necessary information in order to function adequately in the college setting.

3. **Coping Behavior:** Ways of inducing interaction among students in order to help them cope with problems that are common to freshmen in general and specific problems that are common to EOP students were stressed.

During this training period, peer counselors and EOP staff members planned a general outline of the content to be covered in the personal adjustment group counseling sessions (this outline is found in Appendix A).

Along with the two standardized instruments used in the study, one other evaluation developed by the writer for this study was used with only the experimental groups in order to assess whether certain desired behavioral changes might have occurred through the group process. This instrument labeled the Group Behavior Rating Scale (GBRS) consisted of fifteen items, and was used to estimate whether expected behavioral changes might have occurred during the ten week period in the group counseling setting (Appendix D). This instrument was given to each experimental group during the second week of the term, and was administered again at the end of the term. From the resulting data, the investigator was able to
estimate whether the students' self evaluations were congruent to some extent with those of the peer counselors (Group I) or staff counselor (Group II), both at the beginning and again at the end of the term. Behavioral changes of each student could also be assessed. The Self-Appraisal Form of the Group Behavior Rating Scale was used to estimate behavioral change.

**Instruments**

Two standardized instruments were used for the study. The Tennessee Self Concept Scale (TSCS) was used to determine the kind of self image and perceptions that the individuals involved in the study had of themselves. The College Inventory of Academic Adjustment (CIAA) was used as an indication of how the subjects viewed themselves in relation to the academic environment. A third instrument, the Group Behavior Rating Scale (GBRS), was devised by the investigator to estimate behavioral changes of participants in a group setting.

**Tennessee Self Concept Scale**

William H. Fitts began the development of the Tennessee Self Concept Scale (TSCS) in 1955. His purpose was to provide a multidimensional description of an individual's self concept and, at the same time, to provide a wide applicable and well standardized
instrument. This instrument was completed in its present form in 1965.

Fitts (1965) stated that a knowledge of how a person perceives himself can be helpful in understanding his behavior, and that if one can understand how a person views himself, he may be of help in facilitating him in the development of adequate coping behaviors. Fitts constructed the TSCS in order to measure self perceptions.

The Tennessee Self Concept Scale consists of 100 self descriptive items of which 10 assess self-criticism. For each item, the respondent chooses one of five response options labeled from completely false to completely true (Appendix B). There are two forms of the TSCS, the Counseling Form and the Clinical and Research Form. The Counseling Form was chosen for this study.

Fourteen scores are derived from the items in the Counseling Form of the Scale. The following aspects of the self are involved: Identity, Self-satisfaction, Behavior, Physical Self, Moral-Ethical Self, Personal Self, Family Self, and Social Self. Each aspect receives a subscore based on relevant items. Total positive scores reflect the overall self-esteem. High scores imply that an individual tends to like himself and feel that he has self worth, while low scores indicate that he feels unhappy about himself and may tend to see himself as undesirable. The following is an explanation of the nature and meaning of each subscore:
The Self Criticism Score (SC) This scale is composed of 10 items. These statements are mildly derogatory. Most people would not find it difficult to admit that a particular statement is true of them.

Positive Score (P) The statements that make up this score seem to be conveying three messages:

(1) This is what I am,

(2) This is how I feel about myself, and

(3) This is what I do.

From these three kinds of statements, the three horizontal categories were formed. They appear on the answer sheet as Row 1, Row 2, and Row 3. (Appendix B).

The sum of the Row Scores constitutes the Total Positive or P score. These scores represent an internal frame of reference within which the individual is describing himself.

1. Total P Score. This score reflects the overall self esteem of the respondent and is the most important single score.

2. Row 1 P Score Identity. On this scale the individual is expressing how he sees himself.

3. Row 2 P Score-Self-satisfaction. This score reflects how an individual feels about the kind of person he perceives himself. It reflects the level of self satisfaction or self acceptance.
4. **Row 3 P Score--Behavior.** This score measures the perceptions that an individual has of his own behavior or the way he functions.

5. **Column A--Physical Self.** This is a measure of how an individual views his personal appearance.

6. **Column B--Moral-Ethical Self.** This score describes perceptions of the individual to humanity.

7. **Column C--Personal Self.** This score reflects the individual's sense of personal worth and his feeling of adequacy as a person.

8. **Column D--Family Self.** This score reflects one's feelings of adequacy, worth and value as a family member.

9. **Column E--Social Self.** This score reflects the person's sense of adequacy and worth in his social interaction with other people.

**The Variability Scores (V) V scores provide a measure of the amount of variability, from one area of the self perception to another.**

1. **Total V--**This score represents the total amount of variability for the entire scale.

2. **Column Total V--**This score measures the amount of variation within the columns.
3. **Row Total V** -- This score is the sum of the variations across the rows.

**The Distribution Score (D)** This is a summary score of the way one distributes his answers across the five available choices in responding to the items of the scale. High scores indicate that the subject is definite in the way that he perceives himself, while low scores reflect the opposite (Fitts, 1965).

The TSCS was normed on a sample of 626 persons varying in age, sex, race and socioeconomic status. This would support its being used with EOP students. The age of the subjects ranged from 12 to 68. There were approximately equal numbers of both sexes, both black and white subjects, and intellectual levels from 6th grade through the Ph. D. degree.

The instrument developer (Fitts, 1965) has conducted studies which indicate that there is no need to develop separate scales according to race, sex, and age. Data collected by Sunby (1962), with high school students, by Gividen (1959), with army recruits, by Hall (1967), with teachers and by Fitts (1961) with black nursing students show means and variances which are comparable to those of the norm group. These results tend to support the findings of Fitts.

The standardization group helped to influence the writers decision to use the Tennessee Self Concept Scale. It would seem that scores of EOP students on this instrument would be assumed
valid because of the various types of subjects who served as the norm group.

Reliability

Selected statistics show a reliability coefficient of .92 over a two week test re-test period with 60 college students. The test re-test reliability coefficients of all major subscores are reported in Appendix E. These coefficients range from .60 to .92. There are several other indications of the reliability of the Scale. Congdon (1958) used a shortened version of the TSCS in a study dealing with psychiatric patients and obtained a reliability coefficient of .88 for the total Positive Score (Fitts, 1965). Other evidence of reliability is found in the similarity of profile patterns found through repeated measures of the same individuals over a long period of time.

Validity

Fitts (1965) reports validation procedures of four kinds: (1) content validity (2) discrimination between groups (3) correlation with other personality measures and (4) personality changes under particular conditions.

In order to insure content validity, test items were selected from a pool of seemingly useful items. An item was retained for the scale only if there was unanimous agreement by the judges that
it was classified correctly. Therefore, the categories used in the scale are logically meaningful and easily understood (Fitts, 1965).

Studies of discrimination between groups (Congdon, 1958; Piety, 1958; Havener, 1961 and Wayne 1963) have demonstrated highly significant differences between patients and the non-patient norm group for almost every subscore that is utilized on the TSCS. Statistical analyses by Fitts (1965) in which a large group (369) of psychiatric patients were compared with 626 non-patients demonstrated similar results.

Correlation with related parts of the Minnesota Multiphasic Personality Inventory and The Edwards Preference Scale show small but positive correlations. These correlations tend to support the validity of the instrument (Fitts, 1965).

Counseling, psychotherapy, and other positive experiences would be expected to result in enhancement of the self concept while stress or failure would be expected to result in lower self esteem. Studies by Gividen (1959) and by Ashcrafts and Fitts (1964) show a significant proportion of positive changes after subjects were exposed to a positive experience. From the studies mentioned previously, there is considerable evidence which tends to support the validity of the Tennessee Self Concept Scale.
The College Inventory of Academic Adjustment

The College Inventory of Academic Adjustment was developed by Henry Borow in 1949. It was chosen because of the diverse categories it includes. The investigator felt that even though the instrument is somewhat dated, it could be used to give some indication of the student's overall adjustment generally, and in a number of specific areas as well. At the present time, instruments dealing with academic adjustment have not been developed which used norm groups similar to students who are enrolled in the Educational Opportunities Program. However, some measure of academic adjustment was expected to provide useful information. That is, some measure of academic adjustment is considered more valuable than not having any measurement at all.

Borow (1949) described the College Inventory of Academic Adjustment as a self-administering questionnaire designed to identify certain attributes apart from scholastic aptitude. He lists several ways in which the instrument may be used:

1. As a diagnostic aid in counseling which involves the identification of sources of academic underachievement.

2. As a preliminary counseling tool to assist the student who is having difficulty in assessing and focusing in on what might be interfering with his adjustment to college life.

3. As a research tool in investigating the academic adjustment characteristics of various segments of the college population.
The inventory is composed of six diagnostic categories. They are:

Curricular Adjustment. This area appraises the student's expressed satisfaction with college routine in general.

Maturity of Goals and Level of Aspiration. This category is concerned with three intimately related segments of the student's academic adjustment, his educational and life goals, his desire and effort to achieve them, and his sense of values.

Personal Efficiency, and Use of Time. The effectiveness with which the student schedules and carries out his daily activities is investigated by this category.

Study Skills and Practices. This category deals with the subject's characteristic study behavior. It surveys under what conditions he attempts to learn.

Mental Health. The items in this category converge on the status of the students' emotional adjustment.

Personal Relations. The items in this category investigate the ability of the student to get along with both faculty and friends.

There are three possible choices to an item on the inventory. These choices carry scoring weights of 2, 1, and 0 respectively.

Response choices which have key weights of 2 are those characteristically made by students who appear to be well-adjusted and response choices keyed as 0 are those typically made by the less well adjusted individual. The undecided responses carry a weight on one.
Split-half reliability coefficients for the composite inventory (corrected by Spearman Brown Prophecy Formula), yielded .92 for men and .90 for women. Test re-test reliability was determined for each separate scale. This yielded coefficients ranging from .81 to .89.

The instrument was chosen because of the separate categories, as well as its high correlations. It correlates highly with study skill inventories, Wrenn Study-Habits Inventory, as well as those concerned with emotional adjustment, as represented by The Bell Adjustment Inventory (the CIAA is depicted in Appendix C).

The Group Behavior Rating Scale

The Group Behavior Rating Scale, was developed by the investigator for the purpose of estimating whether changes in affect, help to influence behavioral changes within the groups. It is made up of fifteen items and three specific categories: (1) Self-Confidence, (2) Group Participation, and (3) Cooperation Within the Group. (Appendix D).

These items were selected from a pool of items submitted by former personal adjustment group participants. These individuals were asked to submit a list of desirable changes that would be expected to occur as a result of group process.

The Jesness Behavior Check List (JBC), developed by Carl
Jesness in 1970 and published by Consulting Psychologist Press, was helpful in developing the Group Behavior Rating Scale (GBRS). The JBC is an instrument used to estimate the degree of association between certain adolescent and young adult behavior which is deemed anti-social. The format of the two instruments is similar. The JBC is longer, consisting of eighty items. Both instruments have five possible responses, 1—almost never, 2—not often, 3—sometimes, 4—fairly often, and 5—very often. The total score for both instruments is obtained by adding the numbered responses for each item of the scale.

**Treatment of the Data**

The answer sheets from the pre and post-tests were hand scored, and the statistical analysis was completed with the assistance of a graduate student from the Statistics Department, of Oregon State University. The .05 level of confidence was selected as the acceptable level of statistical significance.

Three statistical analyses were used in treating the data. The first, a t statistic was used to estimate whether significant changes occurred for each group after the treatment was completed, by comparing pre and post-test mean scores. The second procedure involved an analysis of variance. This procedure was selected to examine whether there were significant differences between groups.
after the treatment was completed, and was performed by comparing the mean differences of Group I (Experimental group with peers as counselors) and Group II (Experimental group with an EOP staff member as the counselor). The mean differences of the experimental groups (Groups I and II) were compared with the differences of the control group (Group III). An analysis of variance is recommended (Popham, 1967) in lieu of a t test when two or more groups are involved in a study. The first analysis was performed in order to examine the effects of peers and the second comparison was performed to estimate the effects of the group counseling process. The last statistical test was used to examine the relationship between changes on the TSCS and the CIAA. A test for correlation was used for this process.

Data were reported for all subscores of the three instruments but for the statistical testing of the hypotheses, the P score on the TCSC, the total score on the CIAA, and the total score on the GBRS were used. All hypotheses were stated in the null for statistical purposes.

The hypotheses were statistically analyzed as follows.

Hypotheses I, II, and III were tested by a comparison of the pre and post-test mean score utilizing a two-tailed t test.

Hypotheses IV, V, and VI were tested by a comparison of the mean change between Group I and Group II and between treatments (Experimental, Groups I and II) and Controls (Group III), utilizing a two-tailed F test (Analysis of Variance).
Hypothesis VII was tested by a comparison of the total change for all participants (N = 29) on the TSCS and the CIAA, utilizing a Pearson product Moment correlation.
CHAPTER IV

PRESENTATION AND THE ANALYSIS OF THE DATA

Chapter IV is devoted to a description of the statistical analysis performed for this study. Tables with the analyses of the data are presented and indicate the procedure followed for testing each hypothesis.

Analysis Procedure

This study was conducted during the fall term of 1973 for the purpose of investigating the effects of a personal adjustment group counseling procedure and the utilization of peers as group counselors. Experimental Group I, (N=9), participated in a personal adjustment group with peers and group facilitators. Experimental Group II (N=8), participated in a comparable group experience with an Educational Opportunity Program (EOP) staff counselor as the group facilitator. The control group, Group III, (N=12) did not participate in the group counseling process. The Tennessee Self Concept Scale (TSCS) developed by Fitts (1965), The College Inventory of Academic Adjustment (CIAA) developed by Borow (1949) and the Group Behavior Rating Scale devised by the writer for this study served as the data gathering instruments.

For the purpose of statistical analyses, hypotheses I, II, III,
IV, V, VI, and VII were stated in the null form. A two-tailed test for significance was used in each instance. The Positive (P) score of the Tennessee Self Concept Scale was used as a measure of self concept for testing hypotheses I and IV. The College Inventory of Academic Adjustment's total score was used as a measure of academic adjustment for testing hypotheses II and V. The Group Behavior Rating Scale's total score was used as a measure of group behavior and for testing hypotheses III and VI. The total scores of the TSCS and the CIAA were used in the test for correlation and testing hypothesis VII. All subscores of the three instruments used received the same treatment as the total score to examine whether significant changes occurred on certain individual subscores.

In testing hypotheses I, II, and III a t test utilizing confidence intervals, was performed. This test was used to estimate whether differences existed between pre and post-test mean scores of each of the groups involved in the study. An analysis of variance in a one way classification was used to estimate whether there were significant mean differences between the groups after exposure to different treatments. Significant mean differences can be examined by computing the variances of the groups being tested. This procedure was performed in order to test hypotheses IV, V, and VI.

A test for significant correlation between the Tennessee Self Concept Scale (TSCS) and the College Inventory of Academic
Adjustment (CIAA) was performed to test hypothesis VII. All participants were involved in this correlation (N=29). A .05 level of confidence was accepted as the significant level.

The results of the test for each of the hypotheses are described below:

Hypothesis I

Testing for a significant difference in change for each group by comparing pre and post-test mean scores.

H01 There will be no significant change in self concept for Group I (N=9, Experimental Group with peers as counselors) as measured by comparing pre and post-test mean scores for the TSCS.

H02 There will be no significant change in self concept for Group II (N=8, Experimental Group with EOP staff counselor as the group counselor) as measured by comparing pre and post-test mean scores on the TSCS.

H03 There will be no significant change in self concept for Group III (N=12, Control Group) as measured by comparing pre and post-test mean scores on the TSCS.

The t test was used to determine whether a statistically significant difference existed between pre and post-test scores for Group I, Group II and Group III. This procedure was accomplished by computing confidence intervals for differences between means. In the test, if the confidence interval contained 0, the null hypothesis was not rejected and a conclusion was reached that average change was not enough to be significantly different from 0. Confidence intervals
were determined by obtaining the normal curve $t$ value associated with the desired confidence interval, e.g., 95 percent level. This resulting value was then added to and subtracted from the mean differences observed in the samples in order to determine the interval.

An analysis of the P score of the TSCS for testing Hypothesis I (Table 1.1, 1.2 and 1.3) revealed Group I to have a confidence interval of $-6.02--26.0$ which indicated no mean change at the .05 level. Group II had a confidence interval of $-4.48--29.48$ which indicated no change in mean at the .05 level. Group III had a confidence interval of $-8.62--19.12$, which indicated no mean change at the .05 level. From the analysis the null hypothesis was not rejected for Group I, Group II and Group III and it was concluded that there was not a significant change in self concept for Group I, II and III as measured by the P score of the TSCS. Group III did show a significant change in the subscore, Identity in a negative direction (decrease in score at the end of the study) with a confidence interval of $-.334--11.34$.

Hypothesis II

Testing for Significant Differences in pre and post-test scores for each group on the CIAA.

$H_{o1}$ There will be no significant change in academic adjustment for Group I (N=9, peers as group counselors) as measured by comparing the pre and post-test mean scores of the CIAA.

$H_{o2}$ There will be no significant change in academic adjustment for Group II (N=8, EOP counselor as counselor) as measured by
Table 1.1: A comparison of pre and post-test mean scores for Group I (N=9, experimental groups with peers as group counselors) on the Tennessee Self Concept Scale. (Testing Hypothesis I - $H_{01}$)

<table>
<thead>
<tr>
<th>Subscores</th>
<th>Pre Mean</th>
<th>Post Mean</th>
<th>Mean Change</th>
<th>Confidence Int.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity</td>
<td>126.60</td>
<td>128.60</td>
<td>2.00</td>
<td>2.00 ± 6.64</td>
</tr>
<tr>
<td>Self- Satisfact.</td>
<td>109.30</td>
<td>113.60</td>
<td>4.33</td>
<td>4.33 ± 7.19</td>
</tr>
<tr>
<td>Behavior</td>
<td>111.80</td>
<td>116.60</td>
<td>4.80</td>
<td>4.80 ± 6.81</td>
</tr>
<tr>
<td>Physical Self</td>
<td>72.30</td>
<td>75.40</td>
<td>3.10</td>
<td>3.10 ± 5.20</td>
</tr>
<tr>
<td>Moral Self</td>
<td>65.20</td>
<td>67.30</td>
<td>2.10</td>
<td>2.10 ± 3.76</td>
</tr>
<tr>
<td>Personal Self</td>
<td>67.66</td>
<td>70.22</td>
<td>2.56</td>
<td>2.56 ± 5.05</td>
</tr>
<tr>
<td>Family Self</td>
<td>72.55</td>
<td>74.66</td>
<td>2.11</td>
<td>2.11 ± 4.04</td>
</tr>
<tr>
<td>Social Self</td>
<td>69.30</td>
<td>70.20</td>
<td>.90</td>
<td>.90 ± 5.82</td>
</tr>
<tr>
<td>Self Crit.</td>
<td>31.70</td>
<td>33.20</td>
<td>1.50</td>
<td>1.50 ± 3.09</td>
</tr>
<tr>
<td>Total</td>
<td>347.80</td>
<td>357.80</td>
<td>10.00</td>
<td>10.00 ±16.02</td>
</tr>
</tbody>
</table>

t .05, 26 df

* Significant at the .05 level.
Table 1.2: A comparison of pre and post-test mean scores for Group II (N=8, experimental group with EOP staff counselor as counselor) on the Tennessee Self Concept Scale. (Testing Hypothesis I - Ho₂).

<table>
<thead>
<tr>
<th>Subscores</th>
<th>Pre Mean</th>
<th>Post Mean</th>
<th>Mean Change</th>
<th>Confidence Int.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity</td>
<td>122.25</td>
<td>123.87</td>
<td>1.62</td>
<td>1.62 ± 7.04</td>
</tr>
<tr>
<td>Self-Satisfact.</td>
<td>96.50</td>
<td>102.00</td>
<td>5.50</td>
<td>5.50 ± 7.62</td>
</tr>
<tr>
<td>Behavior</td>
<td>104.75</td>
<td>108.87</td>
<td>4.12</td>
<td>4.12 ± 7.23</td>
</tr>
<tr>
<td>Physical Self</td>
<td>69.50</td>
<td>72.25</td>
<td>2.75</td>
<td>2.75 ± 5.54</td>
</tr>
<tr>
<td>Moral Self</td>
<td>60.62</td>
<td>62.25</td>
<td>1.62</td>
<td>1.62 ± 3.99</td>
</tr>
<tr>
<td>Personal Self</td>
<td>63.63</td>
<td>67.12</td>
<td>3.50</td>
<td>3.50 ± 5.36</td>
</tr>
<tr>
<td>Family Self</td>
<td>65.00</td>
<td>67.88</td>
<td>2.88</td>
<td>2.88 ± 4.28</td>
</tr>
<tr>
<td>Social Self</td>
<td>62.13</td>
<td>66.25</td>
<td>4.12</td>
<td>4.12 ± 5.85</td>
</tr>
<tr>
<td>Self Crit.</td>
<td>37.50</td>
<td>36.875</td>
<td>.625</td>
<td>-.625 ± 3.28</td>
</tr>
<tr>
<td>Total</td>
<td>322.25</td>
<td>334.75</td>
<td>12.50</td>
<td>12.50 ± 16.98</td>
</tr>
</tbody>
</table>

\[ t \sim .05, 26 \text{ df} \]

* Significant at the .05 level.
Table 1.3: A comparison of pre and post-test mean scores for Group III (N=12, the control group) on the Tennessee Self Concept Scale. (Testing Hypothesis I - Ho3).

<table>
<thead>
<tr>
<th>Subscores</th>
<th>Pre Mean</th>
<th>Post Mean</th>
<th>Mean Change</th>
<th>Confidence Int.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity</td>
<td>124.75</td>
<td>118.67</td>
<td>-6.08</td>
<td>-6.08 ± 5.75*</td>
</tr>
<tr>
<td>Self-</td>
<td>107.75</td>
<td>112.17</td>
<td>4.41</td>
<td>4.41 ± 6.22</td>
</tr>
<tr>
<td>Satisfact.</td>
<td>113.50</td>
<td>111.53</td>
<td>-1.92</td>
<td>-1.92 ± 5.90</td>
</tr>
<tr>
<td>Physical</td>
<td>71.25</td>
<td>68.41</td>
<td>-2.84</td>
<td>-2.84 ± 4.52</td>
</tr>
<tr>
<td>Self</td>
<td>68.92</td>
<td>70.58</td>
<td>1.67</td>
<td>1.67 ± 3.25</td>
</tr>
<tr>
<td>Moral</td>
<td>68.17</td>
<td>68.67</td>
<td>.50</td>
<td>.50 ± 4.37</td>
</tr>
<tr>
<td>Personal</td>
<td>69.42</td>
<td>67.84</td>
<td>-1.58</td>
<td>-1.58 ± 3.50</td>
</tr>
<tr>
<td>Self</td>
<td>68.25</td>
<td>66.03</td>
<td>-2.17</td>
<td>-2.17 ± 5.07</td>
</tr>
<tr>
<td>Family Self</td>
<td>32.58</td>
<td>31.50</td>
<td>-1.08</td>
<td>-1.08 ± 2.68</td>
</tr>
<tr>
<td>Social Self</td>
<td>346.00</td>
<td>340.75</td>
<td>-5.25</td>
<td>-5.25 ± 13.87</td>
</tr>
</tbody>
</table>

\[ t .05, 26 \text{ df} \]

*Significant at the .05 level.
comparing the pre and post-test scores on the CIAA.

Ho3. There will be no significant change in academic adjustment for Group III (N=12, control group) as measured by comparing pre and post-test mean scores on the CIAA.

An analysis of the total score data on the College Inventory of Academic Adjustment utilizing confidence intervals to measure change for Hypothesis II (Table 2.1, 2.2, 2.3) revealed Group I to have a confidence interval of -10.78--18.10 which showed no significant differences at the .05 level, Group II had a confidence interval of -12.57--18.07 and Group III to have a confidence interval of -.058--3.39. From this analysis the null hypothesis was not rejected for Groups I, II, and III and it was concluded that there was not a significant change in academic adjustment for Group I, Group II and Group III as measured by the total score on the CIAA.

An analysis of the subscores revealed significant changes on the subscore, Personal Relations for Group I and for Group III in a positive direction. Group I had a confidence interval of 2.185--8.475. Group III had a confidence interval of .276--5.724. In Table 2, positive mean change scores indicate an increase in the score for participants after exposure to treatment. A negative mean change implies a decrease in the score after exposure to the treatment.
Table 2.1: A comparison of the pre and post-test mean scores of Group I (N=9, experimental group with peers as counselors) on the College Inventory of Academic Adjustment. (Testing Hypothesis II - Ho₁).

<table>
<thead>
<tr>
<th>Subscores</th>
<th>Pre Mean</th>
<th>Post Mean</th>
<th>Mean Change</th>
<th>Confidence Int.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular Adjustment</td>
<td>15.33</td>
<td>13.78</td>
<td>-1.56</td>
<td>-1.56 ± 2.61</td>
</tr>
<tr>
<td>Maturity of Goals</td>
<td>20.33</td>
<td>19.78</td>
<td>-.55</td>
<td>-.55 ± 2.70</td>
</tr>
<tr>
<td>Personal Efficiency</td>
<td>20.22</td>
<td>21.33</td>
<td>1.11</td>
<td>1.11 ± 3.57</td>
</tr>
<tr>
<td>Study Skills and Pract.</td>
<td>26.32</td>
<td>25.33</td>
<td>.89</td>
<td>.89 ± 5.89</td>
</tr>
<tr>
<td>Mental Health</td>
<td>19.00</td>
<td>19.56</td>
<td>.56</td>
<td>56 ± 3.36</td>
</tr>
<tr>
<td>Personal Relations</td>
<td>16.55</td>
<td>21.88</td>
<td>5.33</td>
<td>5.33 ± 3.14*</td>
</tr>
<tr>
<td>Total</td>
<td>117.89</td>
<td>121.56</td>
<td>3.67</td>
<td>3.67 ± 14.44</td>
</tr>
</tbody>
</table>

t .05, 26 df

* Significant at the .05 level.
Table 2.2: A comparison of the pre and post-test mean scores of Group II (N=8, experimental group with EOP staff counselor as counselor) on the College Inventory of Adjustment. (Testing Hypothesis II - Ho₂).

<table>
<thead>
<tr>
<th>Subscores</th>
<th>Pre Mean</th>
<th>Post Mean</th>
<th>Mean Change</th>
<th>Confidence Int.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular Adjustment</td>
<td>15.50</td>
<td>15.13</td>
<td>- .375</td>
<td>- .375 ± 2.77</td>
</tr>
<tr>
<td>Maturity of Goals</td>
<td>22.00</td>
<td>20.75</td>
<td>-1.25</td>
<td>-1.25 ± 2.86</td>
</tr>
<tr>
<td>Personal Efficiency</td>
<td>20.00</td>
<td>23.00</td>
<td>3.00</td>
<td>3.00 ± 3.79</td>
</tr>
<tr>
<td>Study Skills and Pract.</td>
<td>25.25</td>
<td>25.625</td>
<td>.375</td>
<td>.375 ± 6.25</td>
</tr>
<tr>
<td>Mental Health</td>
<td>18.75</td>
<td>20.63</td>
<td>1.88</td>
<td>1.88 ± 3.56</td>
</tr>
<tr>
<td>Personal Relations</td>
<td>17.13</td>
<td>19.75</td>
<td>2.62</td>
<td>2.62 ± 3.34</td>
</tr>
<tr>
<td>Total</td>
<td>120.37</td>
<td>123.12</td>
<td>2.75</td>
<td>2.75 ± 15.32</td>
</tr>
</tbody>
</table>

* Significant at the .05 level.
Table 2.3: A comparison of the pre and post-test mean scores of Group III (N=12, control group), on the College Inventory of Academic Adjustment. (Testing Hypothesis II - Ho₃).

<table>
<thead>
<tr>
<th>Subscores</th>
<th>Pre Mean</th>
<th>Post Mean</th>
<th>Mean Change</th>
<th>Confidence Int.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular Adjustment</td>
<td>17.33</td>
<td>16.75</td>
<td>-.583</td>
<td>-.583 ± 2.26</td>
</tr>
<tr>
<td>Maturity of Goals</td>
<td>20.75</td>
<td>20.66</td>
<td>-0.83</td>
<td>-0.83 ± 2.34</td>
</tr>
<tr>
<td>Personal Efficiency</td>
<td>23.25</td>
<td>22.75</td>
<td>-0.50</td>
<td>-0.50 ± 3.09</td>
</tr>
<tr>
<td>Study Skills and Pract.</td>
<td>25.50</td>
<td>26.17</td>
<td>-0.666</td>
<td>-0.666 ± 5.10</td>
</tr>
<tr>
<td>Mental Health</td>
<td>20.75</td>
<td>18.83</td>
<td>-1.92</td>
<td>-1.92 ± 2.98</td>
</tr>
<tr>
<td>Personal Relations</td>
<td>16.25</td>
<td>19.25</td>
<td>3.00</td>
<td>3.00 ± 2.73*</td>
</tr>
<tr>
<td>Total</td>
<td>125.00</td>
<td>124.33</td>
<td>-0.666</td>
<td>-0.666 ± 12.51</td>
</tr>
</tbody>
</table>

\[ t .05, 26 \text{ df} \]

* Significant at the .05 level.
Hypothesis III

Testing for Significant Differences in pre and post-test scores for Group I and Group II on the GBRS.

Ho₁ There will be no significant change in behavior for Group I (Experimental Group with peers as group counselors) as measured by pre and post-test mean scores on the GBRS.

Ho₂ There will be no significant change in behavior for Group II (Experimental Group with EOP staff counselor as group counselor) as measured by pre and post mean scores on the GBRS.

An analysis of the total score of the GBRS, testing Hypothesis III (Table 3.1, 3.2) revealed Group I to have a confidence interval of -0.16--7.048 and Group II to have a confidence interval of -8.23--6.823. From this analysis the null hypothesis was not rejected for Groups I and II and it was concluded that there was not a significant change in group behavior as measured by the total score of the Group Behavior Rating Scale (GBRS) for Group I and II.

An analysis of the subscores revealed Group II to have a significant change score on the subscore Cooperation. This was indicated by an average change score of 2.0 and a confidence interval of 0.420--3.580.

An analysis of variance in a one way classification design was performed for testing hypotheses IV, V, and VI. This analysis was performed by examining change scores for significant mean differences. An analysis of covariance was completed for Group I and
Table 3.1: A comparison of the pre and post-test mean scores of Group I (N=9, experimental group with peers as counselors) on the Group Behavior Rating Scale. (Testing Hypothesis III - Ho₁).

<table>
<thead>
<tr>
<th>Subscores</th>
<th>Pre Mean</th>
<th>Post Mean</th>
<th>Mean Change</th>
<th>Confidence Int.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Confidence</td>
<td>19.66</td>
<td>20.44</td>
<td>.78</td>
<td>.78 ± 1.38</td>
</tr>
<tr>
<td>Group Participation</td>
<td>17.11</td>
<td>19.11</td>
<td>2.00</td>
<td>2.00 ± 2.02</td>
</tr>
<tr>
<td>Cooperation</td>
<td>19.00</td>
<td>19.66</td>
<td>.66</td>
<td>.66 ± 1.49</td>
</tr>
<tr>
<td>Total</td>
<td>55.77</td>
<td>59.22</td>
<td>3.44</td>
<td>3.44 ± 3.60</td>
</tr>
</tbody>
</table>

Table 3.2: A comparison of the pre and post-test mean scores of Group II (N=8, experimental group with an EOP staff counselor as the counselor) on the Group Behavior Rating Scale. (Testing Hypothesis III - Ho₂).

<table>
<thead>
<tr>
<th>Subscores</th>
<th>Pre Mean</th>
<th>Post Mean</th>
<th>Mean Change</th>
<th>Confidence Int.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Confidence</td>
<td>20.50</td>
<td>20.63</td>
<td>.125</td>
<td>.125 ± 1.46</td>
</tr>
<tr>
<td>Group Participation</td>
<td>16.88</td>
<td>17.75</td>
<td>.875</td>
<td>.875 ± 2.14</td>
</tr>
<tr>
<td>Cooperation</td>
<td>16.00</td>
<td>18.00</td>
<td>2.00</td>
<td>2.00 ± 1.58*</td>
</tr>
<tr>
<td>Total</td>
<td>53.38</td>
<td>56.38</td>
<td>3.00</td>
<td>3.00 ± 3.88</td>
</tr>
</tbody>
</table>

* Significant at the .05 level.
and Group II on the Group Behavior Rating Scale. In this procedure the scores for Group I and Group II were statistically equated with regard to pretest scores.

Hypothesis IV

Testing for significant differences in mean change between Experimental Groups I and II and between Treatments (I and II) and the Control (Group III) on the TSCS.

$H_{01}$ There will be no significant difference in change in self concept between Group I and Group II as measured by comparing change scores on the TSCS.

$H_{02}$ There will be no significant difference in change in self concept between participants (Treatments, I and II) and non-participants (Controls, Group III) as measured by comparing change scores on the TSCS.

An analysis of the P score data of the Tennessee Self Concept Scale (TSCS) for testing Hypothesis IV (Table 4) revealed a mean difference of .010 between Group I and Group II and a mean difference of 2.66 between Treatments (Group I and II) and Controls (Group III) and a significant F value of 3.37. From this analysis the null hypothesis was not rejected concluding that there was not a significant difference in self concept change scores between Group I and Group II and between Treatments and Controls. Significant differences did occur on the subscore, Identity, between Treatments and Controls. There was a mean difference of 6.17 on this subscore.
Table 4: An analysis of variance between Groups I and II and Treatments (Groups I and II) and Controls (Group III) to examine significant mean change differences on the Tennessee Self Concept Scale. (Testing Hypothesis IV).

<table>
<thead>
<tr>
<th>Subscores</th>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Groups</td>
<td>2</td>
<td>220.19</td>
<td>2.35</td>
</tr>
<tr>
<td>Identity</td>
<td>I vs. II</td>
<td>1</td>
<td>1.47</td>
<td>.015</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>580.68</td>
<td>6.17*</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>93.88</td>
<td></td>
</tr>
<tr>
<td>Self-Satisfact.</td>
<td>Groups</td>
<td>2</td>
<td>3.65</td>
<td>.033</td>
</tr>
<tr>
<td></td>
<td>I vs. II</td>
<td>1</td>
<td>1.47</td>
<td>.013</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>8.14</td>
<td>.074</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>109.95</td>
<td></td>
</tr>
<tr>
<td>Behavior</td>
<td>Groups</td>
<td>2</td>
<td>144.39</td>
<td>1.46</td>
</tr>
<tr>
<td></td>
<td>I vs. II</td>
<td>1</td>
<td>5.88</td>
<td>.059</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>298.98</td>
<td>2.30</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>98.82</td>
<td></td>
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<td>Groups</td>
<td>2</td>
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<tr>
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<td>I vs. II</td>
<td>1</td>
<td>11.53</td>
<td>.198</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>86.12</td>
<td>1.60</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>58.07</td>
<td></td>
</tr>
<tr>
<td>Moral Self</td>
<td>Groups</td>
<td>2</td>
<td>.664</td>
<td>.022</td>
</tr>
<tr>
<td></td>
<td>I vs. II</td>
<td>1</td>
<td>2.12</td>
<td>.069</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>.981</td>
<td>.032</td>
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<td></td>
<td>Error</td>
<td>26</td>
<td>30.05</td>
<td></td>
</tr>
<tr>
<td>Personal</td>
<td>Groups</td>
<td>2</td>
<td>23.87</td>
<td>.440</td>
</tr>
<tr>
<td>Self</td>
<td>I vs. II</td>
<td>1</td>
<td>1.47</td>
<td>.027</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>23.40</td>
<td>.439</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>54.27</td>
<td></td>
</tr>
<tr>
<td>Family Self</td>
<td>Groups</td>
<td>2</td>
<td>59.03</td>
<td>1.70</td>
</tr>
<tr>
<td></td>
<td>I vs. II</td>
<td>1</td>
<td>1.94</td>
<td>.055</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>98.45</td>
<td>2.83</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>34.71</td>
<td></td>
</tr>
<tr>
<td>Social Self</td>
<td>Groups</td>
<td>2</td>
<td>95.90</td>
<td>1.30</td>
</tr>
<tr>
<td></td>
<td>I vs. II</td>
<td>1</td>
<td>36.76</td>
<td>.050</td>
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<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>133.06</td>
<td>1.80</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>34.71</td>
<td></td>
</tr>
<tr>
<td>Self Criticism</td>
<td>Groups</td>
<td>2</td>
<td>17.56</td>
<td>.863</td>
</tr>
<tr>
<td></td>
<td>I vs. II</td>
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</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>17.78</td>
<td>.874</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>20.35</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Groups</td>
<td>2</td>
<td>962.28</td>
<td>1.67</td>
</tr>
<tr>
<td></td>
<td>I vs. II</td>
<td>1</td>
<td>5.88</td>
<td>.010</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>1536.24</td>
<td>2.66</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>576.85</td>
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</tr>
</tbody>
</table>

Tabular F .05; 2, 26 = 3.37 * Significant at the .05 level.
Hypothesis V

Testing for significant differences in mean change between Group I and Group II and between Treatments and Controls on the CIAA.

**Ho**<sub>1</sub> There will be no significant difference in academic adjustment between Group I and Group II as measured by comparing the change scores on the College Inventory of Academic Adjustment (CIAA).

**Ho**<sub>2</sub> There will be no significant difference in academic adjustment between participants (Treatments, Group I and II) and non-participants (Controls, Group III) as measured by comparing change scores on the College Inventory of Academic Adjustment (CIAA).

An analysis of the total score of the College Inventory of Academic Adjustment (CIAA) for testing Hypothesis V (Table 5) revealed a difference between Group I and Group II of .016 and between treatments and controls of .174 and an F value of 3.37.

From this analysis the null hypothesis was not rejected, indicating that there was not a significant difference in change toward academic adjustment between Group I and Group II and Treatments and Controls.

Hypothesis VI

Testing for significant differences in mean change between Group I and Group II and between Treatments and Controls on the GBRS.

**Ho**<sub>1</sub> There will be no significant mean change difference in behavior between Group I and Group II as measured by comparing change scores on the Group Behavior Rating Scale (GBRS).

**Ho**<sub>2</sub> There will be no significant mean difference between Group I and Group II on the Group Behavior Rating Scale where their
Table 5: Comparison of mean change differences for Groups I and II and for Treatments (Groups I and II) and Controls (Group III) by an Analysis of Variance on the CIAA. (Testing Hypothesis V).

<table>
<thead>
<tr>
<th>Subscores</th>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular Adjustment</td>
<td>Groups</td>
<td>2</td>
<td>3.56</td>
<td>.246</td>
</tr>
<tr>
<td></td>
<td>I vs. II</td>
<td>1</td>
<td>7.11</td>
<td>.490</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>.138</td>
<td>.009</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>14.50</td>
<td></td>
</tr>
<tr>
<td>Maturity</td>
<td>Groups</td>
<td>2</td>
<td>3.27</td>
<td>.210</td>
</tr>
<tr>
<td></td>
<td>I vs. II</td>
<td>1</td>
<td>1.47</td>
<td>.094</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>2.60</td>
<td>.167</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>15.48</td>
<td></td>
</tr>
<tr>
<td>Personal Efficiency</td>
<td>Groups</td>
<td>2</td>
<td>29.54</td>
<td>1.087</td>
</tr>
<tr>
<td></td>
<td>I vs. II</td>
<td>1</td>
<td>1.47</td>
<td>.054</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>2.60</td>
<td>.095</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>27.15</td>
<td></td>
</tr>
<tr>
<td>Study Skills and Pract.</td>
<td>Groups</td>
<td>2</td>
<td>6.63</td>
<td>.089</td>
</tr>
<tr>
<td></td>
<td>I vs. II</td>
<td>1</td>
<td>7.17</td>
<td>.096</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>6.78</td>
<td>.019</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>73.90</td>
<td></td>
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<tr>
<td>Mental Health</td>
<td>Groups</td>
<td>2</td>
<td>37.34</td>
<td>1.50</td>
</tr>
<tr>
<td></td>
<td>I vs. II</td>
<td>1</td>
<td>5.88</td>
<td>.245</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>67.01</td>
<td>2.79</td>
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<td></td>
<td>Error</td>
<td>26</td>
<td>24.00</td>
<td></td>
</tr>
<tr>
<td>Personal Relations</td>
<td>Groups</td>
<td>2</td>
<td>19.48</td>
<td>.924</td>
</tr>
<tr>
<td></td>
<td>I vs. II</td>
<td>1</td>
<td>42.88</td>
<td>2.03</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>.138</td>
<td>.006</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>21.07</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Groups</td>
<td>2</td>
<td>55.33</td>
<td>.024</td>
</tr>
<tr>
<td></td>
<td>I vs. II</td>
<td>1</td>
<td>7.11</td>
<td>.016</td>
</tr>
<tr>
<td></td>
<td>I and II vs. III</td>
<td>1</td>
<td>77.55</td>
<td>.174</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>26</td>
<td>444.54</td>
<td></td>
</tr>
</tbody>
</table>

Tabular F .05; 2, 26 = 3.37
their mean scores have been statistically equated with respect to pretest scores.

An analysis of the total score on the GBRS for testing hypothesis VI - \( H_{01} \) (Table 6) revealed there was no significant difference between Group I and Group II. From this analysis, the null hypothesis was not rejected, indicating no difference in change in group behavior between Group I and Group II. An analysis of covariance, which statistically equated means on the GBRS, revealed a significant mean difference between Group I and II on the subscore Self Confidence.

Hypothesis VII

A test for correlation between change scores on the TSCS and the CIAA.

\( H_{01} \) There will be no significant correlation between change scores on the Tennessee Self Concept Scale and the College Inventory of Academic Adjustment.

A positive correlation was revealed between the TSCS and the CIAA of .3006. This correlation was not significant at the .05 level of significance (Table 7).

Summary

The data collected for this study was reported and the results were analyzed in this chapter. The t statistic, utilizing confidence intervals to determine differences in pre and post-test means for
Table 6: An analysis of covariance between Group I (N=9) and Group II (N=8) to examine differences in change scores when the scores have been equated. (Testing Hypothesis VI - Ho$_2$).

<table>
<thead>
<tr>
<th>Subscores</th>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Confidence</td>
<td>Covariance</td>
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<td>20.81</td>
<td>8.19*</td>
</tr>
<tr>
<td></td>
<td>Treatment</td>
<td>1</td>
<td>.16</td>
<td>.062</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>14</td>
<td>2.54</td>
<td></td>
</tr>
<tr>
<td>Group Participation</td>
<td>Covariance</td>
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<td>4.38</td>
<td>.526</td>
</tr>
<tr>
<td></td>
<td>Treatment</td>
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<td>5.80</td>
<td>.697</td>
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<td></td>
<td>Residual</td>
<td>14</td>
<td>8.32</td>
<td></td>
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<tr>
<td>Cooperation</td>
<td>Covariance</td>
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<td>14.4</td>
<td>3.91</td>
</tr>
<tr>
<td></td>
<td>Treatment</td>
<td>1</td>
<td>.64</td>
<td>.173</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>14</td>
<td>3.68</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Covariance</td>
<td>1</td>
<td>79.51</td>
<td>3.62</td>
</tr>
<tr>
<td></td>
<td>Treatment</td>
<td>1</td>
<td>6.53</td>
<td>.298</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>14</td>
<td>21.91</td>
<td></td>
</tr>
</tbody>
</table>

F .05, 1, 15 = 4.54

* Significant at the .05 level.

Table 6: An analysis of variance between Group I (N=9) and Group II (N=8) to examine differences in mean change scores on the GBRS. (Testing Hypothesis VI - Ho$_1$).

<table>
<thead>
<tr>
<th>Subscores</th>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Confidence</td>
<td>Group I vs. II</td>
<td>1</td>
<td>1.81</td>
<td>.047</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>15</td>
<td>3.76</td>
<td></td>
</tr>
<tr>
<td>Group Participation</td>
<td>Group I vs. II</td>
<td>1</td>
<td>5.36</td>
<td>.067</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>15</td>
<td>8.06</td>
<td></td>
</tr>
<tr>
<td>Cooperation</td>
<td>Group I vs. II</td>
<td>1</td>
<td>7.53</td>
<td>1.71</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>15</td>
<td>4.40</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Group I vs. II</td>
<td>1</td>
<td>.837</td>
<td>.033</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>15</td>
<td>2.57</td>
<td></td>
</tr>
</tbody>
</table>

F .05, 1, 15 = 4.54

* Significant at the .05 level.
Table 7: A correlation between change scores of the Tennessee Self Concept Scale and the College Inventory of Academic Adjustment.

SCATTER, 22, 23

LOWER BOUND OF X: -46.00
UPPER BOUND OF X: 57.00
LOWER BOUND OF Y: 39.00
UPPER BOUND OF Y: 58.00

CORRELATION COEFFICIENT = .3006730

22 = change in total academic adjustment
23 = change in total self concept

Significant Correlation for 27(n-2)
.05 Level = .3670
each group was performed to test hypothesis I, II, and III. An analysis of variance in a one way classification design was used to test hypothesis IV, V, and VI. The analysis of covariance in a one way classification was performed for Group I and Group II on the Group Behavior Rating Scale only. A test for correlation was performed to test hypothesis VII and to examine the relationship between change scores on the Tennessee Self Concept Scale (TSCS) and the College Inventory of Academic Adjustment (CIAA).

The P score on the TSCS was used as the measure of self concept, the total score on the CIAA was used as the measure of academic adjustment, and the total score on the GBRS was used as the measure of group behavior.

The results regarding the differences in pre and post-test mean scores for Group I, Group II, and Group III revealed that there was not a significant difference at the .05 level on the three instruments used. The subscore, Identity, on the TSCS revealed a significant change for Group III in a negative direction. The subscore, Personal Relations, on the CIAA revealed a significant change for Group I and Group III in a positive direction.

The analysis of variance for testing hypotheses IV, V, and VI revealed that there was no significant difference between change scores for Groups I, II, and III and for Treatments and Controls on the three data gathering instruments, the TSCS, the CIAA, and
the GBRS. The subscore Identity on the TSCS did show a significant difference in change between Treatments (Group I and Group II) and Controls (Group III).

An analysis of covariance in a one way classification revealed a significant difference between Group I and Group II on the subscore Self Confidence on the GBRS. This level of significance occurred when the pretest scores were statistically equated.

A test for correlation between the Tennessee Self Concept Scale (TSCS) and the College Inventory of Academic Adjustment (CIAA) revealed a positive correlation of .3006 which was not significant at the .05 level.
CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter is divided into three sections. The first is a summary of the major problem of this investigation, the design and methodology followed, and the overall results. The conclusions and implications drawn from the findings are discussed in the second section. The last section contains suggested recommendations for further study.

Summary

The basic problem of the present investigation was to determine if peer counselors could be effective as group counselors for Educational Opportunity Program (EOP), freshman students. This effectiveness would be demonstrated by changes in self concept and academic adjustment for those students who participated in the group counseling process. To this end, the current research was designed to examine students with peers as group counselors, students with an EOP staff counselor as the leader of the group counseling process and students who did not participate in either group counseling procedure.

The hypotheses tested were:
1. There will be no significant change in self concept for Groups I, II and III as measured by comparing pre and post-test mean scores on the Tennessee Self Concept Scale (TSCS).

2. There will be no significant change in academic adjustment for Groups I, II and III as measured by comparing pre and post-test mean scores for the College Inventory of Academic Adjustment (CIAA).

3. There will be no significant change in group behavior for Groups I and II as measured by pre and post-test mean scores on the Group Behavior Rating Scale.

4. There will be no significant difference in change in self concept between Group I and Group II and Treatments and Controls as measured by comparing change scores on the Tennessee Self Concept Scale.

5. There will be no significant difference in change in academic adjustment between Group I and Group II and Treatments and Controls as measured by comparing change scores on the College Inventory of Academic Adjustment.

6. There will be no significant difference in change in group behavior between Group I and Group II as measured by comparing change scores of the Group Behavior Rating Scale.

7. There will be no significant correlation between change scores on the TSCS and the CIAA.

A review of related literature revealed that individuals and institutions are increasingly using peers as helpers in a number of educational settings. Research studies which deal primarily with peers as helpers for special students in the college setting are sparse. This paucity of studies might be due to the small number of low-income, disadvantaged students in institutions of higher learning prior to the middle 1960's, as well as the recent use of peers as helpers, and would indicate a need for research in the area
of special programs.

The sample for this investigation consisted of 29 students who entered Oregon State University in the fall term of 1973. The experimental groups, Group I and Group II were exposed to a personal adjustment group counseling procedure under the auspices of the Educational Opportunities Program (EOP). The group sessions for Group I (N=9) were facilitated by peers, (older EOP students). Group II (N=8) participated in the group counseling process with an EOP staff counselor as the group leader. Group III (N=12) did not participate in the group counseling process.

The function of the group counseling sessions was to aid freshman students in their overall adjustment to the university environment. Peer counselors were trained by enrolling in a course "Student Counselor Orientation", the spring term preceding this investigation.

The Tennessee Self Concept Scale (TSCS) was used in an effort to estimate whether changes in self concept occurred after exposure to a ten week period of counseling activity. The College Inventory of Academic Adjustment (CIAA) was used to measure whether changes in academic adjustment occurred, and the Group Behavior Rating Scale (GBRS) was utilized (with Groups I and II) to estimate whether changes in group behavior took place. The instruments were administered under pre and post-test conditions during the fall term.
The P score of the TSCS was used as the measure of self concept, the total score of the CIAA was used as the measure of academic adjustment and the total score of the GBRS was used as the measure of group behavior. All subscores on the three instruments were included and utilized for analyses with respect to the hypotheses.

Hypotheses I, II, and III were tested by examining differences in mean change by comparing pre and post-test scores for each of the three groups on the instruments used. Hypotheses IV, V, and VI were tested by using an analysis of variance in a one way classification design to estimate whether there were significant differences in change scores for each instrument between Groups I and II and between Treatments and Controls. Hypothesis VII was tested by correlating the change scores on the TSCS with the change scores on the CIAA for all participants involved in the study (N=29). All hypotheses were stated in the null form for testing statistical significance. The .05 level of significance was selected as the acceptable level of statistical significance and a two-tailed test was used.

From the analysis of the data utilizing the t statistic and confidence intervals, the results indicated that there were no significant differences on the three instruments used in the study for Groups I, II, and III. The subscore, Identity, on the TSCS showed a significant difference in change for Group III in a negative direction. The mean scores decreased significantly. The subscore, Personal Relations,
on the CIAA revealed a significant change for Groups I and III.

An analysis of variance in a one way classification design comparing change scores between Groups I and II and between Treatments (participants) and Controls (non-participants) revealed that there was not a significant change for Groups I, II, and III. There was however, a significant difference between treatments and controls on the subscore, Identity, on the TSCS. An analysis of covariance revealed a significant difference between Group I and Group II on the subscore, Self Confidence on the GBRS. The analysis of variance was used to test hypotheses IV, V, VI.

A test for correlation between the TSCS and the CIAA change scores revealed a positive correlation of .3006 which was not significant at the .05 level of confidence.

Findings, Conclusions and Implications

Conclusions and implications drawn from the findings of this study must necessarily be tentative because of the limitations inherent in behavioral research in general, most specifically when such research encompasses the use of psychological constructs such as self concept, adjustment, etc. Within this framework, the following conclusions and implications were drawn.

1. The group participants (Group I) who were involved in the counseling process with peers as counselors changed positively, though not significantly, on all subscores of the scale used to
measure self concept. As a result, it was concluded that peers and the group counseling procedure contributed to these positive changes.

2. The participants (Group II) who were involved in the group counseling procedure with a staff counselor as the group facilitator changed in a positive direction, though not significantly, on all subscores on the instrument that served as a measure of changes in self concept. From these findings it was concluded that the EOP staff counselor and the group procedure contributed to the positive changes of these participants. Both peers and the EOP staff counselor appeared to be positive change agents.

3. The group of students (Group III) who were not involved in the group counseling procedure changed in a negative direction on all subscores with the exception being Moral Self and Personal Self. There was a significant decrease in the subscore Identity for this group. From these findings, conclusions might be drawn that without support EOP freshman students decreased in self concept and adjustment. A group counseling procedure seemed to be supportive of positive changes for group participants. This conclusion would add support for the continuation of the group counseling procedure for freshman EOP students.

4. Since there were positive changes for the groups exposed to the counseling process, assumptions might be made that a larger number of students in the groups would have allowed for significant differences in change. However this assumption might not be valid since the smaller number in the groups might have allowed for more personal contact between participants and counselor(s). This contact could have fostered more positive changes. From this finding, it was possible to infer that peers may be as effective as professional counselors with EOP students in the group setting.

5. The results indicated changes for participants (groups with peers and staff counselor as facilitators) when compared to non-participants on the Identity subscore on the instrument that served as a measure of self concept change. One conclusion that might be drawn, is that participants became more aware of themselves and their own identity as a result of the group experience.

6. A time lag often occurs between exposure to treatment and
affective change. Therefore, the length of treatment may have limited or influenced the amount of change that occurred for each group. Conclusions might be made that more positive changes might result from the group experience after a greater length of time.

7. The Group Behavior Rating Scale did not contribute to the study dealing with treatments and controls, since this instrument was used only in terms of group behavior for those individuals involved in the group counseling activity. This instrument did show both experimental groups changed positively in group behavior, though not significantly, after exposure to treatment. These findings would imply that a group experience is supportive of behavioral changes.

8. There were no clear differences for the three groups on the College Inventory of Academic Adjustment. That is, all groups changed on different subscores. Some of these differences were negative and some were positive. Thus, it was concluded that the CIAA did not discriminate between groups as well as the TSCS. Another conclusion that might be drawn is that the group procedure was more effective in bringing about changes in self concept than in academic adjustment.

9. Of the 17 students who participated in the group counseling procedure, 15 were enrolled for the spring term of 1974. The group experience may have been a factor that contributed to the low attrition rate of these students.

10. Five of the former group participants have volunteered to function as peer counselors for the 1974-75 school year. Their experiences as group participants appear to have contributed to their initial effectiveness as group facilitators.

Recommendations

As a result of the investigation the following recommendations for further research are made:

1. Since groups involved in the group counseling procedure changed in a positive direction though not significantly, it is recommended that the study be repeated using a larger sample of students.
2. Conduct this same study to determine if greater gains in self concept and academic adjustment would occur in a similar group counseling situation extended over a longer period of time.

3. A followup study is recommended utilizing participants of this study for the purpose of examining changes in self concept as related to grade point averages at the end of the freshman year.

4. Additional research is recommended which would compare the self concept of Educational Opportunity students with a sample of regular students at Oregon State University at the beginning of the freshman year.

5. Current research has indicated that not only the participants but the helper as well, show positive changes from the interaction. Additional research should be undertaken to examine the effects of peer counseling on the students who function as counselors.

6. Further research is recommended that would examine the effects of ethnicity and/or sex of peer counselors on the positive changes of group counseling participants.

7. Further research is recommended that would examine whether the sex, age, and ethnic group membership of the EOP staff counselor would affect changes brought about as a result of the group counseling process.
BIBLIOGRAPHY


Bowlin, Robert. 1971. An investigation of the influence of a summer orientation and counseling program for entering freshmen whose predicted grade point average at the University of Oregon is less than 2.00. Doctoral dissertation. Eugene, University of Oregon. (Microfilm).


APPENDIX A

Unit for College Freshmen

**Self Concept and Academic Adjustment**

Specific Objectives:

1. The student will be able to find resources on campus related to his needs.
   a. The utilization of the registrar's office.
   b. Available tutorial services.
   c. How to initiate and maintain contact with school adviser.
   d. Career information.

2. The student will be able to assess his major strengths and weaknesses.
   a. Will be able to list those activities, classes, etc., that he excels in.
   b. The student will be able to be realistic about capabilities.

3. The student will be able to differentiate between the concept that he has of himself and the concept that others have of him.

4. The student will be able to function adequately in the university setting.

5. The student will explore the motivational aspects of achievement.

6. The student will be able to recognize his values and relate them to his short term and long term goals.
7. The student will learn the steps in making "good" decisions.

Specific Activities

The Personal Adjustment group aims are to help the EOP students by making their transition to the university easier. This will be done by considering the personal-social, educational and vocational aspects of college student development.

The group counseling sessions will be held in a physical setting conducive to participation and group involvement. The group facilitator will hopefully be viewed as an "equal" rather than an authority figure.

Week 1

Session I: Introduction

During this session the group leader(s) (Staff or Peer Counselor) will explain the purpose of the group and requirements for the term.

Session II: My First Impressions of Campus Life

Students will discuss their perceptions of the college community. Attempts will be made to determine what their expectations were.
Week 2

Session I: Why am I Here?

During this session the group leader(s) (Staff Counselor) will model for the student by explaining why they are at the university and discuss what the long term goals are (if they have goals). Other members of the group will respond to topics.

Session II: Resources on Campus--Where to go for Help

Students will be given information on resources on campus. An effort will be made to assist students if they are experiencing difficulty.

Week 3

Session I: Self-Perceptions and How Others See Me.

Students will make visual displays reflecting how they feel others view them. This will be done by having them collect pictures, drawings and words (adjectives) that indicate how others view them. They will compare these perceptions with their own. (Feedback here is extremely important.)

Session II: My Strengths and Weaknesses

Attempts will be made to emphasize the strengths of the group participants. Weaknesses will be recognized but not at the expense of strengths. This session is intended to help the individual to see himself and others in a positive manner (more positive self concept).
Week 4

Session I: Motivation--How to Get Going

The discussion will center around how to stay involved in both academic and social activities. Ways to combat feelings of depression. Leaders will share their own personal experiences concerning motivation.

Session II: What has had the Greatest Impact (Inspiration) on Me

Discussion of most important individuals in the lives of participants.

Week 5

Session I: Minority Graduate Students and Faculty

During this session, other minorities from the college environment will have informal chats with group participants, to serve as "successful" role models and to provide resources on how to survive in the college milieu.

Session II: Continuation

Week 6

Session I: Video Tape Session

Students will view themselves after having been video taped in order to get more feedback about themselves. The kinds of specific activities will be determined by individual students in an effort to avoid a situation that is too structured.
Session II: Continuation

Discussion and comments about previous activity.

Week 7

Session I: Planning

Students will use this session as a planning period to discuss other individuals they would like to have speak to the class.

Session II: Planning Continued

Students will work in dyads to contact resource people. This kind of activity will not only provide information but build self-confidence as well.

Week 8

Sessions I and II: Resource People

Speakers will present information concerning major fields, occupations, etc.

Week 9

Session I: Creativity

The group will share creative endeavors. The purpose of this activity is to help participants to explore and recognize their creative ability and to express and share feelings.

Sessions I and II: Continuation or Exploring Other Relevant Topics

Sessions I and II: Personal Conferences and Course Evaluation
APPENDIX B

TENNESSEE SELF CONCEPT SCALE

INSTRUCTIONS

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

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

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

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

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

<table>
<thead>
<tr>
<th>Completely false</th>
<th>Mostly false and partly true</th>
<th>Mostly true</th>
<th>Completely true</th>
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<td>1</td>
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</table>

You will find these response numbers repeated at the bottom of each page to help you remember them.

© William H. Fitts, 1964
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Statement</th>
<th>Responses</th>
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<tbody>
<tr>
<td>1.</td>
<td>I have a healthy body</td>
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<tr>
<td>3.</td>
<td>I am an attractive person</td>
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<td>5.</td>
<td>I consider myself a sloppy person</td>
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<td>19.</td>
<td>I am a decent sort of person</td>
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<td>21.</td>
<td>I am an honest person</td>
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<td>23.</td>
<td>I am a bad person</td>
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<td>37.</td>
<td>I am a cheerful person</td>
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<tr>
<td>39.</td>
<td>I am a calm and easy going person</td>
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<tr>
<td>41.</td>
<td>I am a nobody</td>
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<tr>
<td>55.</td>
<td>I have a family that would always help me in any kind of trouble</td>
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<td>57.</td>
<td>I am a member of a happy family</td>
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<tr>
<td>59.</td>
<td>My friends have no confidence in me</td>
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</tr>
<tr>
<td>73.</td>
<td>I am a friendly person</td>
<td></td>
</tr>
<tr>
<td>75.</td>
<td>I am popular with men</td>
<td></td>
</tr>
<tr>
<td>77.</td>
<td>I am not interested in what other people do</td>
<td></td>
</tr>
<tr>
<td>91.</td>
<td>I do not always tell the truth</td>
<td></td>
</tr>
<tr>
<td>93.</td>
<td>I get angry sometimes</td>
<td></td>
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<tr>
<td>2.</td>
<td>I like to look nice and neat all the time</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I am full of aches and pains</td>
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<tr>
<td>6.</td>
<td>I am a sick person</td>
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<tr>
<td>20.</td>
<td>I am a religious person</td>
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<tr>
<td>22.</td>
<td>I am a moral failure</td>
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<td>24.</td>
<td>I am a morally weak person</td>
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<td>38.</td>
<td>I have a lot of self-control</td>
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<tr>
<td>40.</td>
<td>I am a hateful person</td>
<td></td>
</tr>
<tr>
<td>42.</td>
<td>I am losing my mind</td>
<td></td>
</tr>
<tr>
<td>56.</td>
<td>I am an important person to my friends and family</td>
<td></td>
</tr>
<tr>
<td>58.</td>
<td>I am not loved by my family</td>
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<tr>
<td>60.</td>
<td>I feel that my family doesn't trust me</td>
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</tr>
<tr>
<td>74.</td>
<td>I am popular with women</td>
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<tr>
<td>76.</td>
<td>I am mad at the whole world</td>
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<tr>
<td>78.</td>
<td>I am hard to be friendly with</td>
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</tr>
<tr>
<td>92.</td>
<td>Once in a while I think of things too bad to talk about</td>
<td></td>
</tr>
<tr>
<td>94.</td>
<td>Sometimes, when I am not feeling well, I am cross</td>
<td></td>
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Completely false Mostly false Partly false Mostly true Completely true
Partly true

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</table>
7. I am neither too fat nor too thin          9
9. I like my looks just the way they are         9
11. I would like to change some parts of my body 11
25. I am satisfied with my moral behavior       25
27. I am satisfied with my relationship to God  27
29. I ought to go to church more                29
43. I am satisfied to be just what I am        43
45. I am just as nice as I should be            45
47. I despise myself                            47
61. I am satisfied with my family relationships 61
63. I understand my family as well as I should 63
65. I should trust my family more               65
79. I am as sociable as I want to be            79
81. I try to please others, but I don't overdo it 81
83. I am no good at all from a social standpoint 83
95. I do not like everyone I know                95
97. Once in a while, I laugh at a dirty joke     97

8. I am neither too tall nor too short          8
10. I don't feel as well as I should            10
12. I should have more sex appeal                12
26. I am as religious as I want to be            26
28. I wish I could be more trustworthy           28
30. I shouldn't tell so many lies                30
44. I am as smart as I want to be                44
46. I am not the person I would like to be       46
48. I wish I didn't give up as easily as I do    48
62. I treat my parents as well as I should (Use past tense if parents are not living) 62
64. I am too sensitive to things my family say   64
66. I should love my family more                 66
80. I am satisfied with the way I treat other people 80
82. I should be more polite to others            82
84. I ought to get along better with other people 84
96. I gossip a little at times                   96
98. At times I feel like swearing                 98

Completely  Mostly Partly false Mostly Completely
Responses- false false and true true
Partly true
1  2  3  4  5
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>13.</td>
<td>I take good care of myself physically</td>
</tr>
<tr>
<td>15.</td>
<td>I try to be careful about my appearance</td>
</tr>
<tr>
<td>17.</td>
<td>I often act like I am &quot;all thumbs&quot;</td>
</tr>
<tr>
<td>31.</td>
<td>I am true to my religion in my everyday life</td>
</tr>
<tr>
<td>33.</td>
<td>I try to change when I know I'm doing things that are wrong</td>
</tr>
<tr>
<td>35.</td>
<td>I sometimes do very bad things</td>
</tr>
<tr>
<td>49.</td>
<td>I can always take care of myself in any situation</td>
</tr>
<tr>
<td>51.</td>
<td>I take the blame for things without getting mad</td>
</tr>
<tr>
<td>53.</td>
<td>I do things without thinking about them first</td>
</tr>
<tr>
<td>67.</td>
<td>I try to play fair with my friends and family</td>
</tr>
<tr>
<td>69.</td>
<td>I take a real interest in my family</td>
</tr>
<tr>
<td>71.</td>
<td>I give in to my parents. (Use past tense if parents are not living)</td>
</tr>
<tr>
<td>85.</td>
<td>I try to understand the other fellow's point of view</td>
</tr>
<tr>
<td>87.</td>
<td>I get along well with other people</td>
</tr>
<tr>
<td>89.</td>
<td>I do not forgive others easily</td>
</tr>
<tr>
<td>99.</td>
<td>I would rather win than lose in a game</td>
</tr>
<tr>
<td>14.</td>
<td>I feel good most of the time</td>
</tr>
<tr>
<td>16.</td>
<td>I do poorly in sports and games</td>
</tr>
<tr>
<td>18.</td>
<td>I am a poor sleeper</td>
</tr>
<tr>
<td>32.</td>
<td>I do what is right most of the time</td>
</tr>
<tr>
<td>34.</td>
<td>I sometimes use unfair means to get ahead</td>
</tr>
<tr>
<td>36.</td>
<td>I have trouble doing the things that are right</td>
</tr>
<tr>
<td>50.</td>
<td>I solve my problems quite easily</td>
</tr>
<tr>
<td>52.</td>
<td>I change my mind a lot</td>
</tr>
<tr>
<td>54.</td>
<td>I try to run away from my problems</td>
</tr>
<tr>
<td>68.</td>
<td>I do my share of work at home</td>
</tr>
<tr>
<td>70.</td>
<td>I quarrel with my family</td>
</tr>
<tr>
<td>72.</td>
<td>I do not act like my family thinks I should</td>
</tr>
<tr>
<td>86.</td>
<td>I see good points in all the people I meet</td>
</tr>
<tr>
<td>88.</td>
<td>I do not feel at ease with other people</td>
</tr>
<tr>
<td>90.</td>
<td>I find it hard to talk with strangers</td>
</tr>
<tr>
<td>100.</td>
<td>Once in a while I put off until tomorrow what I ought to do today</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responses</th>
<th>Completely false</th>
<th>Mostly false</th>
<th>Partly false and true</th>
<th>Mostly true</th>
<th>Completely true</th>
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<td></td>
<td>1</td>
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<td>4</td>
<td>5</td>
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</table>

Partly true
APPENDIX C

THE COLLEGE INVENTORY OF ACADEMIC ADJUSTMENT

I

Yes No Un 1. Did you give careful consideration to your choice of curriculum when you entered college?

Yes No Un 2. Are you interested in a number of vocational careers so that you cannot focus your effort and attention upon the course of study you have tentatively selected?

Yes No Un 3. Have you often thought seriously of changing your curriculum?

Yes No Un 4. Did you find the transition from high school to college a difficult and upsetting experience?

Yes No Un 5. Is studying usually enjoyable to you?

Yes No Un 6. Have you found good reasons for knowing the material in each of your courses?

Yes No Un 7. Are you forced to take courses which you dislike or in which you have little interest?

Yes No Un 8. Do you believe that your courses are too unrelated to each other?

Yes No Un 9. Do you feel that too much work is required of you in many courses?

Yes No Un 10. Do you feel that the college regulations are too rigid and arbitrary?

Yes No Un 11. Do you honestly like your college work?

Yes No Un 12. Do you sometimes think it a waste of time for you to continue your college education?

II

Yes No Un 13. Do you feel that you have sound motives for being in college?

Yes No Un 14. Have you set certain definite goals for yourself which you hope to achieve during your college career?

Yes No Un 15. Do you generally strive to attain the highest grades of which you are capable?

Yes No Un 16. Do you feel that you lack a proper sense of proportion in dealing with your daily problems and responsibilities?

Yes No Un 17. Are you restless at the delay in starting your life work?
Yes No Un 18. Are you guilty of not taking things seriously enough?

Yes No Un 19. Do your interests change rapidly?

Yes No Un 20. Are you attending college largely on the insistence of your family?

Yes No Un 21. Are problems of family relations or marriage more important to you at present than your studies?

Yes No Un 22. Have you tried to work out for yourself a satisfactory life plan?

Yes No Un 23. Do you have a keen desire for success?

Yes No Un 24. Are you troubled by the feeling that you do not know where you belong in the world?

Yes No Un 25. Are you sometimes indifferent or apathetic about matters which have considerable importance for your personal welfare?

Yes No Un 26. Do you fail to see the value of the daily things that you do?

III

Yes No Un 27. Do you customarily anticipate and plan your work for the next several days?

Yes No Un 28. Do you feel that you possess some irregular habits which make it difficult for you to carry out your daily college routine?

Yes No Un 29. Do you experience difficulty in scheduling time for study, going to bed, getting up, etc.?

Yes No Un 30. Do you find that you try to seize every opportunity to leave town and return home for a few days?

Yes No Un 31. Do you sometimes oversleep so that you miss classes?

Yes No Un 32. Does your college performance suffer owing to too many outside interests or activities?

Yes No Un 33. Do you usually attend the movies more than once a week?

Yes No Un 34. Are you guilty of wasting valuable time so that you interfere with the mastery of your courses?

Yes No Un 35. Do you feel that you are devoting an adequate amount of time to outside study?

Yes No Un 36. Do you often come to class without having prepared your assignment?

Yes No Un 37. Is it usually easy for a friend to persuade you to go to a show, go out on a date, or otherwise seek recreation when you have previously decided to study?

Yes No Un 38. Can you get your work done without constant urging by professors, parents, and others?
Yes No Un 39. Do you have to wait for a mood to strike you before attempting to study?
Yes No Un 40. Do you use odd times to review what you have learned, such as time between classes?
Yes No Un 41. Are you always able to get your class assignments completed by the specified date?
Yes No Un 42. Do you plan your work systematically so that your learning of course material is facilitated?

IV

Yes No Un 43. When you sit down to study do you customarily plan the amount of work you are to accomplish during that study session?
Yes No Un 44. Does it take you some time to get settled when you sit down to study?
Yes No Un 45. Do you often dawdle over your books?
Yes No Un 46. Do you frequently have the feeling when you have finished studying that you have accomplished very little?
Yes No Un 47. Do you sometimes study with the radio going on or with other persons talking in the same room?
Yes No Un 48. Are you easily distracted from your studies?
Yes No Un 49. Do you sometimes doze off or let your mind wander during a class period?
Yes No Un 50. Do you extend your preparation for an examination over several days?
Yes No Un 51. Do you study late into the night or even all night before an important examination?
Yes No Un 52. Do you often waste time preparing for an examination by studying and reviewing non-essential details or irrelevant materials?
Yes No Un 53. Are you usually successful in understanding what the questions are driving at when taking an examination.
Yes No Un 54. Are your textbooks generally hard to understand?
Yes No Un 55. Do you experience trouble in outlining or note-taking?
Yes No Un 56. Do you experience trouble in using the library?
Yes No Un 57. Do you usually try to select out the main points of the reading assignment for further study?
Yes No Un 58. As you read an assignment, do you frequently take time out to recite to yourself what you have just read and to ask yourself questions about it?
Yes No Un 59. Do you have difficulty remembering what you have just read when you complete a reading assignment?
Yes No Un 60. Is your rate of reading so slow that you have difficulty preparing all your assignments?

Yes No Un 61. Do you have trouble picking out the important points in a study assignment?

Yes No Un 62. Do you have to reread material several times because the words do not have much meaning the first time you go over them?

Yes No Un 63. Do you frequently have long drawn-out but wasteful study sessions?

Yes No Un 64. Do you experience many pleasant or unpleasant moods?

Yes No Un 65. Does some particularly useless thought keep coming into your mind to bother you?

Yes No Un 66. Do you sometimes feel that you allow your thoughts to dwell too much upon your home and family?

Yes No Un 67. Do you daydream frequently?

Yes No Un 68. Does your mind often wander so badly that you lose track of what you are doing?

Yes No Un 69. Are you bothered constantly by some worry or concern so that you cannot concentrate on your work?

Yes No Un 70. Are you often in a state of excitement?

Yes No Un 71. Are you often bothered by the feeling that no one understands you?

Yes No Un 72. Do you often feel just miserable?

Yes No Un 73. Do you have a tendency to give up easily when you meet difficult problems?

Yes No Un 74. Do you get nervous and upset during examinations so that you cannot do your best?

Yes No Un 75. Are you worried by your failure to get ahead?

Yes No Un 76. Do you sometimes feel that you are not doing anything well?

Yes No Un 77. Do you consider yourself a well-adjusted person in college?

Yes No Un 78. Do you find that your professors are honest and straightforward in their dealings with you?

Yes No Un 79. Do you hesitate to ask your instructor to explain points that are not clear to you?

Yes No Un 80. Do you feel that some of your professors hold a "grudge" against you?
Yes No Un 81. Do you think that some of the women instructors in this college show favoritism toward boys in their classes?

Yes No Un 82. Do you feel that some of your professors think that they are superior to their students?

Yes No Un 83. Do you find that some of your professors apparently take delight in making you feel embarrassed before the class?

Yes No Un 84. Are you often frightened by the way some of your professors call on you in class?

Yes No Un 85. Do you find that some of your professors make you feel as if you did not care whether you learned anything in their classes or not?

Yes No Un 86. Have you been the recognized leader (president, captain, chairman) of a group within the last five years?

Yes No Un 87. Do you greatly dislike being told how you should do things?

Yes No Un 88. Are people sometimes successful in taking advantage of you?

Yes No Un 89. Does discipline by others make you discontented?

Yes No Un 90. Does your personality contribute to your success in college work?

IMPORTANT: Look over this inventory to make certain you have answered every question.
APPENDIX D
THE GROUP BEHAVIOR RATING SCALE

Self-Appraisal Form

Student's Name ____________________________

Instructions: The purpose of this checklist is to provide a way of describing your own behavior. In making your ratings, think of your present behavior in the group. Read each statement and decide whether you behave in the stated manner very often = 5, fairly often = 4, sometimes = 3, not often = 2, or almost never = 1. Circle the appropriate number.

I. Self confidence

1. I make decisions on my own 1 2 3 4 5
2. I frequently volunteer opinions 1 2 3 4 5
3. I make positive statements about myself 1 2 3 4 5
4. I am independent 1 2 3 4 5
5. I seek information and help when needed 1 2 3 4 5

II. Group participation

1. I ask questions 1 2 3 4 5
2. I ask for clarification from others 1 2 3 4 5
3. I make statements that encourage group involvement 1 2 3 4 5
4. I become involved in group activities 1 2 3 4 5
5. I discuss areas of concern 1 2 3 4 5

III. Cooperation

1. I attend group regularly 1 2 3 4 5
2. I do outside projects 1 2 3 4 5
3. Can express different opinions without antagonizing others 1 2 3 4 5
4. I make suggestions concerning group activities 1 2 3 4 5
5. I work cooperatively with others in group tasks 1 2 3 4 5
### APPENDIX E

Means, Standard Deviations, and Reliability Coefficients

Tennessee Self Concept Scale

<table>
<thead>
<tr>
<th>Subscore</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Reliability</th>
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### Means, Standard Deviations, and Reliability Coefficients

#### College Inventory of Academic Adjustment

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<th>Reliability</th>
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