

SHORT - TERM ORIENTATION PROGRAMS
FOR FRESHMEN:
A CONTRAST BETWEEN PARTICIPANTS AND
NON - PARTICIPANTS IN A PROGRAM AT THE
CALIFORNIA STATE POLYTECHNIC COLLEGE

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THESIS



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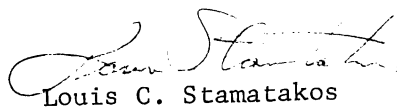
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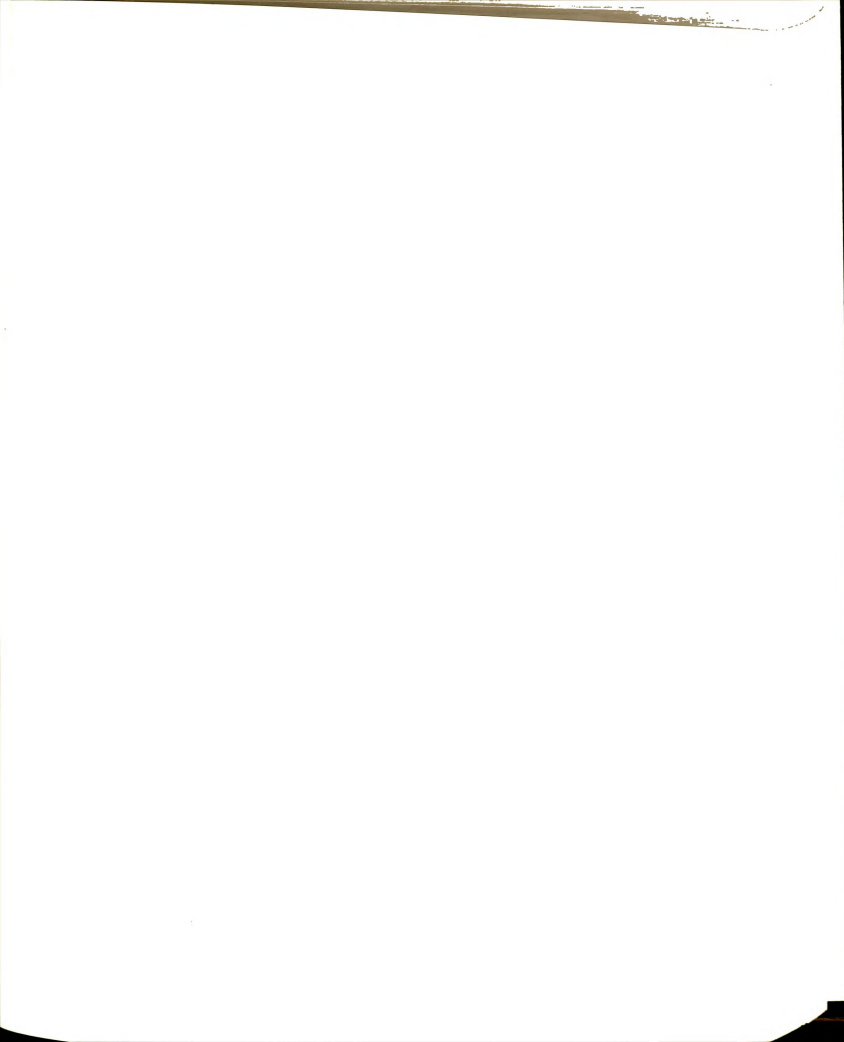
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ABSTRACT

SHORT-TERM ORIENTATION PROGRAMS FOR FRESHMEN:
A CONTRAST BETWEEN PARTICIPANTS AND
NON-PARTICIPANTS IN A PROGRAM
AT THE CALIFORNIA STATE
POLYTECHNIC COLLEGE

By

Everett Marston Chandler

Orientation programs in higher education have involved a wide variety of techniques designed to acquaint the new student with his environment. Although orientation programs are widespread throughout higher education, evaluation of them has consisted primarily of polling students and faculty for their reactions. Comparative or experimental studies are not frequently found in orientation literature. Thus, the primary purpose of this study was to examine the efficacy of a short-term orientation program in meeting objectives of:

- (1) improved academic achievement as measured by grade-point average;
- (2) persistence in college or major; and
- (3) participation in organized co-curricular activities.

The method of examining these factors was to compare and contrast approximately 750 students who participated in orientation with approximately 750 students who did not participate. All students were freshmen who entered the California State Polytechnic College in the Fall of 1969.

As a secondary purpose of the study, sociological facets of orientation were examined. Information was obtained concerning the sources of student orientation referral, the results of participation the students indicated to be valuable and the motivating factors of those who did not participate. Also, as part of this aspect of the study, an opinion survey was made comparing the reactions of both participants and non-participants to a series of items concerning the College and their reactions and relationship to it as students.

Since random assignment to treatment groups was not feasible, demographic data were gathered and analyzed to compare the two groups so that as much similarity as possible might be assured.

It was recognized that statements of causality could not be possible results, but the high degree of similarity which was found in the demographic data did make statements of plausibility possible.

A multivariate analysis of variance was used to test the primary hypothesis relating to the similarity of participants and non-participants with regard to academic

achievement, persistence in the major and/or college, and participation in co-curricular activities. The independent variables were group (participant and non-participant) and sex.

The secondary portion of the study was analyzed by examining statements made by samples of both participants and non-participants. Simple percentages were used to examine trends. The opinion survey was analyzed by chi-square tests of homogeneity.

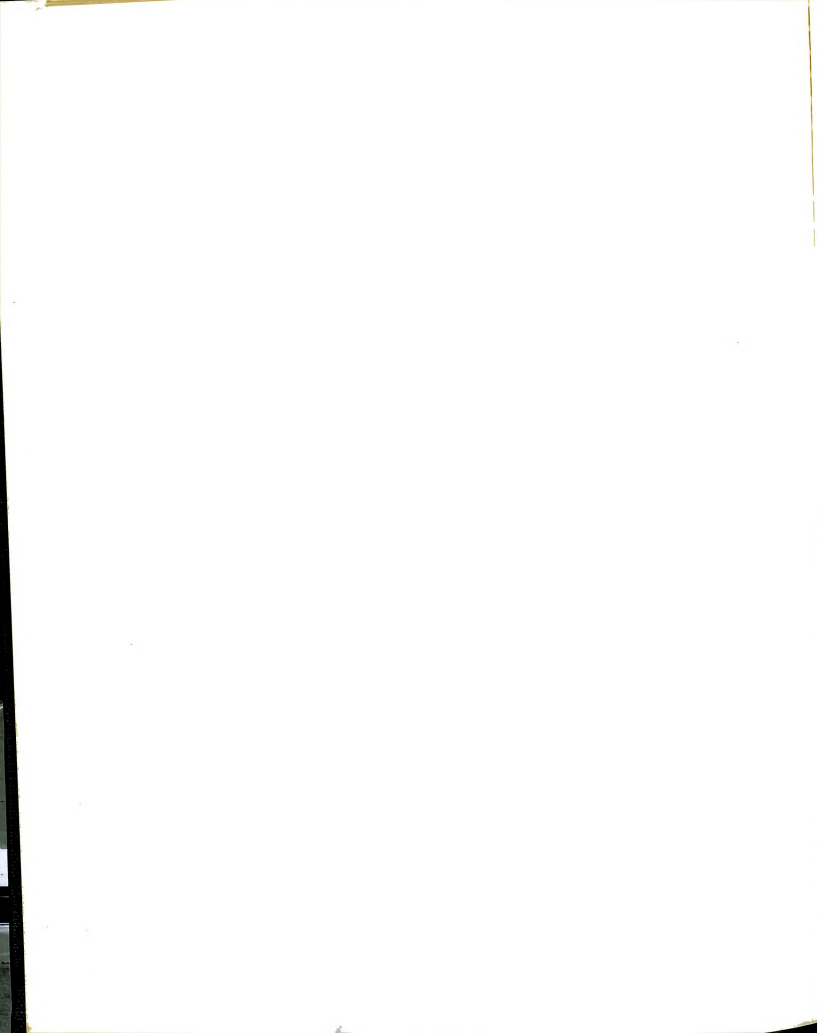
The findings of the study for the primary hypothesis revealed that there was difference between the groups. The multivariate analysis revealed difference between groups and between sexes, with no interaction. The univariate analysis for twelve dependent variables indicated that there was a difference between groups favoring those who participated in orientation with respect to grade-point average, drop-out from College, and participation in three of six co-curricular activities areas. There was also difference between sexes in respect to grade-point average, and participation in certain co-curricular activities.

The findings of the study for the secondary hypothesis revealed that:

- (1) the primary source of referral to orientation was formal announcement;
- (2) the most frequent value attributed to orientation was the making of new friends;

- (3) participants would overwhelmingly recommend participation to friends; and
- (4) the major reason for not taking part was working.

The opinion survey indicated that students participating in orientation were different from those not participating with regard to: (1) decision to attend the College; (2) a feeling that teachers were personally interested in them; (3) obtaining dates; and (4) a feeling that the College was a friendly place.



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CHAPTER I

INTRODUCTION

A simple dictionary definition of orient is "to acquaint with the existing situation or environment" (Webster's Dictionary, 1965). Although there are many definitions of college orientation programs in catalogs and other descriptive materials, this dictionary definition has much merit because of its direct simplicity. This definition can be applied to the orientation of students between high school and college. The movement of a high school student to a four-year college, frequently away from home, requires the student to become acquainted with both a new situation and a new environment, with new academic subjects, a new living place, and a distinctly new student sub-culture.¹

Background

Beginning in 1888 with Boston College, which is credited with having the first formal orientation course,

¹A typology of student subgroupings that has become popular in recent years is that offered by Clark and Trow. In it they describe four types of student subcultures labeled: academic, collegiate, vocational, and nonconformist. A discussion of this typology is found in B. R. Clark and M. Trow, 1966 in T. M. Newcomb and E. R. Wilson (Eds), College Peer Groups: Problems and Prospects for Research (Chicago: Aldine), pp. 17-70.

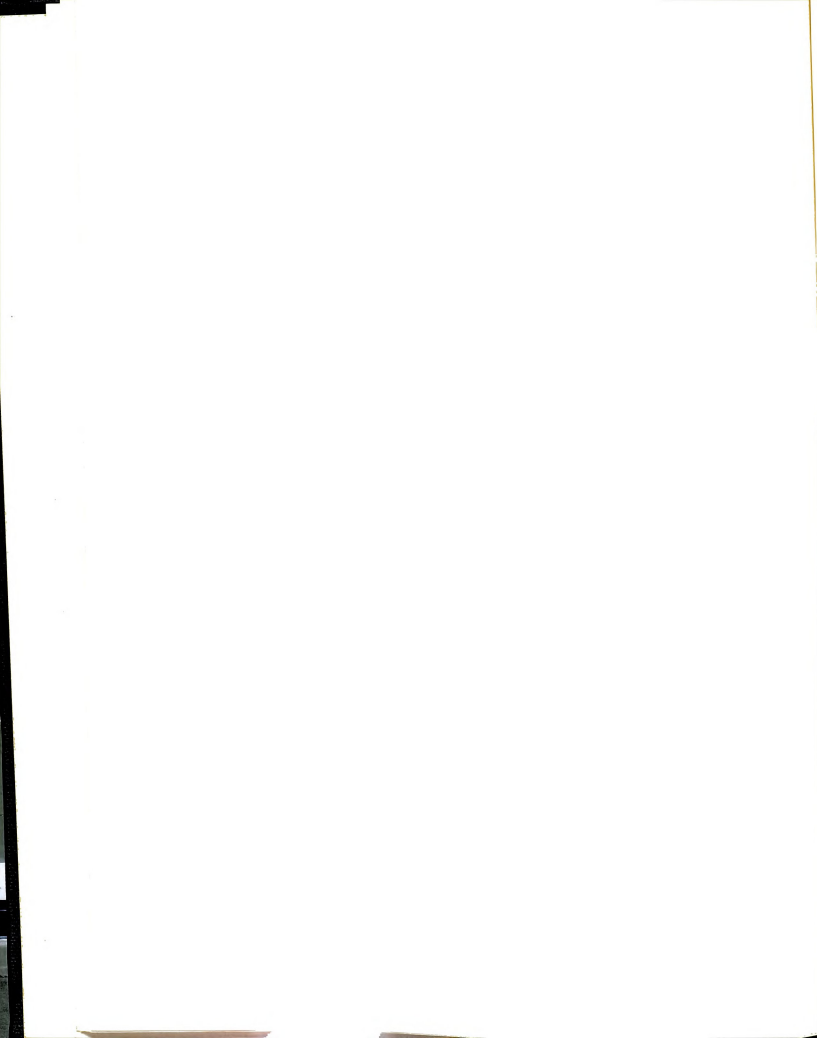
colleges and universities have been introducing orientation courses and programs and making modifications on and expansions of existing ones at a rapid rate. From a rather simple beginning, programs have become more "extensive, elaborate, and costly" (Foxley, 1969, p. 218).

Because of the varied and great resources of the many institutions conducting them, there is considerable diversity of orientation programs. They may emphasize the physical and organization aspects of the campus or they may be devoted to intellectual and academic efforts. They may be conducted either on or off campus. They may be almost entirely student run or be dominated by the administrative staff. Most often they combine various of the elements indicated above. The techniques used in presenting information are also quite varied. Usually there is a great deal of literature in the form of handbooks, brochures, and mimeographed items. There are discussion groups, lectures by student leaders and faculty and staff. Frequently, testing, scheduling, and registration are included in the program with the new students being assisted by the student orientation advisers. Nearly always there are a number of social events such as dances, beach parties, receptions, song-fests, and skits which are designed to function as mixers and to make the new student feel at ease in the college community.

There are a few common threads or patterns which frequently appear. One of these is a short-term orientation program called Freshman Week or Welcome Week which usually lasts from three to seven days. In addition, many colleges provide general orientation courses or classes for credit which range from one quarter to a full academic year in duration. However, such courses are usually held in conjunction with a short-term program and are often taught by student personnel staff or by student assistants who are trained for this specific task. Variations on the general orientation class for credit include orientation classes for specific subjects such as engineering, business administration, and nursing. A somewhat recent development on a large number of campuses has been the introduction of a short-term summer orientation program which usually concentrates on testing and registration procedures with a measure of general orientation as an added attraction.

Purpose of Orientation

In reviewing the literature about orientation, one finds a variety of approaches and contents; however, further analysis reveals that there is a central theme running throughout most orientation programs and the materials written about them. Hoffman and Plutchik (1959) exemplify this theme concept concisely with their statement that the purpose of orientation is to increase the student's receptivity to the total college experience. It would follow,

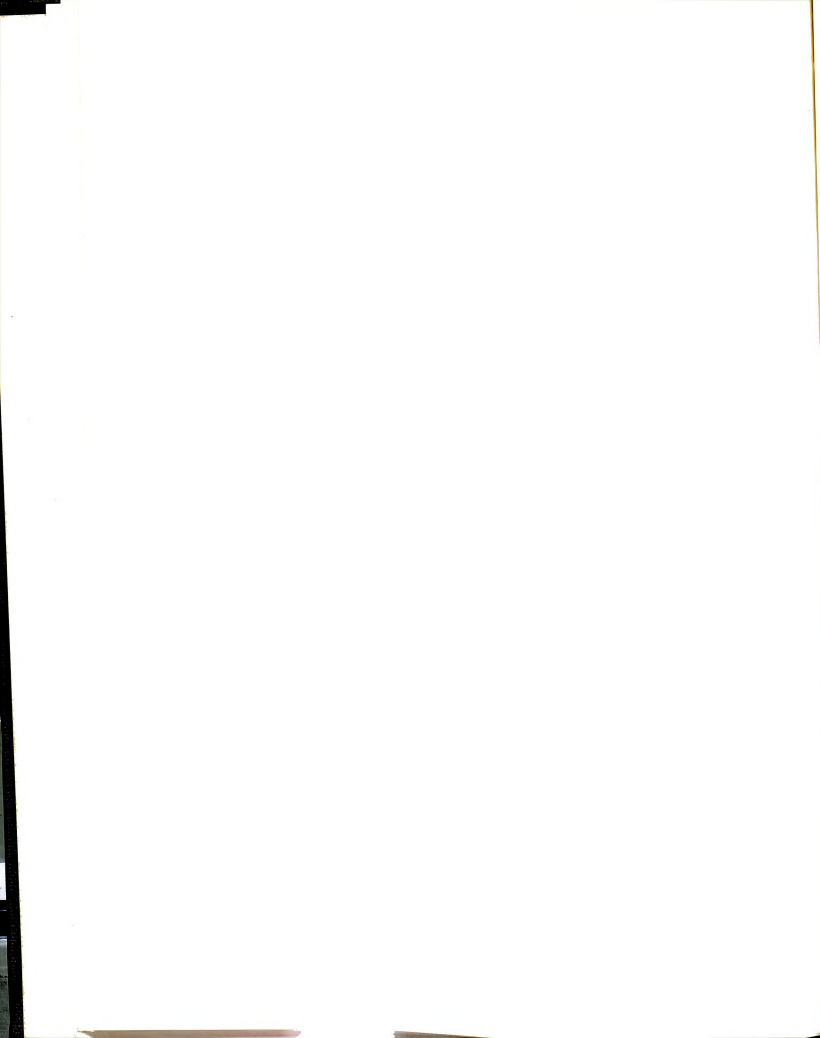


then, that one could interpret this purpose to mean that the student should find that his increased receptivity to the college experience enables him to succeed in college. Receptivity for college success is then generally translated into success in academic achievement, persistence in college, and/or major, and personal-social adjustment often represented by participation in organized college activities. The following selections from orientation literature illustrate this viewpoint.

Freedman asked in a speech to the American College Personnel Association: "What can we tell entering students that is likely to be of value to them in realizing the goals of the college? And secondly, aside from what we may tell students, what can we do to, with, or for them that will be influential in attaining the educational aspiration of the college?" (Freedman, 1960, p. 3). Similarly, Caple (1964) indicated he would like orientation to focus on four broad areas: (1) college as a social institution, (2) the process of learning, (3) the various aspects of personal and extracurricular living, and (4) a personal self-evaluation by each student as to his strengths and abilities. Fitzgerald and Busch urged that the entire faculty should be involved in and support the orientation programs so that the focus might "remain upon appropriate scholarly and intellectual development of each individual . . ." (Fitzgerald and Busch, 1963, p. 274). Seymour and Guthrie (1962) in writing about the initiation

of a summer orientation program, included as goals the desire to minimize drop-outs and delayed changes of major. In the same vein, Goodrich and Pierson (1959) reported that attendance at Summer Counseling Clinics (an orientation process) at Michigan State University was associated with decreased drop-out. They believed that the Clinics aided the student in adjustment by clarifying his academic strengths and weaknesses. Strang (1951) felt that an orientation program should acquaint the student with the physical plant, campus services, traditions, curricular, and co-curricular programs. Jesseph (1966) stated that orientation at Wyoming University was designed to raise grade-point averages and lower attrition rates. Ivey reported that Bucknell University was seeking to develop an orientation program more keyed to the academic life of the University in order to prepare students "for the rigors of the demanding curriculum" (Ivey, 1963, p. 113). And, Black added that "the adjustment of the new student involves three inseparably related areas--emotional (self), material (physical factors), and academic (specific knowledge and skills)" (Black, 1964, p. 103).

It is apparent from these representative statements that there is a concern for academic adjustment, persistence, and personal-social adjustment to college. Indeed, it would be a rare college administrator who would admit that the orientation program at his institution



did not have an educational purpose related to the academic and personal-social adjustment of students.

The scope of orientation programs is indicated by a survey made by Kronovet (1966). She received returns from 1,378 colleges and found that 92.4 per cent of those replying provided some type of program to help new students adjust to the campus.

Need for the Study

As orientation programs have grown and become more elaborate, there has been a proportionate increase in the amount of time and energy expended by the staff and students involved. Many programs today use literally hundreds of student volunteer workers and this, in turn, frequently requires a substantial number of faculty and staff members to counsel the student workers and to take part in the various facets of the program. Expenditures for the programs are increasing to the point where they have become significant budgetary items. For example, in the Fall of 1969 a relatively modest program at the California State Polytechnic College in San Luis Obispo had direct costs of approximately \$30,000 and this did not include salaries of student personnel staff or of faculty working with the program.

In examining the literature for the types of studies done in orientation, one finds three broad categories: (1) those which are merely descriptive of the



programs conducted on a given college campus; (2) those which provide analysis of orientation in the form of student reaction to orientation; and (3) those which evaluate orientation programs by the use of comparison groups. However, there appears to be only a limited number of the latter type and the participating student has seldom been compared with the non-participating student in order to determine the effect of orientation. Dr. Jack Lee Kaplan (1969) described the situation succinctly when at the Orientation Directors' Conference he said, "There is a paucity of research in orientation." Lifton (1960) commented that there was need for research in order to compare the effectiveness of differing techniques on student growth. In his doctoral dissertation, Pappas (1967) reported that evidence of the effectiveness of orientation programs was seriously lacking in the literature describing them. Tautfest (1961) noted that most evaluations of orientation programs have been based on: (1) questionnaires asking for student attitudes and opinions; (2) statements of freshmen problems as defined by staff members or student orientation workers; and (3) non-experimental program reviews made by faculty and staff following the event.

In recent years, orientation has been subjected to rather severe criticism by some respected educators. For example, Riesman (1961) called the typical Freshman Week a "dis-orientation week" since to him it seemed of little or no value to the new student. Caple pointed out that it

appeared necessary to insist that orientation programs be able to "demonstrate a more fundamental contribution to the welfare of those beginning college" (Caple, 1964, p. 42) and Grier added, "Our underlying theories are made up of hopes, good will, educated guesses, and what we fondly believe to be the needs of students" (Grier, 1966, p. 37).

Because of the large expenditures of time and energy on the parts of faculty, staff and students, along with the sizable investment of funds, and in view of the limited research done by use of comparison groups, it is obvious that the impact of orientation upon the student in regard to academic performance, persistence, and personal-social adjustment needs to be studied. It is my belief that such studies should be made in a variety of settings and about a variety of orientation techniques.

Description of the Problem

The primary problem which this study examines is the efficacy of a short-term orientation program in meeting the objectives of: (1) improved academic achievement as measured by grade-point average; (2) persistence in college or major; and (3) participation in organized co-curricular activities. This portion of the study is concerned with an analysis of the effect of the short-term orientation program by contrasting a group of freshman program participants with an approximately equal number of freshman non-participants. All of the students were freshmen who entered the College in the Fall Quarter, 1969.

The participant group consisted of approximately 750 freshmen who took part in Welcome Week, the short-term orientation program of the College. The non-participant group consisted of approximately 750 freshmen who did not participate in the program. Excluded from both groups were foreign students, and a number of other students who had been admitted to special non-degree curricula.

The two groups were compared in age, sex, high school grade-point average, and Scholastic Aptitude Test or American College Test (SAT/ACT) scores, the number of Fall Quarter 1969 credit hours carried, and place of college residence, i.e., campus residence hall, off-campus lodgings, or home. Since no striking differences were evident between the groups in regard to these factors, it was assumed that the two groups were reasonably comparable for the purpose of the study.

A secondary problem which this study examined was the sociological impact of orientation. This was related to a few specific questions of interest regarding the groups of participants and non-participants. These questions pertained to such factors as: (1) how do students become aware of orientation; (2) what values of orientation do students express as a result of participation; (3) what reasons do non-participants express for failure to take part; and (4) how do participants and non-participants compare in opinions regarding the college, its services, and their relationship to it. For this aspect of

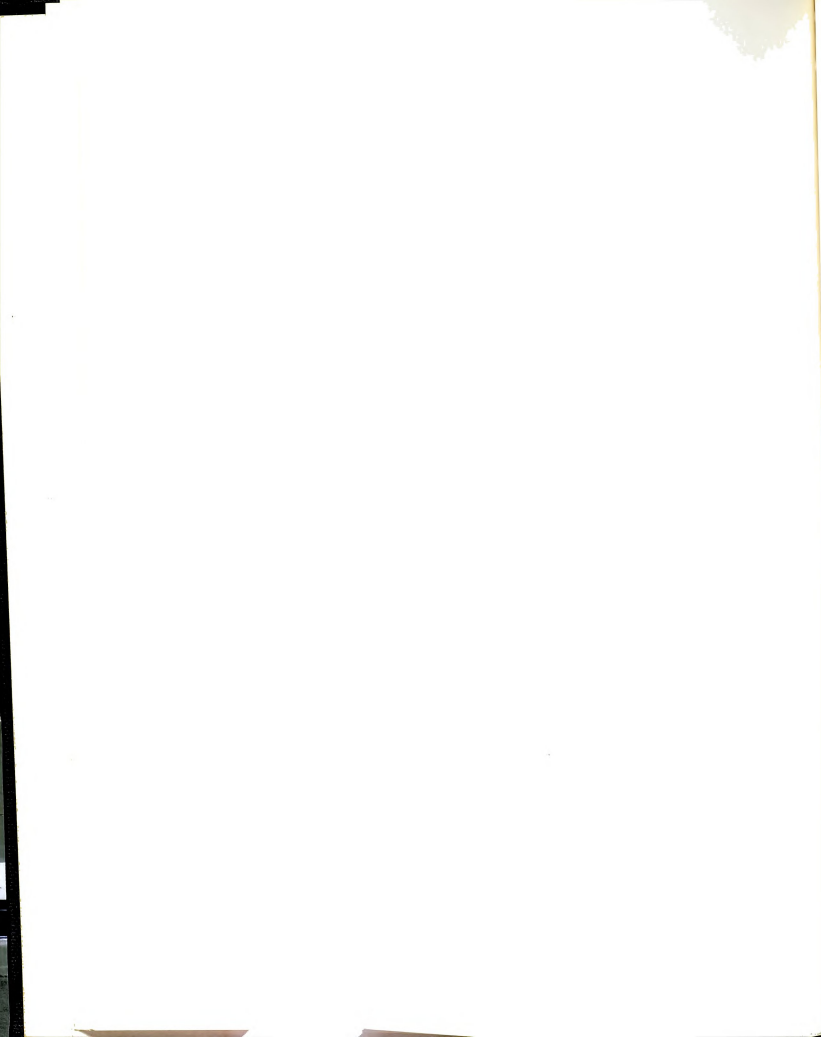
the study, information was obtained through the use of two questionnaires and an interview. The first questionnaire was submitted to 497 students to ascertain information concerning their attitude toward certain aspects of the college. This was given to both participants and non-participants one month after the start of college in the Fall Quarter. A copy of the questionnaire is found in Appendix A. A second questionnaire was issued to 140 participants asking them to: (1) identify their source of referral to the orientation program; (2) indicate in their own words what value(s) they thought that they received from orientation; and (3) state whether they would recommend participation to friends and relatives. This questionnaire was issued at the end of Winter Quarter, about six months after the college year had started. Also a brief interview was held with a sample of non-participants who were aware of orientation. This interview provided information as to why these students had decided not to participate. In addition, a group of non-participants who had not been aware of orientation was located. This group was compared with the group who had been aware and yet had not participated in orientation.

Plan of the Study

After the information was obtained, initial comparisons were made on the following bases: (1) grades achieved during the first and second quarters of attendance;

(2) persistence, including drop-out and change of major during the first and second quarters; (3) participation in organized co-curricular activities for both quarters. The measuring instruments used were: grade points for academic achievement, the calculation of which also produced credit hours carried; college activity records containing information relating to participation in organized activities; and college records indicating drop-out and change of major.

A second portion of the study included the information obtained from the questionnaires and interviews. The statements students made concerning the sources by which they had become aware of orientation, the values which they expressed they had received from orientation and the stated reasons for not participating by those who were aware of orientation and did not take part were all examined. The statements of the 497 students were examined and a comparison of the attitudes of the participants was made with those of the non-participants. Furthermore, the group of students who had been totally unaware of the existence of orientation was compared to a group whose members had been aware of orientation but had not elected to participate. Due to a mailing error, there was a small number of new students who had not had an opportunity to participate in orientation because notice of the event had not reached them.

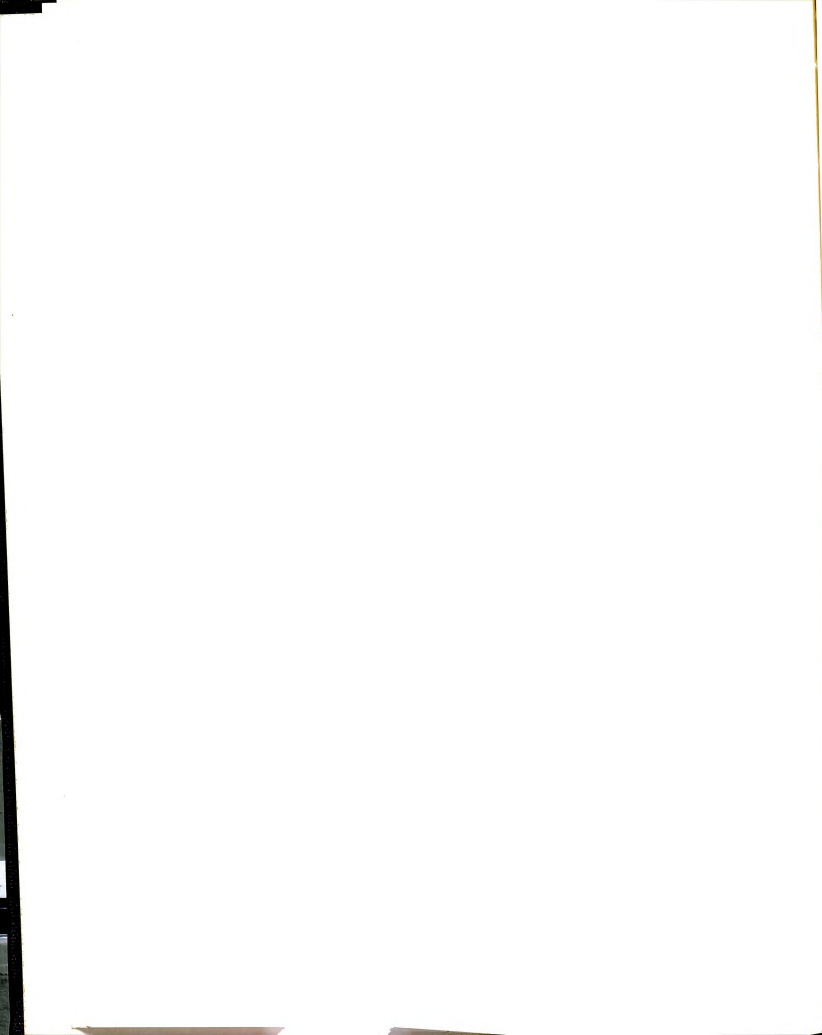


It is hypothesized that a short-term orientation program will produce negligible impact as far as academic achievement, persistence in the College and in the initial chosen major, and participation in co-curricular activities between the participants and non-participants are concerned. This hypothesis is based upon the following observations and suggestions of writers in the field.

Admittedly the information regarding this aspect of orientation does not reveal very consistent and positive trends. There are studies, however, which do cast doubt on the power of orientation materially to effect academic performance and possibly persistence.

In a study similar to the one presented herein, Jesseph (1966) at the University of Wyoming discovered evidence to indicate that a short-term orientation program does not appear to improve academic performance, although persistence in college and in the major first selected seemed to be improved. In a doctoral dissertation done at the University of Kansas, Fahrbach (1960) reported that attendance at a summer program did not in itself seem to have much effect on academic performance or persistence. Cole and Ivey (1967) made a study of a short-term orientation at Colorado State University in 1964. They indicated that attendance made little difference in attitude or success in college.

On the other hand, orientation may produce a feeling of general satisfaction with the institution; that is,



the mere gathering of the various facets of the college community together annually to conduct an orientation program is a sound value in itself (Williamson, 1955). It may well be that the orientation program serves as a "rite of passage," and as such it may receive favorable acceptance by both freshmen and the upper-class-student orientation counselors.

Such acceptance, the general feeling of satisfaction along with the sense of community it provides, and the fact that parents and many students like orientation may account for its expansion and popularity in the face of limited evidence to date as to its effectiveness in improving academic performance, decreasing dropout, and encouraging participation in organized activities. It is possible that these facets of the program may well warrant the effort and expense of the program. However, if this should be the case, then the central mission of the program should be aimed in this direction and not at the assumed values of educational adjustment.

This leads to a second series of hypotheses, i.e., that students participating in orientation have more positive than negative feelings concerning orientation and that those who do not take part fail to do so because of financial limitations or similar factors beyond their control. Also, it is hypothesized that students are primarily referred to orientation by brochures and letters from the colleges and secondarily by friends and relatives.



A third facet of this study involves the opinion survey. In it, it is hypothesized that between participants and non-participants, particularly in social-friendship feelings, there would be differences in opinions concerning the College and their relationships to it.

Setting of the Study

The California State Polytechnic College is located halfway between Los Angeles and San Francisco on the Central Coast of California. It is a college containing schools of Agriculture, Engineering, Architecture, Applied Sciences and Applied Arts. It is similar in many respects to the colleges and universities such as Oklahoma State University, Washington State University, University of Wyoming, Colorado State University, Utah State University, and Oregon State University which began as land grant colleges in the Far Western, Great Plains, and Rocky Mountain states in the late 1800's. The College is a member of the California State Colleges, a system of 19 colleges enrolling over 200,000 students.

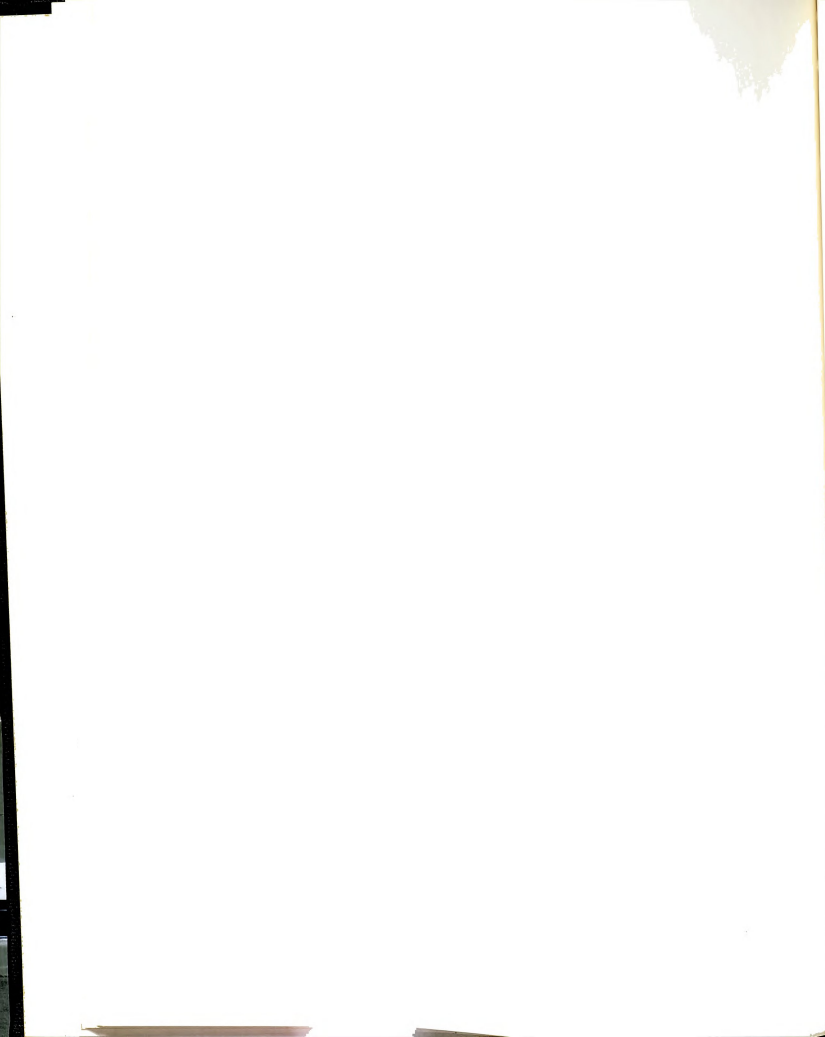
In the Fall Quarter 1969, the enrollment was 11,283 full-time students. Of these, 7,988 were men and 3,295 were women. Over 85 per cent of the students came from more than 100 miles from San Luis Obispo to attend the California State Polytechnic College, which makes the College a residence campus. Nearly 2,500 students lived in campus residence halls and 1,500 more lived in large off-campus

residence hall units near the campus. About 5,600 lived in apartments and houses in the area surrounding the campus and the community. About 1,500 students were married. There was a foreign student population of 508.

Orientation Program

Welcome Week, the short-term orientation program at the California State Polytechnic College, has developed over a period of many years. In an earlier time, prior to World War II, the College had a totally male student body comprised mainly of agriculture or engineering majors. In such a milieu orientation consisted largely of the hazing of new students by sophomores, along with a few burlesque-type skits and performances designed to make the new student both know his place in the "caste system" and feel that he had joined a society of rugged individuals.

Returning veterans from World War II entered the College in substantial numbers and by 1947 had tripled the pre-war enrollment. These veterans were not about to allow the hazing activities to continue since many were married and had no time for activities which they felt were not directly related to their academic goals. Consequently, the orientation program was modified. The hazing activities were dropped and the skits and performances were modified. Additional activities were added which attempted to assist the multitude of newcomers to know their way about the college. Vestiges of the previous activities remained



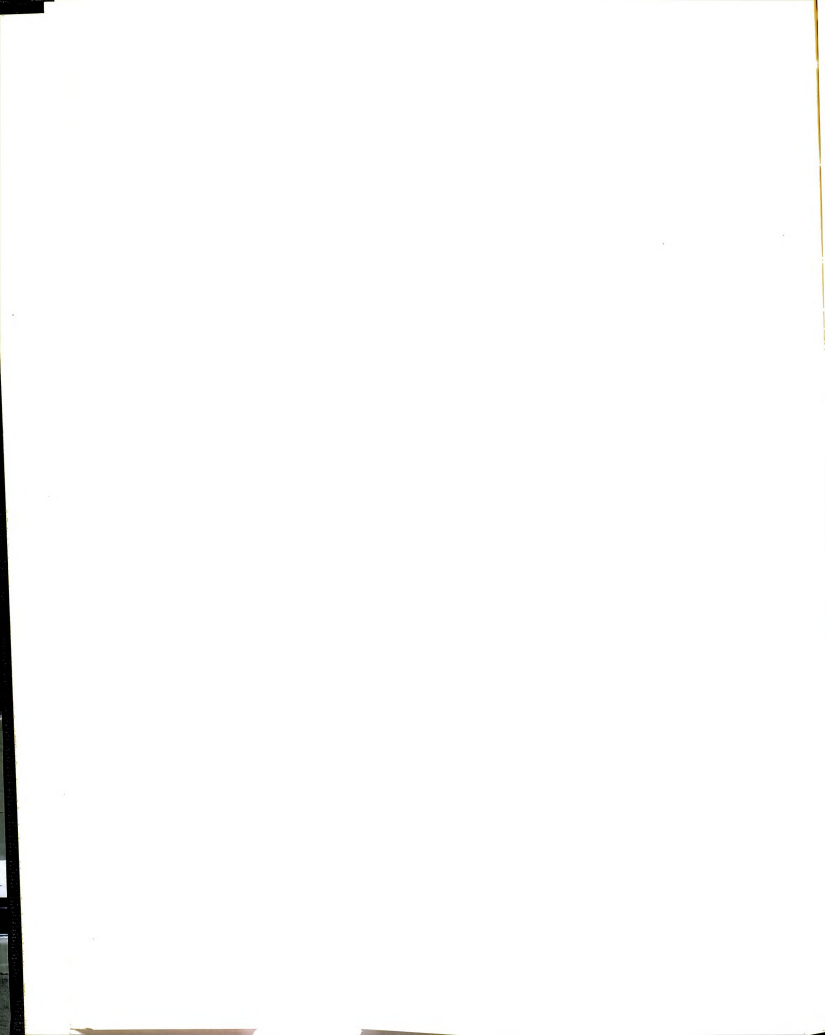
in a more or less formally organized set of "games"--the "Frosh-Soph Brawl"--which was conducted during the orientation period. The loser was theoretically, if not actually, given the doubtful privilege of climbing a steep hill and painting the large "P" overlooking the campus.

The skits continued, but were a little less burlesque and the tone was improved somewhat. Almost simultaneously, in the late 1940's and the early 1950's, the college developed a student personnel program along more contemporary lines. The student personnel staff assumed direction of the orientation program and attempted to lead students in making it more of an "educational experience." Library tours, lectures by faculty and administrators, registration advice were all added. However, some of the flavor of the earlier program still persisted in several of the extra-curricular activities of the program.

In 1956 women were admitted to the College for the first time, and concurrently the College was expanding both the size and scope of its academic offerings. Along with these changes the orientation program gradually became more sophisticated. Innovations were introduced which were designed to make the program more thoughtful and less "fun" oriented. However, the carryover of "games" and skits persisted from one student generation to the next, although the humor was somewhat less broad and the "games" less rough. Small group procedures were introduced by the creation of "orientation clubs" (WOW Clubs). These groups were

formed by combining 30 new students with three student counselors. Attempts were made to balance the groups with proportionate numbers of men and women students. A number of different majors would be represented in the clubs. The number of clubs thus formed would be about 45-50. Along with the creation of orientation clubs, a camp program was developed. The college has access to two camps about 40 miles from the campus and overlooking the Pacific Ocean. One, Camp Ocean Pines, is a YMCA project and the other, Camp Pinecrest, is owned by the Coalinga-Huron School District. Each camp holds about 100 campers plus a staff of student counselors and faculty advisers. In addition to the usual lectures, group discussions and skits, the camp atmosphere of eating together in camp style, sleeping in cottages, and joining around campfires was decidedly effective in creating a feeling of unity among the new students.

With this background, the Welcome Week of 1969 took place. There were two separate camp sessions at each of the two locations and this involved 400 students in an orientation camp. Concurrently, there was a campus program which involved approximately 800 participants in an orientation which was conducted from Sunday, September 14 through September 19. Of the 1,200 participating, 750 were full-time freshman students. The campers also participated in the campus program either prior or subsequent to camp attendance. The orientation program details may be found in Appendix B.



As can be ascertained even from this brief description, the orientation program is similar in many respects to other short-term programs found in many colleges and universities in that it includes the use of large numbers of student counselors who tend to carry traditions of the past from one student generation to the next.

Definitions

Short-term Orientation.--Orientation may be defined as the student's discovery or knowledge of where he is and where he is going with relation to his college environment (Pappas, 1967, p. 10). For the purpose of this study, "short-term" will refer to a program of seven days duration held prior to the opening of the college year and designed to provide the student with information and attitudes which will enable him to make a better adjustment to the College environment.

Academic Achievement.--Academic achievement refers to the grade-point average (g.p.a.) of students for the Fall 1969 and Winter 1970 Quarters. The g.p.a. is a weighted average of academic performance in course work where four points are assigned for each credit hour of A, three for B, two for C, one for D, and zero for F.

Major.--Major is the academic field of study selected by the student. At this College students select a

major prior to matriculation. Course work in the major field is required during all four years of the curriculum.

Persistence.--In this study, persistence is used for two areas. Persistence in the College means continuous attendance following matriculation. Persistence in the College was measured by the drop-out rate, referring to those who discontinued College during or at the end of the Fall Quarter 1969 or during or at the end of the Winter Quarter 1970. Persistence in the major means continuing in the same major selected at the onset of matriculation. Persistence in the major was measured by change of major at the end of the Fall Quarter 1969 or Winter Quarter 1970.

Co-curricular Activities.--Co-curricular activities refer to programs officially organized and sponsored by or within the College structure. Records of participation are maintained. The general areas of coverage are: residence-hall organizations, hobby-interest clubs, departmental or professional clubs or societies, student government, athletic teams, and musical organizations.

Referral Source(s).--This study defines referral source(s) as the information source(s) by which a student becomes initially aware of the orientation program in sufficient specific detail to be fully cognizant of its existence.

Overview of the Study

In Chapter II the history of orientation is briefly covered and literature relevant to it is reviewed. Current studies and reports evaluating orientation are covered in depth, and closely related studies and reports covering other aspects of orientation are surveyed more generally.

In Chapter III, the design of the study is explained. Because of comparing two groups whose members could not be randomly assigned to treatment, emphasis is placed on demographic information comparing the participants to non-participants. The operational procedures are explained, the hypotheses are stated, the statistical models and technique of analysis are explained.

Chapter IV contains an analysis of the results through statements of hypothesis, testing, and a discussion of the findings.

The contents of the next section, Chapter II, were particularly germane to Chapter I in that much of the literature review was used in formulating the problem for study.

CHAPTER II

REVIEW OF THE LITERATURE

Since the primary purpose of this study is to report an evaluation of a short-term orientation, the principal focus in the review of the literature is on evaluation studies and reports. For perspective, however, an overview of the literature relating to the historical development of orientation, and the general purposes, objectives and types of programs found in colleges and universities in the United States is presented first. Representative selections are used to present the overview with no attempt being made to cover this aspect of the literature in detail.

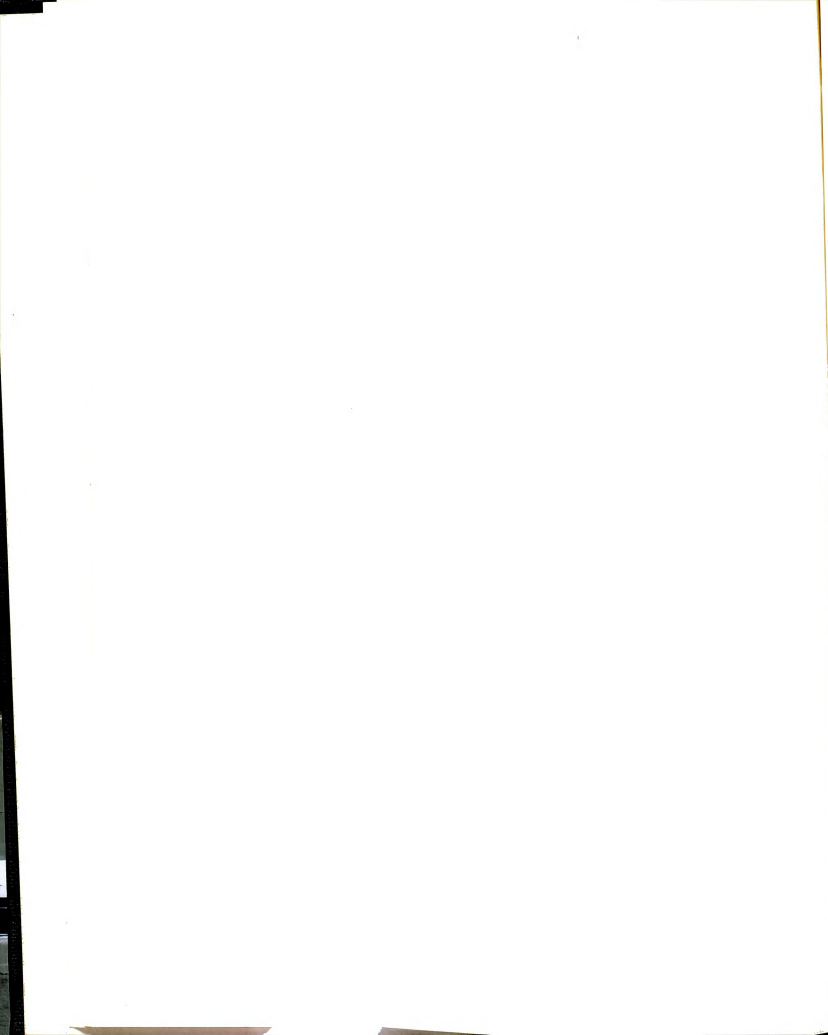
Historical Background

Knode (1930) provided an excellent summary of the early history of orientation programs. He reported that Fitts and Swift traced their beginning to Boston College in 1888. Dean Warren of Boston College is reported to have introduced a new course having as its purpose "the orienting of its new students with relation to the problems of college life and work" (Fitts and Swift, 1930, p. 154).

In 1900, the department of mechanical engineering at Iowa State College required its students to attend without credit a series of "Technical Lectures," which were similar to what is included in many orientation courses or programs today. Knode pointed out that by 1911, the University of Michigan College of Engineering had developed a weekly assembly "at which freshmen were told the things which it would be well for them to know at the very beginning of their work" (Knode, 1930, p. 12). A similar course was given at the College of Engineering at the University of Illinois at about the same time.

Knode continued to report that in 1911-12 the Reed College Catalog listed a course called "College Life" which included: "The History and Meaning of Study," "Student Activities," "College Ethics," and the "Choice of a Vocation." The University of Washington developed a course which was required by all second semester freshmen in the College of Arts and Sciences. This was reported by Hart (1912) in letter to "The Nation." The 18-week course included vocational lectures, talks by various deans, the president, and the Librarian and others on the general problems of college life. The course provided one unit of college credit.

The orientation courses reported here are representative of a number of similar courses which developed



in all parts of the country and in all types of institutions of higher education during a period of about 30 years, beginning in 1888.

Out of these orientation courses grew the concept of a short-term orientation program, frequently called Freshman Week or Welcome Week. Although the records are somewhat inexact, it appears that the first formal Freshman Week began at Wellesley College as early as 1916. In response to a questionnaire sent out by the Association of American Colleges in 1925, President Pendleton among her answers stated, "We have had a freshman week for some eight or nine years" (Knode, 1930, p. 16). Knode added that in another letter President Pendleton replied to Dr. Adam L. Jones in 1926 that she did not have any record of "Freshman Week earlier than 1916." In the same letter she indicated a transition from orientation courses to freshman week by the following statement:

A good many years ago, a series of addresses by various members of the faculty were given during the first four or five weeks of college. When we introduced this freshman week, we gave up these addresses, and we try to concentrate the information in the addresses of the administrative officers and other members of the faculty (Knode, 1930, p. 16).

The catalog of the University of Rochester in 1918-19 contained the following statement: "All freshmen are required to report on Monday of the week preceding the beginning of regular college classes for instruction in matters pertaining to the nature, aims, and methods of college study and college life" (Knode, 1930, p. 15).

It appears that it was at the University of Maine in 1923 that the name Freshman Week was first popularized. At least "Freshman Week" at Maine received widespread attention following its establishment there, according to Knode.

It was about this time, a few years after World War I, that orientation programs began to develop rapidly in the nation's colleges and universities. Grier (1966) indicated one moving force behind the rapid growth of orientation programs during the 1920's was the great concern over excessive dropouts. He added that "when orientation swept the country in the '20's, we were in full cry on the hunt for 'progressive' or life adjustment techniques" (Grier, 1966, p. 37).

Wrenn (1938) reported that one-third of the colleges and universities had orientation programs by 1930. Ten years later, in 1940, Kamm and Wrenn (1947) reported that all 123 liberal arts colleges in the North Central Association planned Fall Orientation programs. Bookman (1948) surveyed 220 institutions with enrollment between 1,000 and 3,000 students and found 76 per cent with some form of orientation and in 1966 Kronovet reported that 2.4 per cent of 1,378 colleges responding to a questionnaire had an orientation program. So, from a simple beginning in Boston in 1888, orientation by 1966 had become somewhat institutionalized as a fixture in the American college scene.

An indication of the degree of the development of orientation as an accepted function in colleges and universities is the creation and growth of a professional organization of Orientation Directors who have held a National Conference annually for the past 19 years. The scope of the organization is evidenced by the fact that the conference in Salt Lake City in November of 1969 was attended by 125 persons representing 102 colleges (1969 conference papers).

In the structural organization of the college, orientation is most often considered one of the student personnel services. It is included in a discussion of the services in such well-known textbooks on student personnel as Mueller (1961), Williamson (1959) and Fitzgerald, Johnson and Norris (1970).

Professional committees of the American Council on Education provided recognition of orientation in 1949 by including orientation within a list of fifteen functions comprising student personnel services. The Report of the American Council on Education Committee on the Administration of Student Personnel Work included orientation under the heading of special services along with foreign student advising, veterans advising, marriage counseling, and religious activities and counseling (Feder, 1958).

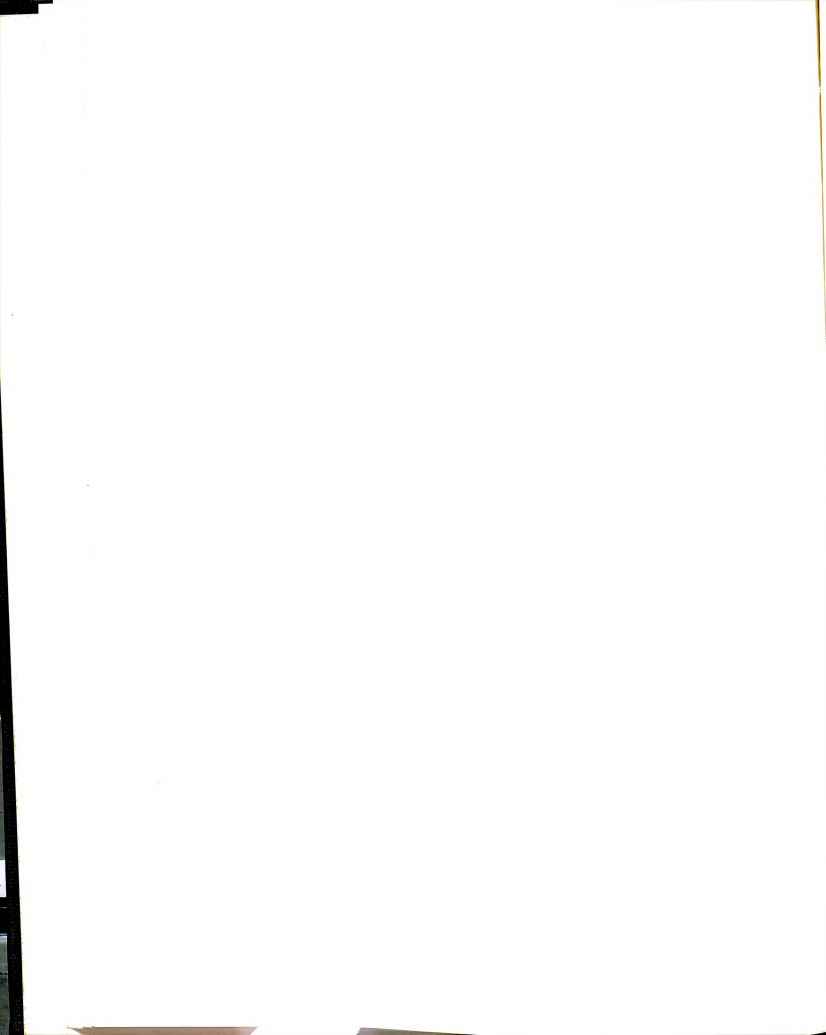
Thus, orientation in some form or another has developed over the years until it is now found in almost

every college or university in the United States. Although it has its own professional group, it is usually considered a student personnel service.

Purposes, Objectives and Types of Programs

Hoffman and Plutchik (1959) stated that the purpose of orientation is to help the student become more receptive to the total college experience. Froe and Lee (1956) cited basic aims of orientation as follows: (1) to aid the student in becoming acquainted with the educational facilities offered by the college; (2) to give the educational institution an opportunity to evaluate each student; (3) to acquaint the student with the campus personality and community; and (4) to acquaint the student with himself, his aspiration and potential. Strang (1951) stressed that orientation should be a developmental process with a need for concentrating orientation procedures at certain points in the formal education of students. She viewed the orientation process as a means of helping students in acquiring techniques of living in college, in achieving a beneficial balance among all the demands and opportunities of college life, and in gaining perspective and a sense of purpose" (Strang, 1951, p. 274).

Mueller (1961) stated that "The objectives of orientation week are the objectives of the whole personnel program in miniature" (Mueller, 1961, p. 223). She

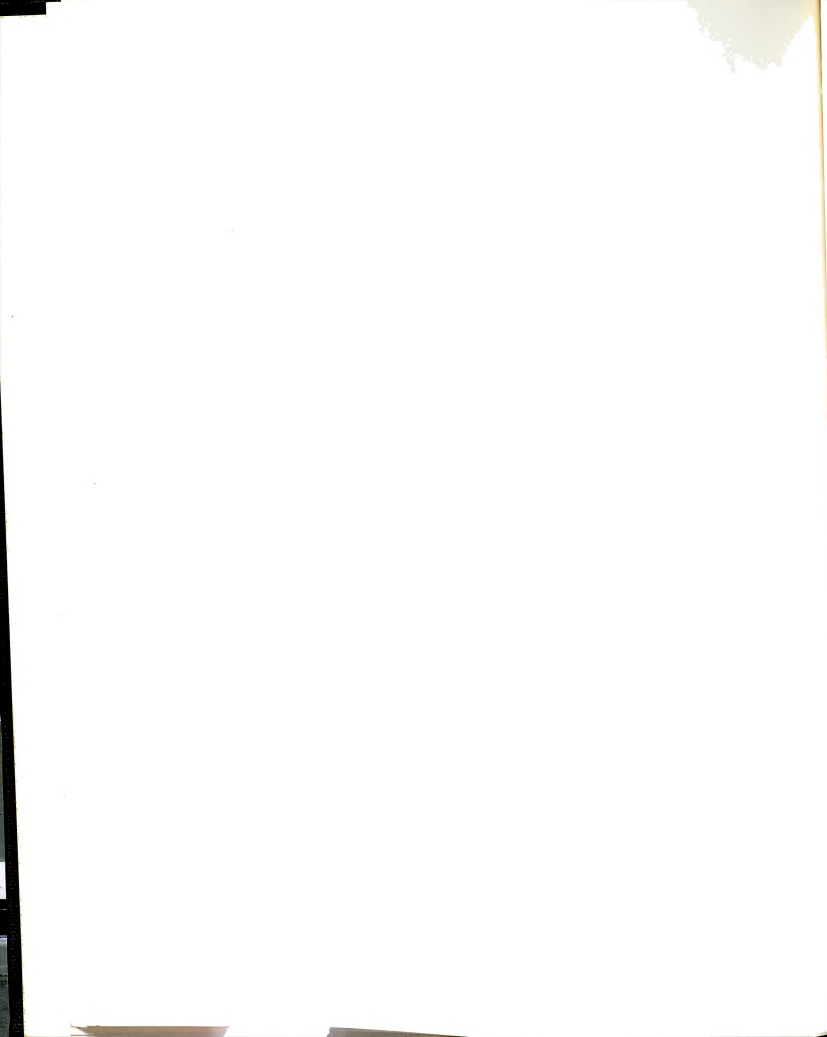


advocated a schedule of meetings, group discussions, activity events and advising procedures as desirable features of an orientation program.

Fitzgerald and Busch (1963) described freshman orientation goals in a philosophical continuum of microcosmic to macrocosmic. They stated that the former term refers to orienting the student in terms of his immediate relationship to the institution and stresses such things as pre-registration advising, lectures on study habits and student activities. The latter term referred to the orientation of the student in terms of the functions and goals of higher education and emphasized such factors as the intellectual aspects of college life, the purpose of higher education and the discussion of vital issues. They cited Shaffer's delineation of the major purpose of orientation which is "to communicate to the new student that college is a self-directed, intellectually-oriented experience" as a macrocosmic approach. In turn, they cited Mueller's description as microcosmic.

A survey of 125 institutions found that most statements of orientation include both microcosmic and macrocosmic approaches (Powell, 1959).

Grier conceived of the adjustment of the new student to college as involving three inseparably related areas--emotional, material, and academic. He added that adjustment or lack of it in one area has a direct bearing on the other areas for they constitute the total experience

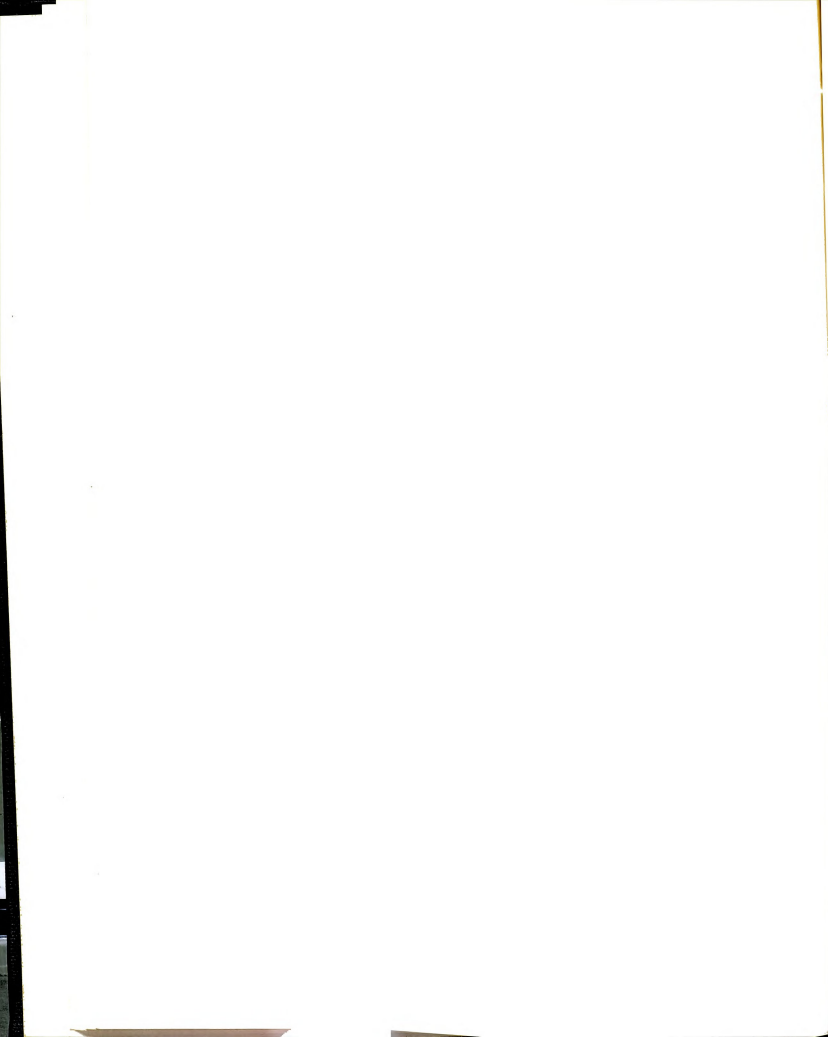


in which the student learns as a whole person. Orientation was seen as a part of the total learning process (Lloyd-Jones and Smith, 1954).

In this same work, Grier made a special point of noting that a short-term orientation program can be equated with a Neo-Humanist Philosophy of Education because it does not interfere with the academic program and does not become part of the total student development process. He warned student personnel workers to be alert to the concept that a sound orientation program is not the sole prerogative of a specialized student personnel empire, but is the function of the entire college, students, faculty, and administration. He concluded that if helping students to become part of the college is to be an important factor in the deeper teaching of students, three points must be considered:

(1) student needs must be ascertained and met; (2) the student must be considered a whole person; and (3) orientation must be a function of the whole college. This statement followed completely the Student Personnel Point of View, a statement developed first in 1937 and reissued in 1949 by a committee of the American Council on Education (American Council on Education 1937, 1949).

Williamson (1955) described a short-term orientation, a complete Welcome Week at Minnesota. It consisted of convocations, lectures, activities, a camp program, parents' programs, scheduling, advising and orientation clubs. He indicated that orientation should not be viewed



as a fixed, pre-educational exercise, but rather as a fundamental part of the learning process itself.

A contrasting point of view was expressed by McCann (1967) when she stated that typical orientation programs at colleges are becoming outmoded because of the growth in college enrollments and the diversity of types and backgrounds of entering students.

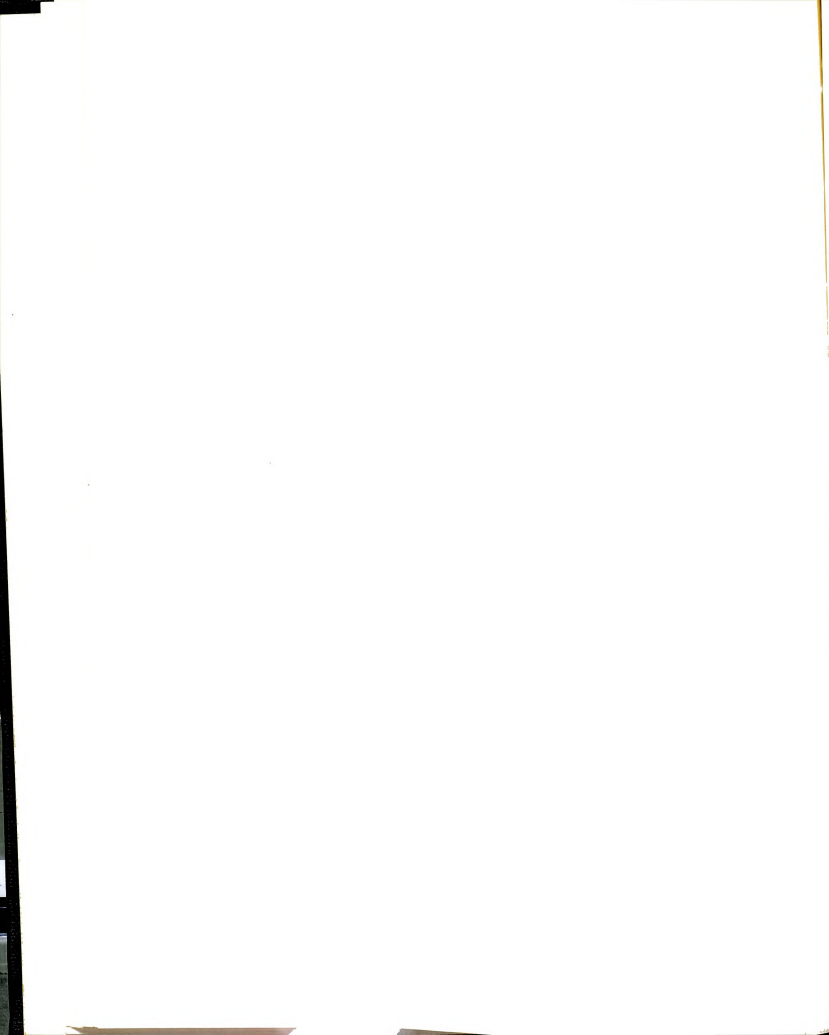
Crofts (1951) expressed an almost diametrically opposing statement to McCann. He provided four major reasons for having orientation programs: (1) high school curricula which are not designed to meet the demands made by higher education because the high school student does not have to find information on his own; (2) enlarged enrollments, because large size bewilders the student; (3) lack of homogeneity in the social background of the student; (4) growing complexity of the college instructional field.

Fitzgerald and Busch (1963) indicated concern for the emphasis on orientation programs when they stated that orientation programs were "Typically developed prior to the establishment of well defined goals for the local situation, rationale to support the program, and techniques of evaluation" (Fitzgerald and Busch, 1963, p. 270). They felt that orientation programs were usually justified before evaluation. They were especially critical of the emphasis on the social-activities side of orientation at the expense of the intellectual. Since incoming students, when asked to

specify interests, showed more interest in the academic area--study habits, academic programming, and academic responsibilities--than in the "social" events.

These writers were among the very few who indicated a need to place orientation earlier in the admissions process. They suggested that it be included in pre-admissions counseling because they believed that sound orientation at this point might keep students who really were not basically interested in the program of a given college from entering that college. Also, they suggested a possible shift away from an increase in student planning of orientation and a corresponding increase in the faculty role. If scholarly and intellectual development of each individual according to his potential is an aim, then both faculty and administrative staff must play a role.

Directly counter to the position calling for more faculty involvement advocated by Fitzgerald and Busch (1963), Williamson (1959), and Grier (1966) was a position taken by Nygreen (1963). He repeated the criticism that orientation is a program which is not closely related to the central academic mission of the college. He then stated that the usually recommended solution was more faculty involvement and said that this was both unrealistic and dangerous. He believed it would damage faculty-student relationships. He provided a series of reasons which may be summarized by stating that a scholar is not interested in social interaction and in fact finds it alien to his way

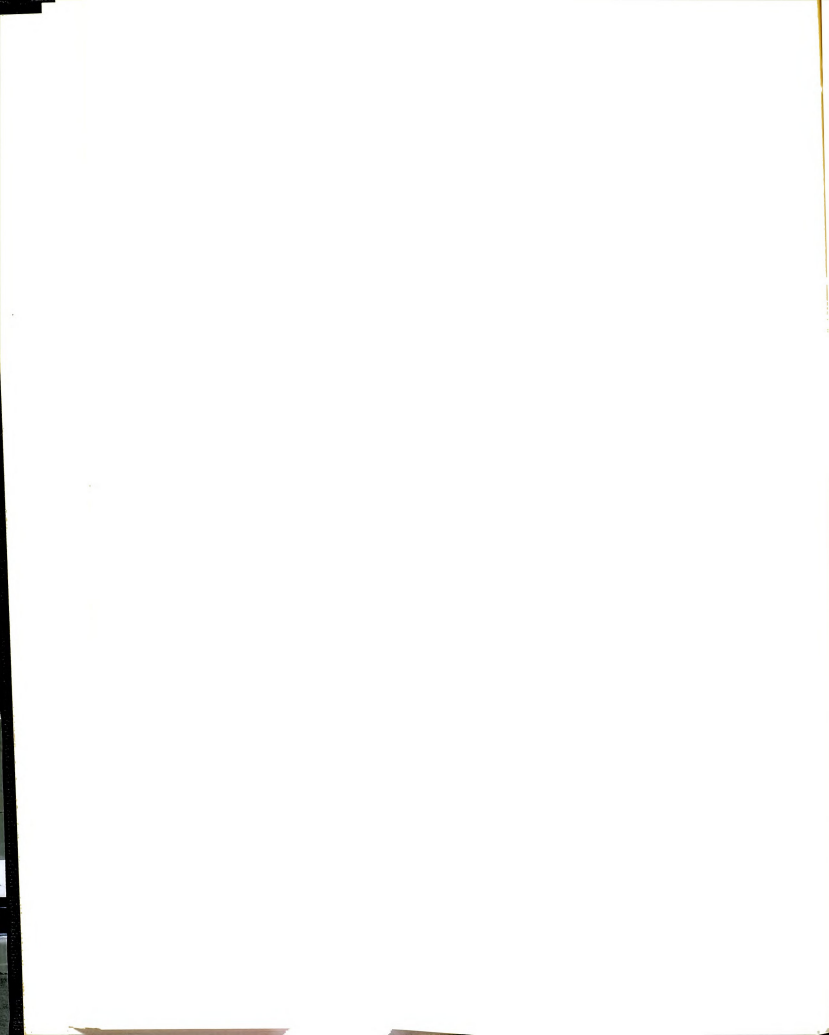


of life and that his competence is restricted to his discipline. To cast him in other roles has him exercising a set of values counter to that which he and the institution wish to encourage. Thus, involvement of faculty in orientation threatens the integrity of the scholar and creates confusion in the perception of the student. Nygreen did qualify his statement by saying that he is opposed to misuse, not all use, of faculty. For instance, he would not use faculty as counselors, "bon-vivants," fee takers and section clerks. He closed by advising that orientation be left to the "specialists."

However, Froe and Lee (1956) at Morgan State found that heavy faculty involvement paid dividends in improving study skills of new students. But it should be noted that the faculty were engaged in academic type endeavors. Grier (1966) noted that the trend was obviously toward a more academic or intellectual approach and somewhat less toward life adjustment.

In contrast Spolyar of the University of Washington (1963) visited 13 universities and found a strong emphasis on the activities side as compared to the academic. Although the number was small, it was worth noting because his interviews revealed the degree of emphasis on activities not always apparent through more superficial examination of programs.

In another aspect of orientation, Grier (1966) questioned the extensive use of tests. He stated that the



use of SAT/ACT provided information about as good as a battery of tests, and added that "the time to use special tests is when an individual student needs them" (p. 40). This probably would occur at least several weeks or more after the student had been enrolled.

Grier's belief appeared to be substantiated by Caldwell (1959) who compared the stability of scores on a personality inventory administered during orientation week with scores on the same tests administered six weeks after the start of college. He found that personality inventory scores of tests administered at orientation week were less stable than those administered six weeks later when conditions at college were more normal.

The procedures for conducting orientation are varied. Most programs involve faculty and students in a series of lectures, activities, meetings and entertainment sessions as indicated in such standard works as Shaffer and Martinson (1966) and Williamson (1955). In addition there are special techniques which have become part of the total orientation process in many colleges. The literature on these aspects will now be reviewed briefly in order to indicate the nature of those techniques which are most frequently related to the purpose and objectives of orientation.

Camps have been used in many colleges for orientation. The usual camp program is a two- or three-day event at a university, "YMCA," or church-type camp located near

the institution. Orientation activities such as camp fires, group singing, and outdoor lectures are similar to those found on campus but have a camp flavor. Sehy and Estrin (1964) and Williamson (1955) described camp programs used by the Newark College of Engineering and Rutgers and by the University of Minnesota respectively.

There have been many studies and reports devoted to the use of small groups in orientation. Arbuckle (1947 and 1953) made a strong case for small group activities. Hoffman and Plutchik (1959) provided a detailed procedure for conducting small group programs in orientation. Pappas (1967) provided experimental data comparing the use of small groups in orientation with a traditional approach. The use of small groups appears to be widely accepted and many programs are making use of smaller groups by breaking down the larger units into "orientation clubs."

Parents' programs are frequently part of an orientation program. Wall (1962) reported that he found a parents' program created a more realistic attitude on the part of parents toward their sons and daughters in terms of goals and grades. Newton (1955) described a special case for a parents' program. He pointed out the valuable gains that could be made by having a solid parents' program at a non-resident commuter college. He believed that a well-directed program to gain parental understanding and support for the students' educational needs and goals was important in such settings.

Raines (1956) demonstrated the use of case study as an orientation technique. The case study is used in conjunction with small group processes. Because the educationally disadvantaged are entering higher education in rapidly increasing numbers, Thurston (1969) and Ward and Headley (1969) both indicated the need for special orientation for the disadvantaged youth coming to colleges under educational opportunity programs.

Summer orientation programs are now widely adopted. There have been a number of studies describing and reporting on such programs. The journal articles by Goodrich and Pierson (1959), Hause (1966), Forest and Knapp (1966) are representative of such reports.

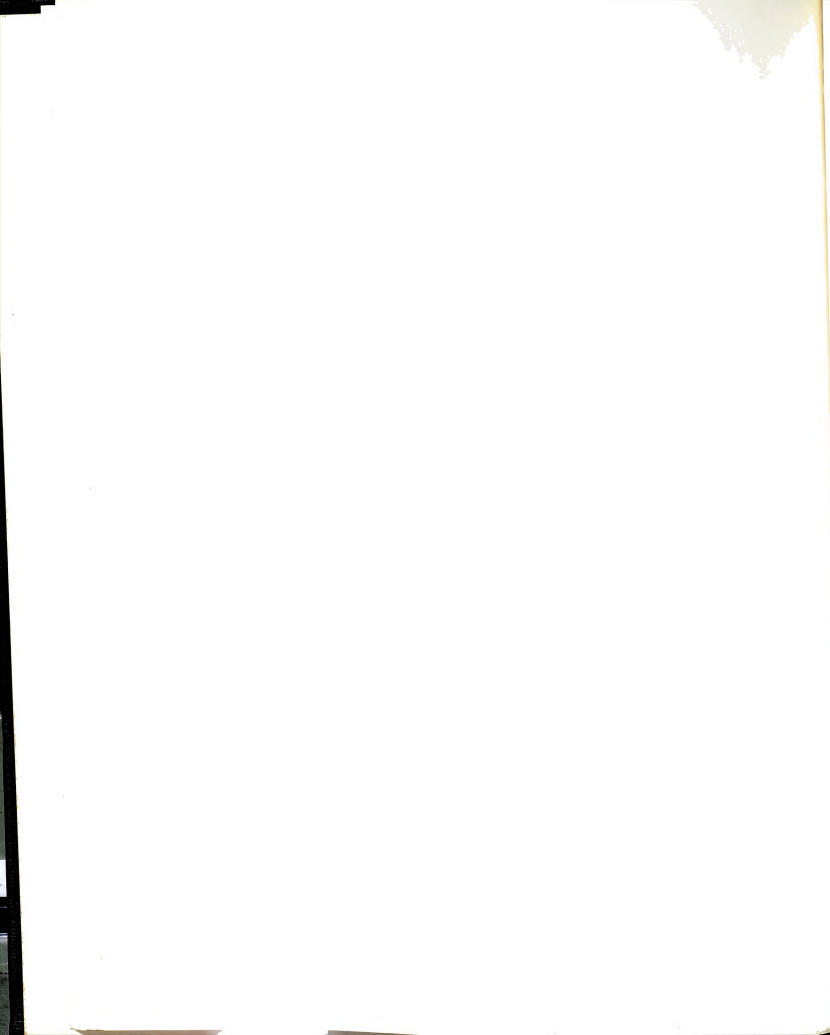
The purposes and objectives of orientation include a range from global statements relating to the development of the whole person to such specific objectives as providing registration information to students. Ivey (1963) indicated the state of the orientation process when he said that "Despite the considerable thought and attention which has (sic) been given to new student orientation, the factors which make for a successful program are still not fully known" (Ivey, 1963, p. 113). Mueller (1961) seemed to have summed up the situation when she stated that it was easier to plan and carry out a campus orientation program than to describe the complex of underlying theories.

Evaluation

Obviously, programs as extensive and varied as orientation have been evaluated many times and in a number of different ways. Some evaluations appear superficial in that they represent merely the feelings of the faculty and/or staff regarding the program. Others involve polling the students about various aspects of the program and include a weighing of their opinions concerning the various phases. A limited number use tests and measurements involving such techniques as pre-test post-test methods or comparison groups.

In the evaluation studies, it is possible to discover quite varied findings. Some reported orientation as successfully aiding students to achieve academically and personally, while others reported little effect. A few studies reported orientation as possibly being disorientation (Foxley, 1969). Jesseph (1966) stated that "Research regarding freshman orientation leaves one with ambivalent feelings" (Jesseph, 1966, p. 289). Some studies suggested that benign effects accrue while others indicated little or no evidence to support the value of programs designed to help freshmen relate themselves more effectively to the academic community.

Among the first to report an attempt at evaluation was Erland Nelson (1941) who studied the effect of orientation at 14 Lutheran Colleges in the South and Midwest. Nelson devised a test of College Orientation and



administered it to 1,118 freshmen in 1941. The test purported to measure such information as knowledge of the college library, study, religion and facts about the particular college. The test revealed that students participating in orientation scored higher on the several phases of this test used to evaluate orientation. However, the test was not administered until the second semester and this raised doubts about where the student might have obtained his information. Furthermore, a test covering orientation at 14 different colleges could be subject to questions of validity. In addition, such a test may have been self-fulfilling. Nelson did not claim any causal relationship, however. Bookman (1949) surveyed 220 institutions to: (1) determine relationship between orientation techniques actually used as compared to those suggested by authorities in the field of guidance; (2) indicate conformity or its lack in each technique by schools using it; and (3) to evaluate procedures currently used. She reported that conformance to objectives indicated more "lip service" than real and effective conformance to objectives.

In a doctoral study, Fahrbach (1960) at the University of Kansas in 1958 evaluated matched pairs of participants and non-participants in a summer orientation program. Results indicated few differences in matched samples. Among these one difference was a finding that proportionately more male participants in the summer orientation group joined fraternities than non-participants. This

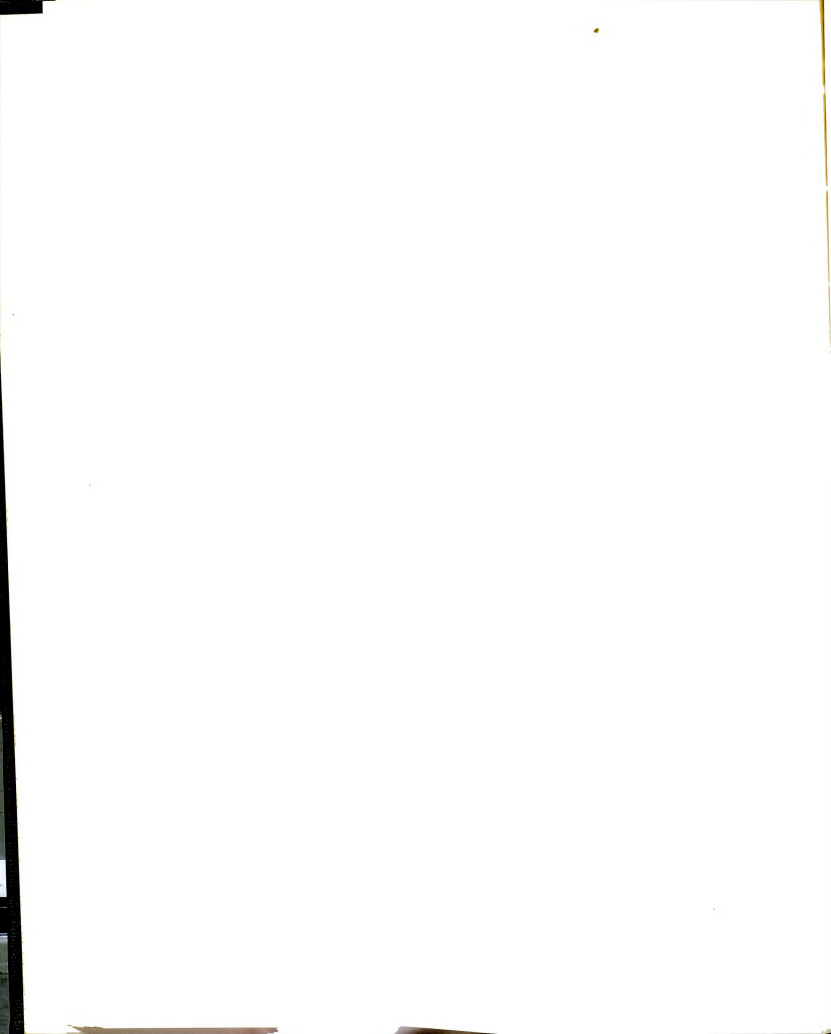
might indicate a socio-economic difference between the groups of participants and non-participants in the summer program, however.

Goodrich and Pierson (1959) described the program of summer orientation at Michigan State University from its inception to 1958. They stated:

Our studies show that those who attend Counseling Clinics have made better initial adjustment to the University and have been less likely to drop out of school during their freshman year. Furthermore, a study of drop-outs during the first term of 1953 showed that four times as many non-clinic as clinic students withdrew from the University during the early months of the school year (Goodrich and Pierson, 1959, p. 597).

The report did not indicate the nature of the studies made including demographic information concerning the students involved.

Jesseph (1966) reported an evaluative study of a two-day summer orientation program at the University of Wyoming. He attempted to determine relationship between orientation and subsequent behavior. A contrast of 540 attenders and 647 non-attenders was made. The study was ex post facto. Jesseph used two comparison groups which were unselected. In addition he used two groups which were matched on high school grade-point average, Ohio State Psychological examination scores, the College enrolled in the University, out-of-state status, sex, and a formula prediction of college grade-point average. He studied the relationships between a two-day orientation and: (1) college grades; (2) academic probation; (3) persistence;



(4) enrollment in study skills classes; (5) use of counseling center; and (6) change of major. He reported that students who attended the pre-college orientation conferences at Wyoming were not helped to improve their academic performance.

It is interesting to note that on the unmatched groups the attenders exceeded the non-attenders with respect to academic ability, OSUPT score, high school grade-point average and predicted college grade-point average. This indicated the need for matching groups to control the academic ability variable. There were no significant differences between the matched groups college grade-point averages.

Jesseph (1966) indicated that the use of study-skills classes, and persistence in major courses were higher for attenders than non-attenders to a small degree, but he was careful to state that the causal relationship is not evident in the study. (This study is similar to the study being reported herein.)

Cole and Ivey (1967) reported a study of summer orientation at Colorado State University in 1964. The differences between attenders and non-attenders of the program were checked against the following six questions:

1. Are students who have attended a pre-college orientation and counseling program more certain of their choice of college major than other students?
2. Are attending students more confident of their chances for successful academic performance than students who do not attend pre-college programs?

3. Do students who have attended a pre-college orientation and counseling program differ from others in their preference for sources of help with personal and academic problems?
4. Do students attending pre-college programs differ from others in their attitudes toward academic achievement, social life, counseling, and the University?
5. Do students who attend pre-college programs differ from others in measured scholastic ability?
6. Do attending students achieve academically at a higher level during their first quarter at college? (Cole and Ivey, 1967, p. 16)

In discussing their findings they stated: "The data clearly imply that attendance at an orientation program makes little difference in college and that, in general, differences between attenders and non-attenders are minimal" (Cole and Ivey, 1967, p. 19).

They further stated that the study appeared to raise as many questions as it answers. They suggested examination of test information and demographic data to see if any differences existed between attenders and non-attenders.

It was noted that all of the students in the study, both attenders and non-attenders, went through the regular Welcome Week orientation program of the University in September. This may have affected the results if the regular Welcome Week program attempted to achieve some or all of the objectives listed.

Mitchell (1967) reported an evaluation of an orientation program at Southwest Texas State College. Student counselors with 40 hours of training, supported by faculty advisers and counselors, met with freshmen in small groups.

An emphasis of the differences between high school and college and factors leading to success in college were emphasized. In a matched pair study of four groups of 108 each, the uncounseled remained constant, whereas the counseled group showed increase in study skills. At the end of the fall semester, grades of those counseled averaged half a letter-grade higher than the uncounseled.

Packard (1968) reported on the use of a programmed-instruction technique in new student orientation. A self-instructional orientation workbook was written for use of new students entering the General College of the University of Minnesota. The use of the workbook constituted the experimental treatment. For the control condition only the standard orientation lecture process was used to present information.

The workbook took approximately 70 minutes to complete. Instruments used to check results were a test of general college information, an orientation evaluation inventory, and a registration rating scale prepared and administered by registration advisers, to determine ease of moving through registration processes. The latter item, when used as a test, tells something about the registration process and its difficulties.

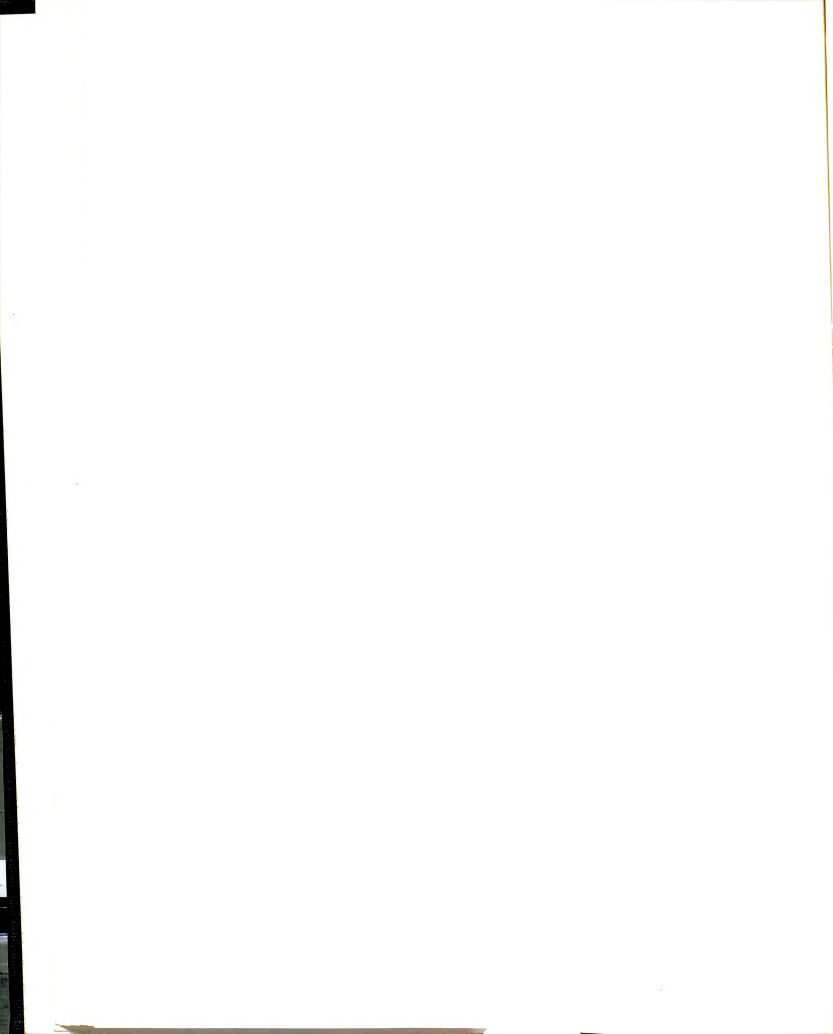
Packard's conclusions were that learning occurred no matter what the mode of instruction. The lecturers seemed to have prepared the students better for registration, a circumstance at which he expressed a degree of

surprise. This may have been due to registration emphasis on the part of the lecturers and/or to their individual skill as teachers.

Shaler (1960) described a study of Mineral Industry students at Pennsylvania State University in 1960. Concerned because of loss of freshmen in mineral engineering, Shaler developed a special orientation course for engineers using "experiential problems" rather than lectures or lecture discussion. In a comparison study, the students who were assigned the special orientation class achieved significantly better academically and persisted in Mineral Industry longer than the students who were not assigned the special class. The unusual aspect of this program was the high degree of specificity of class problems used for the class. It could indicate the result of good teaching as much as any other factor. But it did point out that a specific approach rather than a variety of "shotgun" techniques might be of value in improving academic performance.

Zwickey (1965) reported favorably on an orientation program at the University of Houston in which an intellectual approach was used. A survey of student reactions indicated that the most favored events were small group discussions led by faculty members and centered around a list of readings sent to the student the preceding summer.

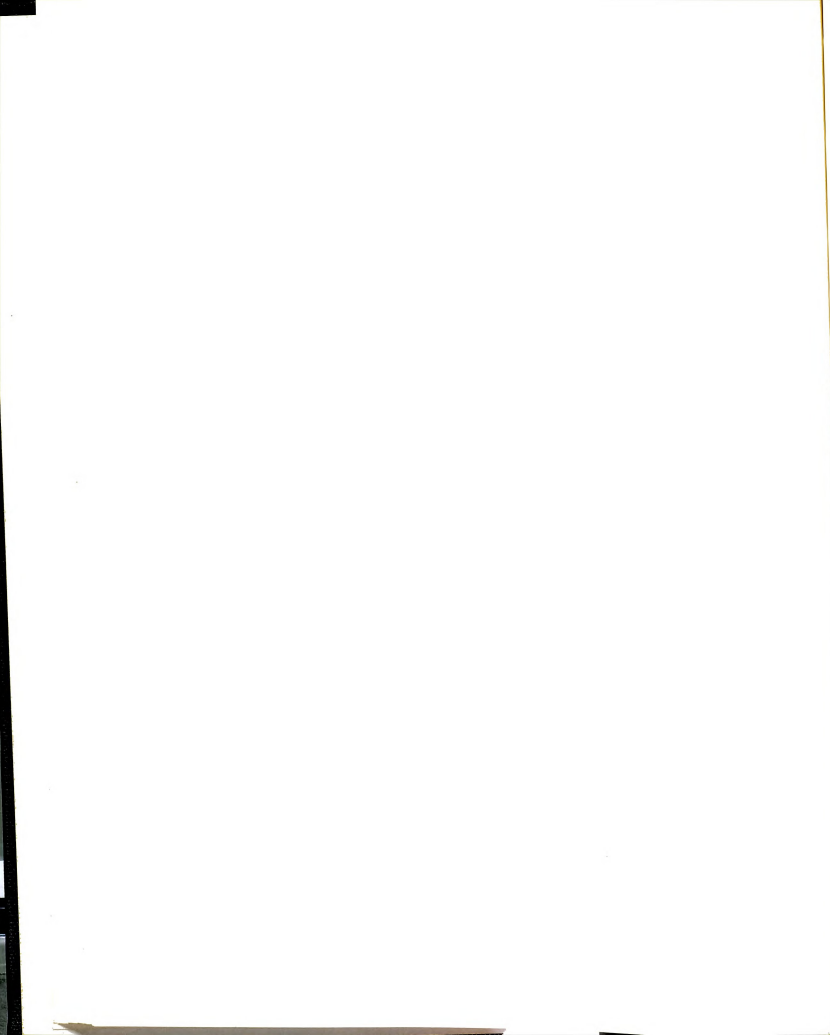
In a recent doctoral study at the University of Utah, Foxley (1968) undertook to determine the effect of freshman orientation upon student perceptions of university



environment, knowledge of university information and attitudes toward the orientation experience. She found that orientation influenced student perception of the university as measured by College and University Environmental Scales (CUES), developed by G. R. Pace in 1962, but that the differences were not in the desired or expected direction. Following orientation, students viewed the university as less academic and more social and more collegiate.

Pappas (1967) undertook to determine the effects of three approaches to college orientation on two groups of entering freshmen at Kent State University. One approach was the existing pre-college orientation. The second two represented additional college orientation. One of these two was listed as directive factual and the other identified as small group. Criteria for evaluation were academic achievement and the number of students using selected student personnel services. He found that both the directive factual and the small group performed better academically than the group using existing pre-college orientation alone. The directive factual group had a superior aptitude when compared with the small group, but the small group achieved as well as the directive factual, indicating the possible desirability of small group approach.

Reiter (1964) at Hofstra studied the effect of small group discussion in modifying attitudes. A set of new students allowed to talk freely about their problems



was compared to a set of students who were enrolled in a "Reading for Improvement Program" only. He reported that the attempt to modify attitudes in small group orientation discussion was not validated in this study.

Rothman and Leonard (1967) tested the difference in academic achievement measured by grade-point average, persistence, and attitude as measured by AVL Study of Values (Allport, Vernon, Lindsey) between freshmen participating in a freshman Orientation Course of 12 meetings and students who did not participate. They found that the null hypothesis proved out even against the expectations of the authors who conducted the class.

Alff (1963) and Boyd (1956) reported studies of reactions of college freshmen and their parents to a short-term orientation program at Ohio University. They found that attendance at such orientation programs did not have significant effect on first-semester grades. They reported that friendliness and cooperation can be overdone to the point of intrusion, and that students wanted more emphasis on academic and less on social activities. Much information provided in orientation appeared to be premature and was forgotten. Yet, parents who attended were better able to understand college life and its ramifications, and the student felt more confidence and better prepared to tackle the demands of the campus.

Moser (1965) prepared a checklist after interviewing a large number of college students to ascertain

greatest concerns. His study reveals that 75 per cent worried about course selection, and nearly 50 per cent worried about friendliness of college teachers. About 37 per cent expressed concern over personal-social problems.

Hartz (1964) made a plea for conveying library information at some other time than the traditional Welcome Week if the goal was to be more than the mere showing of the physical layout of the library to the new students. He stated that orientation programs devised to give library orientation just once during a student's college career were filled with lectures burdened with details and innumerable reference citations and tried to accomplish in one or two hours what it had taken librarians one or two years of formal training to learn. He recommended a planned library orientation over a period of years as needed by students in various disciplines.

In an evaluation of a three-day new student orientation, Volkwein and Searles (1965) made a summary statement that the new students generally indicated a desire to have orientation be something done to them and for them. As newcomers they felt ready only to absorb, not initiate, analyze and challenge.

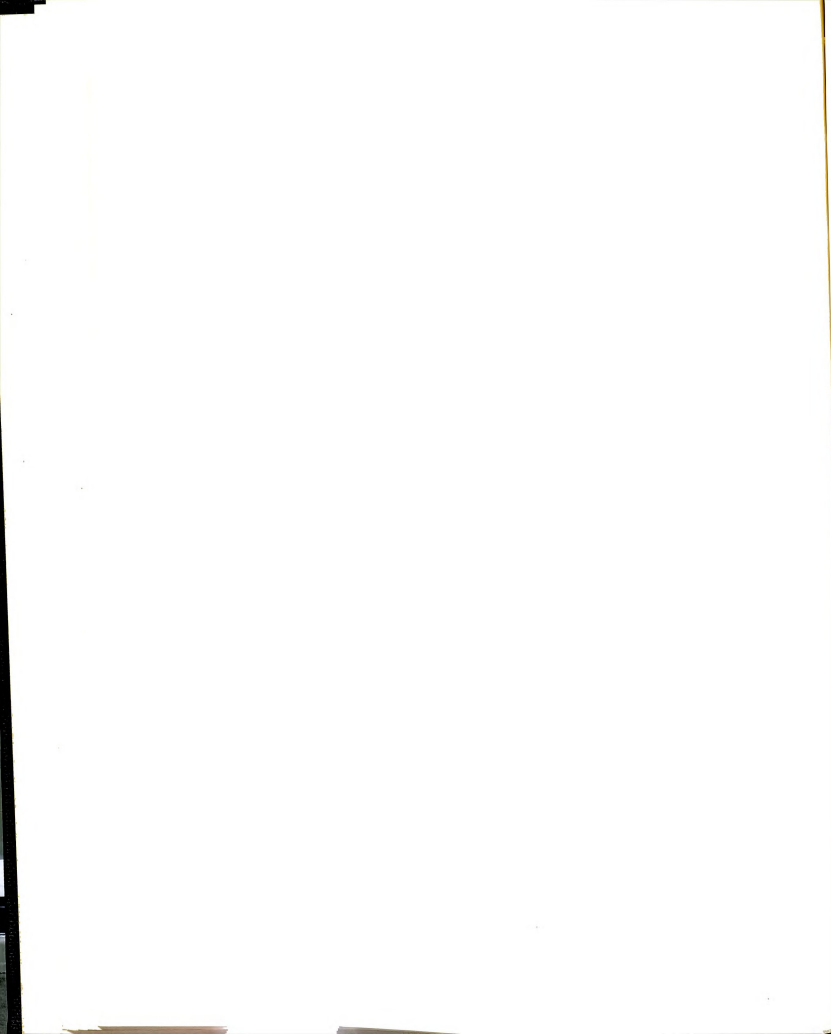
There were numerous statements indicating the need for research on orientation. A few are listed below. Guthrie (1951) stated "We have not done enough in the way of formal research to study the results of our own program and it is little consolation to find that very little

research is carried on elsewhere in the field" (Guthrie, 1951, p. 716). Lifton (1960) indicated a need for research "on the comparative effectiveness of differing orientation techniques to student growth in security and self-knowledge" (Lifton, 1960, p. 300). Tautfest (1961) noted that evaluations of orientation programs have generally been based on students' attitudes and opinions, statements of freshmen problems, and program reviews by staff and faculty.

Discussion of Previous Research

As indicated above, the situation concerning research in orientation was well stated by Jesseph (1966) when he said that "research regarding freshmen (sic) orientation leaves one with ambivalent feelings."

Fahrbach (1960) found few differences between matched pairs of participants and non-participants. Jesseph (1960) reported that freshman students at the University of Wyoming participating in a short-term orientation program did not display differences in academic performance, but he did find that persistence in majors, courses and persistence generally were higher for participants. Cole and Ivey (1967) reported that attendance at summer orientation at the University of Colorado made little difference in success in college. However, the fact that all students attended a short-term Fall orientation may have affected the results.



Goodrich and Pierson (1959) found that students attending a summer orientation program (counseling clinics) at Michigan State University were less likely to drop out. Pappas (1967) and Mitchell (1967), using very small groups, found academic achievement improved, but Reiter (1964) at Hofstra did not find attitudes modified by a small group approach.

Rothman and Leonard (1967) found that a freshman orientation course of 12 meetings did not improve grade-point average, persistence, or attitude as measured by the AVL Study of Values. Alff (1963) and Boyd (1956) found that attendance at a short-term orientation program at Ohio University did not improve grades. Foxley (1969) found that following orientation, perceptions of the University of Utah as measured by CUES were affected in a way not anticipated or desired.

It is apparent that these various studies are measuring somewhat different aspects of orientation with different populations.

The study most nearly parallel to the one being reported is that of Jesseph (1966) in Wyoming. His study is a contrast of those who participated compared to those who did not participate in a short-term orientation program. While not precisely the same populations, the students at the University of Wyoming and California State Polytechnic College have much in common, since both attend institutions similar to those in the Great Plains, Rocky

Mountain, and Far Western states which are land-grant colleges. The comparison of academic achievement and persistence is parallel, but the methods of comparison are different; Jesseph uses Garrett's formula for testing of the differences between percentages and this study, a multivariate analysis of variance.

CHAPTER III

DESIGN

This chapter consists of a definition of the population and samples, a description of the methodology, a restatement of the hypotheses, and an explanation of the techniques used during analysis.

Definition of Population and Samples

The population selected for this study consisted of the first-time freshman students entering the California State Polytechnic College in the Fall Quarter of 1969. There were 1,736 such students. However to achieve the objectives of the study, it was considered necessary to exclude the following groups who were not believed to be typical of the freshman class as a whole or comparable to freshman students at other four-year collegiate institutions:

- (1) Sixty-one foreign students, most of whom were older than the average freshman by nearly 10 years, were married, and were attending college under a government-sponsored program;

- (2) Twelve students enrolled in a one-quarter short course in Agriculture;
- (3) Eleven students who did not have either a high school grade-point average and/or were missing SAT or ACT scores;
- (4) One hundred and sixty students enrolled in a two-year non-degree program in Agriculture for which different admission requirements were applied than for regularly admitted freshmen.

After deleting these groups, the actual working population consisted of 1,492 first-time freshmen of whom 838 were males and 554 were females.

Of the 1,492 individuals comprising the working population of this study, 738 participated in the short-term orientation program offered by the College and 754 did not. Attendance at orientation was encouraged, but was not compulsory. Demographic data describing the 1,492 students are presented in Tables 3.1 through 3.16. The data are presented in a form which allows comparison of participants versus non-participants in orientation and are shown separately by sex.

It is readily apparent that the age of both participants and non-participants and both men and women was overwhelmingly in the 18-year-old frequency. Moreover, of the 17 year olds, 64 male and 59 women participants, and 85 male and 24 women non-participants became 18 prior to



TABLE 3.1.--Age.^a

AGE	Participants				Non-Participants			
	Men		Women		Men		Women	
	No.	%	No.	%	No.	%	No.	%
16-less	0	-	1	0.2	2	0.4	0	-
17	72	18.8	63	18.0	93	16.8	25	12.5
18	291	75.8	287	81.2	436	78.7	165	82.5
19	18	4.7	1	0.2	16	2.9	9	4.5
20	2	0.5	1	0.2	3	0.5	0	-
21-over	1	0.2	1	0.2	4	0.7	1	0.5
Totals	384	100.0	354	100.0	554	100.0	200	100.0

^aAge was determined by age of the student in September, 1969 at matriculation.

January, 1970. It appears that in respect to age that participants and non-participants were from the same population.

Tables 3.2 through 3.5 present data relating to aptitude scores as measured by either the SAT or ACT. Of the total population of 1,492, 1,252 students had taken the SAT and 240 the ACT, which is permissible under the California State College Admissions Requirements. Thus data for both groups are presented. The aptitude scores are reported for both verbal and quantitative results which are believed to be more useful than total scores which mixes somewhat dissimilar measures.

TABLE 3.2.--SAT Scores--Verbal.

SAT Scores-- Verbal	Participants				Non-Participants			
	Men		Women		Men		Women	
	No.	%	No.	%	No.	%	No.	%
200-324	6	1.8	4	1.3	13	2.7	4	2.4
325-374	18	5.4	11	3.8	41	8.7	5	3.0
375-424	47	14.2	35	12.1	62	13.1	25	15.3
425-474	83	25.1	61	21.1	120	25.4	39	23.9
475-524	68	20.6	60	20.8	97	20.5	27	16.5
525-574	60	18.1	67	23.2	76	16.1	36	22.0
575-624	31	9.3	37	12.8	37	7.8	20	12.2
625-674	15	4.5	9	3.1	19	4.0	5	3.0
675-800	2	0.6	4	1.3	6	1.2	2	1.2
Totals	330	99.6	288	99.5	471	99.5	163	99.5
Mean:	487.33		493.68		478.96		492.31	
S.D.:	80.37		81.11		83.91		84.06	

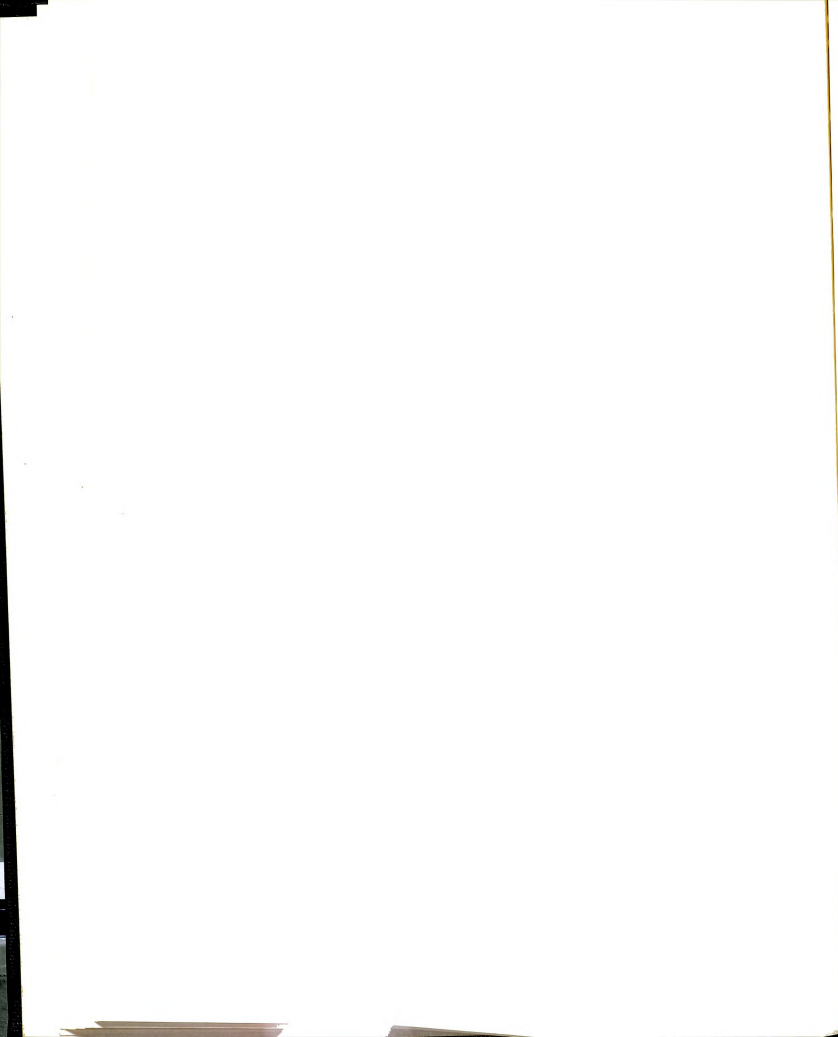


TABLE 3.3.--SAT Scores--Quantitative.

SAT Scores Quantitative	Participants				Non-Participants			
	Men		Women		Men		Women	
	No.	%	No.	%	No.	%	No.	%
200-324	3	0.9	3	1.0	1	0.2	3	1.8
325-374	6	1.8	14	4.8	9	1.9	13	7.9
375-424	6	1.8	33	11.4	19	4.0	17	10.4
425-474	23	6.9	62	21.5	44	9.3	37	22.6
475-524	49	14.8	76	26.3	84	17.8	36	22.0
525-574	80	24.2	50	17.3	92	19.5	28	17.1
575-624	62	18.7	28	9.7	101	21.4	14	8.5
625-674	48	14.5	17	5.9	66	14.0	15	9.2
675-800	53	16.0	5	1.7	55	11.6	0	-
Totals	330	99.6	288	99.6	471	99.7	163	99.5
Mean:	577.40		497.50		565.77		494.44	
S.D.:	89.82		82.87		90.29		88.44	

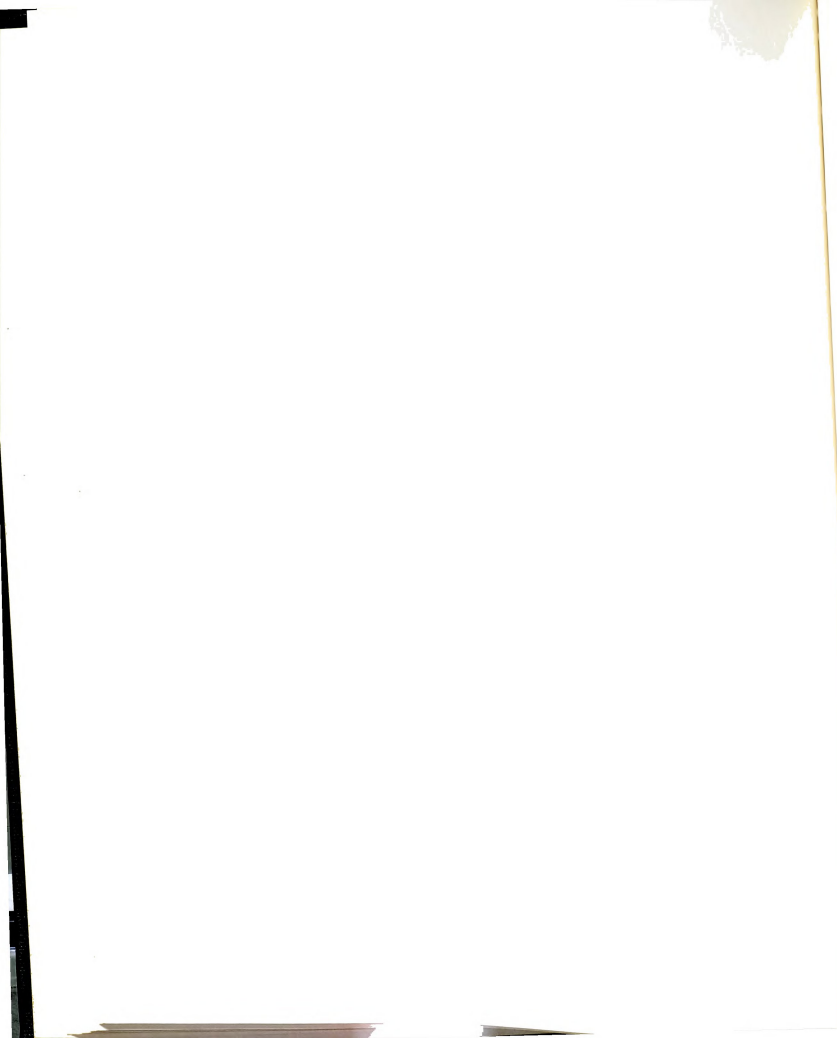


TABLE 3.4.--ACT Scores--Verbal.

ACT Scores- Verbal	Participants				Non-Participants			
	Men		Women		Men		Women	
	No.	%	No.	%	No.	%	No.	%
6-14	6	11.1	0	-	13	15.6	0	-
15-16	3	5.6	5	7.5	11	13.2	1	2.7
17-18	6	11.1	12	18.1	10	12.0	8	21.6
19-21	23	42.5	20	30.3	25	30.1	13	35.1
22-24	11	20.4	19	28.7	13	15.6	11	29.7
25-26	3	5.6	8	12.1	5	6.0	2	5.4
27-28	2	3.7	0	-	3	3.6	2	5.4
29-31	0	-	1	1.5	0	-	0	-
32-36	0	-	1	1.5	3	3.6	0	-
Totals	54	100.0	66	99.7	83	99.7	37	99.9
Mean:	19.67		21.39		19.41		21.16	
S.D.:	4.00		3.88		6.67		2.94	

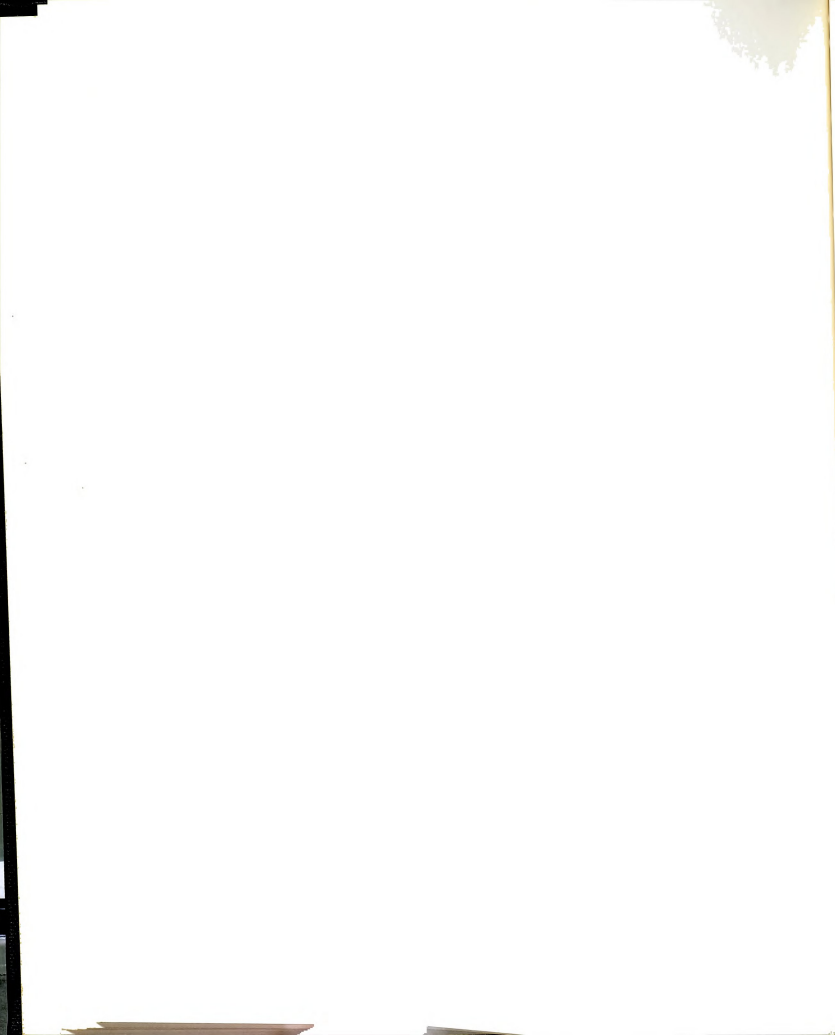
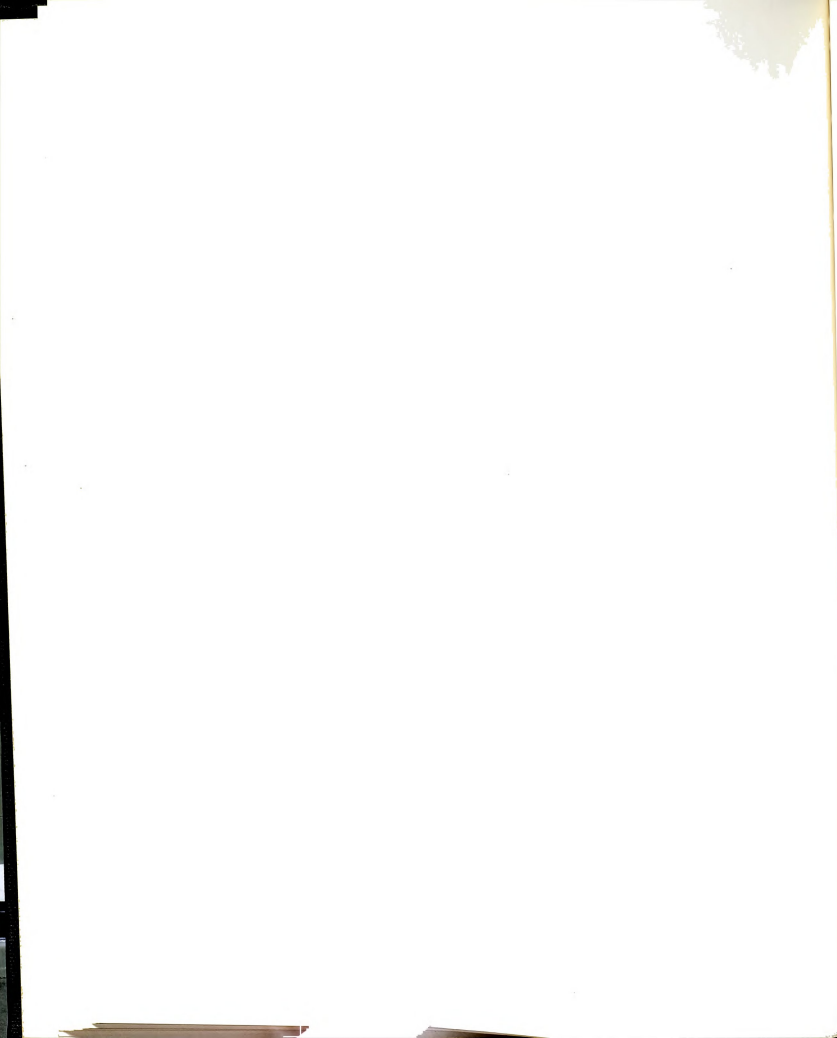


TABLE 3.5.--ACT Scores--Quantitative.

ACT Scores Quantitative	Participants				Non-Participants			
	Men		Women		Men		Women	
	No.	%	No.	%	No.	%	No.	%
6-14	2	3.7	7	10.6	7	8.4	4	10.8
15-16	1	1.8	10	15.1	5	6.0	4	10.8
17-18	4	7.4	12	18.1	6	7.2	5	13.5
19-21	6	11.1	14	21.2	12	14.4	8	21.6
22-24	8	14.8	12	18.1	17	20.4	9	24.3
25-26	12	22.2	5	7.5	9	10.8	4	10.8
27-28	8	14.8	2	3.0	11	13.2	2	5.4
29-31	10	18.5	4	6.0	11	13.2	1	2.7
32-36	3	5.5	0	-	5	6.0	0	-
Totals	54	99.8	66	99.6	83	99.6	37	99.9
Mean:	24.72		19.36		23.16		20.63	
S.D.:	4.95		5.26		5.85		4.86	



Means and standard deviations were calculated for both SAT and ACT groups separately and for participants and non-participants by sex. The means were compared by use of Z-scores. This statistic was used because the number in each of the various categories was large. Table 3.6 below presents the comparative data.

TABLE 3.6.--Difference between means of participants by sex for aptitude scores--Z-scores.

Aptitude Test	Men	Women
SAT		
Verbal	1.42	.17
Quantitative	1.80	.36
ACT		
Verbal	.28	.34
Quantitative	1.68	.66
Alpha = .05		Critical value = ± 1.96

With an alpha level of .05 the critical value is ± 1.96 . All of the above Z-scores are below the critical value indicating that in respect to their aptitude scores the participants and non-participants may reasonably be expected to have come from the same population.

Tables 3.7 and 3.8 present information relating to high school grade-point average. Because information was gathered in which students taking the SAT were kept separate from those taking the ACT, the results are reported separately for convenience in processing.

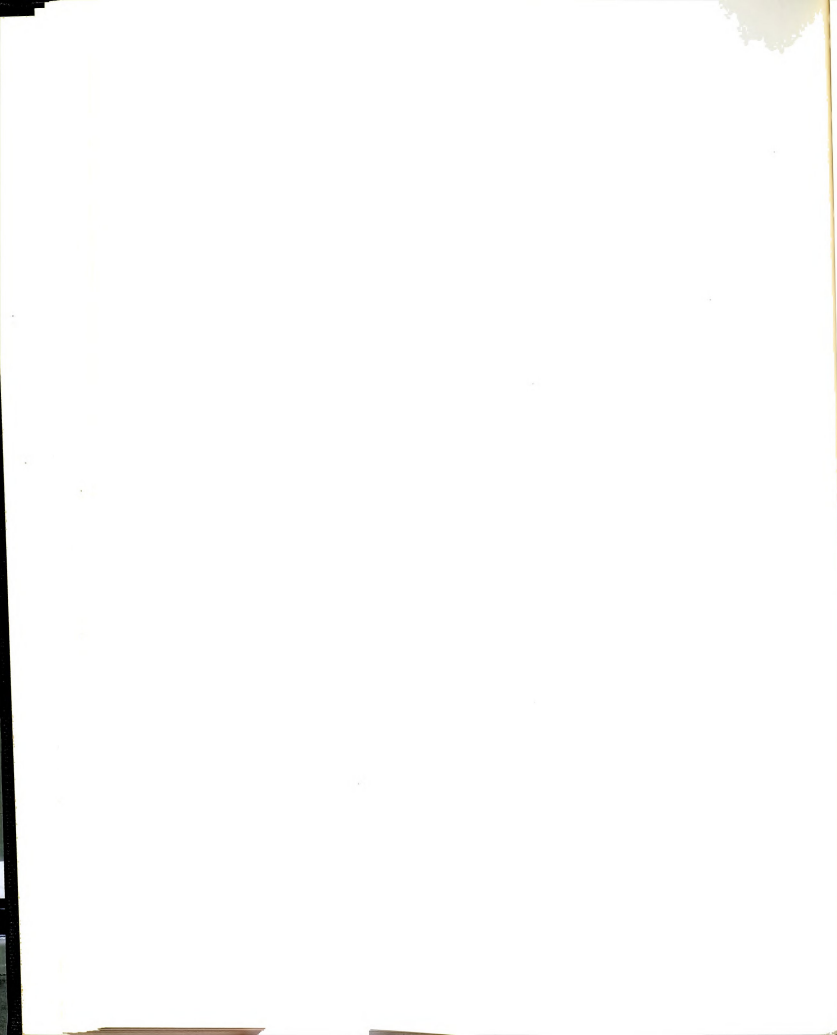


TABLE 3.7.--High school grade point averages--SAT group.

High School G.P.A.	Participants				Non-Participants			
	Men		Women		Men		Women	
	No.	%	No.	%	No.	%	No.	%
0.00-1.99	0	-	0	-	3	0.6	2	1.2
2.00-2.24	1	0.3	1	0.3	3	0.6	0	-
2.25-2.49	11	3.3	3	1.0	22	4.6	2	1.2
2.50-2.74	64	19.4	22	7.6	82	17.4	15	9.2
2.75-2.99	96	29.1	66	22.9	142	30.2	48	29.4
3.00-3.24	78	23.6	90	31.2	104	22.1	35	21.4
3.25-3.49	40	12.1	49	17.0	59	12.5	32	19.6
3.50-4.00	40	12.1	57	19.7	56	11.8	29	17.7
Totals	330	99.9	288	99.7	471	99.8	163	99.7
Mean:	3.03		3.17		3.01		3.12	
S.D.:	0.36		0.34		0.38		0.36	

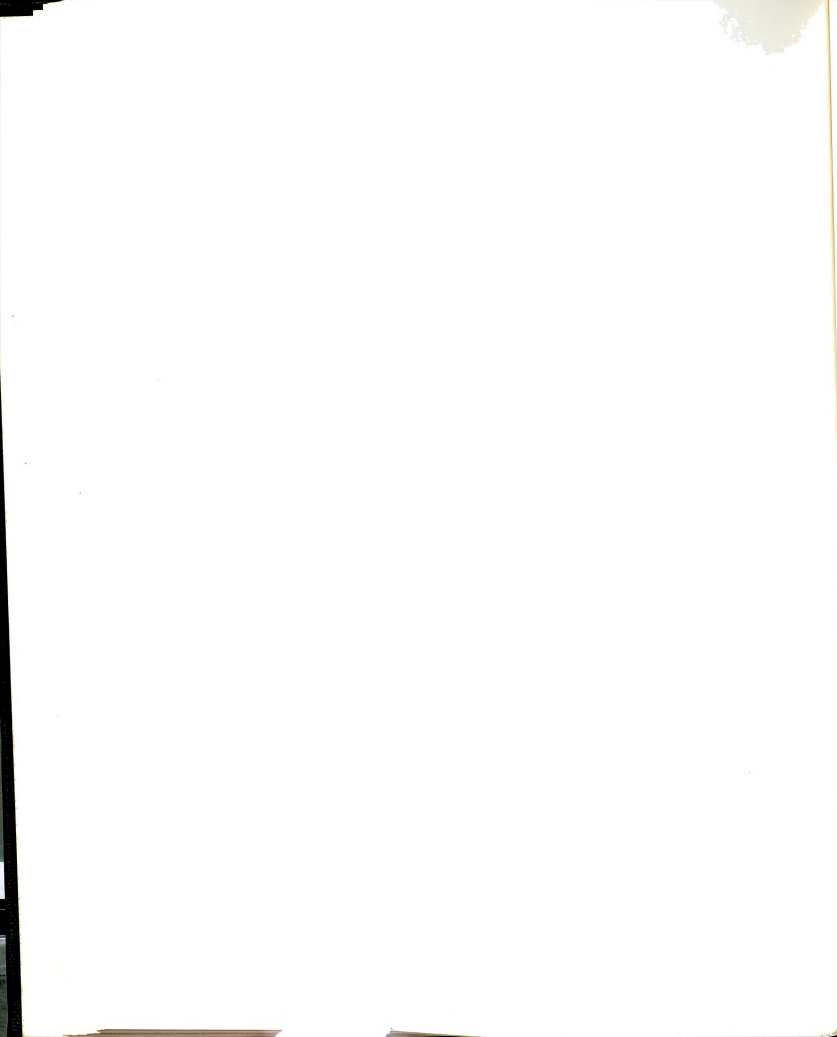
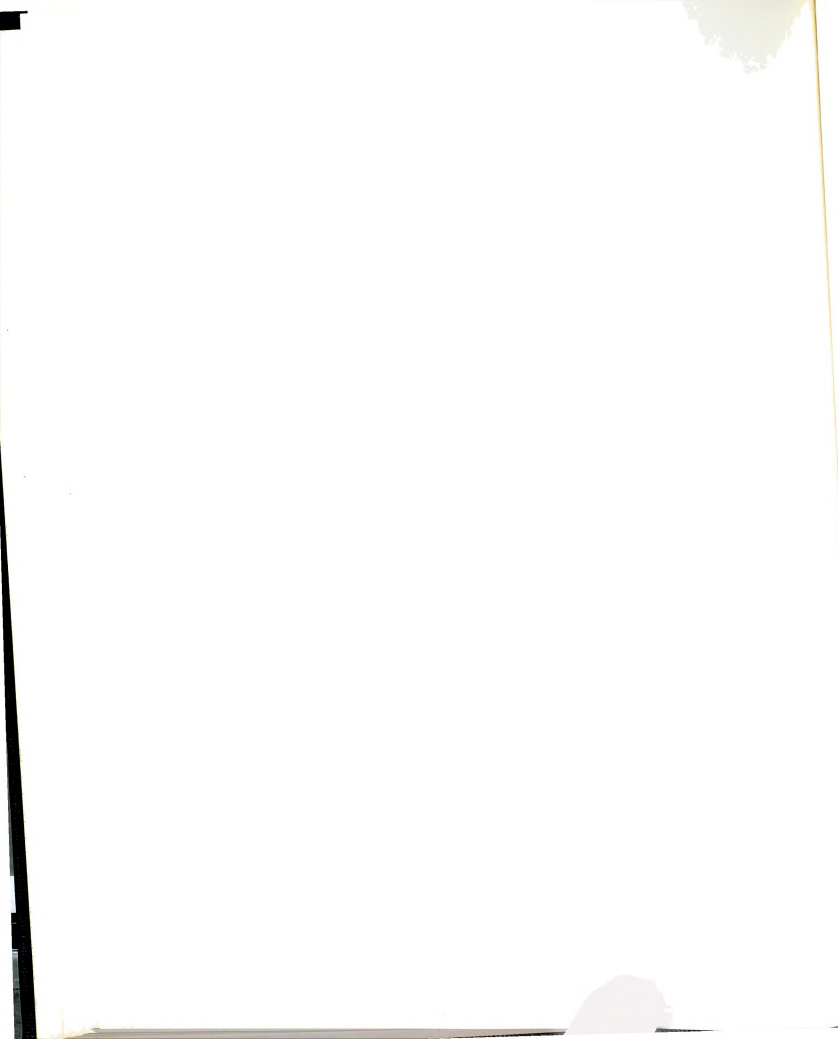


TABLE 3.8.--High school grade-point averages--ACT group.

High School G.P.A.	Participants				Non-Participants			
	Men		Women		Men		Women	
	No.	%	No.	%	No.	%	NO.	%
0.00-1.99	0	-	0	-	0	-	0	-
2.00-2.24	0	-	0	-	4	4.8	0	-
2.25-2.49	5	9.2	1	1.5	4	4.8	1	2.7
2.50-2.74	15	27.7	13	19.6	20	24.0	2	5.4
2.75-2.99	22	40.7	18	27.2	26	31.3	19	51.3
3.00-3.24	6	11.1	25	37.8	23	27.7	10	27.0
3.25-3.49	5	9.2	7	10.6	4	4.8	2	5.4
3.50-4.00	1	1.8	2	3.0	2	2.4	3	8.1
Totals	54	99.7	66	99.7	83	99.8	37	99.9
Mean:	2.83		2.98		2.86		3.01	
S.D.:	0.25		0.24		0.31		0.29	



Means and standard deviations were calculated for both SAT and ACT groups. These groups were further divided into participants and non-participants by sex. The means by sex of the participants were compared to non-participants by use of Z-scores, which were used because of the large sample sizes.

The difference between the means of participants and non-participants by sex is presented in Table 3.9.

TABLE 3.9.--Difference between means of participants and non-participants by sex and by test group for high school grade point average--Z-scores.

Test Group	Men	Women
SAT group high school grade-point average	.91	1.52
ACT group high school grade-point average	-.73	-.50

Alpha = .05

Critical value = ± 1.96

For an alpha level of .05 the rejection region is ± 1.96 . All of the above Z-scores are below the critical value of ± 1.96 , indicating that the participants may reasonably be expected to have come from the same population in respect to high school grade-point average.

Another comparison between participants and non-participants was made on the basis of the credit hours for which they enrolled in the Fall Quarter 1969 when they matriculated in college. The data are presented in Table 3.10.

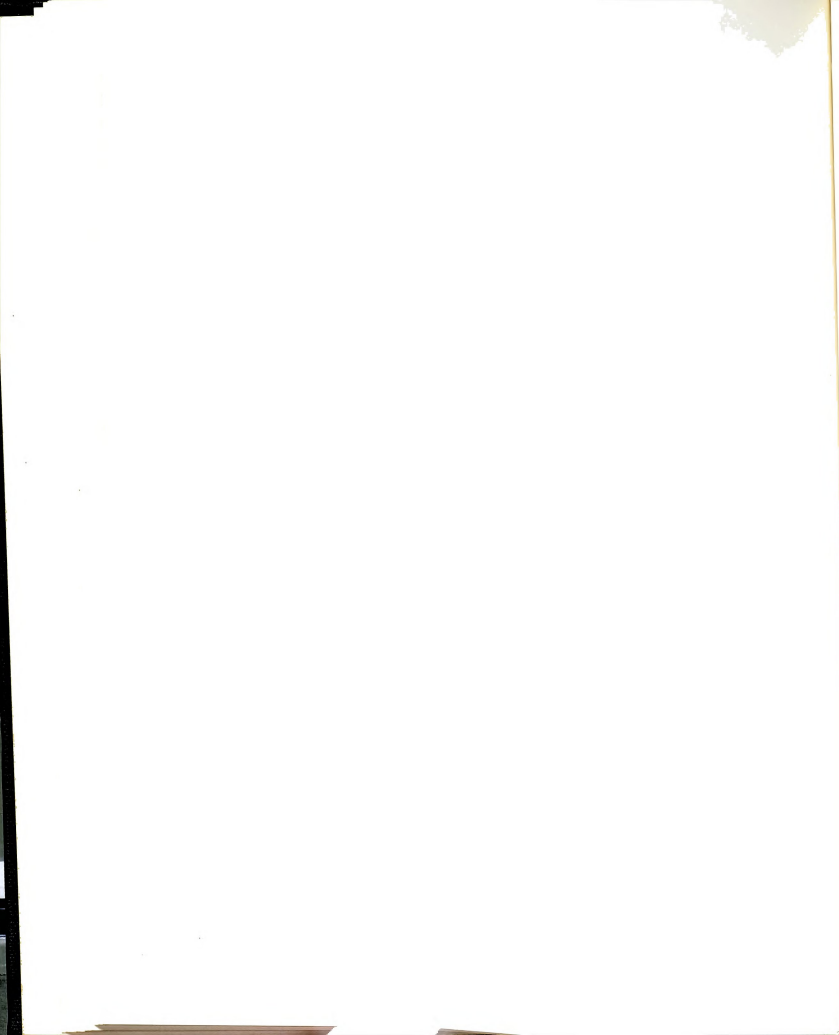


TABLE 3.10.--Mean credit hours--Fall Quarter 1969.

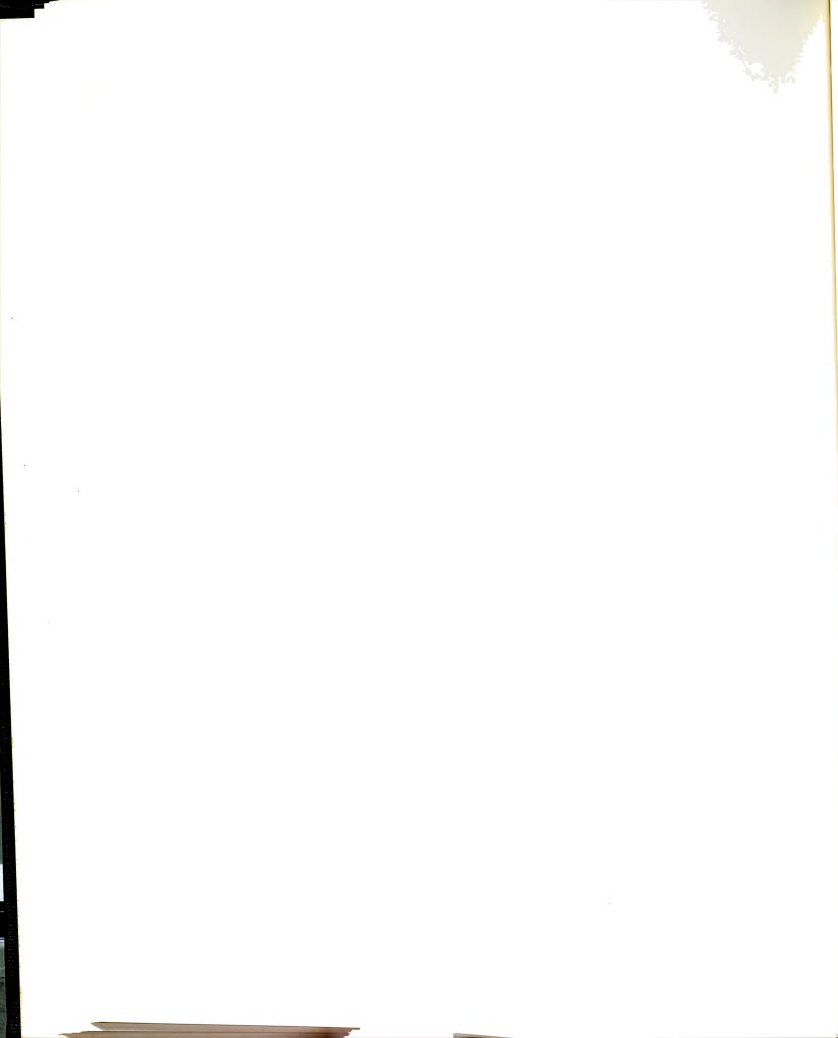
Test Group	Participants				Non-Participants			
	Men		Women		Men		Women	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
SAT Group	15.59	2.73	14.95	1.87	15.32	2.49	14.47	2.68
ACT Group	15.73	1.95	14.20	3.16	15.13	2.65	13.15	4.07

The difference between the means of participants and non-participants by sex and by aptitude test group is presented in Table 3.11 below.

TABLE 3.11.--Difference between means of participants by sex and by test group for Fall credit hours carried--Z-scores.

Test Group	Men	Women
SAT Group	1.43	2.01
ACT Group	1.52	1.36
Alpha = .05		Critical value = ± 1.96

Three of the Z-scores fell below the critical value of ± 1.96 , but the fourth was 2.01 or .05 above the critical score; this represented the difference between mean scores of women participants and non-participants who took the SAT. Therefore, in respect to credit hours



carried the population of participants differed. Although the difference was relatively small and only for one of the four measures, it was significant. However, because the influence of the element of credit hours carried is not believed to be of strong importance in and of itself, it was felt that this difference would not destroy the comparative analysis between participants and non-participants.

Another comparison between the two groups was based on the place of college residence. Table 3.12 below provides data relating to residence.

TABLE 3.12.--College residence.

Residence	Participants				Non-Participants			
	Men		Women		Men		Women	
	No.	%	No.	%	No.	%	No.	%
On-Campus	320	83.3	260	73.5	447	80.6	142	71.0
Off-Campus	44	11.5	61	17.2	64	11.6	39	19.5
At Home	20	5.2	33	9.3	43	7.8	19	9.5
Totals	384	100.0	354	100.0	554	100.0	200	100.0

A contingency table was prepared and chi square (χ^2) was run to compare the independence of the participants and non-participants in respect to their college residence. The χ^2 value was .6627. With an alpha of .05, the critical value is 5.99 with two degrees of freedom. This is an indication that the two groups were alike with



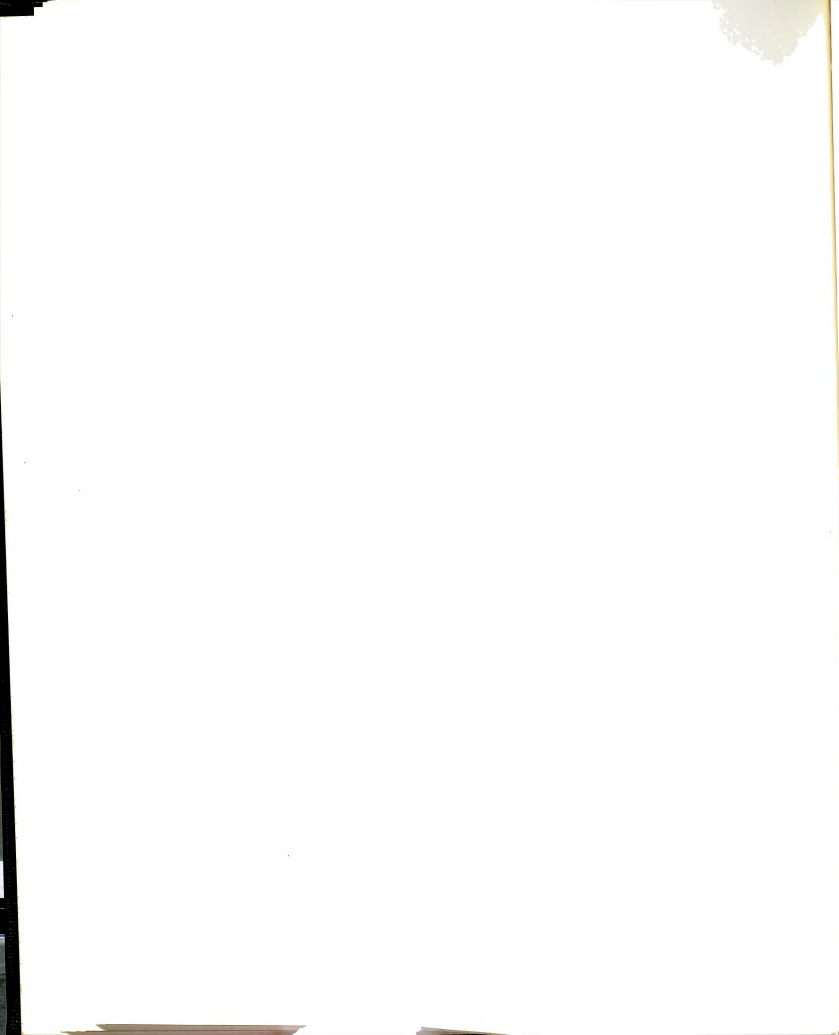
respect to the place in which they chose to live. It was apparent that a very large proportion of all new freshmen students lived away from home and mostly on-campus.

Because of the importance of determining comparability of the two populations of participants and non-participants as closely as possible, an additional check was made.

Due to an oversight in mailing procedures during the summer of 1969, a number of brochures announcing the orientation were not mailed to new students. The exact number was not known although it was thought to be a fairly sizable group. All of the non-participants who could be reached by telephone or by letter and who would respond were contacted. They were asked simply whether or not they had been aware of the existence of the orientation program prior to their matriculation in the Fall Quarter 1969.

As a result of this survey, 44 such students were located. Originally, estimates indicated that the figure would be higher, that there would be approximately 70 such students. Over 90 per cent of all non-participants were reached and responded. It was felt that the 44 students who were unaware represented the total population from which both participants and non-participants were drawn.

For another purpose explained below, a sample of 57 students who had not taken part in orientation was gathered. The 44 students who had been totally unaware of



orientation were compared to the 57 who had been aware of orientation but had chosen not to attend.

To make the comparisons, basic statistics were obtained for both the "aware" and the "unaware" groups mentioned above. The basic statistics were limited to those who had taken the SAT as the aptitude test, because the numbers taking the ACT were too limited for adequate comparisons. The statistics gathered were means and standard deviations for high school grade-point average, SAT verbal and SAT quantitative scores, and Fall Quarter credit hours. The differences between these means were compared by use of Z-scores. These data are summarized in Table 3.13. In addition, a multivariate analysis of variance (MANOVA) was calculated to compare academic achievement, persistence, and participation in activities between the "awares" and the "unawares." The MANOVA included both SAT and ACT groups. These data are summarized in Table 3.14.

The Z-scores calculated from the basic statistics were all within the critical value of ± 1.96 for an alpha level of .05. This indicated that the two samples were from similar populations in respect to the qualities measured.

The multivariate F-ratio for the two groups of aware and unaware non-participants did not indicate significant difference between these groups. There was no interaction. There was a significant difference in the multivariate F-ratio for sex. The univariate F-ratio

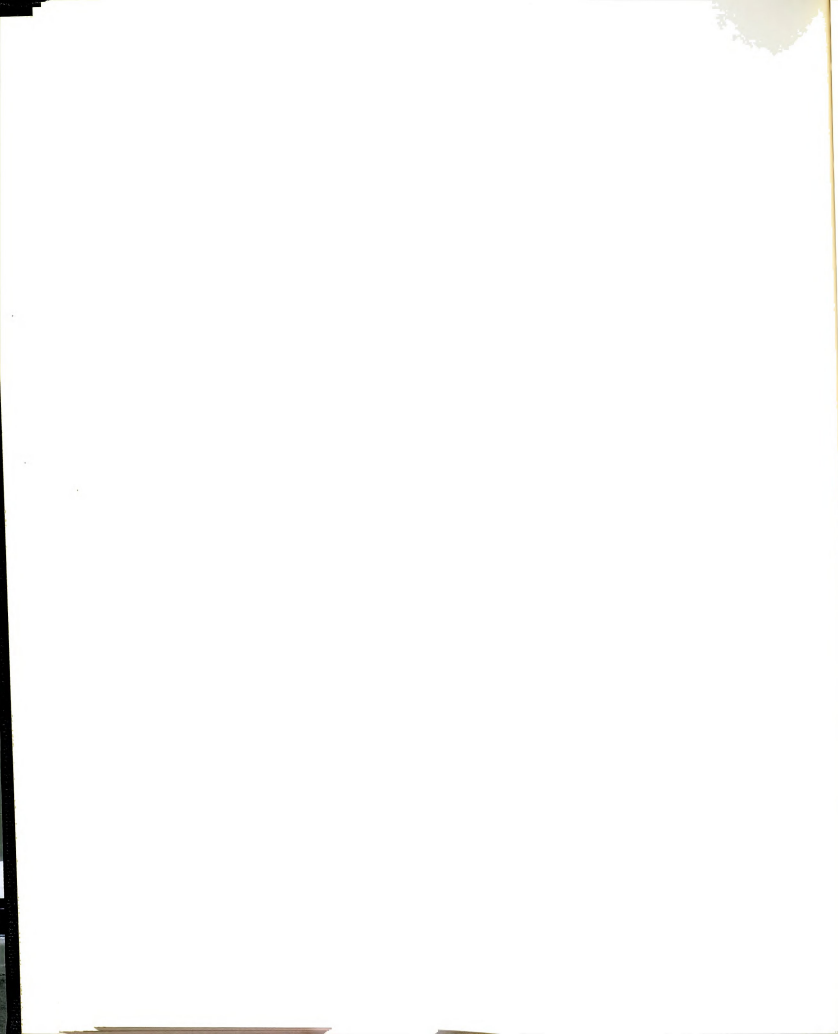


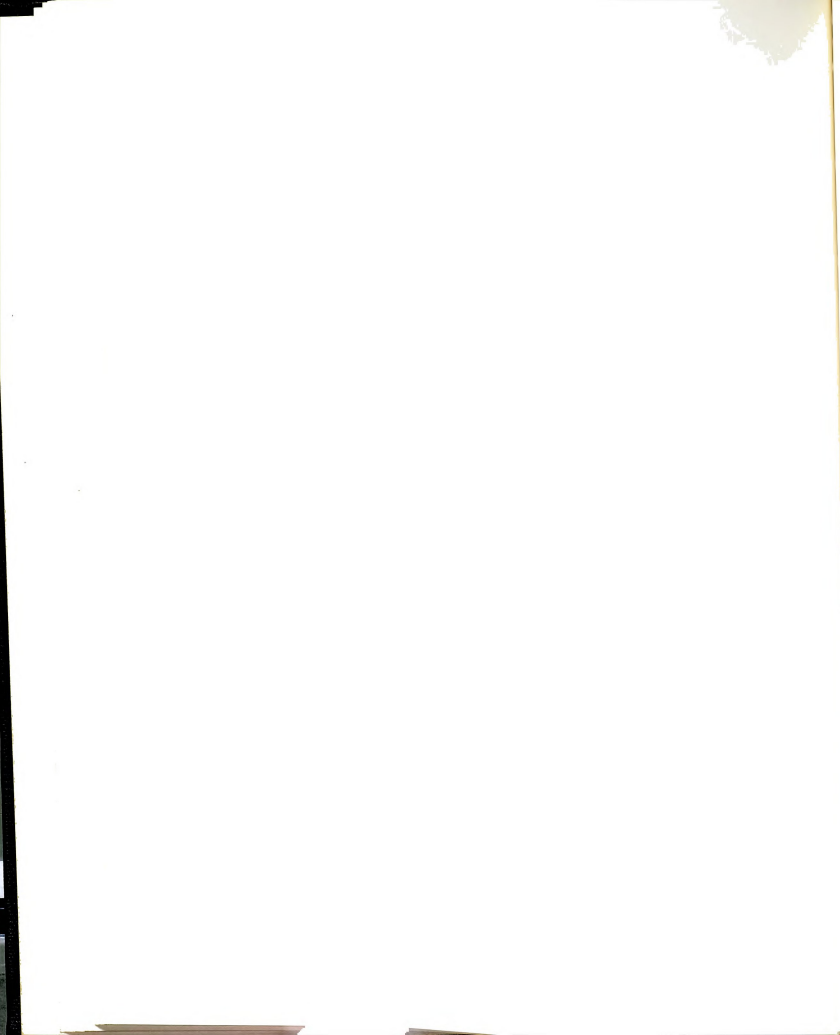
TABLE 3.13.--Means and standard deviation of non-participants who were aware and unaware of orientation, for high school grade-point averages, aptitude scores and Fall Quarter credit hours.

Category	Aware		Unaware		Z Score
	\bar{X}	S.D.	\bar{X}	S.D.	
High School G.P.A.	3.10	.401	3.01	.369	1.047
SAT					
Verbal	490.954	92.743	475.083	91.106	.765
Quantitative	549.209	93.813	541.694	75.944	.393
Fall Credit Hours	15.360	2.158	15.292	2.146	.140
Alpha = .05			Critical value = ± 1.96		

TABLE 3.14.--Multivariate F-ratio for aware and unaware non-participant students--comparing academic achievement, persistence in major and in college, and participation in organized activities.

Source of Variation	F-Ratio	P
Group	1.1475	0.3351
Sex	2.5405	0.0061**
Group X Sex	.4178	0.9589

**Significant at .01 level of confidence.

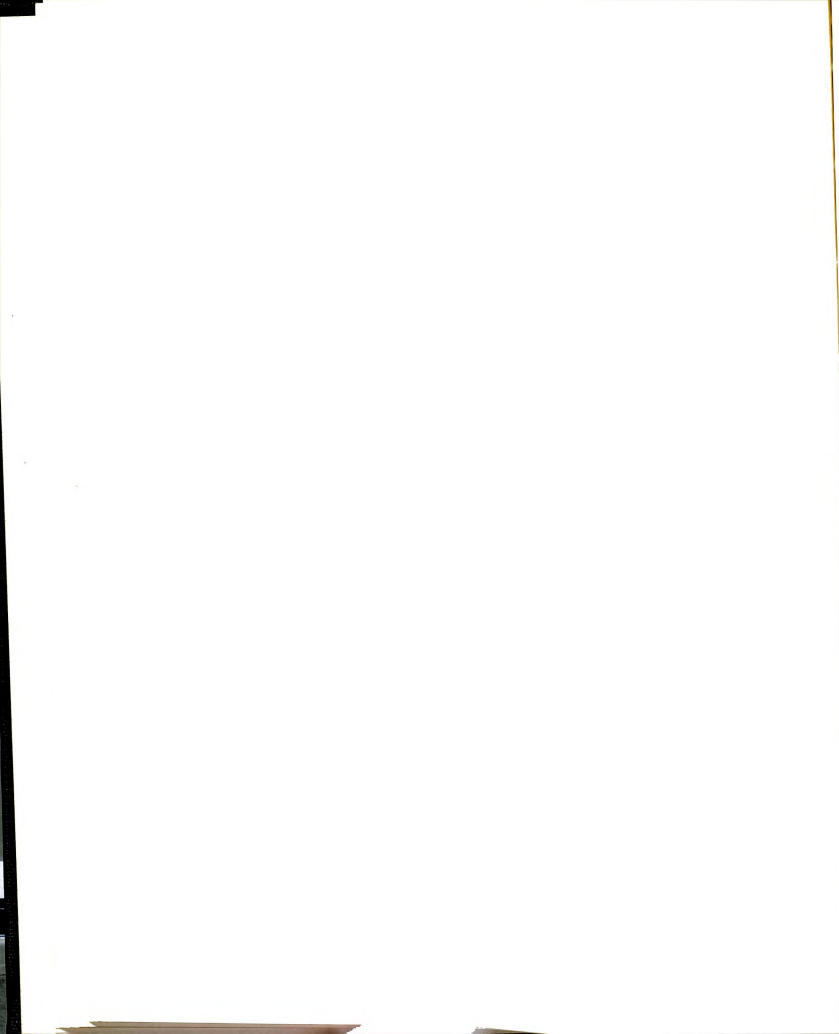


produced by the program for analysis of the independent variables revealed that significant difference occurred between the sexes in high school grade-point average and in activity number five which was athletics. Further data are found in Appendix C. Since women students frequently attain better grades in high school and since men overwhelmingly outnumber women students in athletic participation, these differences are understandable.

Although these tests do not guarantee that the entire group of participants and the entire group of non-participants were from a single population, for the purpose of this study, they do lend further credence to the possibility that both groups were from one population.

The comparison of the participants to the non-participants suggested that the two groups were much alike. The most noticeable difference was in the proportions of men and women students with a noticeably higher proportion of women students participating in contrast to the non-participants. However, the statistical procedure used in the study takes this factor into account and this reduces the impact of the difference. This is further discussed in the section on methodology.

In addition to the two large groups of participants and non-participants, there were other samples taken from the two populations of freshmen in order to study various aspects of the orientation program.



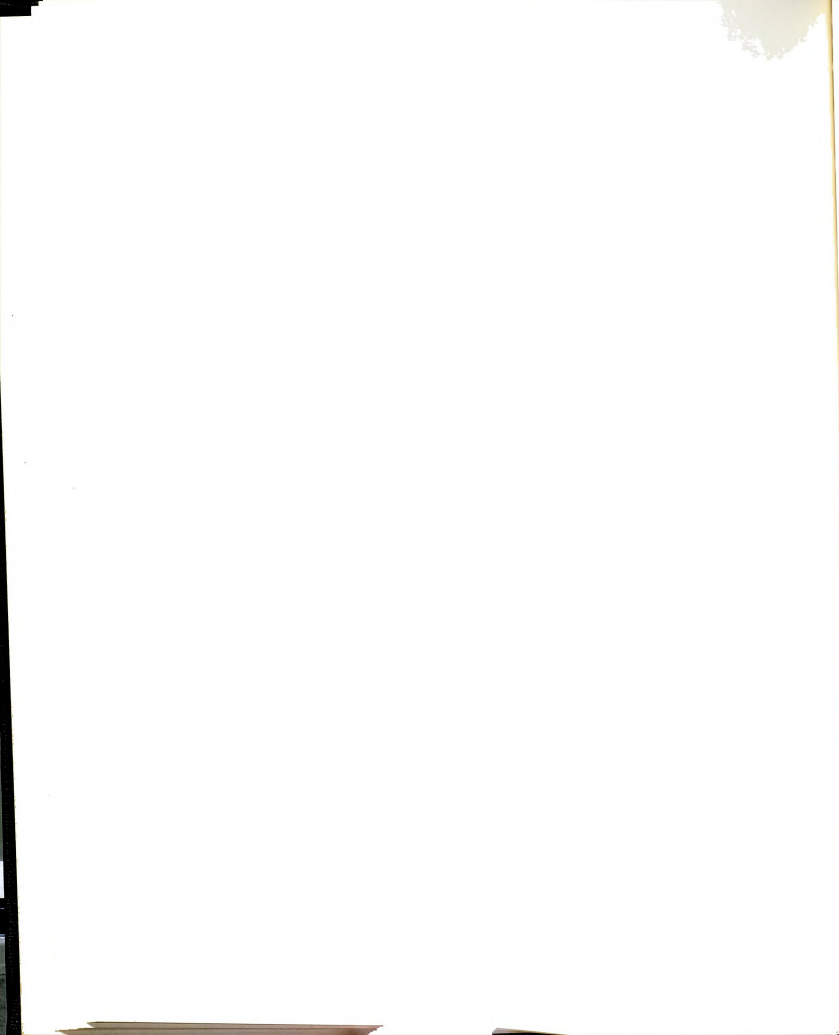
The first sample in point of time was an opinion survey. Thirty days after the beginning of classes, a questionnaire containing 18 structured items and two free response items was sent to every third student on the list of freshmen. A copy of the questionnaire is found in Appendix A. This method of sampling was believed to be adequate in view of the large sample size--497.

Of the 497 questionnaires issued, 456 (91.8 per cent) were returned. This high percentage of return was attributed to an intense follow-up. Three persons called the students on the telephone to request completion and return of the questionnaire as soon as the date for return was passed. Table 3.15 below lists the return by sex and by participation in orientation.

TABLE 3.15.--Response to opinion questionnaire relating to orientation.

	Men	Women	Total
Participant	151	123	258
Non-Participant	135	47	198
Totals	286	170	456

The proportion of men and women students in this sample are approximately the same as the total population. However, the ratio of participants to non-participants was high. This sampling variation is not readily explained



other than by chance factors, in view of the high return and the large size of the sample.

A second sample of 140 students was drawn at the end of Winter Quarter, nearly six months after orientation. This sample was drawn by using a series of random numbers generated by the campus computer (IBM 360/40). The last four digits of the student number were the basis of selection. These 140 students were students who had participated in orientation. Each of these students was provided a brief questionnaire. Of the 140 students, 115, or 82.1 per cent, responded.

The six months time period between orientation and the questionnaire issuance was designed to help overcome halo effects of orientation. It was believed that responses concerning orientation would be based upon a more thoughtful reflection of what occurred rather than more immediate impressions of the event.

The questionnaire contained only three questions relating to orientation. These questions were phrased in such a way as to allow freedom of response within a somewhat specific context. The questionnaire can be found in Appendix D.

The 115 students in the sample were drawn from the 738 participants in orientation. Of this group 49 were women and 66 were men. Table 3.16 provides other comparative information for this sample. Ages and residence at College were not calculated. There were so few students

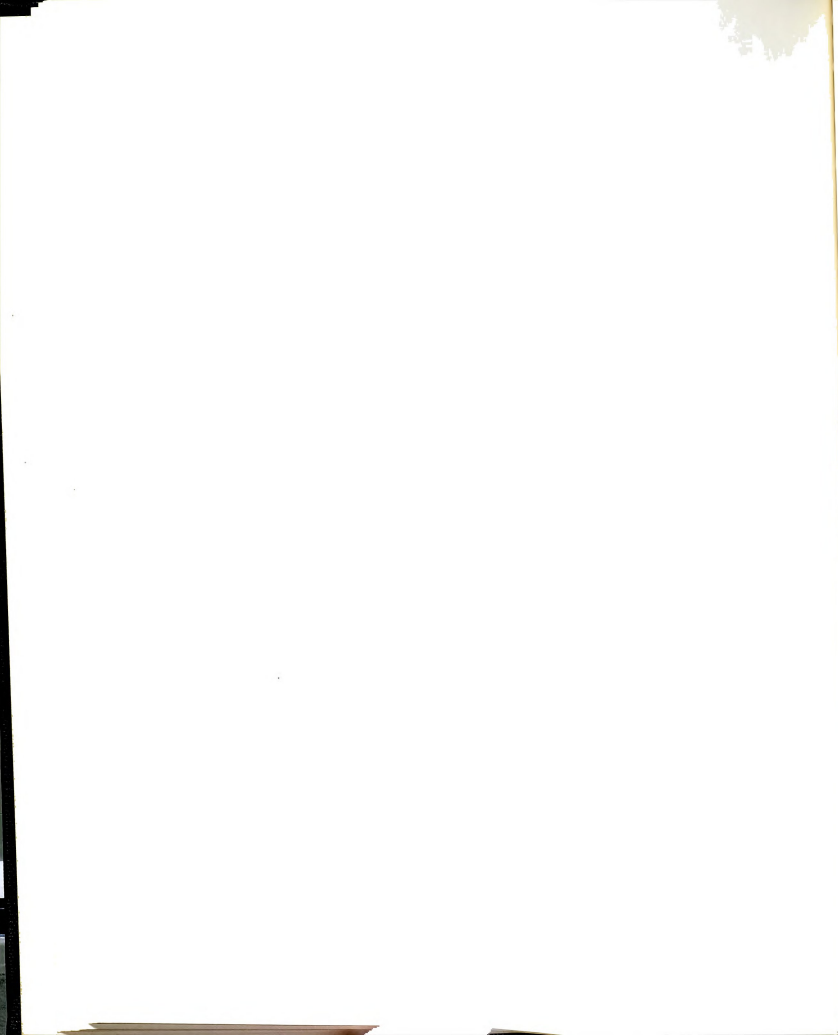


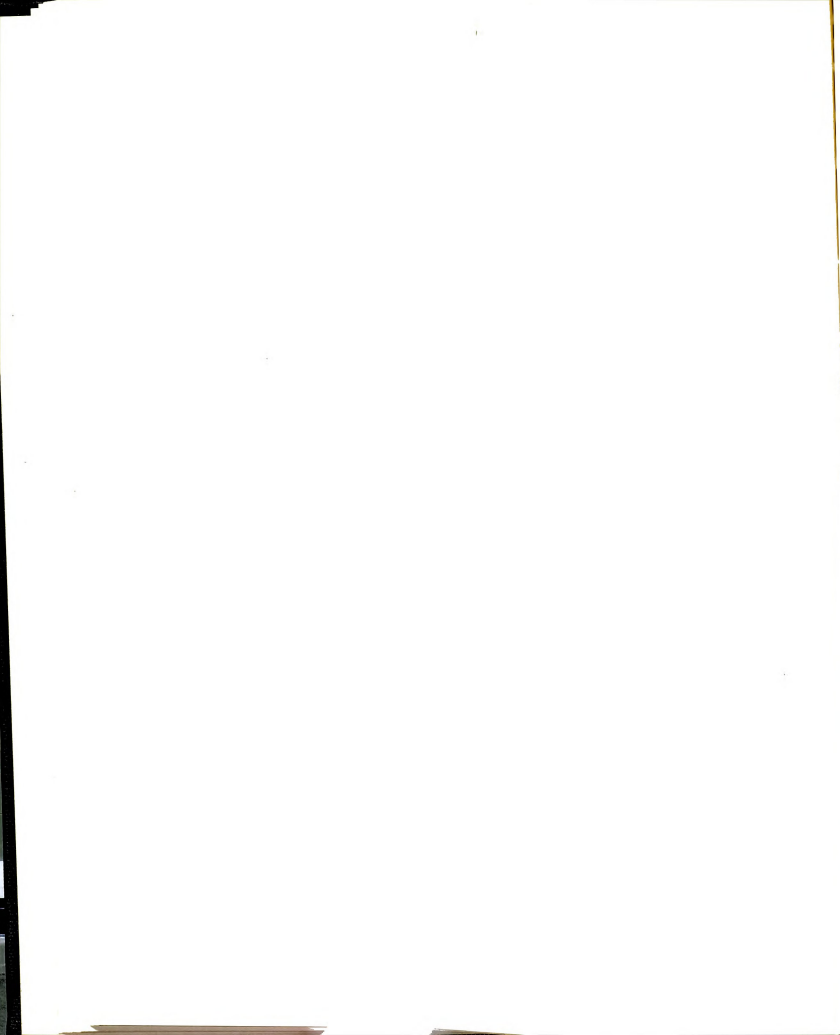
TABLE 3.16.--Means and standard deviations for sample of 115 participants for high school grade-point average, aptitude, and Fall Quarter credit hours, compared to all participants by use of "z" or "t" scores.

Category	Men			Women		
	\bar{X}	S.D.	"z" or "t" scores ^c	\bar{X}	S.D.	"z" or "t" scores ^c
High School Grade-Point Average:						
SAT Group	3.01	.36	.392	3.16	.35	.169
ACT Group	2.96	.24	-1.585 ^a	2.99	.26	-.481 ^b
Aptitude:						
SAT-Verbal	489.56	81.47	-.188	494.03	84.21	-.025
SAT-Quantitative	575.61	90.82	.133	491.11	81.73	.463
ACT-Verbal	19.01	4.01	.499 ^a	21.24	4.06	.108 ^b
ACT-Quantitative	24.21	4.56	.315 ^a	19.72	5.16	-.387 ^b
Credit Hours	15.49	2.95	.235	14.98	1.92	-.091

^at-score with d.f. 63, alpha .05 with critical value ± 1.645 .

^bt-score with d.f. 73, alpha .05 with critical value ± 1.645 .

^cAll other scores z-scores, alpha .05 with critical value ± 1.96 .



other than 18, or close to it, and so few students living other than on-campus or in a large off-campus facility within walking distance of the campus that these data were not believed of sufficient value to warrant inclusion in checking the sample.

The data in Table 3.16 indicated that the sample of 115 participants can be considered reasonably similar to the entire group of participants. No Z-score or t-score used to test the difference between means of the sample and entire group of participants exceeded the critical value. The t-score was used for the ACT group because the number of men and women students in the sample group was below 30, being 11 for men and nine for women.

Another sample drawn after the completion of two quarters was one of 70 students who did not participate in orientation. This sample was selected randomly in the same manner as the sample of 140 participants above. Of the 70 selected, 57 (35 men and 22 women) were reached and responded to a request for an interview. This was a return of 81.4 per cent. The questions and responses were recorded on an interview sheet which is included in Appendix E.

This sample appeared to be representative of the non-participants. Table 3.17 provides summary and comparative data for this sample. The table includes summary data only for the students who completed the SAT examination inasmuch as only eight students in this group took

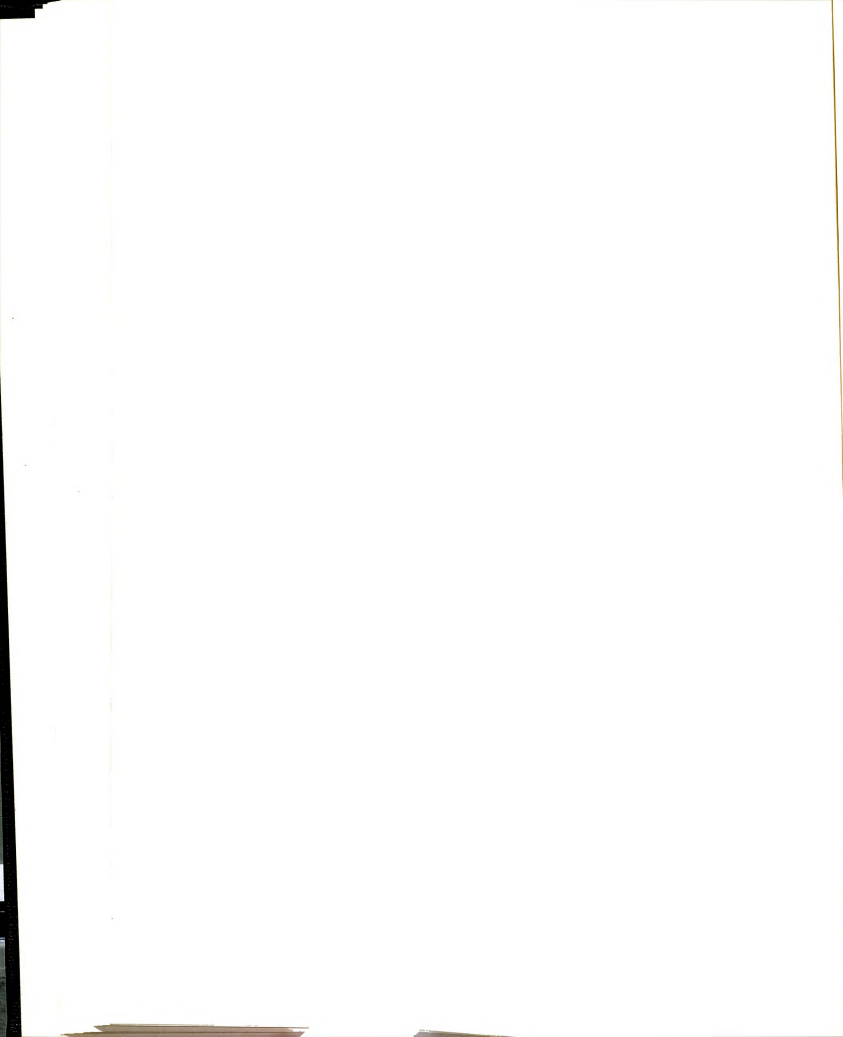


TABLE 3.17.--Means and standard deviations for a sample of 49 non-participants for high school grade-point average, SAT verbal and quantitative score, and Fall Quarter credit hours, compared to all non-participants in the SAT grouping.

Category	Men ^a			Women ^b		
	\bar{X}	S.D.	Z-score	\bar{X}	S.D.	t-score
High School grade-point average	3.10	.401	.123	3.141	.399	-.173
Aptitude						
SAT-Verbal	490.954	92.743	-.712	495.146	87.382	-1.209
SAT-Quantitative	549.209	93.813	.969	496.010	83.932	-1.188
Credit hours	15.360	2.158	.111	14.866	2.514	-.611

^aN = 32 men

^bN = 17 women

Alpha = .05

For Z-scores Critical value is ± 1.96 and for t-scores is ± 1.645 .



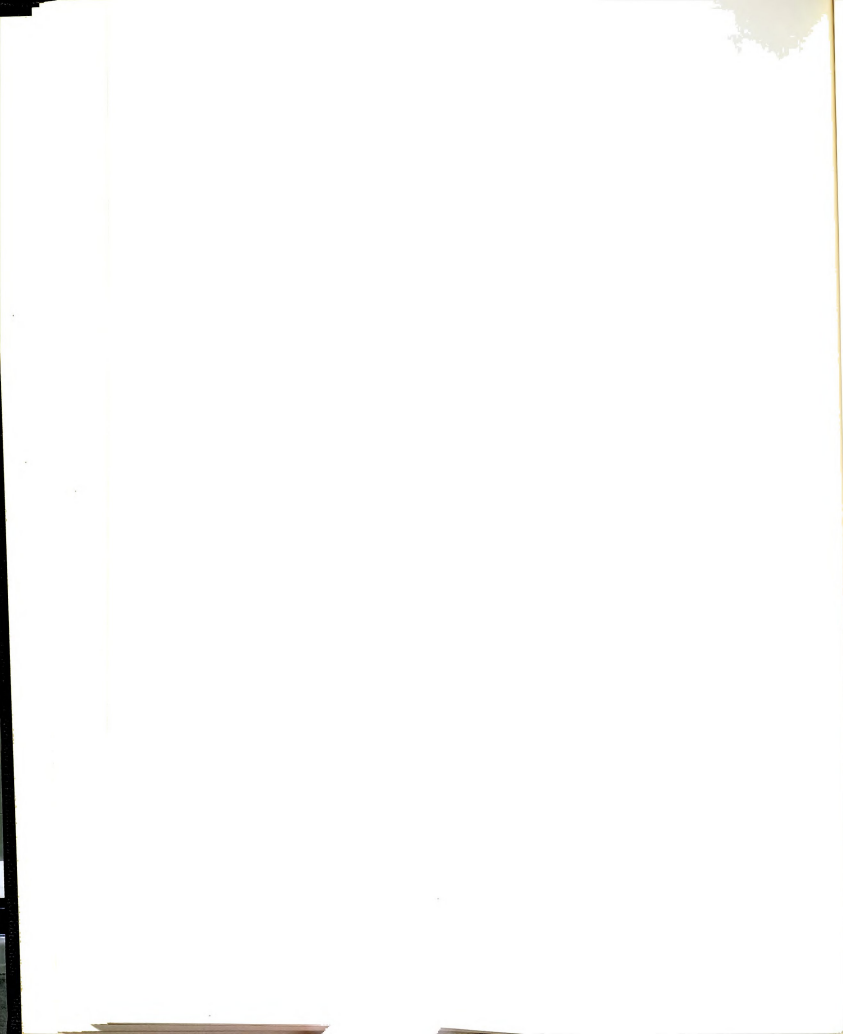
the ACT. The difference between the means for the men were compared by use of Z-scores and for the women by t-scores since the sample for women was under 30.

The data indicated that the sample reasonably represented the population of non-participants for the comparisons made. No Z-score or t-score exceeded the critical value for any comparison.

The 57 students who responded to the request for interview were students who were fully aware of orientation, but did not participate.

Design of the Study

The basic design of this study is similar to the Recurrent Institutional Cycle Design as presented in Campbell and Stanley (1966, p. 57). This design is appropriate when it is not feasible to randomly assign subjects to treatment groups. In this case, it was believed unreasonable to assign students to participate or not participate in orientation. To have forced students to participate against their wishes and to have deprived participation to those wanting to participate would have created immeasurable administrative difficulties and would have very likely caused emotional reactions among the students sufficient to distort badly any results. As a consequence, it was realized at the outset that causal statements could not be made concerning any findings of the study.



It was also realized that in a comparative study such as this, statements of plausibility are about all that can be made. As indicated above, the populations and samples of participants and non-participants were checked in various ways to assure as near comparability of basic populations as possible.

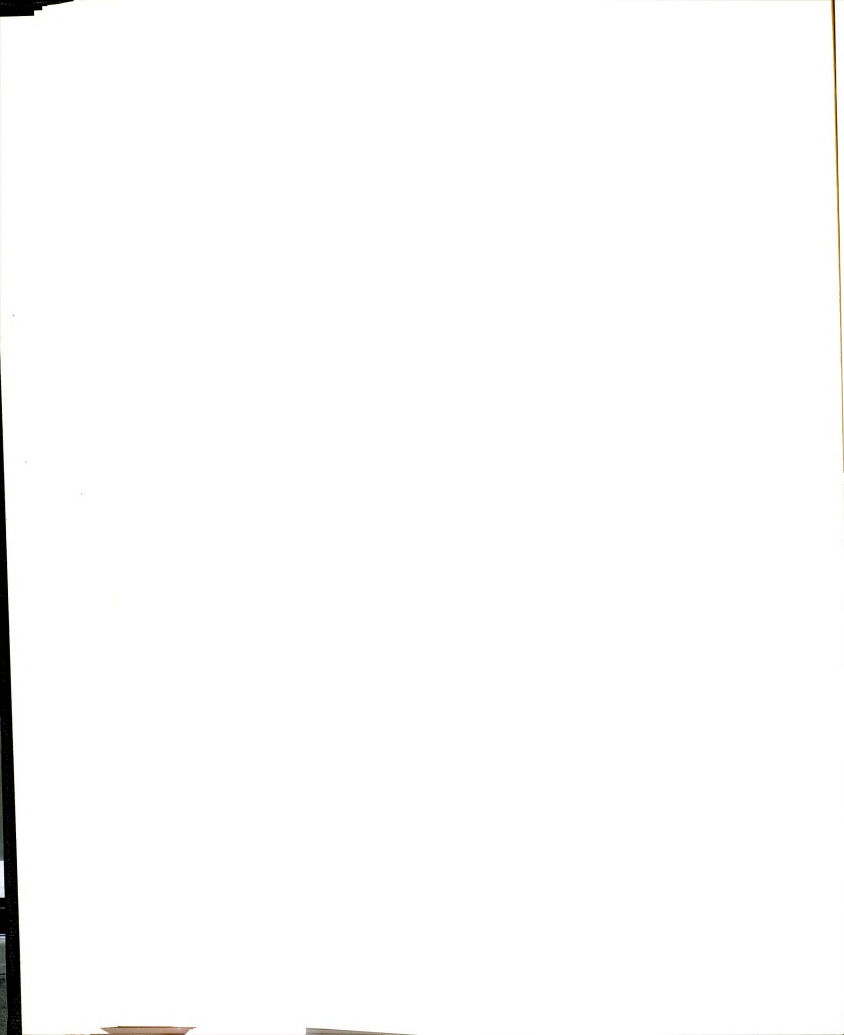
For the purposes of this study, the checks that were made indicated that it was plausible to assume that the participants and non-participants came from the same basic population.

Methodology

The methodology of the study involved the contrasting of the freshman participants with the freshman non-participants in orientation. Contrasts were made for Fall and Winter Quarter grades, Fall and Winter Quarter change of major, Fall and Winter Quarter drop-out, and Fall and Winter participation in co-curricular activities.

In addition, a questionnaire was obtained from a sample of participants to garner data concerning referral sources to orientation and values assessed to orientation. Also, an interview was held with a sample of non-participants to determine their reasons for non-participation.

A questionnaire was issued to a sample of participants and non-participants to ascertain their opinion on a number of facets of the College and their relationship and feelings regarding the College. There were 18



structured items and two free response items on the questionnaire. The questionnaire was tested in two separate education classes prior to use. Suggestions made by the classes were incorporated in the questionnaire.

Hypotheses

The research hypotheses of this study were initially stated in Chapter I. These hypotheses are grouped into three general categories. The first category relates to the hypotheses regarding academic achievement, persistence in the major and College, and participation in co-curricular activities. The second category relates to the responses made on the questionnaire regarding the referral sources of student to orientation, the value placed on orientation by participants, and to the interview regarding reasons for not participating by non-participants. The third category relates to responses made by students on the opinion questionnaire.

Category 1

The hypothesis presented in this category is transformed into null or operational form. The hypothesis is:

Null Hypothesis I: No difference will be found between freshmen participating in orientation and freshmen not participating in orientation as defined by: (1) academic achievement represented by Fall and Winter grade-point averages; (2) persistence in the initially chosen

major field; (3) persistence in College; and (4) participation in College-sponsored co-curricular activities.

$$H_0: M_1 = M_2$$

$$H_a: M_1 \neq M_2$$

Legend:

M_1 = group mean of freshmen participants in orientation

M_2 = group mean of freshmen non-participants in orientation

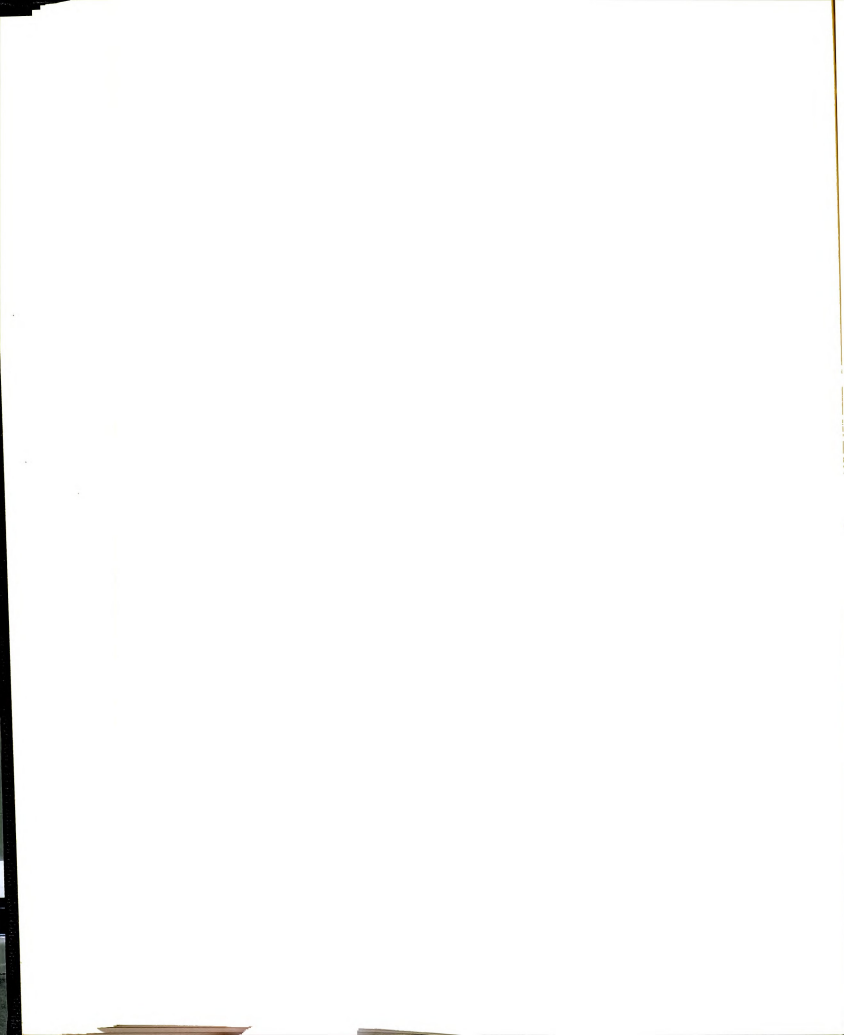
Category 2

The hypotheses in Category 2 lend themselves to direct statements and are not transformed into the null form.

Hypothesis II: It is hypothesized that students will become aware of orientation primarily through literature sent to them by the college and secondarily through peer group friends.

Hypothesis III: It is hypothesized that students who participate in orientation will indicate that the primary value of orientation to them will be the meeting of new friends and secondarily will be the gaining of knowledge of the physical aspects of the campus.

Hypothesis IV: It is hypothesized that students who participated in orientation will recommend participation to relatives and friends.



Hypothesis V: It is hypothesized that students who did not participate in orientation and who were aware of it, did not participate primarily because they were working and secondarily because of a lack of interest in such events.

Category 3

Hypothesis VI: Hypothesis VI was transformed into the null form. No difference will be found between freshmen participating in orientation and freshmen not participating in orientation in their responses to a survey of their opinions concerning the College and their relationship to it.

$$H_0: P_1 = P_2$$

$$H_a: P_1 \neq P_2$$

Legend:

P_1 = Response of freshman participants to the questionnaire items.

P_2 = Response of freshman non-participants to the questionnaire items.

Analysis of the Data

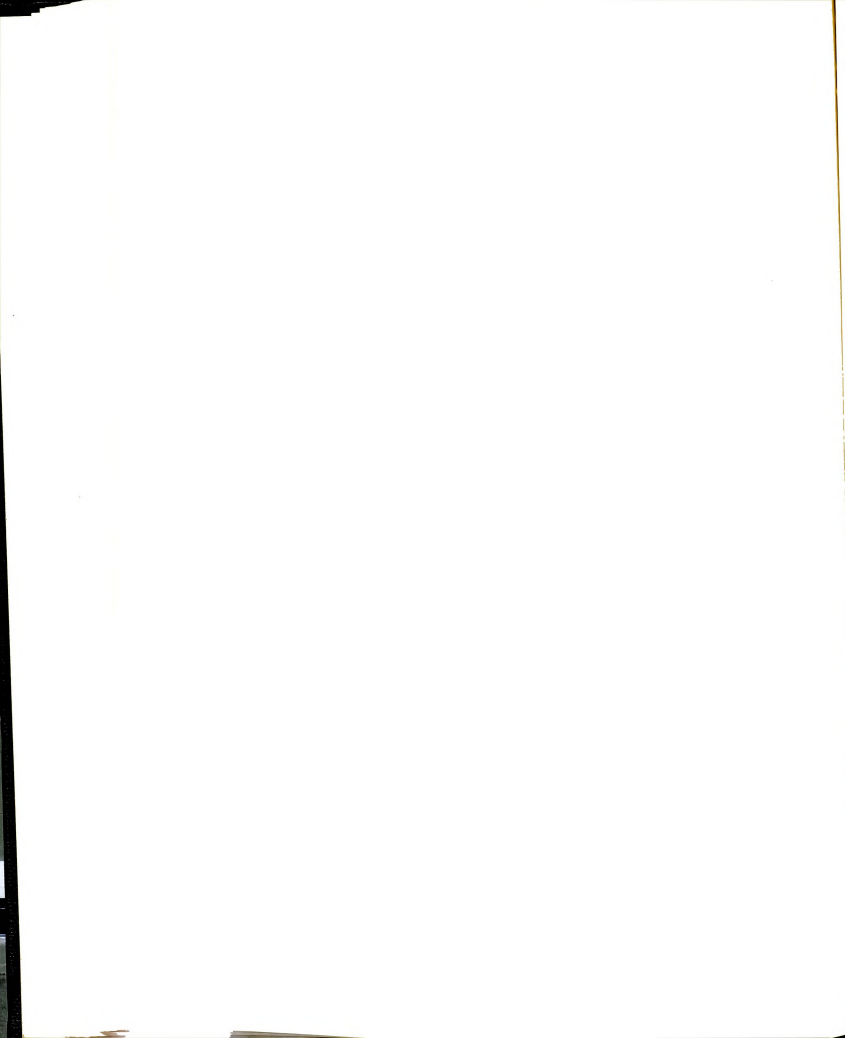
The data on the academic achievement, persistence, and participation in activities were analyzed by means of the multivariate analysis of variance (MANOVA). This analysis was made by a two-factor design which permitted the testing of the effect of many variables acting simultaneously. The independent variables were: group

(participant or non-participant), and sex. The selection of this method was due to the capacity of the multivariate analysis technique to identify variable interaction that allows the researcher to describe the interaction and relationships of the data being studied. Depending upon the particular test in question, the alpha level was set at the .01 or .05 level for the multivariate analysis of variance. In addition univariate F-ratios were produced for each of the 12 dependent variables under study according to group, sex and interaction of group by sex.

The computer program used was prepared by Jeremy Finn, State University of New York at Buffalo.

An initial run of the data was made using Multivariate Analysis of Covariance (MANCOVA), with the covariates being high school grade-point average, SAT-verbal scores, and SAT-quantitative scores. The initial run revealed that the covariates were not influencing the data to any extent. The use of the covariates required two separate runs, one for a large number of students who had taken the SAT and one for a smaller group (240) who had taken ACT only. By dropping the covariates, it was possible to merge the SAT group and ACT group and make one run using MANOVA. Summary details of the MANCOVA are listed in Appendix F.

The MANOVA form was appropriate to the study because there were two independent variables both of which were qualitative. There were the groups of participants



or non-participants and the sex of the participants and non-participants and 12 dependent variables which were quantitative such as college g.p.a. It was assumed that the population was normal. The large size of the population, 1,492 warranted such assumption (Hays, 1963, p. 352).

The MANOVA, as programmed by Finn, is a powerful technique and is suitable for use involving qualitative independent variables and quantitative dependent variables. It adjusts for the effect of unequal cells as existed in this study. It produces both a multivariate analysis where all the variables acting simultaneously are measured and a univariate analysis of each of the dependent variables.

Hypotheses II, III, IV and V were tested by summarizing the data and comparing the responses to the hypotheses. Simple percentages appeared to reveal the trends adequately.

Hypothesis VI was tested by use of a chi square test for homogeneity. Both dependent and independent variables were qualitative making this model useful for this purpose. An .05 level of confidence was selected as the criterion for testing the hypotheses. The two free-answer items were summarized and percentages of responses made to indicate trends. A chi square was calculated to test association of the nine most frequent responses on these two items.

Summary

The population of this study consisted of 1,492 freshman students who entered College in the Fall of 1969. Of this group 738 participated in freshman orientation and 754 did not. Demographic data was gathered and analyzed to compare the group of participants and the group of non-participants to determine whether or not it was plausible to assume that they were from the same population. Various tests indicated such plausibility.

Random samples were drawn from this population and from both groups to make studies concerning various aspects of orientation such as referral groups, values, reason for not participating. A large sample was drawn and administered an opinion survey.

MANOVA was used to test Hypothesis I. Hypotheses II, III, IV, and V were tested by analyses of trends by use of percentages. Chi-square test for homogeneity was used to test Hypothesis VI. The .05 level of confidence was selected as the level at which differences were considered as a result of factors other than chance.

CHAPTER IV

ANALYSIS OF RESULTS

In this chapter a report of the analysis of the data and a discussion of the results are presented. Tables are included which summarize the statistical information. The analysis is presented in three parts following the organization of the hypothesis in Chapter III. The first part relates to the hypothesis concerning academic achievement, persistence in the major and the College, and activity participation, and compares participants with non-participants in orientation.

The second part relates to a questionnaire and an interview concerning referral sources, expressed values of orientation, and stated reasons for not participating. The third part relates to a questionnaire survey of certain opinions, and compares the responses of participants and non-participants.

Part One--Multivariate Analysis of Variance

Hypothesis I.

No difference will be found between freshmen participating in orientation and freshmen not participating in

orientation as defined by: (1) academic achievement represented by Fall and Winter grade-point averages; (2) persistence in the initially chosen major field; (3) persistence in College; and (4) participation in College-sponsored co-curricular activities.

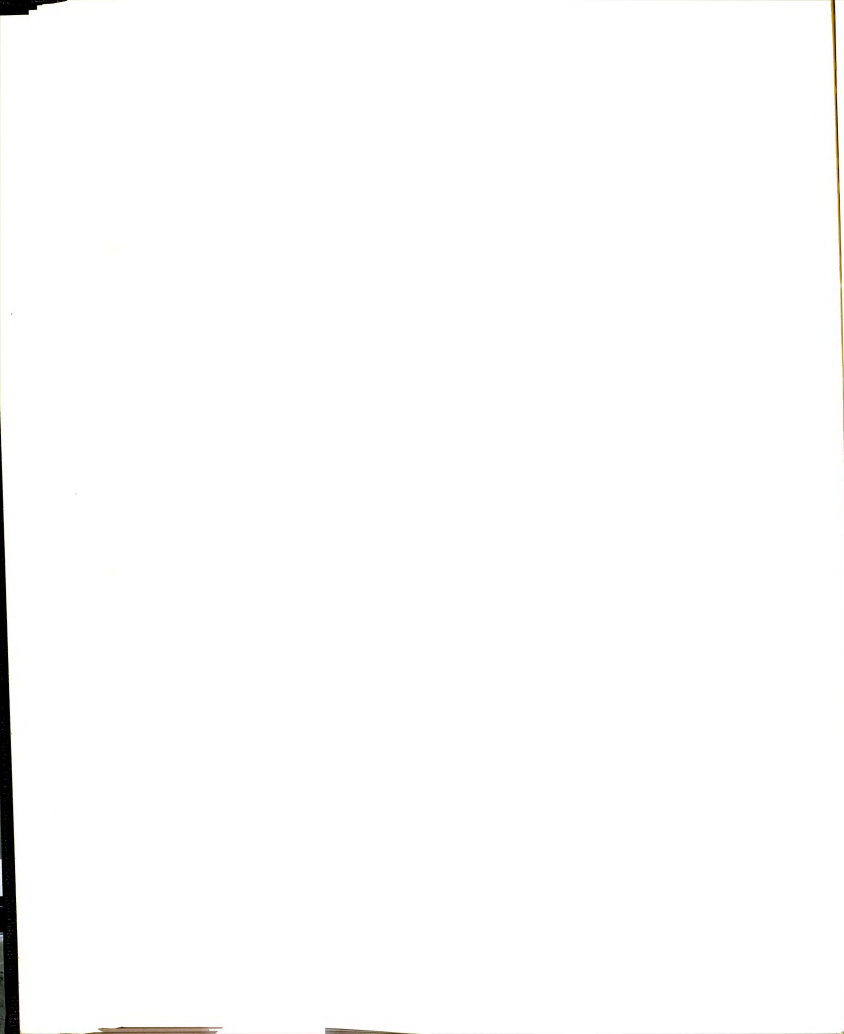
The hypothesis was tested by a multivariate analysis of variance. In addition, univariate F-ratios were produced for each of the 12 dependent variables. The results of the multivariate analysis of variance (MANOVA) are presented below. Table 4.1 is a summary of the multivariate F-ratio and P values for group effect, sex effect, and interaction of group by sex.

TABLE 4.1--Multivariate F-ratio and P values.

Source of Variation	F-Ratio	P
Group Effect	6,8236	.0001**
Sex Effect	17,0355	.0000**
Group X Sex	1,5617	.0964

** Significant at the .01 level.

The multivariate analysis of variance indicated that the group of participants differed from the group of non-participants with all of the variables acting simultaneously. The multivariate group effect produced an F-ratio of 6.8236 with a P-value of .0001 which is significant at the .01 level of confidence.

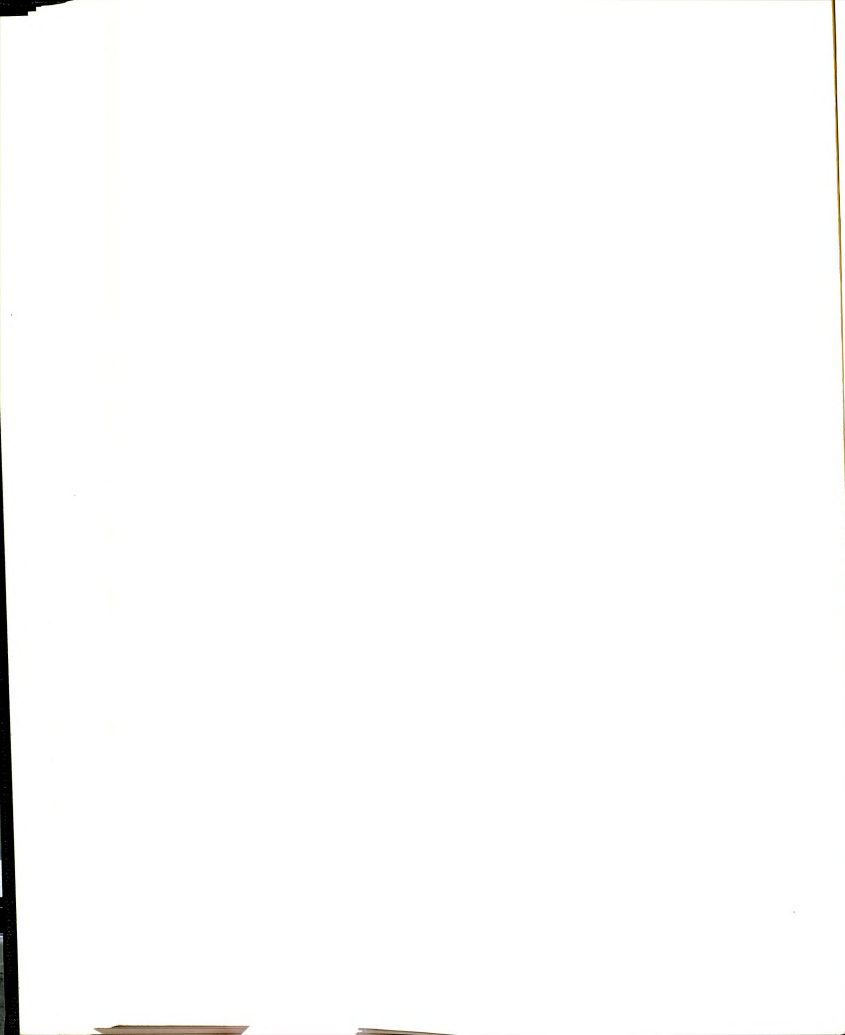


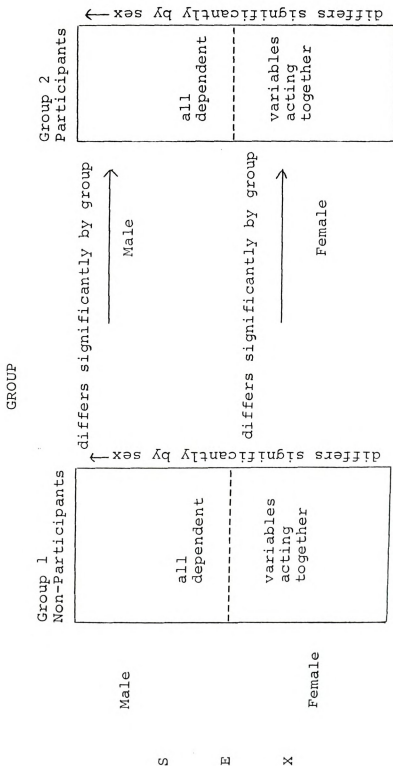
The multivariate analysis indicated that the sex effect differed. Since the next test of interaction of group by sex did not indicate significance, the multivariate F-ratio for sex was considered to be operating within the groups of participants and non-participants respectively. Figure 4.1 illustrates this relationship.

The multivariate sex effect produced an F-ratio of 17.0355 with a P-value of .000, significant at the .01 level of confidence.

In addition to the multivariate F-ratios, the multivariate analysis of variance as programmed by Jeremy Finn produced univariate F-ratios and P-values for 12 variables of interest. These measures were expressed for group effect, sex effect and interaction. The results of the univariate analysis are tabulated in Tables 4.2, 4.3, and 4.4. In Table 4.5 the cell means are tabulated in order to indicate the direction of difference.

The univariate F-ratios for group effect for the 12 dependent variables revealed that seven of the variables were significantly different. Table 4.2 presents this data. The seven variables which showed significant differences between the group of participants and the group of non-participants were: (1) Fall grade-point average with an F-ratio of 18.0191 with a P of .0001 which was significant at the .01 level of confidence; (2) Winter Quarter grade-point average with an F-ratio of 17.1096 with a P of .0001





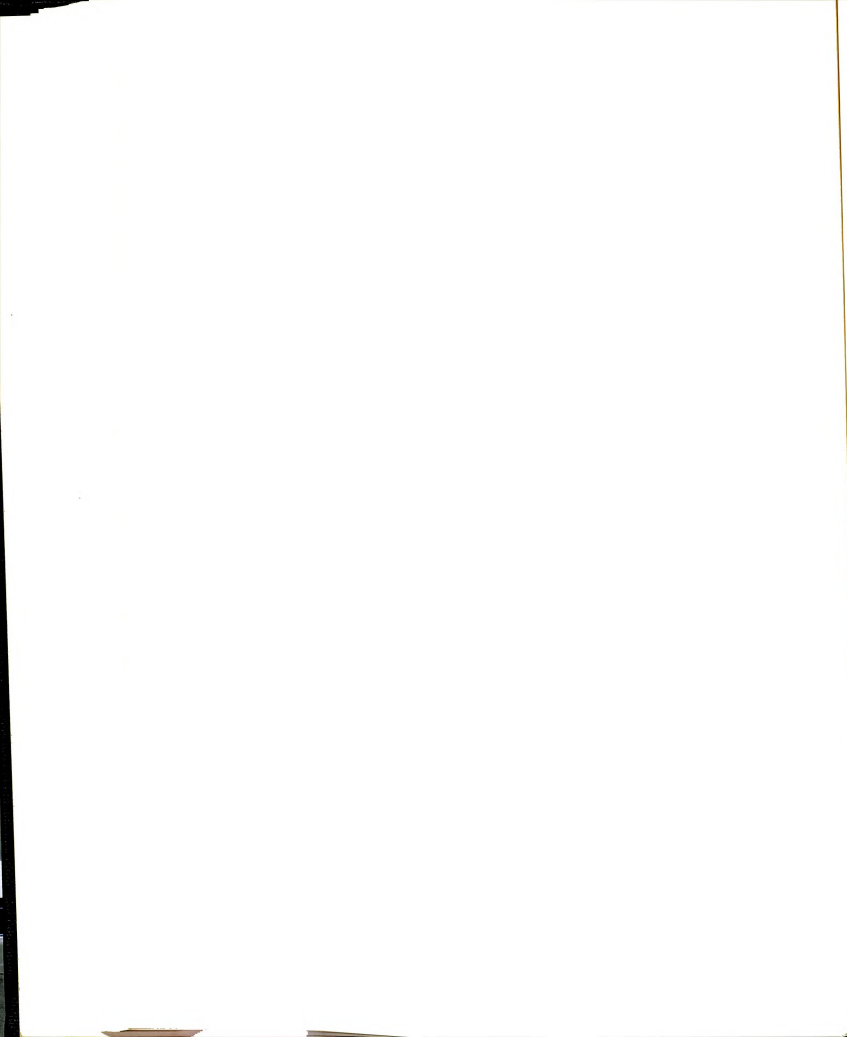


TABLE 4.2.--Univariate F-ratio for dependent variables--
Group Effect.

Source of Variation	Univariate F-Ratio	P
Fall Quarter - g.p.a.	18.0191	0.0001**
Winter Quarter - g.p.a.	17.1096	0.0001**
Change Major - Fall	1.2225	0.2691
Change Major - Winter	0.0251	0.8743
Drop-out - Fall	5.7375	0.0168*
Drop-out - Winter	10.9075	0.0010**
Activity-1, Residence Hall	43.7223	0.0001**
Activity-2, Clubs	3.3912	0.0658
Activity-3, Major, professional	1.7734	0.1832
Activity-4, Student Government	12.5239	0.0005**
Activity-5, Athletic	1.7502	0.1861
Activity-6, Music	4.2247	0.0401*

* significant at the .05 level.

**significant at the .01 level.

TABLE 4.3.--Univariate F-Ratio for dependent variables--Sex Effect.

Source of Variation	Univariate F-Ratio	P
Fall Quarter - g.p.a.	6.1600	0.0132*
Winter Quarter - g.p.a.	17.9755	0.0001**
Change Major - Fall	0.0094	0.9228
Change Major - Winter	2.3809	0.1231
Drop-out - Fall	0.0175	0.8950
Drop-out - Winter	0.4958	0.4815
Activity-1, Residence Hall	99.1974	0.0000**
Activity-2, Clubs	11.4493	0.0008**
Activity-3, Major, professional	0.4227	0.5158
Activity-4, Student Government	0.1652	0.6845
Activity-5, Athletic	39.3988	0.0001**
Activity-6, Music	19.1327	0.0001**

* significant at the .05 level.

**significant at the .01 level.

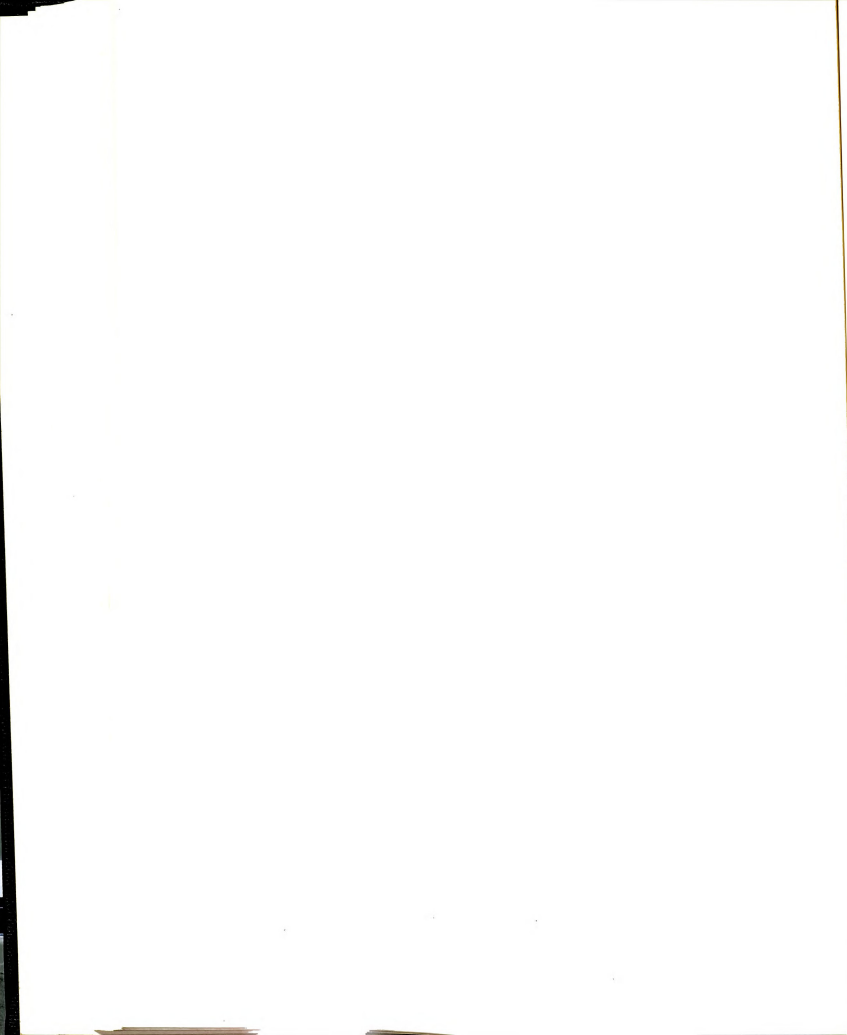


TABLE 4.4.--Univariate F-Ratio for dependent variables--
Interaction of group by sex.

Source of Variation	Univariate F-Ratio	P
Fall Quarter - g.p.a.	0.6174	0.4322
Winter Quarter - g.p.a.	4.5113	0.0339*
Change Major - Fall	0.1251	0.7237
Change Major - Winter	1.4736	0.2250
Drop-out - Fall	0.7963	0.3724
Drop-out - Winter	0.3603	0.5485
Activity-1,*Residence Hall	4.5804	0.0326*
Activity-2, Clubs	2.4051	0.1212
Activity-3, Major, professional	0.0538	0.8167
Activity-4, Student Government	0.4023	0.5260
Activity-5, Athletics	0.0060	0.9386
Activity-6, Music	4.7273	0.0299*

* significant at the .05 level.

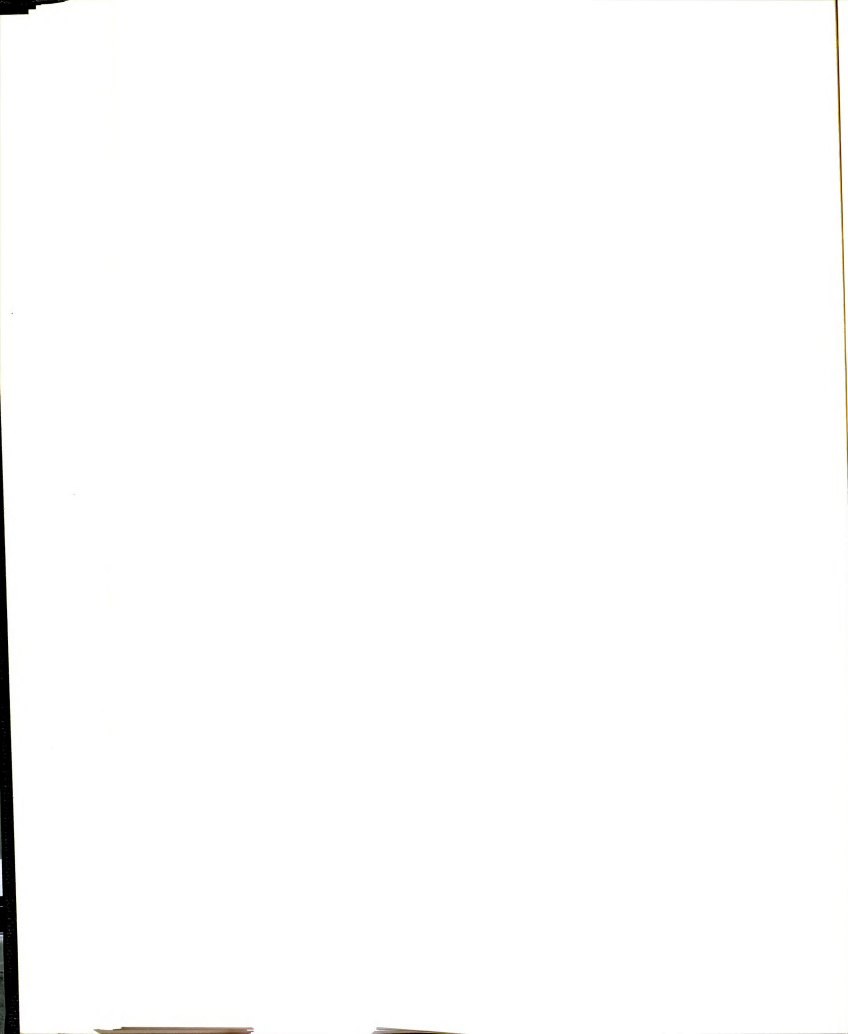


TABLE 4.5.--Cell means for dependent variables.

Category	Participants		Non-Participants	
	Men	Women	Men	Women
Fall Quarter - g.p.a.	2.5168	2.6357	2.4086	2.4685
Winter Quarter - g.p.a.	2.3662	2.6493	2.2994	2.3853
Change Major - Fall	0.9349	0.9407	0.9242	0.9200
Change Major - Winter	0.9766	0.9944	0.9838	0.9850
Drop-out - Fall	0.9740	0.9831	0.9585	0.9500
Drop-out - Winter	0.9792	0.9744	0.9495	0.9350
Activity-1, Residence Hall	0.1615	0.4181	0.1065	0.2700
Activity-2, Clubs	0.1172	0.1525	0.0794	0.1700
Activity-3, Major, professional	0.0885	0.1017	0.0740	0.0800
Activity-4, Student Government	0.0859	0.0734	0.0361	0.0400
Activity-5, Athletic	0.0703	0.0000	0.0686	0.0000
Activity-6, Music	0.0599	0.0056	0.0217	0.0050

which was significant at the .01 level of confidence; (3) Fall Quarter drop-out with an F-ratio of 5.7375 with a P of .0168 which was significant at the .05 level of confidence; (4) Winter Quarter drop-out with an F-ratio of 10.9075 with a P of .0010 which was significant at the .01 level of confidence; (5) Activity 1--residence hall organization--with an F-ratio of 43.7223 with a P of .0001 which was significant at the .01 level of confidence; (6) Activity 4--participation in student government and related committees--with an F-ratio of 12.5239 with a P of .0005 which was significant at the .01 level of confidence; and (7) Activity 6--participation in musical organizations--with an F-ratio of 4.2247 with a P of .0401 which was significant at the .01 level of confidence.

For both Fall and Winter grade-point averages, the participants in the orientation program received the higher average of grades. For both Fall and Winter Quarters the non-participants dropped out more frequently than the participants. For each of the three activity areas in which differences were found, the participants in orientation took part in more activities than did the non-participants.

Table 4.3 presents the univariate F-ratios for sex effect for the 12 dependent variables. Six of these variables showed significant differences as follows: (1) Fall Quarter grade-point average with an F-ratio of 6.1600 with a P of .0132 which was significant at the .05 level

of confidence; (2) Winter Quarter grade-point average with an F-ratio of 17.9755 with a P of .0001 which was significant at the .01 level of confidence; (3) Activity area 1--residence hall organizations--with an F-ratio of 99.1974 with a P of .0000 which was significant at the .01 level of confidence; (4) Activity 2--hobby interest--religious-social clubs--with an F-ratio of 11.4493 with a P of .0008 which was significant at the .01 level of confidence; (5) Activity 5--athletics--with an F-ratio of 39.3988 with a P of .0001 which was significant at the .01 level of confidence, and (6) Activity 6--music organizations--with an F-ratio of 19.1327 with a P of .0001 which was significant at the .01 level of confidence.

For both Fall and Winter Quarter grade-point averages, women students achieved the higher averages. The women participated far more actively in residence hall organizations and in hobby-interest-religious-social clubs than did the men. For the activity areas of athletics and music organizations men participated more actively than the women students.

The univariate F-ratios presented in Table 4.4 for the interaction of group by sex revealed three interactions. The first interaction was Winter Quarter grade-point average which had an F-ratio of 4.5113 with a P value of .0339 which was significant at the .05 level of confidence. The second was residence hall activity which had an F-ratio of 4.5804 with a P value of .0326 which was significant at the

.05 level of confidence. The third was music organizations in which the F-ratio was 4.7273 with a P value of .0299 which was significant at the .05 level of confidence. These interactions are graphed in Figure 4.2.

The null hypothesis was rejected on the basis of the results of the multivariate F-ratios and the univariate F-ratios.

Discussion of Part One

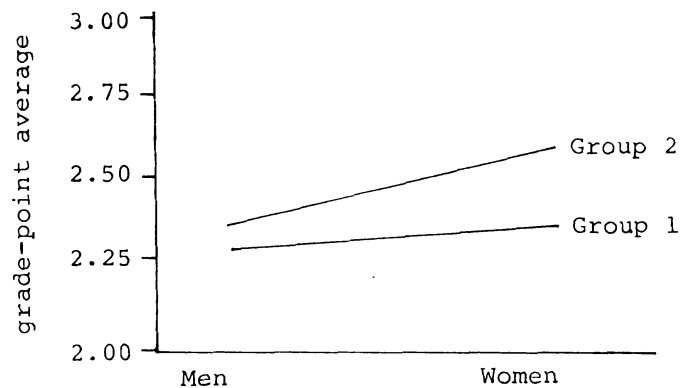
The Multivariate F-Ratio

The multivariate measure indicated that there was a significant difference between the groups of participants and non-participants and between sexes. The lack of interaction for the multivariate measure suggested that the sex differences were within the groups as displayed in Figure 4.2.

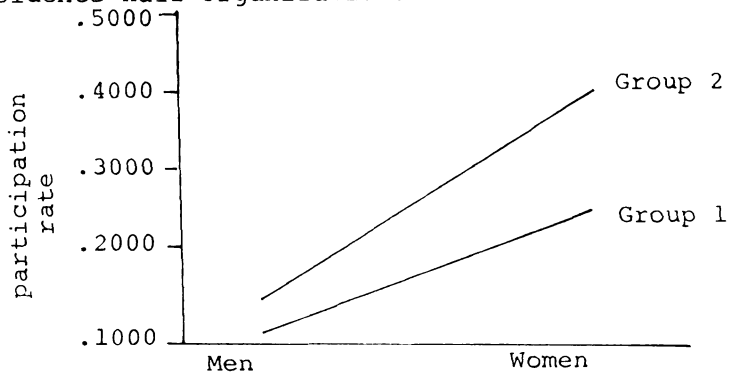
It is realized that the inability to have made random assignment of students to the orientation program did not allow statements of causality. However, it is plausible that orientation may have created difference between the groups.

Students participating in the orientation program received a strong message on study techniques and the early seeking of assistance if needed. The ways and means of obtaining needed assistance were clearly delineated. In addition, the activity program was well explained. Moreover, students in orientation not only were encouraged

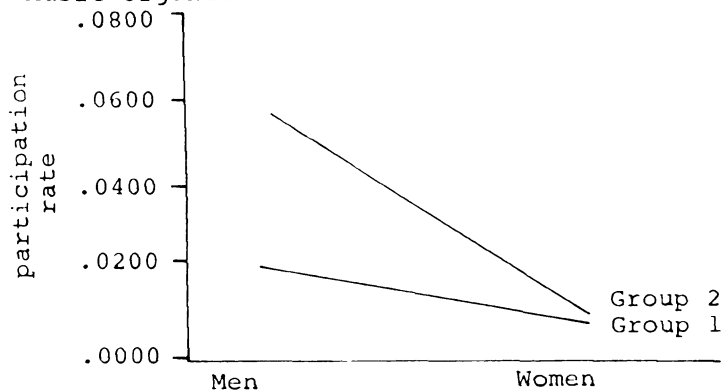
Winter Quarter
Grade-Point Average



Activity 1
Residence Hall Organizations



Activity 6
Music Organizations



Legend: Group 1 = non-participants
Group 2 = participants

Figure 4.2.--Graphs of interactions--group by sex--cell means

to participate but were actively recruited, particularly by musical organizations. This combination of factors may have been sufficient to create a difference between the groups for the multivariate measure.

The Univariate F-Ratio--Group Effect

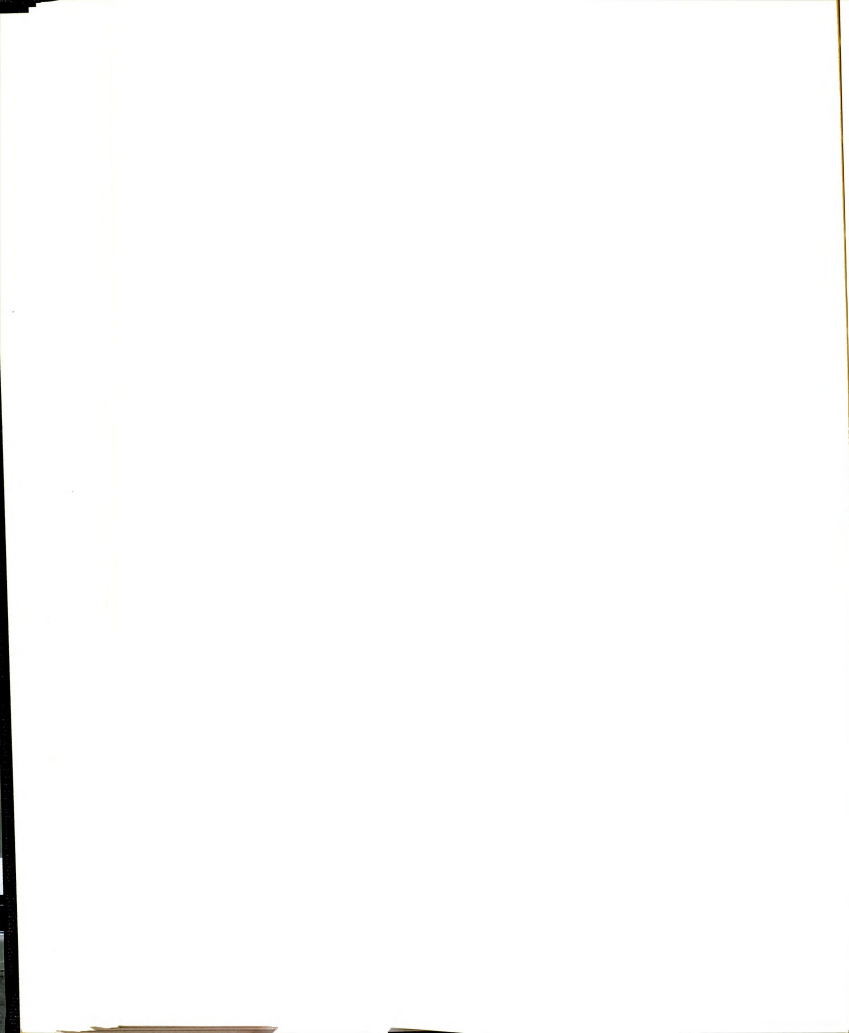
The univariate analysis for group effect disclosed additional facets of the relationship between the variables. As indicated above, seven of the 12 dependent variables showed significant differences between the groups. Both Fall and Winter grade-point averages were significantly higher for the group which participated in orientation. Since prior high school grades and aptitude scores as measured by SAT and ACT indicated that the two groups were alike in this respect, it is possible that the emphasis on study techniques and the early seeking of assistance if needed may have made a difference. This finding may parallel that of Goodrich and Pierson at Michigan State University where summer counseling clinics, somewhat analogous to a short-term orientation, appeared to have improved academic achievement (Goodrich and Pierson, 1959).

The univariate group effect for drop-out revealed a significant difference in both Fall and Winter Quarter drop-outs with the non-participant group dropping out more frequently than the participant group. The finding that participants are less likely to drop out of college than non-participants parallels the finding by Goodrich and

Pierson (1959) at Michigan State University and Jesseph (1966) at the University of Wyoming.

It is possible that students who participate in orientation are more highly motivated to attend college; therefore less likely to drop out. On the other hand, the experience of orientation may give the students who participate a feeling of confidence and a desire to continue their education. The participants were exposed to the various services of the College and may be more aware of them than the non-participants; consequently, they may have used the services rather than drop out when confronted with personal, academic, or financial problems.

In the univariate group effect for the activity areas, three revealed significant differences and three did not. The three with differences were residence-hall social and governmental participation, student government and official committee participation, and music groups. The orientation program placed emphasis on student government. The orientation committee itself as a committee of student government attracted many new students. The college union program board and the student body officers were involved in the orientation program and their activities included the recruitment of students for student government. This makes it easy to understand why students exposed to student government during orientation would participate more actively than those not similarly exposed and recruited. The residence halls had a lesser degree of



involvement in orientation than student government, but they were involved to a degree. Also, the similarity of residence-hall government and residence-hall activities may have caused them to have been the recipient of a certain amount of "spin-off" from the emphasis on student government, thus accounting for group differences in residence-hall participation.

The music groups on-campus such as marching band, symphonic band, and men's and women's glee clubs recruit new students very actively in the orientation program. Again this may account for the difference between the groups in regard to this activity.

The three activity areas which did not have differences were: (1) hobby-interest-religious-social groups; (2) major subject departmental and/or professional type groups; and (3) intramural and intercollegiate athletics. During the orientation, the emphasis on the hobby-interest-religious-social area was not as direct or great as that on student government. Representatives of these organizations were not generally available. An activities carnival at which the hobby-interest-religious-social groups presented their programs to the student body was held about two weeks after the opening of the Fall Quarter; thus, all students were equally presented with information concerning these activities. The departmental-professional clubs are formed in the major departments usually after

registration sometime during the first quarter. All students in a department are equally encouraged to participate.

Athletics is a different situation. Freshman football players are effectively prevented from orientation participation by virtue of practice sessions which are held concurrently with orientation. The intramural program is widely advertised following registration for the particular sport in season. Athletics were not given special emphasis during orientation. Compared to the three activities for which differences did not exist and which did not receive emphasis in orientation, the three activities which showed differences were all ones on which the orientation program placed emphasis and for which it even recruited. This would indicate that a short-term orientation may well be having an impact in areas in which emphasis is placed.

There was no difference between the groups for persistence in a major. All freshman students select a major upon entrance to the College. Although early changes of major are not encouraged, the process for change is made evident to all students. Counseling is readily available to assist students in making changes. The total number of changes for both Fall and Winter Quarters made by both groups was relatively small, being 70 for the non-participants and 57 for the participants. Persistence in the major has not been extensively reported in the literature on orientation. Cole and Ivey (1967) and Fahrback (1960)

reported no difference between participants and non-participants whereas Jesseph (1966) reported that non-participants made significantly more changes than participants.

Univariate Sex Effect

The univariate sex effect measures for both Fall and Winter Quarters revealed that women students in both participant and non-participant groups performed significantly better than men. This is not a surprising finding. Women students come to college with better grade-point averages than men. Prior studies of entering students indicate similar results to that found in this study (Weiss, 1964 and College Entrance Examination Board, 1969).

The remaining differences among the variables in the sex effect analysis were all in the activities area.

The residence hall activity was first. Women students showed a decided difference in participation in residence halls. This may be in part a carryover from the days when women's residence halls were tightly organized to assist the college in enforcing the many rules of the halls. It may also be related to the fact that women students do not have as many outlets for expression as men, for example, athletics; thus they concentrate on hall activities.

Women were also more active in hobby-interest-religious-social organizations. The inclusion of the religious organizations in this category may have influenced

the result, because women students tend to predominate in these groups. Also, as in the residence hall situation, women students do not have as many outlets for expression as men and may find these activities more available; thus, they participate at a greater level.

Participation in athletic activity is overwhelmingly by men in both intramural and intercollegiate activities. This is understandable and creates readily a significant difference in the sex effect.

In the music activity, the early Fall emphasis on marching band, although the band is integrated according to sex, is predominately male. The men's glee club is more than twice as large as the women's glee club. There is a dance band almost exclusively male. This concentration of male opportunities tends to draw more men in relation to women students and thus creates the difference for sex effect.

Univariate Interaction--Group by Sex

There were three interactions of group by sex. The means for each group were graphed according to sex for each of these three interactions. The first interaction was found for Winter grade-point average. The graph revealed that the interaction was relatively slight and in the same direction. In other words, the effect of orientation on both men and women was the same in relation to the non-participants, but the effect was somewhat stronger

for women. In precisely the same manner, this is also true for residence-hall activities.

For music activity the graph reveals that the interaction was more pronounced, but it was still in the same direction. The orientation appears to have stimulated more men to participate than women. Analysis of the music program as discussed previously under sex effect indicates why this difference may exist.

Part Two--Questionnaire and Interview

In part two, the results of the questionnaire issued to a sample of participants six months following orientation and the interview with a sample of non-participants during the same time period are analyzed in relationships to Hypotheses II, III, IV and V.

Hypothesis II

It is hypothesized that students will become aware of orientation primarily through literature sent to them by the College and secondarily through peer group friends.

A questionnaire was submitted to a sample of 140 participants six months following matriculation. Response was obtained from 115 of the sample. One aspect of this questionnaire was designed to obtain information on how or from whom did the student become aware of the existence of orientation. The results of this survey are presented in Table 4.6.

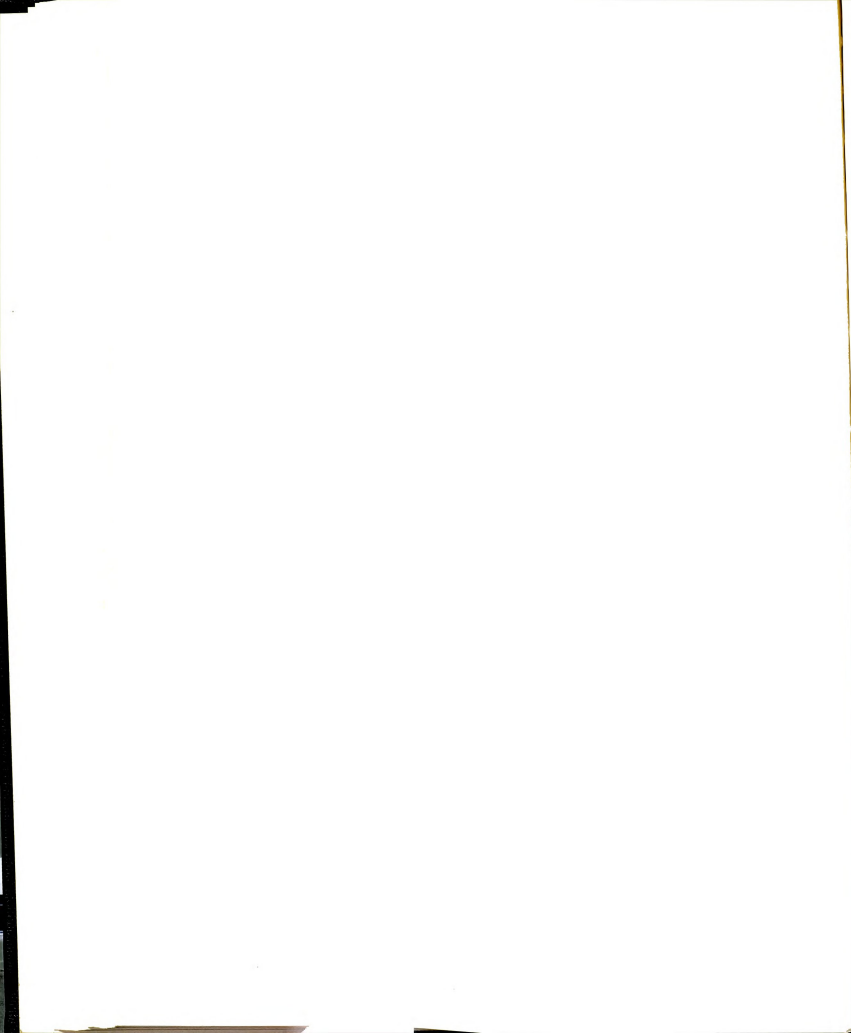


TABLE 4.6.--Referral source to orientation.

Source of Referral	No.	%
First source ^a expressed:		
1. Orientation literature	74	64.3
2. Friends	26	22.6
3. Relatives	9	7.8
4. Arrived early on campus and "discovered" orientation	4	3.4
5. College catalog	<u>2</u>	<u>1.7</u>
	115	99.8
Second source ^a expressed:		
1. Orientation literature	23	50.0
2. Friends	12	26.0
3. Relatives	7	15.2
4. College catalog	<u>4</u>	<u>8.6</u>
	46	99.8

^aA portion of the students listed a second source although it was not specifically requested. These responses are included as a second source.

Examination of Table 4.6 revealed that nearly two-thirds of the sample of 115 participants had become aware of orientation through orientation literature sent to them. A second source of referral was friends, which comprised about one-fourth of the referrals. Including relatives, and all other referral sources declared by the sample of participants were relatively small in number. As a second source expressed by 46 of the 115, both orientation literature and friends ranked high. While the numbers are not large, the students expressing a second source indicated relatives at a proportion of 15 per cent.

Accordingly, Hypothesis II is not rejected.

Hypothesis III

It was hypothesized that students who participate in orientation will indicate that the primary value of orientation to them will be the making of new friends and the secondary value will be the gaining of knowledge concerning the physical aspects of the campus.

Another aspect of the questionnaire submitted to the sample of participants six months following matriculation was concerned with ascertaining what value the orientation experience had for the participant. He was asked to express this in his own words.

A summary of the statements which the 115 students made is presented in Table 4.7.

TABLE 4.7.--Expressions of value of orientation made by participants.

Value Statements	No.	%
A. Positive statements:		
1. Made new friends	77	37.6
2. Became familiar with physical aspects of campus	31	15.1
3. Became knowledgeable about campus services	22	10.7
4. Developed a "college spirit" feeling	34	16.6
5. Gained confidence	19	9.3
6. Had a good time	9	4.4
B. Negative statements:		
1. Was a waste of time	8	3.9
2. Was a juvenile or "phoney" program	3	1.5
3. Was too much a jumble of information	<u>2</u>	<u>0.9</u>
Totals	205	100.0

^aThe 115 students responding expressed 205 value statements. If a student indicated more than one statement, it was included in the summary.

Since orientation emphasized the making of new friends by a variety of means, it is not surprising that at least 37.6 per cent of the participants expressed this as a value. The second value expressed most frequently was the development of "college spirit" or the feeling that the campus atmosphere was alive and a pleasant place to be. There were 16.6 per cent of the participants who stated that this was a benefit of orientation. Closely following was the gaining of familiarity with the campus at 15.1 per cent. There were 10.7 per cent who felt the gaining of knowledge of campus services was of value to them. Although the number is not large it is believed important that 9.3 per cent felt that they had gained confidence as a result of orientation. Only 6.3 per cent expressed negative feelings.

Hypothesis III is not rejected in regard to discovering that students felt the making of friends to be a primary value achieved in orientation. However, a major secondary value appeared to be the development of a "college spirit." Gaining familiarity with the physical aspects of the campus ranked high but was relatively low in percentage.

Hypothesis IV

It was hypothesized that students who participated in orientation would recommend participation to friends and relatives.

A third aspect of the questionnaire submitted to the sample of participants six months after matriculation was a simple question asking whether or not they would recommend orientation to close friends and relatives.

The results of this question are presented in Table 4.8 below.

TABLE 4.8.--Would you recommend orientation to friends and relatives?

Recommendation	No.	%
1. Strongly recommend	88	76.5
2. Moderately recommend	23	20.0
3. Negative recommendation	4	3.5
Totals	115	99.9

It appeared that students who participated in orientation would overwhelmingly recommend participation in friends or relatives with a total of 96.5 per cent expressing a favorable response.

Hypothesis IV is not rejected.

Hypothesis V

It was hypothesized that students who did not participate in orientation although they were aware of it, did not participate primarily because they were working and secondarily because of a lack of interest in such events.

At the end of a six-months period following matriculation, a sample of non-participants was interviewed to ascertain why they did not take part in orientation.

The results of the interview were summarized and are presented in Table 4.9.

As hypothesized, the major reasons for not participating as indicated by the sample of non-participants was "working" 35.1 per cent and "no interest" 24.6 per cent. No other reason expressed accounted for more than 8.8 per cent.

Hypothesis V is not rejected.

Discussion of Part Two

The data in Table 4.6 disclosed that a large majority of students who participated in orientation became aware of orientation through literature sent to them by the college. A sizable group, 22.6 per cent, became aware through friends. Relatives accounted for 7.8 per cent.

Although this is in agreement with Hypothesis II, it was thought that relatives might have had a greater influence. The college has many alumni with college-age children and there appears to be a fairly strong alumni loyalty in comparison to other California State Colleges. The alumni membership ranks among the top of the nineteen State Colleges even though other institutions such as San Jose State and San Diego State have been in existence

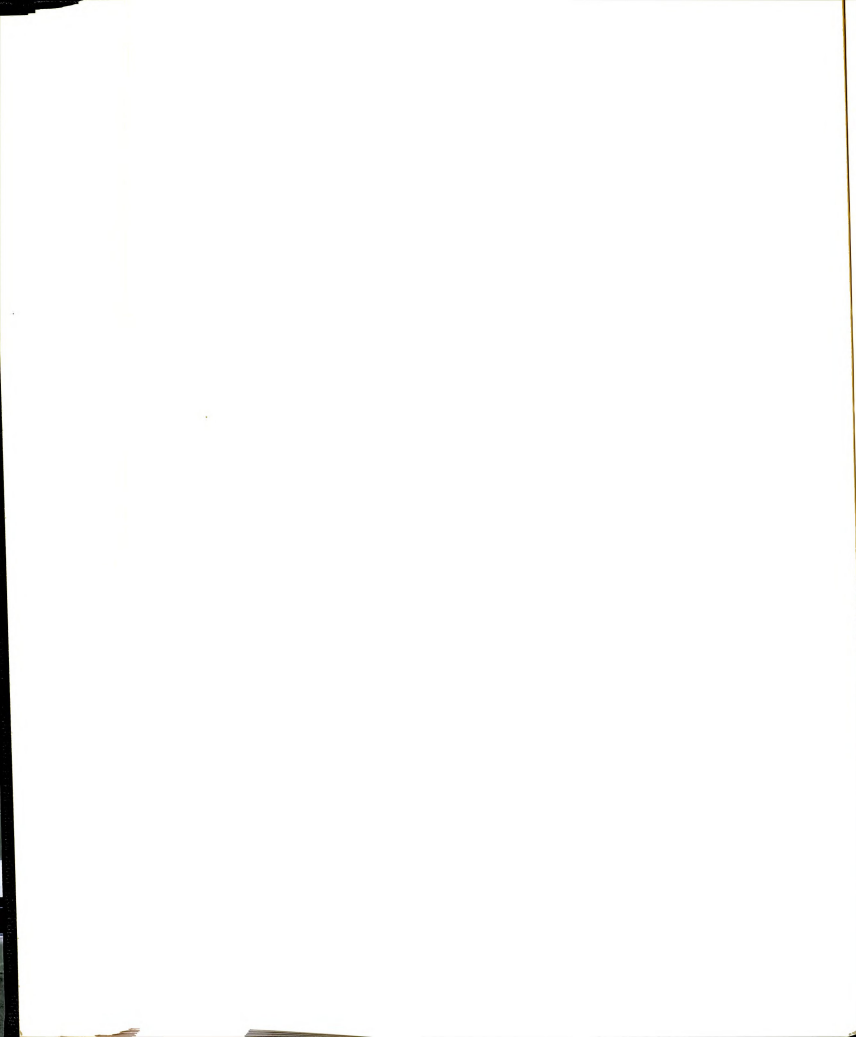


TABLE 4.9.--Expressed reasons for not participating in orientation.

Expressed Reasons	No.	%
1. Working	20	35.1
2. No interest	14	24.6
3. Other engagements ^a	5	8.8
4. Already knew about college	5	8.8
5. Heard about orientation too late to change plans	5	8.8
6. Lack of funds	3	5.3
7. Car trouble--couldn't make it even though planned to come	2	3.5
8. Freshman football practice	2	3.5
9. On vacation--too far away	<u>1</u>	<u>1.7</u>
Totals	57	100.0

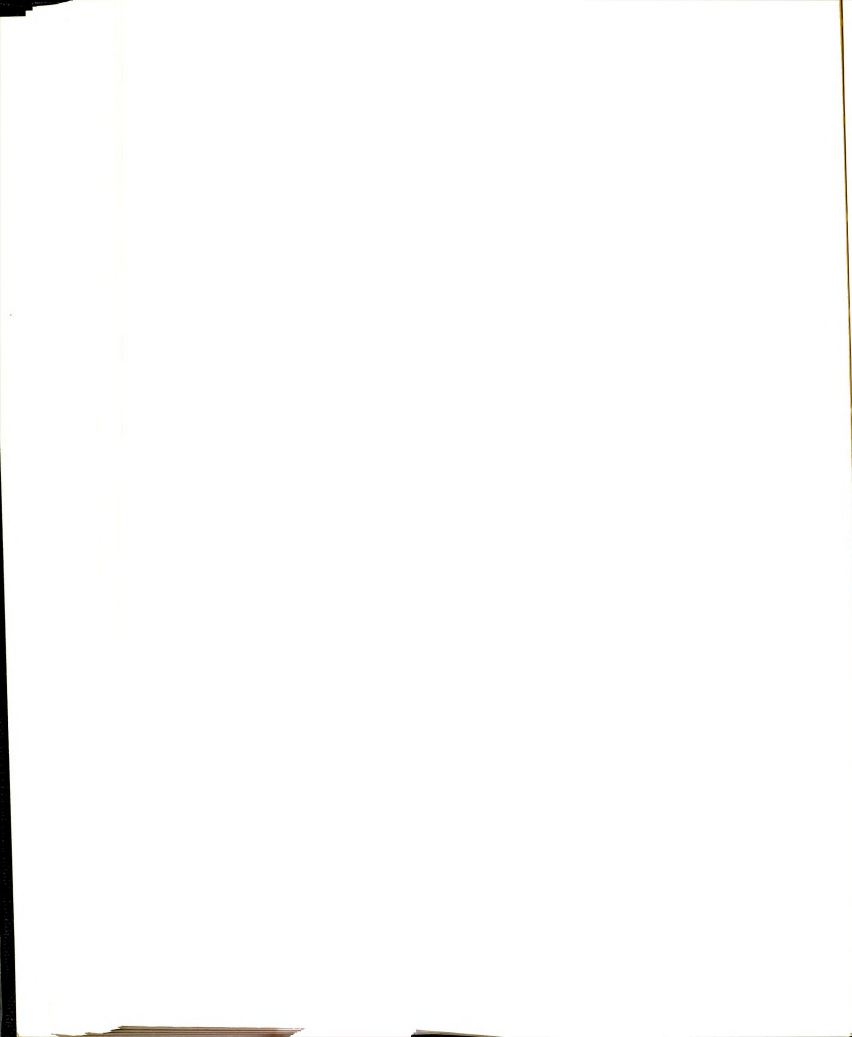
^aIncluded participation as wedding party member, house guests, and family engagements.

much longer and have much larger student bodies.¹ In addition the College has received considerable statewide publicity during the past few years because there have been no disruptive events or any large-scale campus unrest. Because of this combination of factors, it was thought that the influence of parents and relatives might have been a larger source of referral to orientation than appeared to be the case.

It was noted that a formal document such as the College Catalog appeared to play a very small role in apprising students of orientation. Only 1.7 per cent cited the catalog as a source of information. This may reflect the fact that other sources such as orientation literature may make catalog use for such purpose unnecessary.

The testing of Hypothesis III is indicated by the summary of information in Table 4.7. Questionnaire results revealed that 37.6 per cent of the sample expressed the feeling that making new friends was the chief value of orientation to them. This was more than twice the number reporting any other category and was in conformance with the hypothesis. However, the second item most frequently mentioned was the development of a "college spirit" feeling, 16.6 per cent. This statement is somewhat nebulous, but again and again students would mention such

¹The alumni mailing list contains 17,000 active names, whereas the next highest state college has an active list of only 6,000 names.



factors as campus atmosphere, morale, the "college spirit," or pride in the College which indicated that orientation had generally given them a positive feeling toward the College, its students, faculty and program. A close second was a series of statements which indicated that becoming familiar with the campus was a major value; 15.1 per cent expressed this point of view. While it is not a major item in terms of numbers, it is worth noting that 9.3 per cent of the students considered the gaining of confidence in attending college to be the chief value of orientation.

There were 6.3 per cent of the students who made negative comments, because they felt that the program was a waste of time, juvenile, and comprised of too many things mixed together.

Hypothesis IV was tested by a questionnaire sampling of the participants. The results are summarized in Table 4.8.

The questionnaire revealed that 76.5 per cent would strongly recommend participation in orientation to friends and relatives, and another 20 per cent would moderately recommend participation but with some reservations usually relating to one or two aspects of orientation but not the whole program. Only 3.5 per cent expressed a negative reaction and would not recommend orientation to friends or relatives.

This question tended to summarize in one short item the general feelings of the participants toward the value of the program.

Hypothesis V was tested by an interview. The results are summarized in Table 4.9. Over one-third, 35.1 per cent, of the students interviewed declared that they were working and did not feel that they could leave their jobs to arrive early for orientation. A substantial percentage, 24.6 per cent, stated that they had no interest in such programs as orientation. Analysis of the responses summarized in Table 4.9 indicates that 56.2 per cent or over half of the non-participants appeared to have acceptable reasons, from the writer's viewpoint, for not participating. The following categories were used to arrive at this figure:

Working	35.1
Lack of funds	5.3
Heard too late	8.8
Car trouble	3.5
Football practice	<u>3.5</u>
	56.2

In addition, Table 4.9 reveals that only 24.6 per cent stated flatly that they had no interest. Other statements were not as completely negative and may have indicated feelings somewhere between the poles of desiring to participate but being unable to and definitely not wanting to participate.

Part Three--Opinion Survey

In part three the results of an opinion survey taken by questionnaire 30 days following the opening of Fall Quarter are analyzed.

Hypothesis VI

No difference will be found between freshmen participating in orientation and freshmen not participating in orientation in their responses to a survey of their opinions concerning the college and their relationship to it.

The results of the opinion survey are presented in summary for the 18 structured items (Table 4.10) and for the two free response items (Table 4.11). Chi square tests for homogeneity were calculated for those items for which there was sufficient response to warrant statistical treatment. There were four of the 18 structured items which did not have sufficient response for calculations. For example, only three students in the sample were married and only a few students had been to the counseling center or had sought religious guidance.

For the free response items, there were nine categories repeated enough times to warrant analysis. Chi squares were calculated for these. A detailed analysis of the questionnaire responses may be found in Tables A-7 and A-8 in the Appendix.

TABLE 4.10.--Summary data^a questionnaire--opinion survey--eighteen structured items.

Item	χ^2	Remarks
1. Estimated grade	5.140	
2. Decision to attend Cal Poly	12.453*	
3. Stability of Education Goal	9.143	
4. Interest of teachers in my personal welfare	15.404**	
5. Quality of instruction	1.402	
6. Advisor accessibility: Seen him since registration; Feeling about advisor Group not seeing him Group seeing him	3.644 .216	
7. Academic confidence	8.668	
8. Study habits	7.783	
9. Marital status: Single Getting dates:	14.650**	Very few married
10. Health Center Reaction	3.531	Only those who visited reacted
11. Religious guidance	x	Too few for adequate measurement
12. Part-time work	x	Too few for adequate measurement
13. Counseling Center reaction	x	Too few for adequate measurement
14. Recreational activities, reaction to program	4.225	
15. Department Hobby and Interest Clubs, Reaction to Program	x	Too few in each category for adequate measurement
16. Make friends easily	5.637	
17. Have friendly college	12.023*	
18. Living quarters satisfactory	5.919	

*significant at .05 level of confidence.

**significant at .01 level of confidence.

^aStudents did not respond to every question. There were questions which they may have been unable to answer. For example, if they had not been to the Health Center, it was difficult for them to state a reaction to the service.

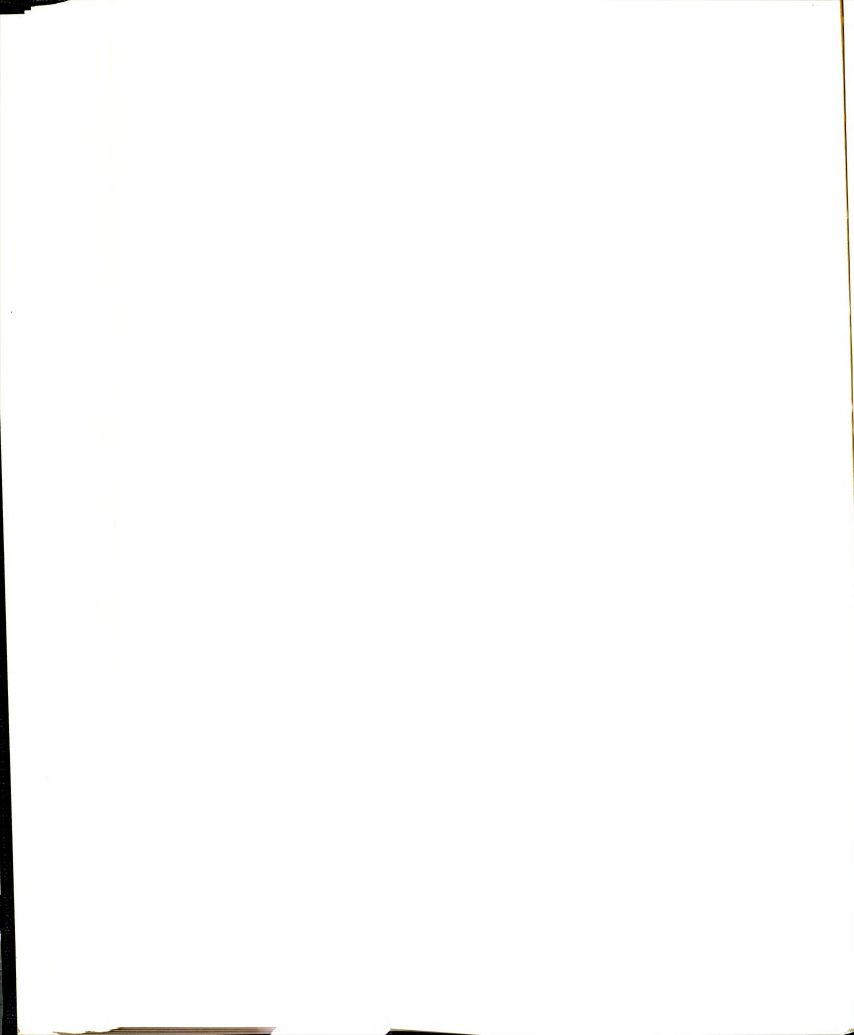


TABLE 4.11.--Summary of data--two free response items,
opinion survey questionnaire

Category	χ^2	Significance
1. Conservatism of campus	1.3869	NS
2. Friendliness of campus	.3011	NS
3. Campus facilities	2.1597	NS
4. Activities on campus	.3188	NS
5. Campus atmosphere or "spirit"	.8457	NS
6. Campus location and area climate	.0020	NS
7. Cafeteria service and food	.3424	NS
8. Curriculum	1.3372	NS
9. Quality of faculty and instructional departments	2.1500	NS

Of the 14 remaining items four showed significant differences. The first of these was "decision to attend Cal Poly" with a χ^2 of 12.453, significant at the .05 level of confidence. Students attending orientation appeared to be more satisfied with their decision.

The second was "interest of teachers in my personal welfare" with a χ^2 of 15.404, significant at the .01 level of confidence. Students attending orientation seemed to feel that teachers were more interested in them. The third was "getting dates" with a χ^2 of 14.650, significant at the .01 level of confidence. Students who attended orientation expressed the feeling that they experienced less difficulty in getting dates. The fourth was "Is Cal Poly a friendly college" with a χ^2 of 12.023, significant at the .05 level of confidence. Students attending orientation stated that the college was a more friendly place than did students not participating in orientation.

The analysis of the two free response items is presented in Table 4.11. The nine categories which had sufficient response to warrant calculation of a χ^2 did not reveal any significant differences between participants and non-participants. Yates' correction was used in a few instances where cells contained less than five observations.

With one degree of freedom and an alpha of .05 for each of the nine categories a critical value of 3.8415 existed. None of the nine χ^2 's exceeded the critical

value, indicating that the two groups were alike as far as the free responses were concerned.

Hypothesis VI was rejected on the basis of differences disclosed in the 18 structured items on the questionnaire.

Discussion of Part Three

Although the sample is not fully representative of the numbers of participants and non-participants in the population, the very size of the sample, 456, which is 30.6 per cent of the population, suggests that the data be considered, albeit with caution.

The χ^2 for the first 18 structured items disclosed four significant differences between the participants and non-participants.

Since the orientation program was designed to make the student more aware of the College, it is possible that the participating student would be more satisfied with his decision to attend the College as was revealed by the data. However, it is also true that students who came to orientation may have been those who were more sure of and therefore pleased with their decision for a long time prior to matriculation.

Orientation emphasized student-teacher relationships and gave students an opportunity to interact on a personal level with teachers. This may have accounted for a feeling that teachers were more interested in the

personal welfare of the student. The orientation program purposely mixed men and women students in "orientation clubs" of about 20 to 30 students each. A number of dances, mixers, and other events made it easy for students to become acquainted. This may account for the feeling of those students who attended orientation that it was easier for them to get dates than it was for students who did not attend. The subject of friendliness was emphasized in orientation so it is likely that students participating in orientation would view the college as more friendly than would those not participating. However, the free responses did not reveal significant differences in expressions of friendliness although this may be a result of the juxtaposition of the free response blanks to the item relating to a friendly campus. The power of suggestion may have influenced both participants and non-participants to express a comment regarding a friendly atmosphere. This was an item frequently mentioned by both groups.

The remaining items concerned reactions to various programs of instruction and services or expressed feelings regarding quality of instruction and academic confidence. Both participants and non-participants appeared to have had somewhat equal opportunity to react to services. These items were not particularly stressed during orientation.

The format of the questionnaire itself may have adversely affected the two free response items. Although the questionnaire was checked by testing it in two separate

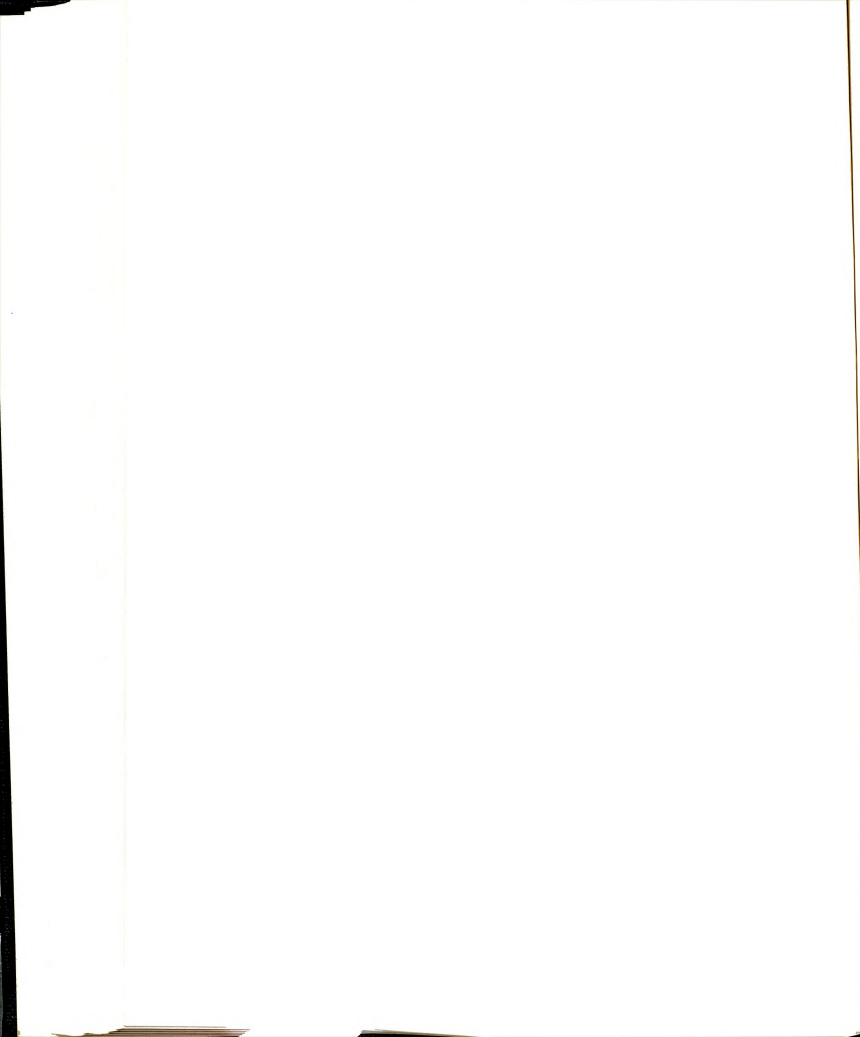
classes, the location of the free response sections in relation to the 18 structured items may have created a deficiency. The responses to these two sections may have been affected by the 18 items immediately preceding them in that the 18 items suggested and prompted responses. Also, a student who had already responded to a structured item may have felt that it was not necessary to make a free response. Therefore, the free response aspect of the questionnaire must be considered deficient and the results obtained from it are questionable.

Summary of Chapter IV

Summary of Part One

The results of the multivariate analysis revealed that there was a significant difference between participants and non-participants in the orientation program. There were differences found within each group in the multivariate sex effect. There was no multivariate interaction of group by sex. The program used produced univariate F-ratios separately for 12 dependent variables of interest relevant to the two main effects of group and sex and to interaction of group by sex.

There were significant differences in seven of the twelve variables as presented for the group effect. They are as follows: (1) Both Fall and Winter grade-point averages; (2) Both Fall and Winter drop-outs; and (3) the three



activity areas of residence hall participation, student government participation, and music group participation.

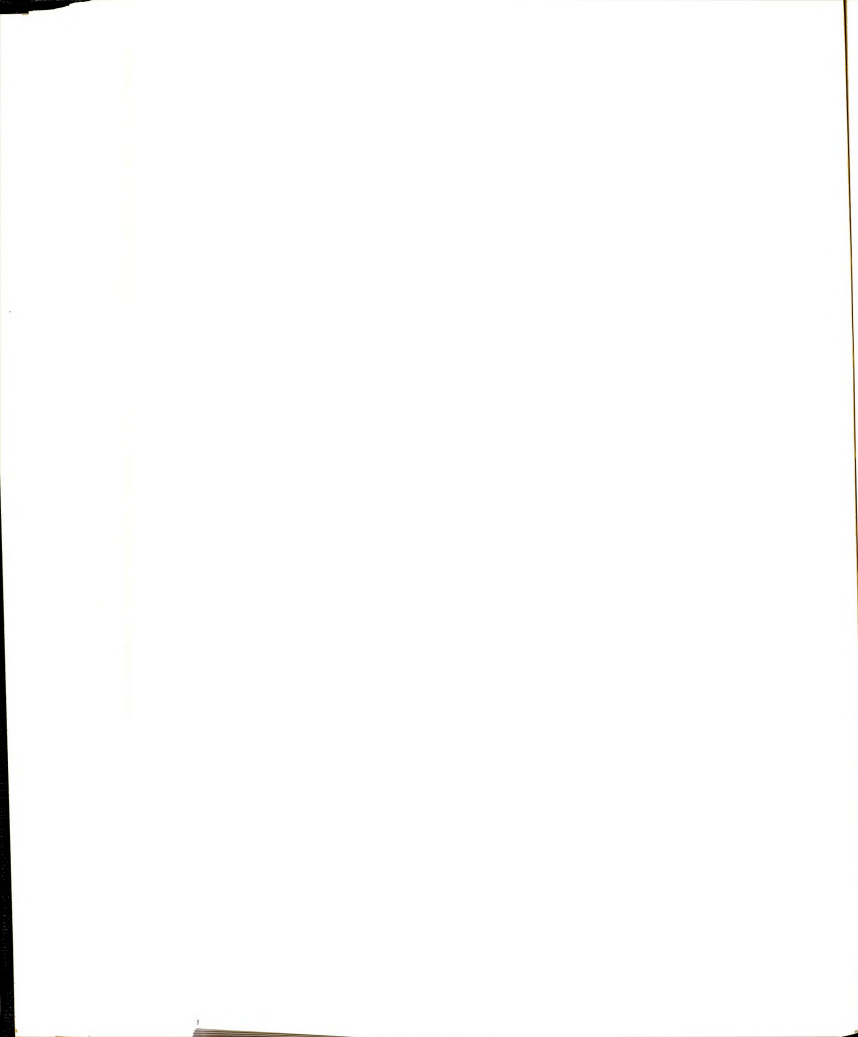
For the univariate sex effect, there were significant differences in six of the twelve variables as follows:

(1) Fall and Winter grade-point averages; and (2) the four activity areas of residence hall, hobby-interest-religious-social clubs, athletics, and music.

There were three significant interactions at the .05 level of confidence for the univariate interaction of group by sex. Graphs of the means for these three interactions did not reveal a complete interaction, but did show that the means for sex were varied by group in the same direction but magnified somewhat for men in respect to music and for women in respect to grade-point average and residence hall participation.

The multivariate and univariate results indicated that there were group differences which may be attributed to orientation, but which also may be attributed to other causes such as self-selectivity on the parts of participants and non-participants. Since it was not possible to make random assignment of students to groups, rival hypotheses cannot be rejected.

The lack of multivariate interaction indicated that the main effects of group and sex were operating since both were significant.



The significant differences in the univariate analysis were analyzed and potential reasons for differences explained.

Summary of Part Two

The results of a questionnaire submitted to a sample of participants were tabulated. This questionnaire was designed to ascertain: (1) how students became aware of orientation; (2) the value that they placed on participation in orientation; and (3) would they recommend orientation to friends and relatives. As hypothesized, it was found that College literature about orientation was the primary referral source and the recommendations of friends the secondary referral source. The benefits of orientation most frequently valued by students were the making of new friends, the development of a "college spirit" feeling, and familiarization with the campus physical features and the College services. Over 9 per cent indicated an increase in confidence. An overwhelming number (96.5 per cent) indicated that they would recommend orientation to friends and relatives.

There were 6.3 per cent of the participating students who made negative comments about orientation.

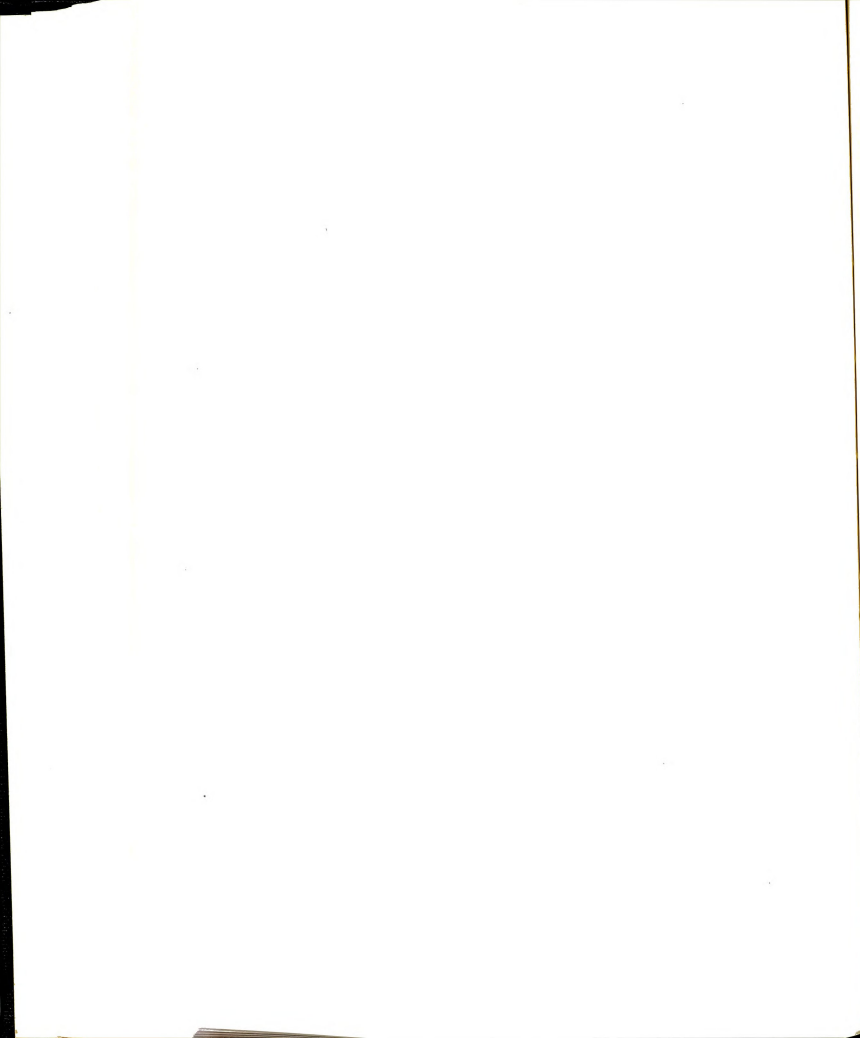
An interview was held with a sample of students who did not participate in orientation to ascertain their reasons for not participating. Analysis of the responses revealed that 56.2 per cent of the non-participants gave

reasons for not taking part which did not have negative connotations. Working, not receiving information about the program, and practicing freshman football were among reasons stated for not taking part. Only 24 per cent stated flatly that they had no interest in the program.

Summary of Part Three

Part three contained the results of an opinion questionnaire issued 30 days following the first day of classes in the Fall. The structured items on the questionnaire contained four which showed a significant difference. Participants in the orientation program appeared to be more satisfied with their decision to attend Cal Poly, felt that teachers had an interest in their personal welfare, expressed that they experienced less difficulty in getting dates, and judged the college as being a more friendly place.

Responses to two free-answer items revealed no significant differences in nine categories which were expressed sufficiently often to warrant comparison. The format of the questionnaire made the two free-response items doubtful.



CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

In higher education, orientation has involved a wide variety of programs and activities designed to acquaint the new student with his college environment.¹ These programs have aimed the student to make a better adjustment to the college life and culture on a given campus. The purpose of orientation has been defined as increasing the student's receptivity to the total college experience (Hoffman and Plutchik, 1959). Frequently, the concept of better adjustment is described in terms of improved academic proficiency, persistence in the college and/or a major field of study, and social-personal adjustment which may be related to participation in organized co-curricular activities.

Orientation programs may be generally categorized into two types: (1) an orientation course lasting from one quarter to a year in length and required of each new

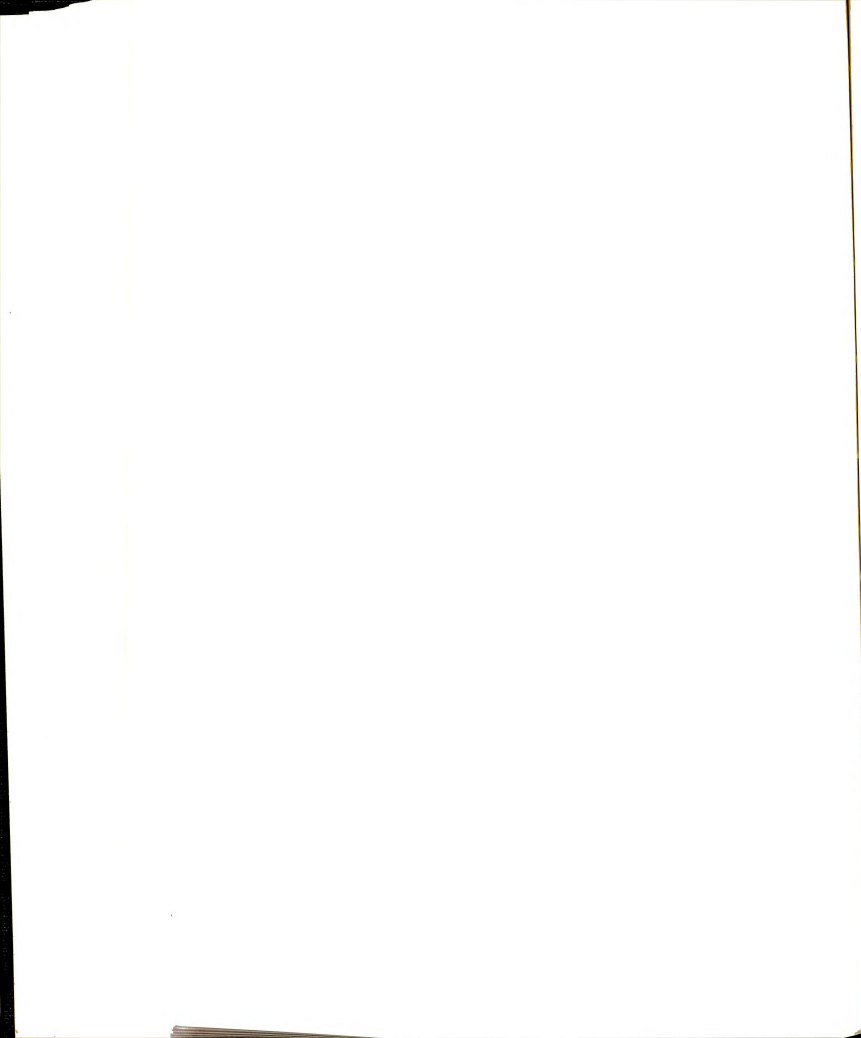
¹As indicated previously the scope of such programs has been documented by Kronovet who discovered that 92.4 per cent of 1,378 colleges surveyed in 1966 had them (Kronovet, 1966).

student; and (2) a short-term orientation program usually given during the summer immediately preceding enrollment or during a period of about two to five days prior to registration.²

The need for evaluation of orientation has been recognized for many years. However, much of the evaluation has been in the form of student and faculty reactions expressed in opinion polls or descriptive statements about programs with value judgments of their worth. Comparative or experimental studies are not frequently found. As an example, in 1967, in a doctoral dissertation, Pappas reported that evidence of the effectiveness of orientation programs is seriously lacking in the literature (Pappas, 1967).

Thus, the primary purpose of this study was to examine the efficacy of a short-term orientation program in meeting objectives of: (1) improved academic achievement as measured by grade-point average; (2) persistence in college or major; and (3) participation in organized co-curricular activities. The method of examining these factors was to compare and contrast approximately 750 students who participated in orientation with approximately 750 students who did not participate. The two groups were compared

²It may be recalled that over a period of years, these programs have become more elaborate and expensive. As such they have generated some severe criticism. Sociologist David Riesman has called short-term orientation a "dis-orientation week" (Riesman, 1961).



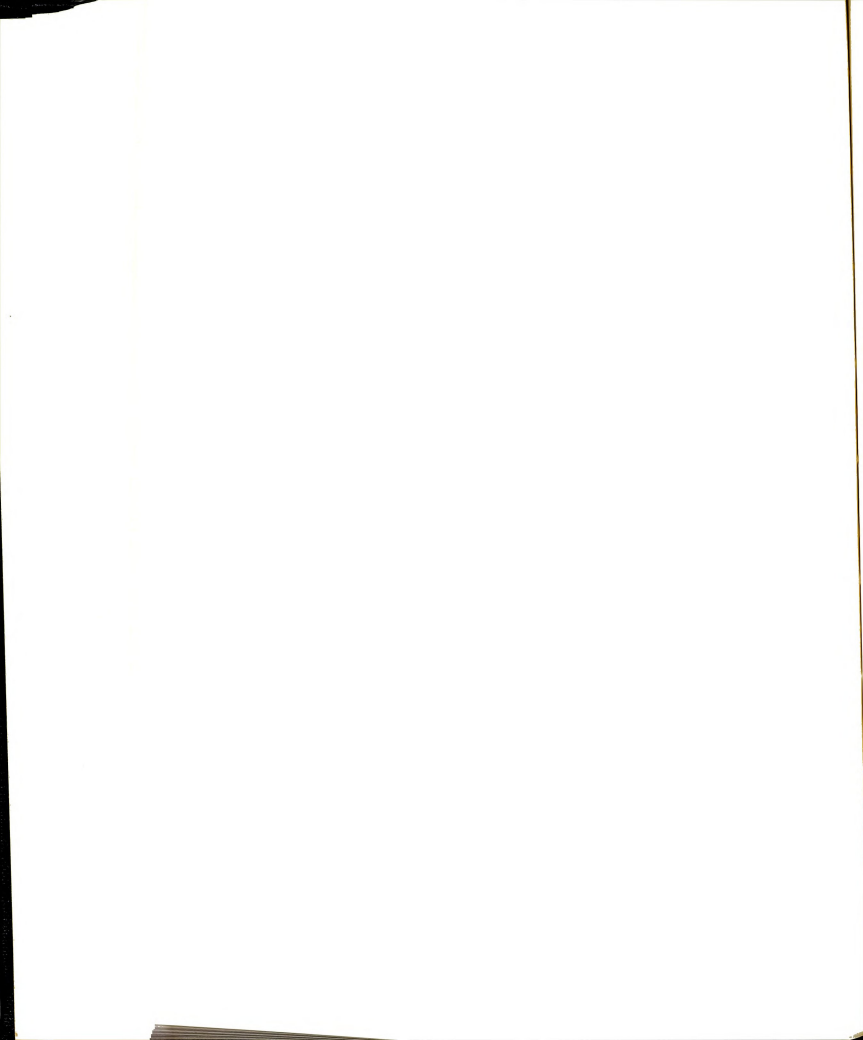
according to age, sex, high school grade-point average, SAT/ACT verbal and mathematics scores, place of college residence, and credits carried Fall Quarter in order to ascertain their similarities.

A sample of students who knew about orientation but did not participate was compared to a group of students who were totally unaware of orientation and could not have participated. This was used to ascertain similarity of population. It was felt that if those not aware were similar to those aware and both were similar to the participants and non-participants, then more trust would be placed in the findings.

As a secondary purpose of the study, sociological facets of orientation were examined. Additional information was obtained concerning the sources of student orientation referral, the results of participation the students indicated to be valuable and the motivating factors of those who did not participate.

As part of the sociological aspect of the study, an opinion survey was made comparing the reactions of both participants and non-participants to 18 structured questions and two free-answer questions concerning the College and their reactions and relationship to it as students.

The study was performed at the California State Polytechnic College using the Fall 1969 entering Freshman class as subject. At that time, the College enrollment



was made up of about 11,500 students in Agriculture, Architecture, Applied Arts, Applied Sciences and Engineering.¹

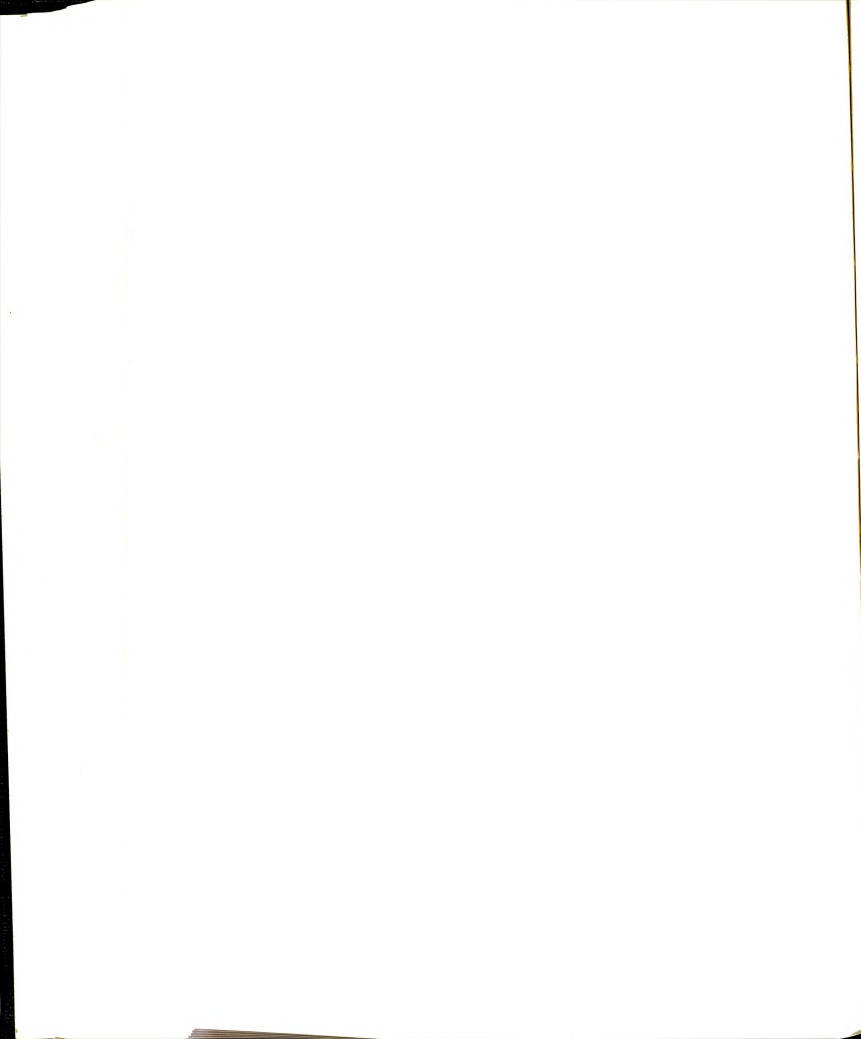
The orientation program consisted of both a campus and a camp program. About one-third of the 1,200 participants took part in a two-day camp session. Students were organized into "orientation clubs" of 20-30 members with three student counselors in charge of each club.

The program included both serious and casual events, ranging from how-to-study sessions, small group discussions, library use, detailed tours and explanation of various campus services to humorous skits, dances, and movies.

The study was designed to effect a comparative analysis of the participants and non-participants. Since random assignment to treatment groups was not feasible, demographic data were gathered and analyzed to compare the two groups so that as much similarity as possible might be assured.

It was recognized that statements of causality could not be possible results. However, the fact that there was a high degree of similarity in the demographic data did make statements of plausability possible. A multivariate analysis of variance as programmed by Jeremy Finn was performed. This program was used to test the primary hypothesis relating to the similarity of

¹As stated earlier in this study, the California State Polytechnic College is very similar to land grant colleges of the Great Plains, Rocky Mountain, and Far Western states.

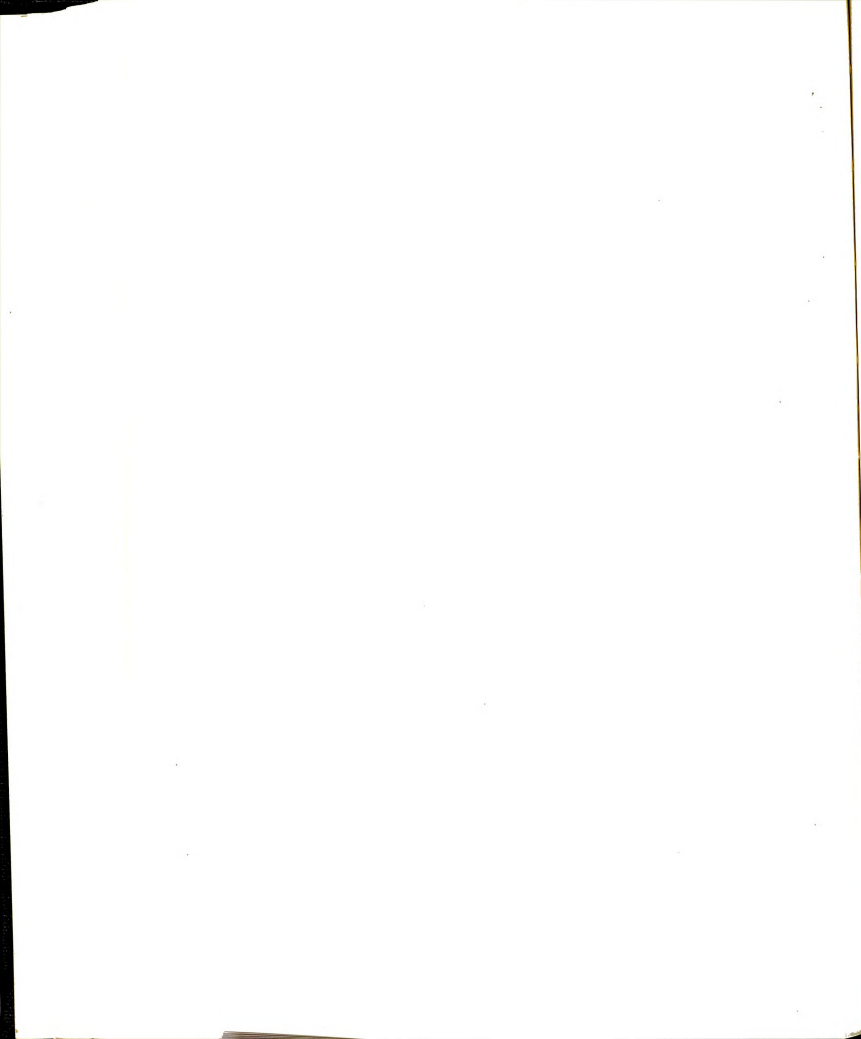


participants and non-participants in orientation with regard to academic achievement, persistence in the major and/or college, and participation in co-curricular activities.

The independent variables used were: (1) "group," --either of participants or non-participants--and (2) "sex." There were 12 dependent variables as follows: (1) Fall and Winter grade-point averages; (2) Fall and Winter change of major; (3) Fall and Winter drop-out, and (4) six co-curricular activity areas. In addition to the multivariate analysis, the program produced a univariate F-ratio for each of the dependent variables according to categories of group, sex, and interaction group by sex.

The secondary portion of the study, concerning referral sources to orientation, values of orientation expressed by participants and reasons for not participating, was analyzed by examining statements made by the sample of students. Simple percentages were used to examine trends.

The third aspect of the study, based on an opinion survey comparing the reactions of participants and non-participants, was analyzed by use of chi-square tests of homogeneity. Generally, the .05 level of confidence was used to test the level at which point difference could be considered as a result of factors other than chance.



Findings and Conclusions

The findings of the study are reported in three parts. The findings for the first part generated the following conclusions:

1. The multivariate analysis indicated that there was a difference between the group of participants and the group of non-participants.
2. The multivariate analysis indicated that there was a difference between the sexes within each group, inasmuch as there was no interaction of group by sex.
3. The univariate analysis for the dependent variables by group indicated that:
 - a. There was a difference in favor of the group which participated in orientation with respect to grade-point average;
 - b. There was a difference between the groups regarding Fall and Winter Quarter drop-out with non-participants having the greater number of drop-outs;
 - c. There was a difference between groups in three of the activity areas, residence-hall organizations, hobby-interest-religious-social clubs, and music organizations with orientation participants showing the greater amount of involvement in these activities.

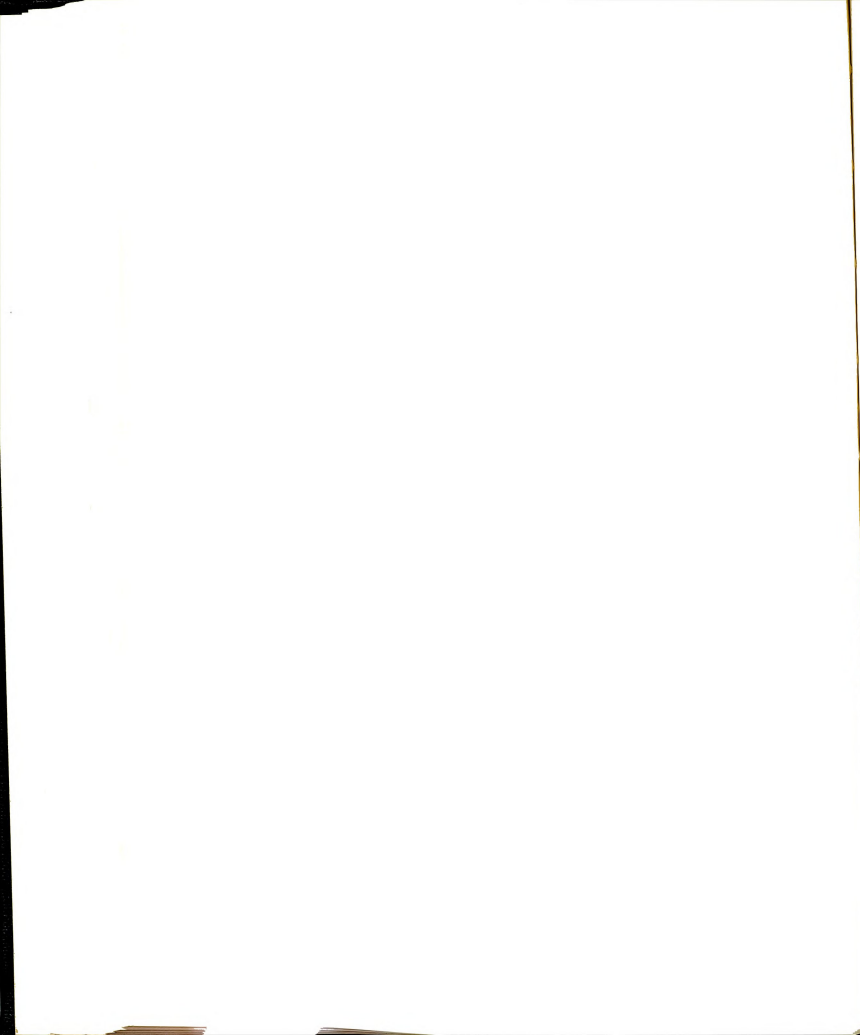
4. The univariate analysis for the dependent variables by sex indicated that within each group:
 - a. There was a difference between men and women students inasmuch as Fall and Winter grade-point average favored the women students.
 - b. There was a difference in four of the six activity areas with women being more active participants in residence-hall organizations and hobby-interest-religious-social clubs and men more active participants in athletics and music organizations.
5. The univariate analysis revealed three interactions for group by sex at the .05 level of confidence. These were grade-point average, residence-hall activity, and music activity. Graphs of the means for these interactions were made. The graphs revealed that the group by sex varied in the same direction but that the difference was magnified for men in respect to music and for women in respect to grade-point average and residence-hall activities.

The findings for the second part generated the following conclusions:

1. It was found that formal announcements of orientation were the prime source of referral of

students to the program with recommendations by friends and to a lesser extent, relatives, second.

2. The most frequent value attributed to orientation by the participants was the making of new friends; this was followed by the development of a feeling of "college spirit" and a feeling of familiarity with the campus physical features and the college services. Noteworthy was the fact that over 9 per cent of the new students expressed an increase in confidence. There were 6.3 per cent of the participants who expressed negative feelings about the program.
3. An overwhelming 96.5 per cent of the participating students stated that they would recommend participation in orientation to friends and relatives.
4. Students who did not participate in orientation indicated that working was a major cause for not participating. There were 56.2 per cent of the non-participants who gave reasons for not participating which did not have negative connotations. Only 24 per cent of the non-participants stated flatly that they had no interest in the program.



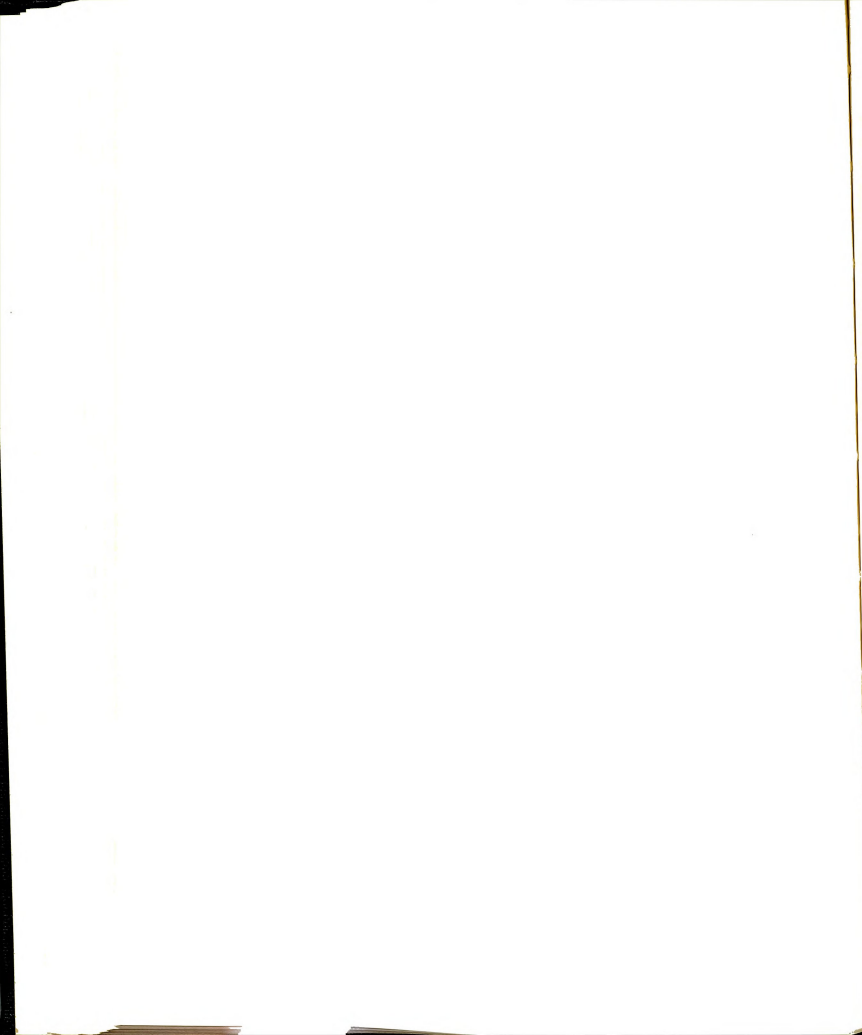
The findings for the third part generated the following conclusions:

1. There were significant differences between participants and non-participants with regard to:
(1) decision to attend the College; (2) a feeling that teachers had a personal interest in them; (3) obtaining dates; and (4) a feeling that the College was a friendly place.

Limitations

1. The most apparent limitation of the study was the inability to make random assignment of students to participant and non-participant groups. Attempts were made to assure comparability of the two groups through a demographic analysis which revealed no important differences between the groups. A further check was made comparing a group of students who had been totally unaware of orientation with a sample who had been aware but had not participated. A multivariate analysis did not reveal differences between these groups with regard to the independent variables used to contrast the populations of participants and non-participants. In spite of these checks, there remains the possibility that there was a difference between the groups in factors such as motivation to attend college which might be expressed by a student in willingness or unwillingness to attend orientation functions.

Therefore, no statements of causality were made in the study.



2. Students who participated in the opinion questionnaire and the questionnaire and interviews relating to referral sources, values, and reasons for not participating were aware that they were participating in a study. This may have caused artificial or unreasonable replies.

3. Students were asked to identify themselves by name in the questionnaire and in the interviews. Although the material did not appear to be threatening in any way, this may have influenced their responses.

Therefore, the conclusions reached and the discussion concerning the conclusions must be considered within limitations.

Discussion

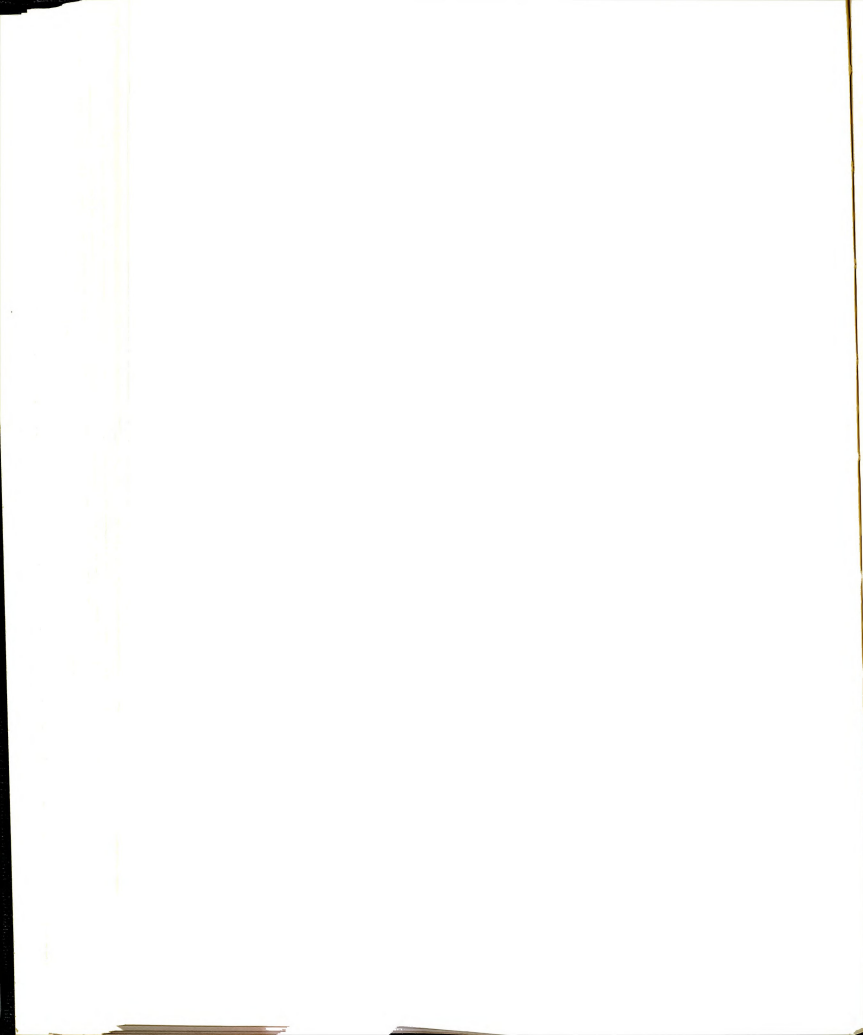
The finding that there was a significant difference in grade-point average between the participants and non-participants was contrary to expectation. Jesseph in a similar study at Wyoming in 1966 did not find any increase in academic proficiency (Jesseph, 1966). Cole and Ivey in a study at Colorado State University in 1964 found no difference between orientation attenders and non-attenders in academic achievement (Cole and Ivey, 1964). Both Alff and Boyd found that the short-term orientation program at Ohio University had no significant effect on first semester grades (Alff, 1963 and Boyd, 1956). However, Pappas and Mitchell reported improved academic performance as a result of small group orientation programs, although

these were conducted over a longer time than usual short-term orientation (Pappas, 1967 and Mitchell, 1967). Goodrich and Pierson reported that students attending counseling clinics (similar to a short-term orientation) made better initial adjustment to Michigan State University (Goodrich and Pierson, 1959).

The orientation program contained strong segments on study techniques and emphasized the early seeking of assistance if the student felt troubled academically. The sources of assistance were introduced to him through visits to the various offices involved. The necessity of getting to work at once in the quarter system was discussed. There is a possibility that the student's brief exposure to academic demands along with the suggestions of how to meet these demands may have been impressive enough to make a sufficient difference in his study habits.

The finding that students who had not participated in orientation dropped out of college at the end of the Fall and Winter Quarters in significantly larger numbers than those who had participated was not surprising. It should be noted that the number of drop-outs for both groups was relatively quite small, totaling 74 for the non-participants and 33 for the participants. This result was similar to that found by Jesseph (1966) and Goodrich and Pierson (1959).

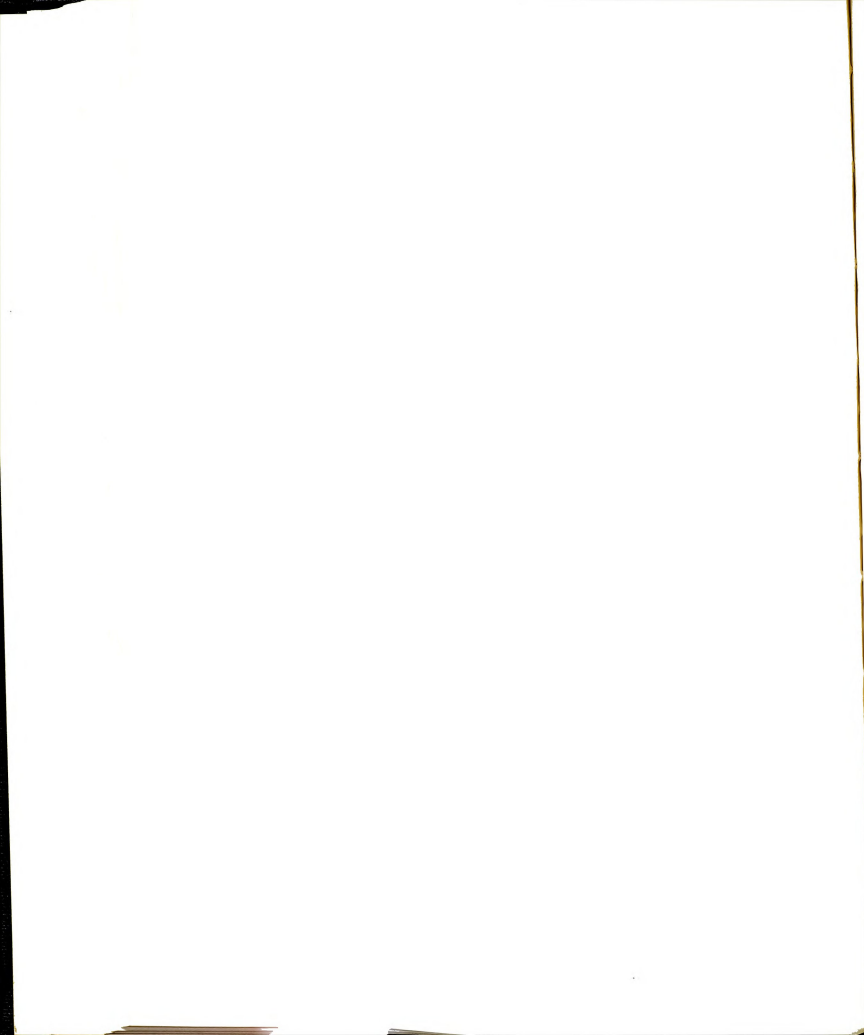
No specific studies were found which included participation in co-curricular activities as a measuring



device. It is likely that accurate records of such participation are difficult to keep; therefore, many colleges and universities do not have the information available.

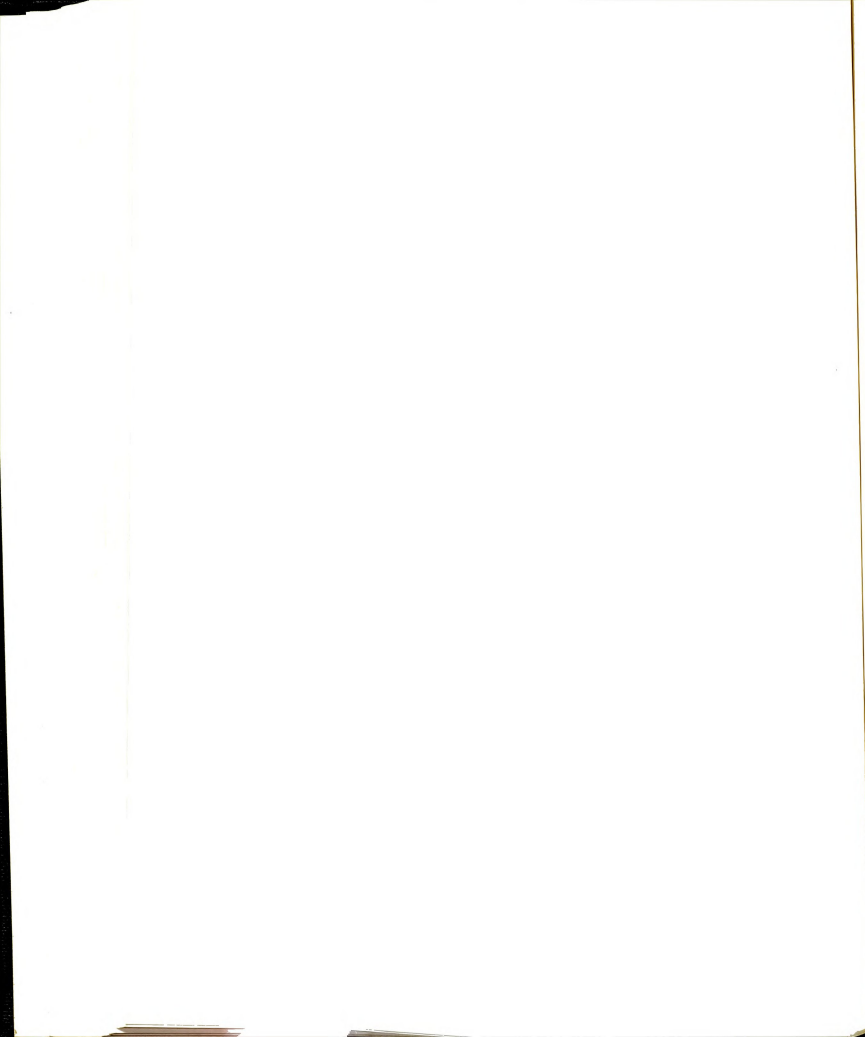
The findings that students participating in orientation took part in residence-hall organizations, student government, and music groups were not surprising inasmuch as these activities were emphasized during orientation. In fact, students were actively recruited for participation in both student government and music. The freshman football team was practicing and could not participate in orientation; thus, a large group was eliminated from participation. Department clubs and professional societies did not get started until the academic year was well under way and this made the opportunity to join equally available to both participants and non-participants. Hobby-interest-religious-social clubs were not emphasized as heavily as student government-type groups which may account for the lack of difference in this activity area. This aspect of the study appeared to have provided new data in orientation research and evaluation.

There was no difference between the groups in regard to persistence in the major. This agreed with the results of Cole and Ivey (1967) and Fahrbach (1960), but was contrary to the results of Jesseph (1966). The subject of persistence in the major in relation to orientation has not been mentioned often in literature on orientation.



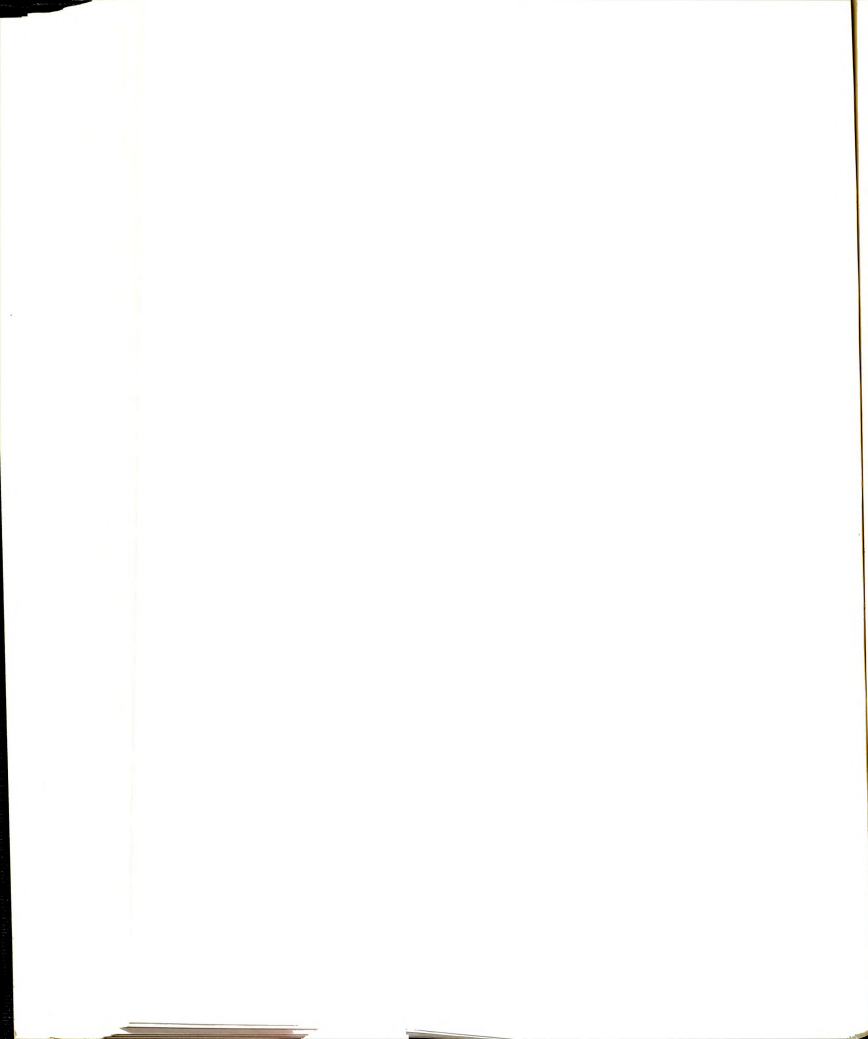
The findings in Part Two of the study did not disclose any extent of information which was unexpected. The major referral sources to orientation were predicted. It was thought that relatives might have had somewhat more influence due to the facts that: (1) the College has a reputation for being a campus with a minimum of unrest; (2) the campus is a residence campus with only 10 per cent of its students commuting; and (3) many alumni tend to encourage their children to attend the College. These factors may account for the high rate of applications for admission (the highest of the California State Colleges) compared to actual enrollment, but they do not influence the decision to participate in orientation.

The major values that students cite they had received from the orientation experience were as expected. However, there was one aspect which deserves further attention. Over 9 per cent of the participating students expressed a belief that they had gained confidence as a result of participation. Awareness of this feeling should enable orientation planners to concentrate even more effort in this direction. The fact that the survey was made six months after registration and nearly 10 per cent of the students were aware of the gaining of confidence appears to be an important aspect of orientation since it is obvious that the orientation program produced positive feelings about the College which were retained for at least



six months. Such positive feelings may help motivate students and this, in turn, may result in improved academic achievement.

Williamson, as far back as 1955, noted that orientation seemed to produce a general feeling of satisfaction with the institution (Williamson, 1955). Such a sense of satisfaction could involve some aspects of a "rite of passage" which, no doubt, is a need of many young people (Gennep, 1909). On the other hand, 6.3 per cent of the participants expressed negative feelings about the program and nearly 25 per cent of the non-participants stated that they had no interest in the program. If orientation is to be of value, then it would appear that a better job should be done of presenting its necessity to those who otherwise would choose not to participate. It may be that the presentation should include emphasis on improved college performance and gaining of confidence, as well as knowledge of the physical facilities and services of the college. While "fun and games" should not be eliminated from the presentation, they may need to be placed in a context which will not make them appear to be the major aspect of orientation. This can easily be the impression left by the literature which thus loses the serious student who needs to feel that the program will serve his academic needs. Obviously, if many are not interested in the program, it is because they tend to see orientation as merely play without any relationship to success in college. Zwicky at Houston

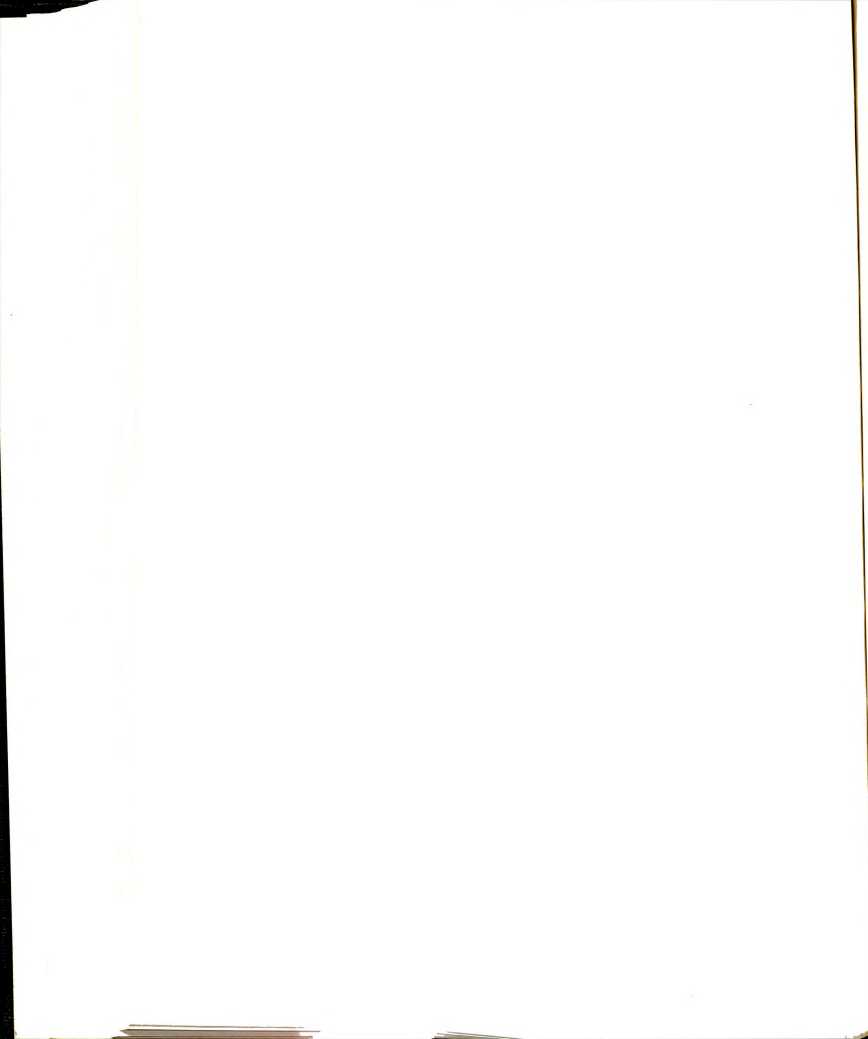


found that students there were more interested in intellectual activities than more frivolous events (Zwicky, 1965). Consequently, changes in orientation literature will require both thoughtful programming and insightful presentation.

The opinion survey completed about 30 days following Fall Quarter produced an indication that students who participate in orientation tend to view the college with more satisfaction than the non-participants. The opinion items that related to "friendliness," "happy with decision to attend the college," "getting dates," "a better personal relationship with faculty" were all significant.

These appear to be the kind of things that produce the elusive factor of morale. The student who appeared to appreciate orientation frequently mentioned such items as the general atmosphere, "college spirit," and a feeling of belonging. These are related to those items in the opinion survey mentioned above. They were reported to be at a significant level both one month and six months later so it is apparent that orientation did generate a lasting feeling of satisfaction with the College.

Although the data indicates that the orientation program may have produced significant differences between the participants and non-participants in several areas, it is also valid to conclude that these differences may be attributed to factors other than orientation such as motivation.



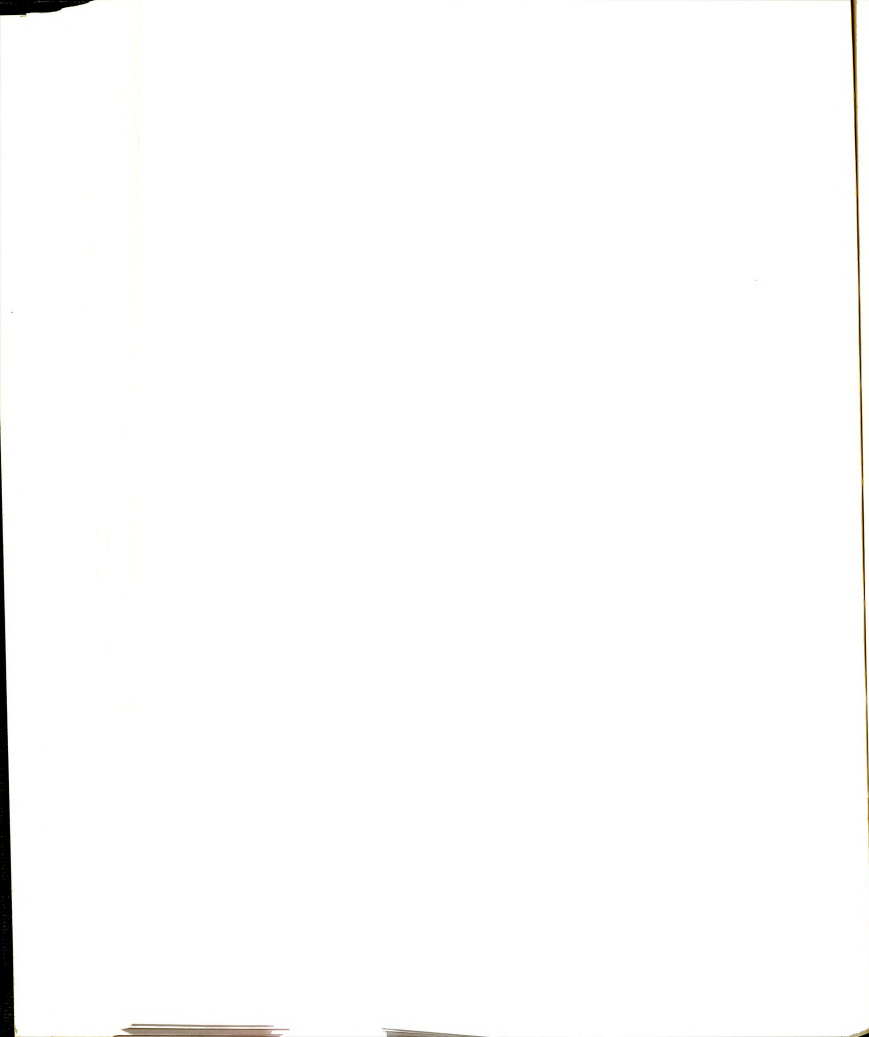
Even if such rival hypotheses are assumed to be true, it may be very much worthwhile to conduct the orientation program for these more highly motivated students. These students may feel a need for such programs to reduce their anxiety concerning college attendance. Moreover, the evidence clearly reveals that both the participating students and their parents are pleased with orientation.

Implications for Further Research

This study suggests areas for additional investigation.

1. In this study, the multivariate analysis of variance indicated that the participants in the orientation program achieved better academically than did the non-participants. This finding was contrary to the results of several similar studies. It appears that further research on this aspect of orientation is warranted. Although it is very difficult to make random assignments of students to orientation programs, the possibility of doing so should be investigated. Perhaps the use of smaller samples, for example 30 to 40 students might be considered. It would be desirable if such experimental studies could be made at several institutions having a variety of programs.

2. The study of personality differences between participants and non-participants would also be a profitable area for further research. In this study the demographic data and the analysis of the "unaware" and "aware"-

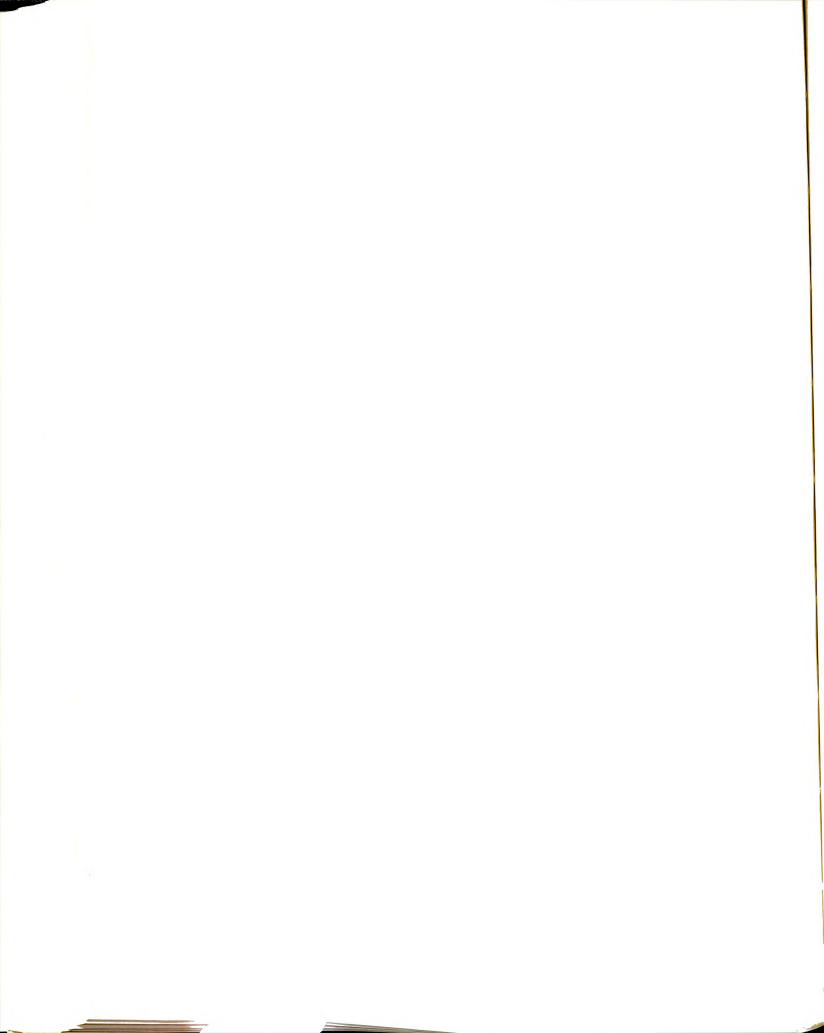


of-orientation groups did not reveal differences in the populations of participants and non-participants. However, random assignment of a representative sample of participants and non-participants to a personality test might reveal interesting information concerning such groups.

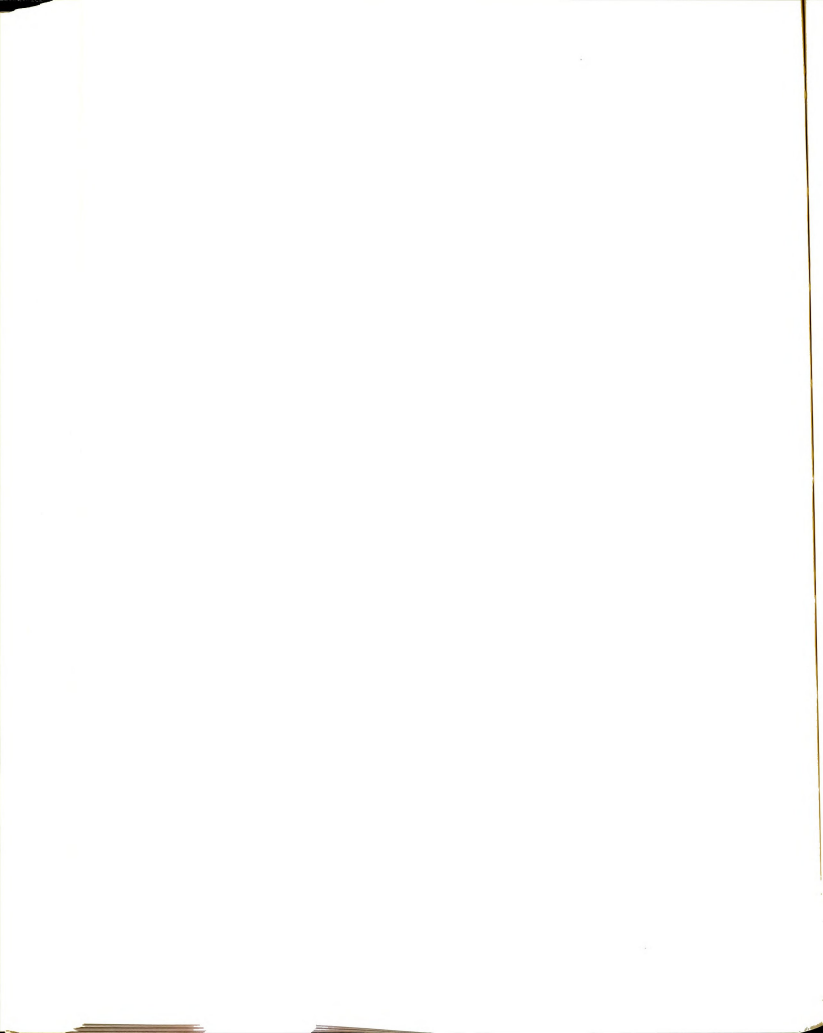
3. Examination of the socio-economic background of participants and non-participants might produce information which would indicate differences. Fahrbach at Kansas found a socio-economic difference between students who attended a summer orientation program and those who did not (Fahrbach, 1960). Further research in the background of the college freshman population in relation to orientation could prove rewarding.

4. Since orientation programs frequently organize participating students into "clubs" of about 30 students with student counselors as group leaders, a study of the student counselors using such elements as personality tests, academic background, and demographic data might be quite useful. The success-failure pattern of the students within each group could be examined in relationship to the counselor. Random assignment would be feasible in such a study.

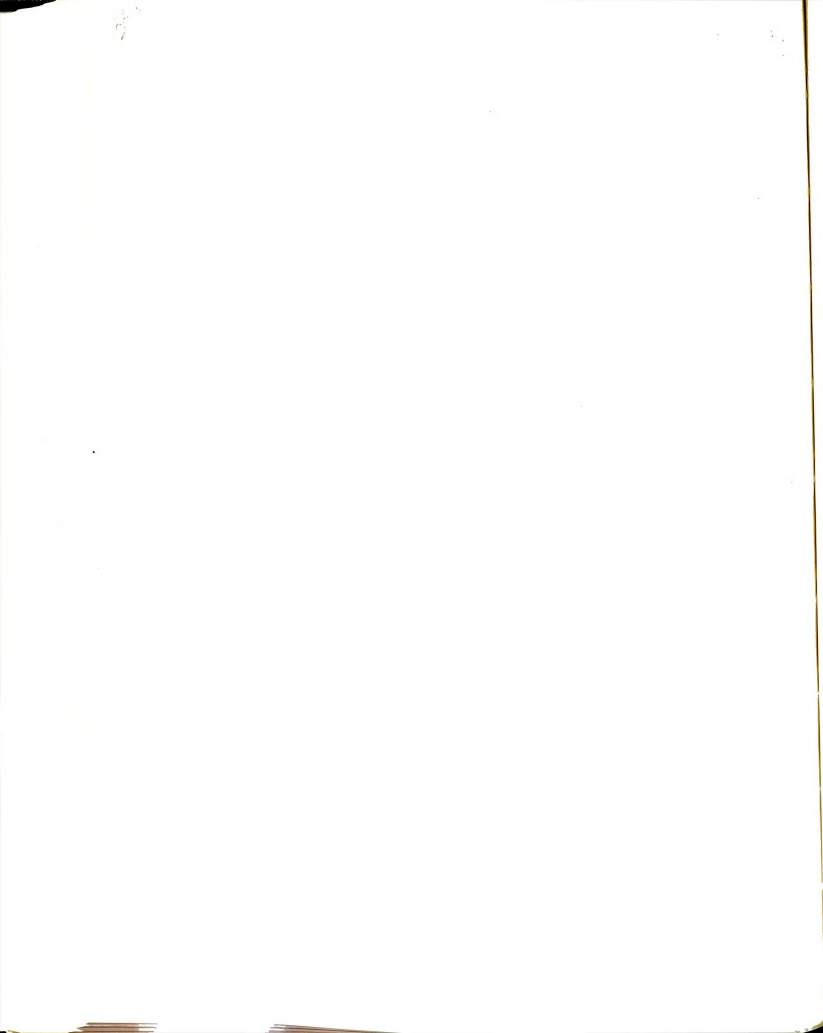
5. Because of the apparent lack of experimental or even comparative research studies in orientation, it would be desirable to conduct studies of orientation similar to this one at other institutions in different settings.



6. Orientation programs contain a mixture of specific programs, approaches, and even subject matter. Research should be done to determine the different effects of specific aspects of orientation. Some portions might prove to be totally useless while others, very important. Such research would enable orientation directors to focus upon the more desirable portions of the program.



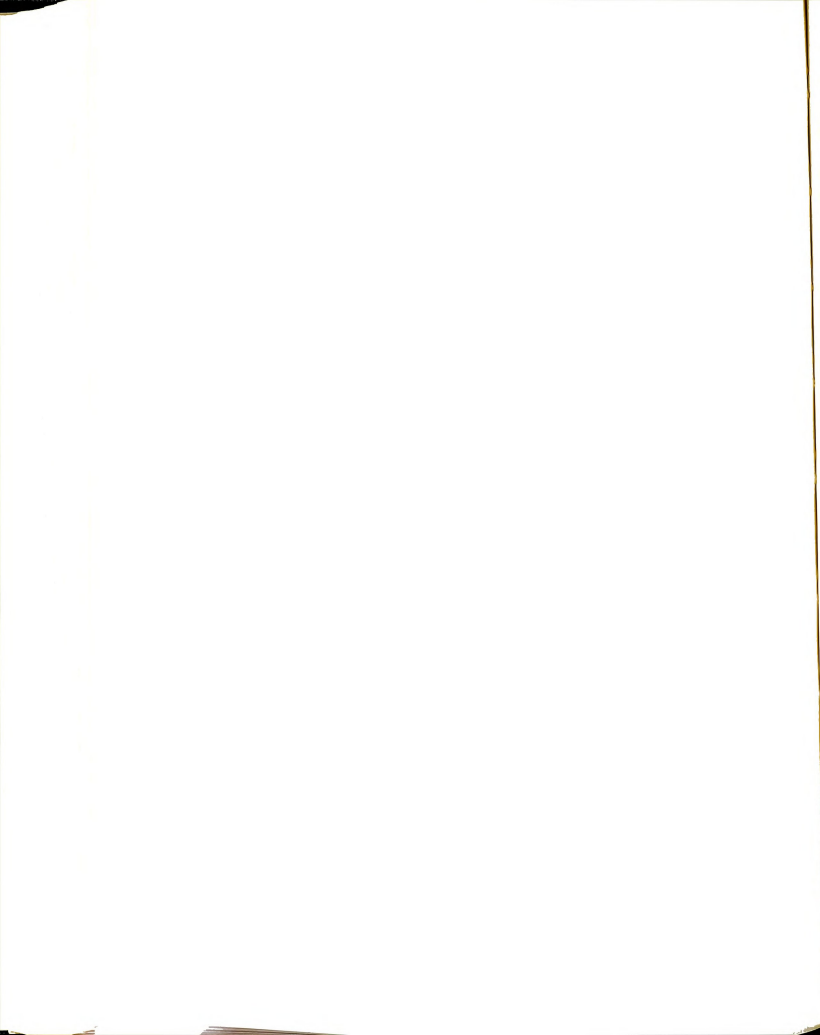
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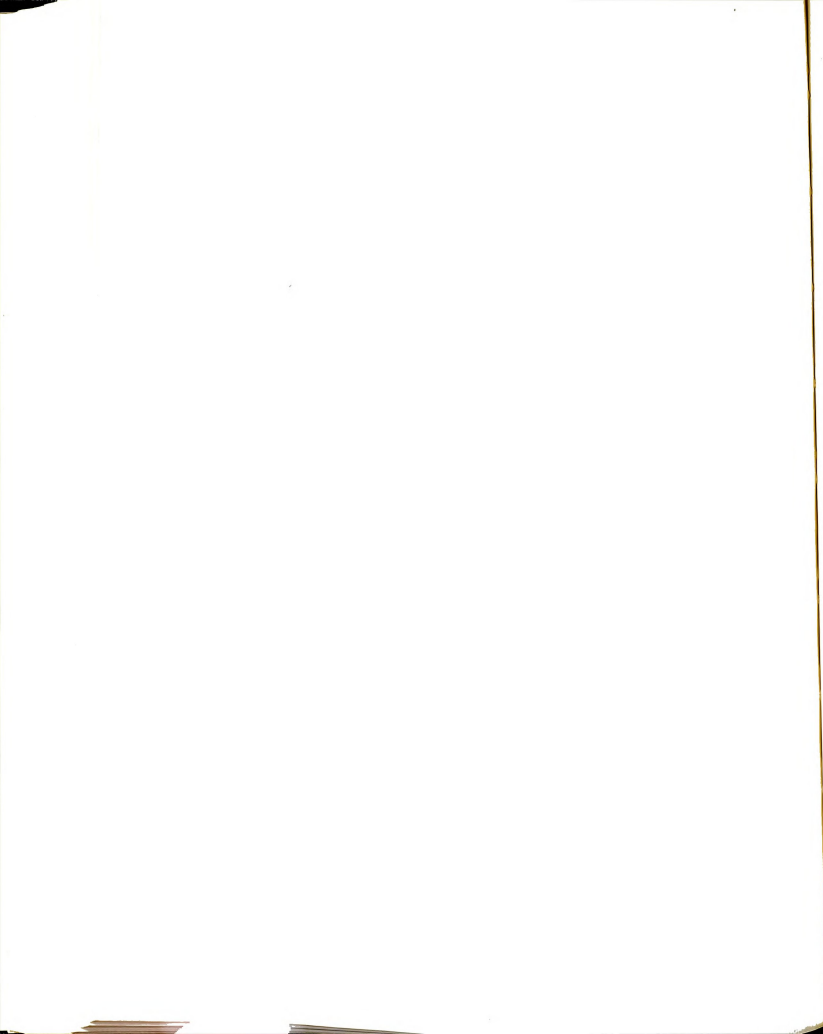
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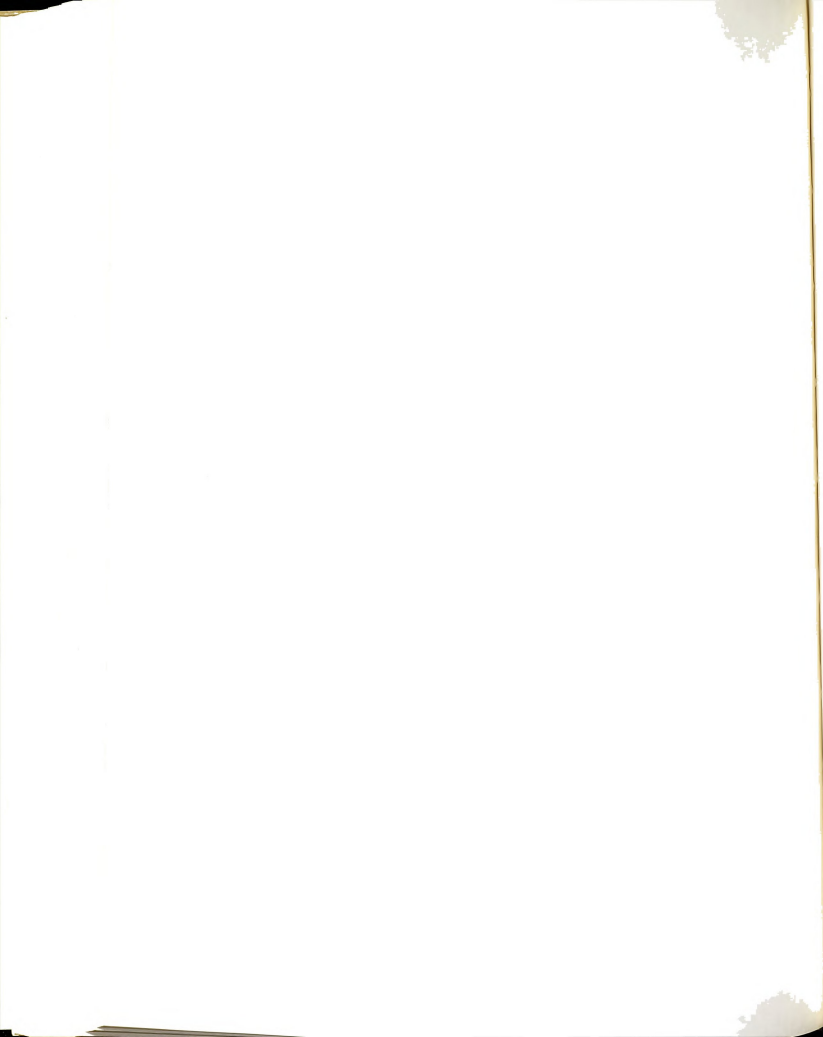
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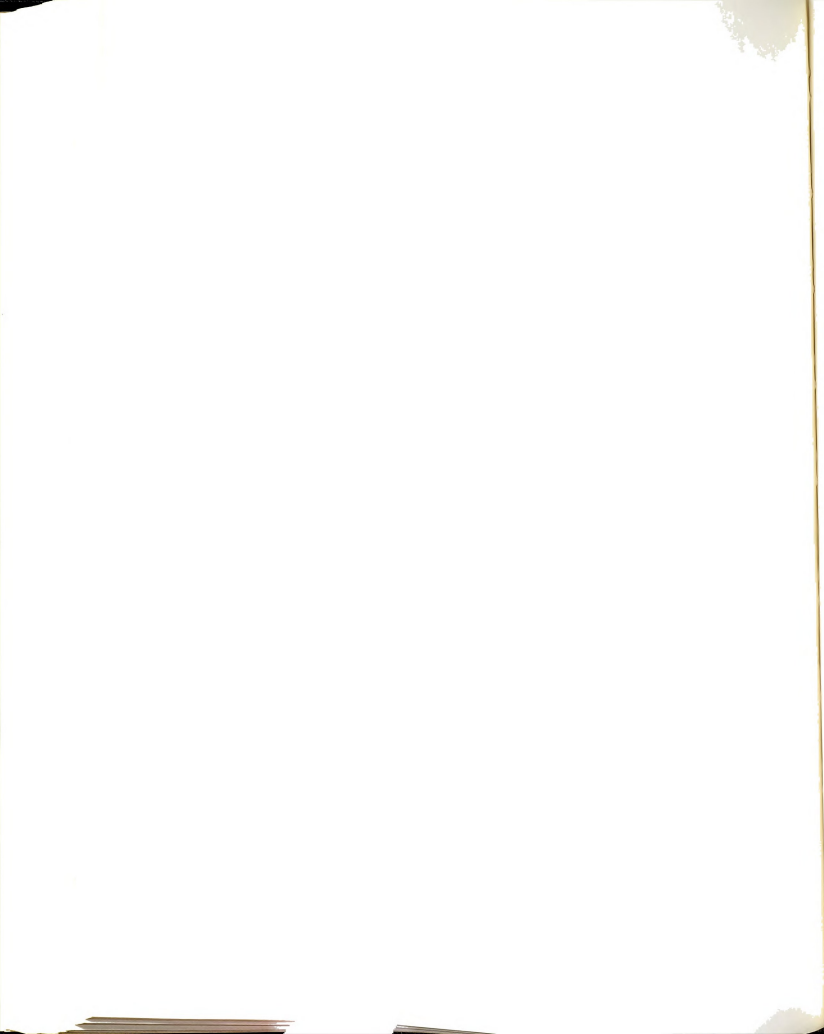
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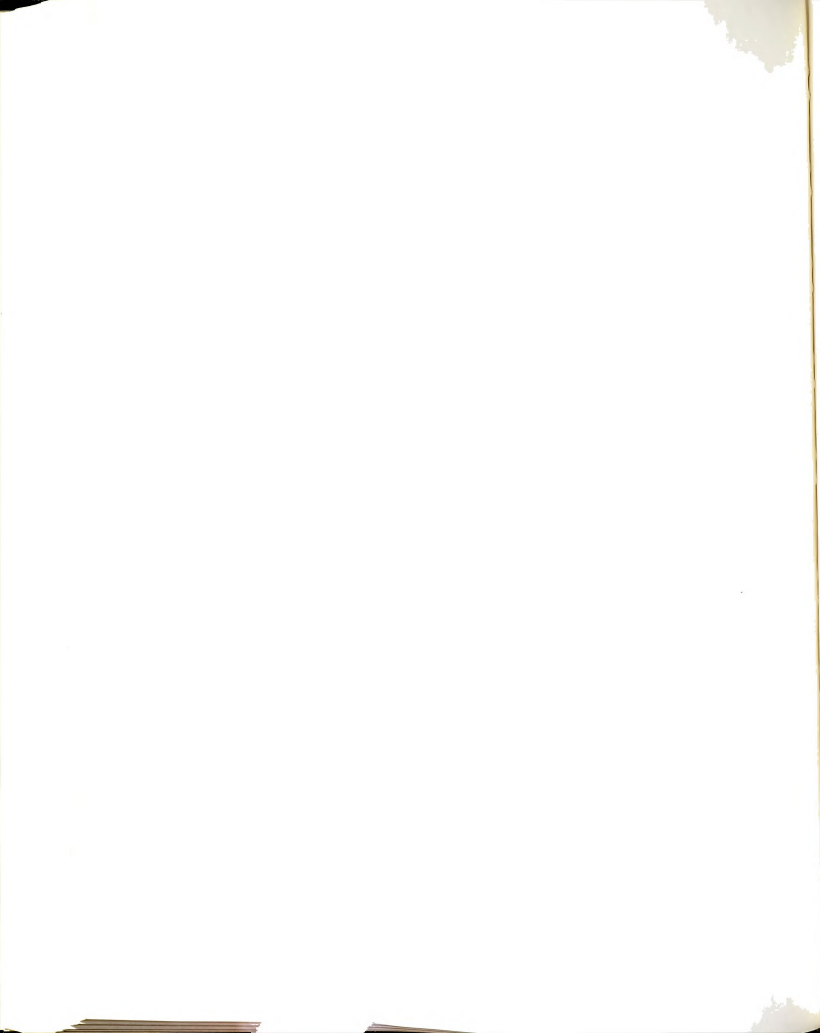
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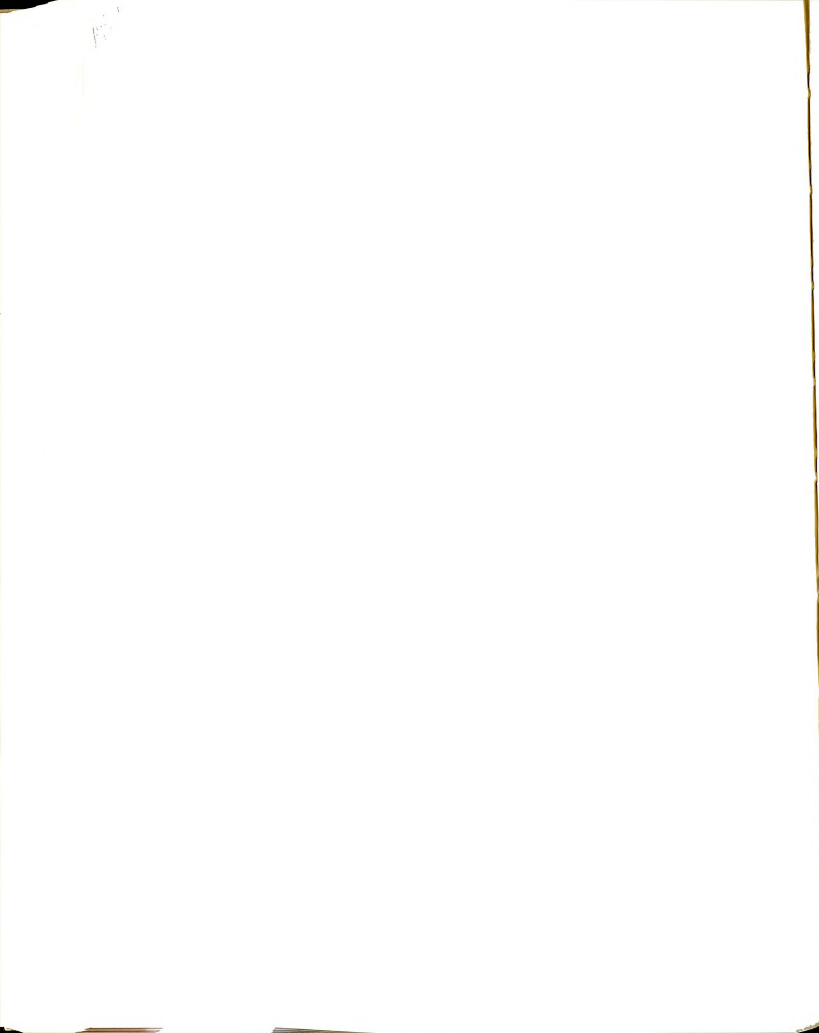
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APPENDICES



APPENDIX A

STUDENT SURVEY OF OPINIONS REGARDING THE COLLEGE AND
THE STUDENT'S RELATIONSHIP TO IT, INCLUDING LETTERS
OF REQUEST TO COMPLETE QUESTIONNAIRE

A selected number of students at Cal Poly are being questioned in order to find out if the College can better help students in their transition from high school to college. Since the statistically selected sample is small and you are one of the few who has been chosen, it is especially important to have your response. Please let your answers indicate exactly how you feel. Your answers will be kept in the strictest confidence. Your cooperation is appreciated.

Name		
Last	First	Middle
Sex	Residence (Kind)	

1. summer registration? Yes _____ No _____
 2. Welcome Week Camp? Yes _____ No _____
 If so, which one? Pinecrest _____ Ocean Pines _____
 3. regular fall registration? Yes _____ No _____
 4. Welcome Week Activities On-Campus? Yes _____ No _____
 If so, check each one of the following in which
 you participated. Check only those. If you did not
 participate leave it blank.

Pres. Kennedy _____ Health Center _____ Placement _____
Dean Chandler _____ Counseling Center _____ ASI Office _____
Dr. Howard _____ Library _____ Security _____
Music _____ ROTC _____ Bookstore _____
_____ College Union _____

Invitation to Thought_____	Invitation to Thought_____
Discussion Group following_____	Hootenanny Try Out_____
Hootenanny_____	Volleyball_____
Beach Party_____	Sports Day_____
People Rallye_____	Faculty Home Visit_____
"P" Climb_____	

Ag _____ Engr _____ Arts _____ Science _____ Arch _____

WOW Club Meetings _____
LUNCHES: Mon _____ Tues _____ Wed _____ Thurs _____

MOVIES _____

DANCES: Crandall Gym _____ Men's Gym _____ Arch Patio _____
Aero Hangar _____ Cafeteria _____



1. Estimate your grade point average to date at Cal Poly. Is it
 - _____ (1) between B and A
 - _____ (2) between C and C+
 - _____ (3) between D+ and C
 - _____ (4) between D and D+
 - _____ (5) less than D
2. How do you feel about your decision to attend Cal Poly?
 - _____ (1) very satisfied
 - _____ (2) satisfied
 - _____ (3) somewhat in doubt
 - _____ (4) dissatisfied
 - _____ (5) very dissatisfied
3. Have your educational goals and aspirations changed since you entered Cal Poly?
 - _____ (1) not any
 - _____ (2) slightly
 - _____ (3) some
 - _____ (4) considerably
 - _____ (5) completely
4. What is your reaction to the following statement? "Few teachers take a genuine interest in my personal welfare."
 - _____ (1) strongly disagree
 - _____ (2) disagree
 - _____ (3) undecided
 - _____ (4) agree
 - _____ (5) strongly agree
5. How would you evaluate the over-all quality of the instruction of your teachers?
 - _____ (1) excellent
 - _____ (2) good
 - _____ (3) fair
 - _____ (4) poor
 - _____ (5) unsatisfactory
6. Have you seen your academic adviser other than at registration time? Yes _____ No _____. What is your reaction to him?
 - _____ (1) He is easy to find in his office and easy to talk to.
 - _____ (2) He seems interested in me.
 - _____ (3) He is all right.
 - _____ (4) He is rather difficult to find or talk to.
 - _____ (5) I would like a new adviser.
7. In comparison with other students in your classes, how do you feel you rank academically?
 - _____ (1) superior most of the time
 - _____ (2) superior sometimes
 - _____ (3) equal most of the time
 - _____ (4) inferior sometimes
 - _____ (5) inferior most of the time

8. About your study habits, do you
_____ (1) have an adequate routine of study which will insure good grades?
_____ (2) have a reasonable routine of study?
_____ (3) study about as much as the average Cal Poly student?
_____ (4) need to improve, somewhat, your study habits?
_____ (5) have a serious need to improve your study habits?
9. Are you single? Yes _____ No _____. If so, since coming to Cal Poly, have you experienced any trouble getting dates?
_____ (1) No
_____ (2) No, not really
_____ (3) Yes, some
_____ (4) Yes, considerably
_____ (5) I do not know; I haven't tried
10. Have you been to the Health Center seeking medical help? Yes _____ No _____. If so, what is your reaction to their services?
_____ (1) excellent
_____ (2) good
_____ (3) fair
_____ (4) not adequate
_____ (5) poor
11. Have you sought religious guidance since you have been on campus? Yes _____ No _____. If so, how do you feel about the help that you received? Was it
_____ (1) excellent
_____ (2) good
_____ (3) fair
_____ (4) not adequate
_____ (5) poor
12. Do you work part-time? Yes _____ No _____. Who helped you find your job? _____. If the Placement Office helped you, how did you find its service to you?
_____ (1) excellent
_____ (2) good
_____ (3) adequate
_____ (4) not very adequate
_____ (5) poor
13. Have you been to the Counseling Center? Yes _____ No _____. Within the limits of your experience there, what is your evaluation of its service?
_____ (1) of great value
_____ (2) of considerable value
_____ (3) of some value
_____ (4) of little value
_____ (5) a waste of time



14. Do you participate in Cal Poly recreational activities? Yes _____
 No _____. If so, what is your opinion of these facilities?
 _____ (1) of great value
 _____ (2) of considerable value
 _____ (3) of some value
 _____ (4) of little value
 _____ (5) a waste of time
15. Do you participate in a departmental club? Yes _____ No _____.
 An interest of hobby club? Yes _____ No _____. Of what value
 do you consider these kinds of clubs?
 _____ (1) of great value
 _____ (2) of considerable value
 _____ (3) of some value
 _____ (4) of little value
 _____ (5) a waste of time
16. Have you made friends with other students? Yes _____ No _____.
 If so, how difficult was it to get acquainted with other students?
 _____ (1) extremely easy
 _____ (2) quite easy
 _____ (3) not too difficult
 _____ (4) somewhat difficult
 _____ (5) very difficult
17. How would you characterize Cal Poly?
 _____ (1) a very friendly college
 _____ (2) a friendly college
 _____ (3) neither friendly nor unfriendly
 _____ (4) somewhat unfriendly
 _____ (5) decidedly unfriendly
18. How do you feel about your living quarters, considering costs,
 spaciousness, roommates, and the like?
 _____ (1) very satisfied
 _____ (2) reasonably satisfied
 _____ (3) all right
 _____ (4) somewhat unsatisfactory
 _____ (5) definitely unsatisfactory
19. Is there anything you especially dislike about Cal Poly? _____

20. Is there anything you especially like about Cal Poly? _____

CALIFORNIA STATE POLYTECHNIC COLLEGE

SAN LUIS OBISPO, CALIFORNIA 93401



AGRICULTURE

APPLIED ARTS

APPLIED SCIENCES

ARCHITECTURE

ENGINEERING

October 16, 1969

We need your help! Cal Poly studies its programs to improve them. To do this we need the help of students. You have been selected by a statistical sampling. The sample is small so it is important that each person selected responds.

The study is simple and requires your reaction to several phases of the college program. To make the study you are requested to come to Room _____ in the _____ Building on Thursday, October 23, 1969 at 11:00 a.m.

If you cannot come, would you please come to my office to let me know.

Sincerely,

Everett M. Chandler
of Students

ATMOSPHERIC

RECORD

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CALIFORNIA STATE POLYTECHNIC COLLEGE

SAN LUIS OBISPO, CALIFORNIA 93401



AGRICULTURE

APPLIED ARTS

APPLIED SCIENCES

ARCHITECTURE

ENGINEERING

October 28, 1969

We still need your help! Last week we sent a note to you asking your help in a study of the college orientation process. It is just as important to have your help if you did not participate as if you did.

Some students could not come at the time requested, it is realized. Please come to my office - Administration Building, Room 209 - between 8:00 a.m. - Noon and 1:00 p.m. - 5:00 p.m. any day this week or next. The survey forms are easy to complete. Please assist us.

Everett M. Chandler
Dean of Students

CALIFORNIA STATE POLYTECHNIC COLLEGE
San Luis Obispo

November 12, 1969

Dear Student:

Time is running short. You are one of the few persons who has not yet completed the survey forms which you were requested to do previously. It is very important to the success of the research project that you assist the college by taking these few minutes to complete the forms. All that you need to do is come to Administration Building Room 209. Just tell the girls in the office you are there to take the survey. They will be glad to assist you. You can come anytime between 8 a.m. and 5 p.m., except Noon to 1 p.m. It would be desirable to have you come in the next ten days.

Please help. It is important.

Sincerely,

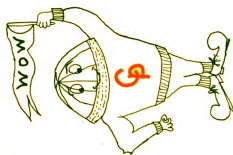
Everett M. Chandler
Dean of Students



APPENDIX B

ORIENTATION BROCHURE AND PROGRAM - 1969

127a



WEEK OF WELCOME

CALIFORNIA STATE POLYTECHNIC COLLEGE

SAN LUIS OBISPO

147a

1969 Week of Welcome

The week prior to registration, you should plan on attending "Week of Welcome," which is designed to assist you in joining the Cal Poly Family. Welcome Week offers an opportunity for you to see what life at Cal Poly has for you.

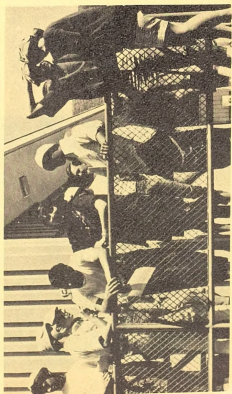
During Welcome Week you will become acquainted with other new students, student leaders, faculty, and administrative staff members. Special programs have been planned for you to meet the School Deans, your Department Head and many other faculty members. You will also be given the opportunity to ask questions about the college curriculum, student affairs, and Cal Poly traditions.

"Week of Welcome" consists of two programs—Camp and Campus, running simultaneously—both introducing the new students to Poly life. The Camp program has been carefully coordinated with Campus, so that you will not miss any necessary information, and upon your return from Camp, you will easily be integrated into the campus activities.



You will not miss any necessary information, and upon your return from Camp, you will easily be integrated into the campus activities.

Past experience indicates that new students form some of their most lasting friendships within their WOW clubs. We hope you will join in our "Week of Welcome" which the students have planned especially for you.



Why Go To Camp?



Cal Poly has its own "Head Start" program, and you can be a part of this experience by attending Welcome Week Camp. The lasting friendships formed and the knowledge of our school's philosophy gained during the 2½ days at camp will prove invaluable for the duration of your college career. A student staff of 25 counselors working cooperatively with faculty advisors provide a varied program of fun and thought. Discussions of the college adjustment, co-curricular activities, and student government are integrated with opportunities for individual inquiry with counselors and faculty. Evening campfires, songs, dancing and skits highlight the night-life at Camp. The casual and friendly atmosphere lends itself to personal involvement with student leaders and instructors in your field of study. Camp creates a strong basis for academic and social success in the college environment.

Where are the camps located?

Camps Ocean Pines and Pinecrest are located north of the Poly campus in beautiful and historic Cambria. A blend of rugged coast line and pine trees offer you some of the most spectacular scenery in the state.

The two camp sessions, each 2½ days (Sept. 13-15 or Sept. 15-17) are filled on a first-come-first-serve basis (with an equal guy/girl ration).

147a

campus in beautiful and historic Cambria. A blend of rugged coast line and pine trees offer you some of the most spectacular scenery in the state.

The two camp sessions, each 2½ days (Sept. 13-15 or Sept. 15-17) are filled with activities on a non-competitive basis (with an equal guy-gal ration) so mail the application in NOW!

What should I bring?

Informality in dress is the keynote at WOW Camp. A list of "musts" include:

- 1) sleeping bag (or a reasonable facsimile)
- 2) warm jacket and levi's
- 3) flashlight (one that really works)
- 4) tennis shoes (socks?)
- 5) toilet kit (towel, washcloth, soap, etc.)
- 6) notebook, pencil or pen

Sweatshirts are advisable, as the nights may be cool.

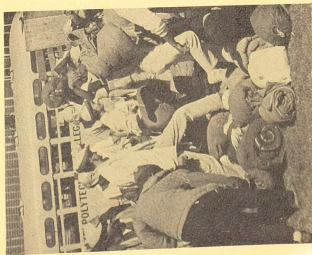
If you play a guitar or other musical instrument, bring it along.

How much does this exciting opportunity cost?

The entire program, consisting of transportation, meals and lodging for 2½ days plus the campus activities costs only \$30.

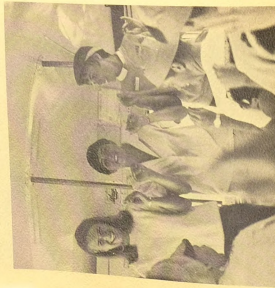
HOW TO APPLY FOR CAMP

Limited space at Camps make it necessary to restrict the attendance. Be certain there is a place for YOU by returning at once the accompanying application right away!



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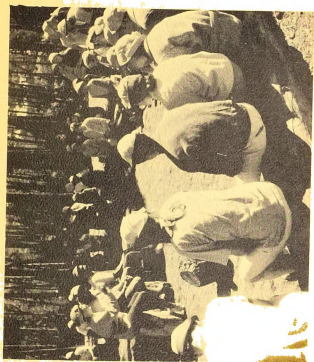
What's Happening at Camp?



Campfires
Faculty Discussions
Dancing
Sports Bar-B-Q
Skits Singing
Cocurricular Activities
Discussion
Friends
College Philosophy

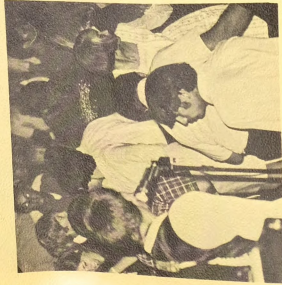


Friends
College Philosophy



147a

What's Happening on Campus?



Movies Sports Day

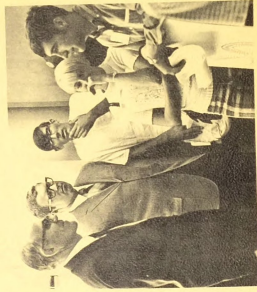
Meet the
Administrators

People Rallye Tour

Faculty Home Visits

Beach Party Stomps

Church Night Plays



What Is A WOW Club?

When you arrive on campus, register at the Welcome Week booth found in front of the Men's Gym. Here you will be assigned to a WOW Club. WOW Clubs are composed of 12 new students under the supervision of 1 upper class counselor. The counselors are chosen from many applicants on the basis of their academic, social and leadership accomplishments. Each Campus WOW Club participates as a group in the main events of the week. Camp WOW

Clubs proceed to their respective Camps and return to Campus orientation activities after 2 1/2 days. Each Club has several informal discussion periods where questions may be discussed in depth to aid the new student. Transfer students are placed with other transfer students, and special programs are planned for foreign and married students.



When Should I Arrive On Campus?

Campus Welcome Week begins on September 14, with the WOW Booth opening up at 9 a.m. in front of the Men's Gym. Therefore, you should plan on arriving at school on the morning of the 14 as WOW Clubs will hold their first meeting Sunday afternoon.

Residence halls will open September 12 and students may move in between the hours of 2 p.m. and 6 p.m. As the cafeteria will not be serving students at this time, the El Corral Snack Bar will be open for your convenience.

Welcome Week fees are kept to a minimum and adjustments are made for late registrants, so that all new students may participate in the orientation program. The cost of the Campus WOW program is only \$15, which includes four lunches and numerous orientation and social events.

Advanced registration for Camp is required, and no refunds can be made after September 1. Registration for Campus will start Sept. 14 from 9:00 a.m. to 5:00 p.m. in front of the Men's Gym.



147a

Camp Application Blank

er September 1. Registration for Campus will start Sept. 14 from 9:00 a.m. to 5:00 p.m. In front of the Men's Gym.

1. Fill out this application blank.

2. Enclose a check or money order for \$30 payable to Associated Students, Inc. Cal Poly.

3. Mail the application and check or money order to:

WELCOME WEEK
A.S.I. Office, Cal Poly
San Luis Obispo, Calif. 93401

4. No refunds will be made after September 1.

☐ I would like to attend WOW CAMP (includes most campus activities).

☐ First session, September 13-15. (Open to students who completed their Placement Tests during the summer.

☐ Second session, September 15-17.

Name _____

Address _____



SEPT 14-21
2003
69
WELCOME WEEK



W O W -- 1969

A SCHEDULE OF CAMPUS ACTIVITIES

This Belongs to

Name: _____

WOW Club: _____

Meeting Place: _____

WOW CLUB TOURS

During the Week, WOW Clubs will have an opportunity to participate in the following scheduled tours:

- (1) President's Office.....Dr. Robert E. Kennedy
- (2) Dean of Students.....Mr. Everett M. Chandler
- (3) Dean of Women.....Dr. Lorraine Howard
- (4) Counseling Center.....Mr. George Mulder
- (5) Health Center.....Dr. Billy Mounts
- (6) College Union Building.....Student Counselor
- (7) Placement Center...Mr. Eugene A. Rittenhouse
- (8) Security Office.....Mr. George Cockriel
- (9) R.O.T.C.....Colonel Robert Green
- (10) El Corral Bookstore.....Mrs. Mary Lee Green
- (11) College Library.....Mr. Harry Strauss
- (12) Music Building.....Mr. Harold Davidson
- (13) ASI President's Office.....Mr. Paul Kresge
- (14) ASI Business Office.....Mr. Roy Gersten
- (15) Dean of Student Activities....Dr. Dan Lawson

SUNDAY - SEPTEMBER 14

- 6:30 am College Snack Bar Opens for Breakfast
- 9:00 am WOW Booth Opens in Front of Men's Gym
- 9am-4pm Campus Tours--New students and families
leaving in front of Music Building
- 10:00 am Residence Halls open to move in 10am to 6pm
- 11:00 am WOW Counselor Meeting - Engineering Aud.
- 1:00 pm WOW Clubs Meet - Assigned Rooms
- 1:00 pm Parents Reception - College Theater
- 5:00 pm WOW Booth Closes
- 6:30 pm WOW Clubs Meet - Assigned Rooms
- 7:00 pm Invitation to Thought
Transfer Students - College Theater
New Students - Men's Gym
- 8:00 pm WOW Clubs Meet - Assigned Rooms
Invitation to Thought Discussion Groups
- 9:00 pm WOW Mingle - Student Dining Hall
- 10:30 pm Snack Bar Grill and Fountain Close
- 11:00 pm Snack Bar Vending Closes

opportunity to
tours:

E. Kennedy
M. Chandler
Raine Howard
George Mulder
Billy Mounts
at Counselor
Rittenhouse
ge Cockriel
Robert Green
y Lee Green
erry Strauss
ld Davidson
Paul Kresge
Roy Gersten
Dan Lawson

MONDAY - SEPTEMBER 15

- 6:30 am College Snack Bar Opens for Breakfast
- 8:00 am Camp Ocean Pines Buses Leave for Cambria
in front of Men's Gym
- 8:00 am WOW Counselor Meeting - Engineering Aud.
- 8:30 am WOW Clubs Meet - Assigned Rooms
- 9:00 am WOW Booth Opens in Front of Men's Gym
- 9:00 am WOW Tours Begin - Assigned Schedules
- 9:00 am People Rallye (Ask WOW Counselor)
- 10:00 am First Camp Session Buses Arrive from
Camp Ocean Pines in Front of Men's Gym
- 10:00 am Residence Halls Open to Move in 10am - 6pm
- 10:00 am Camp Pinecrest Buses Leave for Cambria
in front of Men's Gym
- 11am-1pm Lunch for WOW Clubs - Assigned Times
- 1:00 pm WOW Tours Begin - Assigned Schedules
- 1:00 pm People Rallye (Ask WOW Counselor)
- 5:00 pm WOW Tours End
- 5:00 pm WOW Booth Closes. Buy WOW Tickets in
Snack Bar after 5:00 pm
- 7:00 pm Residence Hall Meetings for all new students
living on campus
- 8:30 pm Faculty Home Visits
- 10:30 pm Snack Bar Grill and Fountain Close
- 11:00 pm Snack Bar Vending Closes

TUESDAY - SEPTEMBER 16

- 6:30 am College Snack Bar Opens for Breakfast
- 8:00 am WOW Counselor Meeting - Engineering Aud.
- 8:30 am WOW Clubs Meet - Assigned Rooms
(Quiet Please...Faculty Meetings are Being
Held in all Academic Buildings)
- 9:00 am WOW Booth Opens in Front of Men's Gym
- 9:00 am WOW Tours Begin - Assigned Schedules
- 9:00 am Volleyball and "P" Climb Begin
- 11-1 pm Lunch for WOW Clubs - Assigned Times
- 1 - 5 pm Volleyball Tourney, and "P" Climb
Continue
- 1:00 pm WOW Tours Begin - Assigned Schedules
- 5:00 pm WOW Tours End
- 5:00 pm WOW Booth Closes
- 6:30&8:30 Movies in the College Theater
- 7 - 9 pm Hootenanny Try-Outs
- 9-12 pm Stomp - Architecture Patio
- 10:30 pm Snack Bar Grill and Fountain Close
- 11:00 pm Snack Bar Vending Closes

WEDNESDAY - SEPTEMBER 17

- 6:30 am College Snack Bar Opens for Breakfast
- 8:00 am WOW Clubs Meet - Assigned Rooms (Quiet Please!)
- 8:30-10:30 Dean's Assemblies:
School of Agriculture---Crandall Gym
School of Applied Arts--Stadium
School of Applied Sciences--College Theater
School of Architecture--Architecture Patio
School of Engineering---Engineering Aud.
- 9:00 am WOW Booth Opens in Front of Men's Gym
- 9:30 am Camp Ocean Pines Buses Arrive from Cambria
- 10:00 am Residence Halls Open to Move in 10am - 6pm
- 10:30 am WOW Tours Begin - Assigned Schedules
- 11 - 1pm Lunch for WOW Clubs - Assigned Times
- 12:00 Camp Pinecrest Buses Arrive from Cambria
- 1 - 5 pm Sports Day - Old Athletic Field
- 1:00 pm WOW Tours Begin - Assigned Schedules
- 2:00 pm WOW Booth Closes
- 5:00 pm WOW Tours End
- 7:00 pm Residence Hall Meetings for All New Students
Living on Campus
- 8:30 pm Faculty Home Visits
- 8:30 pm Movie in College Theater
- 10:30 pm Snack Bar Grill and Fountain Close
- 11:00 pm Snack Bar Vending Closes

NOTE: Faculty Advisors are available during the
following office hours today:

10:00 am - 12:00 Noon
1:00 pm - 5:00 pm

ast
 Quiet Please!)

THURSDAY - SEPTEMBER 18

Wear Your Rooter's Caps...Welcome Week Isn't Over Yet!

Gym	6:30 am	College Snack Bar Opens for Breakfast
College Theater	8:00 am	Counselor Meeting - Engineering Aud.
College Patio	9:00 am	WOW Tours <u>Begin</u> - Assigned Schedules
Engineering Aud.	10:00 am	<u>Residence Halls Open</u> to Move in 10am - 6pm
Gym	11-1 pm	Lunch Served to Meal Ticket Holders
Cambria	1-6 pm	Registration - Men's Gym...for those not registered (See Fall Quarter Class Schedule)
m - 6pm	4-6 pm	<u>BBQ</u> for WOW Clubs - Poly Grove
s	5:00 pm	WOW Tours End
s	4:30-6:30	College Dining Hall Serves Dinner to All Meal Ticket Holders
Cambria	7:00&9:30	<u>Movies</u> in College Theater
	7-9 pm	<u>Hootenanny</u> - Architecture Patio
	9-12 pm	<u>Stomp</u> - Aero Hangar
Students	7:00 pm	Snack Bar Grill and Fountain Close
	11:00 pm	Snack Bar Vending Closes

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FRIDAY - SEPTEMBER 19

- 6:30 am College Snack Bar Opens for Breakfast
- 6:30-8:15 College Dining Hall Serves Breakfast
- 8:30-4:00 Registration Continues for those not
registered (See Fall Quarter Class
Schedule)
- 9 - 4pm Beach Party at Port San Luis
Buses Leave from in Front of the Snack
Bar Periodically from 9am - 3pm.
- 10:00 am Residence Halls Open to move in 10am-6pm
- 11am-1:00 College Dining Hall Serves Lunch to Meal
Ticket Holders.
- 4:30-6:30 College Dining Hall Serves Dinner
- 9 - 12pm Dance - Crandall Gym
- 7:00 pm Snack Bar Grill and Fountain Close
- 11:00 pm Snack Bar Vending Closes

SATURDAY - SEPTEMBER 20

7:00 am College Snack Bar Grill and Fountain
Open for Breakfast

7:00 pm Snack Bar Grill and Fountain Close

8-12 pm Concert and Dance - Men's Gym

11:00 pm Snack Bar Vending Closes

he Snack
m.

10am-6pm
to Meal

r

se

SUNDAY - SEPTEMBER 21

8:00 am Snack Bar Grill and Fountain Opens for
 Breakfast

5 - 7 pm Church Night

7:00 pm Snack Bar Grill and Fountain Close

11:00 pm Snack Bar Vending Closes

1969 WOW CAMPUS EXECUTIVE STAFF

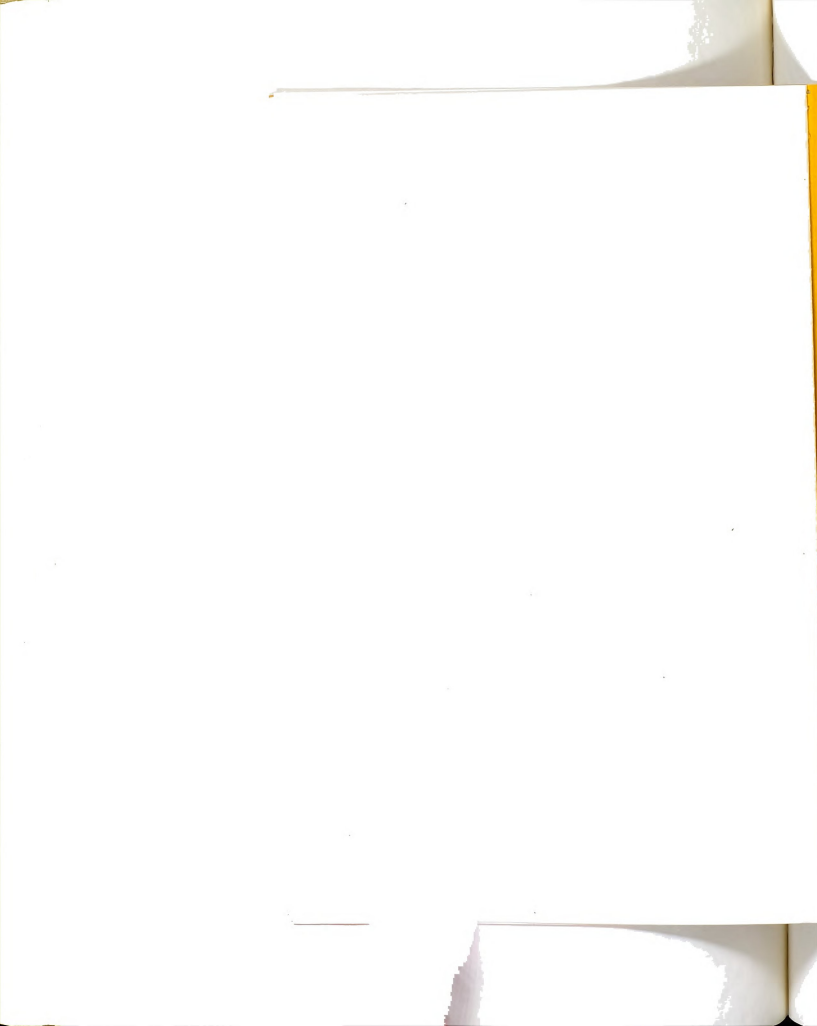
General Chairman.....Dave Johnston (Sr) Math
 First Vice Chairman.....Willy Mautner (Sr) Arch
 Second Vice Chairman.....Ken Lehr (Sr) Bus Adm
 Treasurer.....Pat Nixon (Jr) Soc Sci
 Recording Secretary.....Ev Benson (Sr) Bus Adm
 Corresponding Secretary.....Jinx Snow (Sr) Journ
 Historian.....Claudia Freitas (Sr) Bio
 A/V Coordinator.....Bruce Whitlock (Sr) IE
 Transportation Coordinator...Gerald Hanson (Sr) Bio

Activity Committee Chairmen

Lunches and BBQ.....Dave Long (Jr) EL
 Invitation to Thought.....Sue Bain (Jr) Bus Adm
 Parents Reception.....Diane Reich (Jr) P.E.
 People Rallye.....Brian Waterbury (Sr) Math
 Beach Party.....Norm Rabin (Sr) Bio Sci
 Dances.....Bob Jonte (Jr) Soc Sci
 Hootenanny.....Sandy Parsons (Jr) AH
 Movies.....Charlie Jennings (Sr) IT
 "P" Climb, Volleyball.....Mike Burrell (Sr) Soc Sci
 Sports Day.....Tom Corl (Jr) ME
 Song Leader.....Curt Lester (Soph) ME

Advisors

Program Counselor.....John Lucin
 Graduate Intern.....Gerry Reynolds
 Graduate Intern.....Tom Waters





APPENDIX C

SUMMARY DATA--MANOVA FOR STUDENTS WHO DID NOT
PARTICIPATE IN ORIENTATION--COMPARING THOSE
WHO WERE AWARE WITH THOSE UNAWARE

14.0

TABLE C-1.--MANOVA--"awares" and "unawares" multivariate F-ratio test.

Source of Variation	F-Ratio	P
Group	1.1475	0.3351
Sex	2.5405	0.0061**
Group X Sex	.4178	0.9589

**significant at .01 level of confidence.

TABLE C-2.--Univariate F-ratio--group effect--"awares" compared to "unawares"

Source of Variation	Between Mean Squares	Univariate F	P
G.P.A.-Fall	0.0190	0.0485	0.8262
G.P.A.-Winter	0.0076	0.0170	0.8965
Change Major-Fall	4.1089	0.2825	0.5965
Change Major-Winter	0.0139	1.2343	0.2697
Drop-out-Fall	13.5200	2.5349	0.1151
Drop-out-Winter	0.0200	0.6128	0.4359
Activity 1	0.0272	0.2222	0.6386
Activity 2	0.0022	0.0116	0.9144
Activity 3	0.4356	2.2348	0.1386
Activity 4	0.0939	1.1483	0.2870
Activity 5	0.0272	0.2171	0.6425
Activity 6	0.0800	2.4426	0.1218

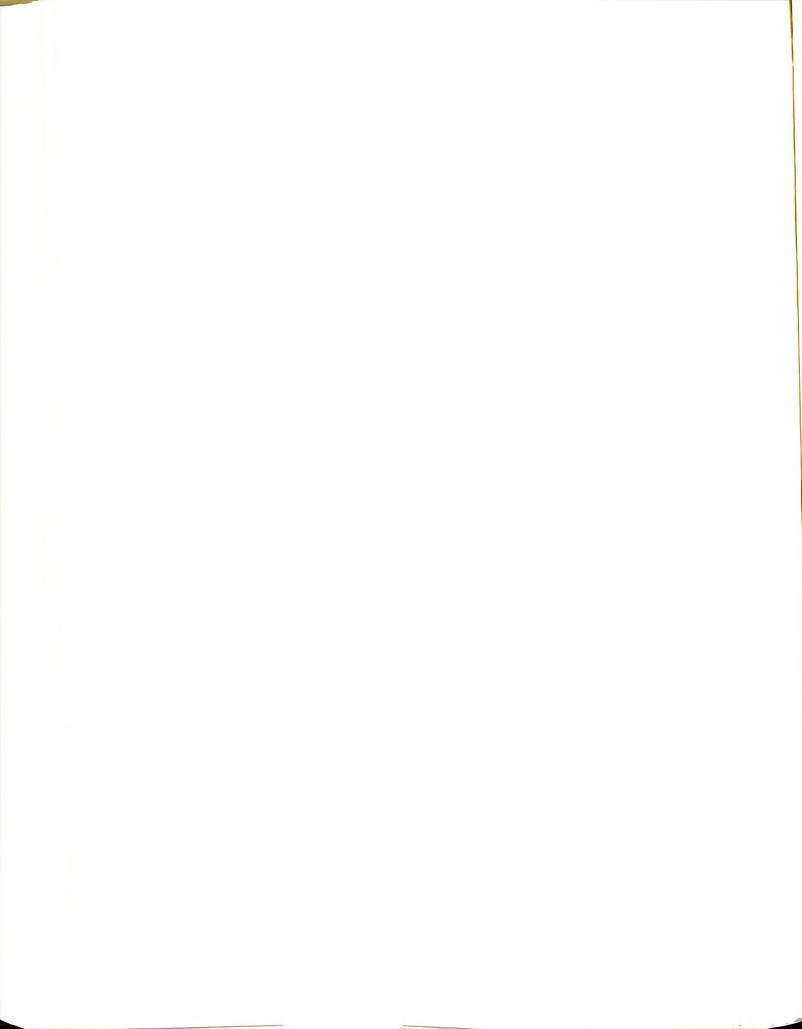


TABLE C-3.--Univariate F-ratio--sex effect--"awares" compared to "unawares"

Source of Variation	Between Mean Squares	Univariate F	P
G.P.A.-Fall	2.2046	3.3101	0.0724
G.P.A.-Winter	1.2942	1.1978	0.2769
Change Major-Fall	0.5356	2.0610	0.1548
Change Major-Winter	29.9775	0.2371	0.6276
Drop-out-Fall	0.0027	0.0436	0.8352
Drop-out-Winter	0.0697	2.1356	0.1476
Activity 1	0.3771	3.0777	0.0830
Activity 2	0.6642	3.4805	0.0656
Activity 3	0.6092	3.1259	0.0807
Activity 4	0.1479	1.8083	0.1823
Activity 5	1.0087	8.0429	0.0057**
Activity 6	0.0021	0.0644	0.8004

** significant at the .01 level of confidence.

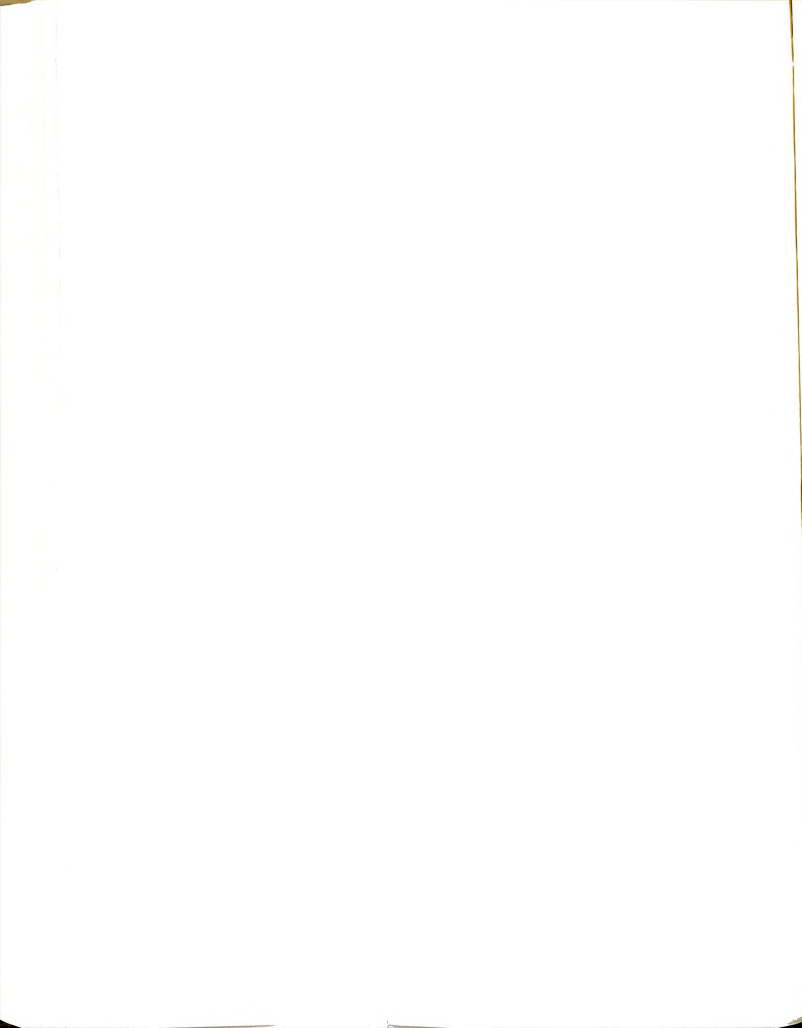
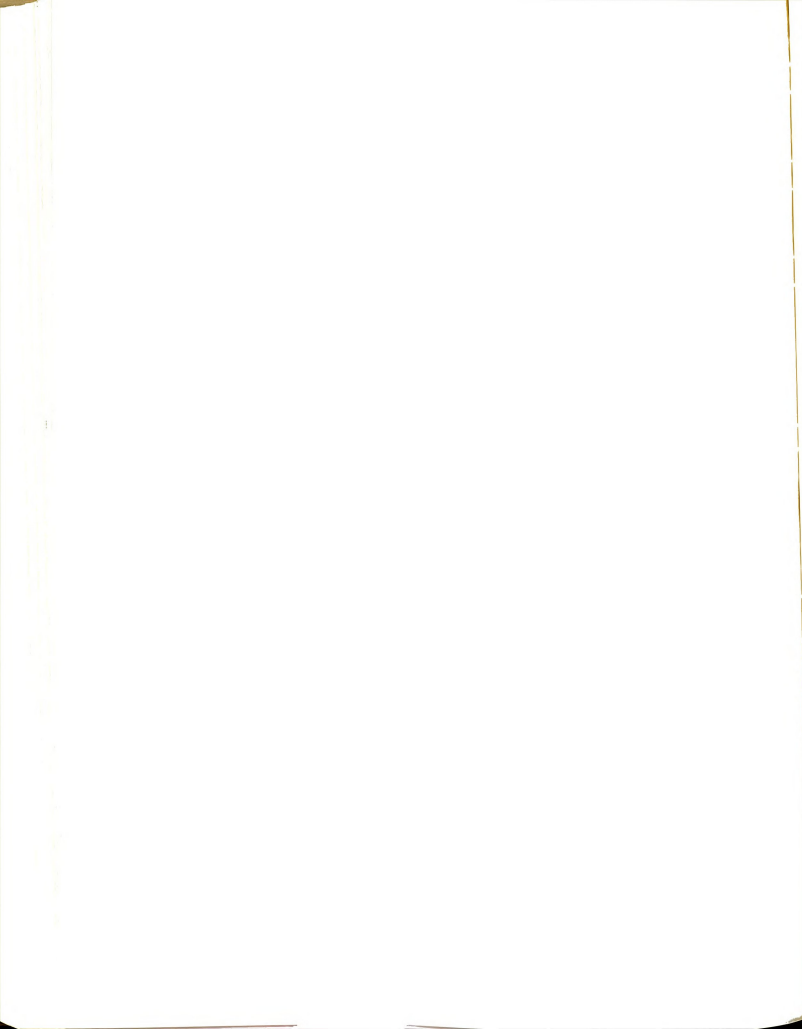


TABLE C-4.--Univariate F-ratio-interaction of group by
sex--"awares" compared to "unawares"

Source of Variation	Between Mean Squares	Univariate F	P
G.P.A.-Fall	0.0358	0.0915	0.7631
G.P.A.-Winter	0.2229	0.4986	0.4821
Change Major-Fall	9.5282	0.6551	0.4206
Change Major-Winter	0.0046	0.4079	0.5248
Drop-out-Fall	1.1702	0.2194	0.6407
Drop-out-Winter	0.0037	0.1125	0.7382
Activity 1	0.1803	1.4711	0.2285
Activity 2	0.0449	0.2353	0.6289
Activity 3	0.2498	1.2820	0.2607
Activity 4	0.0152	0.1864	0.6671
Activity 5	0.0002	0.0020	0.9645
Activity 6	0.0012	0.0374	0.8471



APPENDIX D

QUESTIONNAIRE REQUESTING PARTICIPANTS TO INDICATE SOURCE
OF REFERRAL TO ORIENTATION, VALUES GAINED, AND
RECOMMENDATION TO FRIENDS OR RELATIVES TO
PARTICIPATE

15:00

CALIFORNIA STATE POLYTECHNIC COLLEGE

SAN LUIS OBISPO, CALIFORNIA 93401



AGRICULTURE

APPLIED ARTS

APPLIED SCIENCES

ARCHITECTURE

ENGINEERING

April 6, 1970

Dear Cal Poly Student:

In an attempt to evaluate our Welcome Week (WOW) Program at Cal Poly, we are asking a selected group of new students who participated in last Fall's WOW activities to answer the questions below. Since only a few students are being asked to complete this brief survey, your answers are urgently needed.

Would you please return the completed form no later than Friday, April 17, 1970 in the enclosed envelope? Many thanks for your assistance.

Robert Timone

Assistant to the Dean of Students

1. From whom or how did you become aware of Welcome Week? You may answer more than one - but if you do, please rank your response in the order of their importance, e.g. #1 being most important, etc.
 - A. WOW brochure or letter _____
 - B. friend _____
 - C. relative _____ Who _____
mother, father, sister, brother
 - D. catalog _____
 - E. other _____ What or Who _____
 - F. or did you come early unaware of WOW activities and just join in? _____
2. Now that Welcome Week is two quarters behind you, what did you get out of it in your own words? _____

3. Would you recommend participation to a friend or relative?
 - A. strongly _____
 - B. so-so _____
 - C. negative _____
4. Please list (on back) college activities you have participated in.



APPENDIX E

INTERVIEW SHEET USED FOR SAMPLE OF NON-PARTICIPANTS

February 10, 1970

Name of Student _____

Phone Number: _____

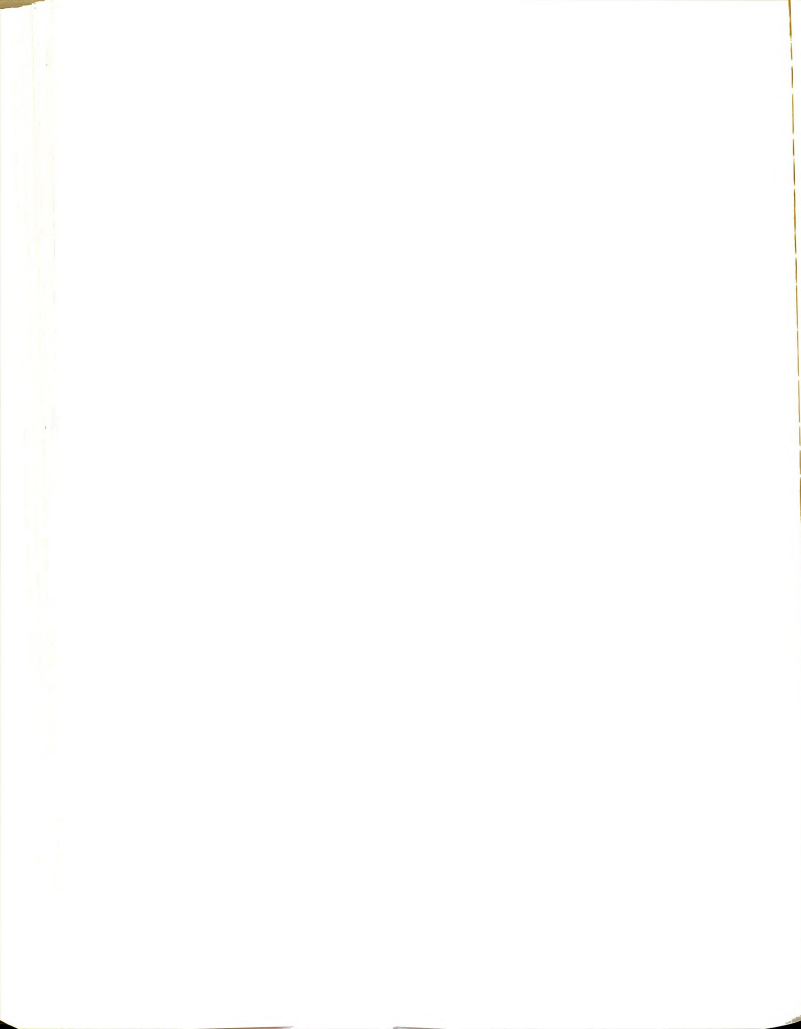
My name is _____. I am a student at Cal Poly,
and we're trying to evaluate last Fall's Welcome Week activities
to help plan the best possible program for next year. Would you
answer just a couple of questions for me?

1. Did you know about Welcome Week (WOW) before coming to
Cal Poly? Yes _____ No _____

IF YES, Why did you decide not to participate?

2. What college activities have you taken part in since you've
been here? (such as clubs, program committees, athletics,
residence activities).

Thank you very much.



APPENDIX F

MULTIVARIATE ANALYSIS OF COVARIANCE - SUMMARY DATA

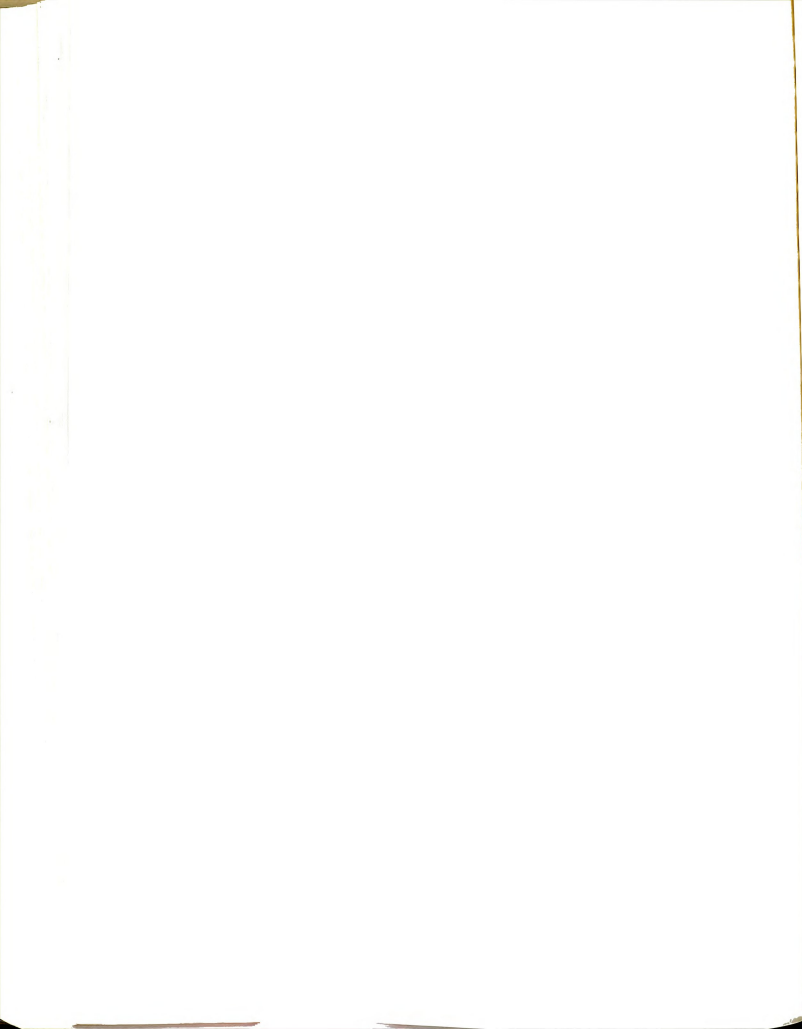
SAT - GROUP

TABLE F-1.--Summary of covariate effects on dependent variables.

Covariates	Cannonical Correlation	Square Correlation	% of Variation in Dependent Variables
High School G.P.A.	0.5119	0.2620	2.1834
SAT - V	0.1541	0.0237	0.1978
SAT - M	0.0865	0.0075	<u>0.0624</u>
Total			2.4436

TABLE F-2.--MANCOVA summary data.

Source of Variation	F-Ratio	P
Group Effect	3.0898	.0003
Sex Effect	12.9234	.0000
Group X Sex	1.1146	.3437



APPENDIX G

SUMMARY DATA - OPINION SURVEY



TABLE G-1.--Summary data--questionnaire opinion survey.

Questionnaire Item	Response		Percentage		df	χ^2	Critical Ratio
	Non-participant	Participant	Non-participant	Participant			
1. Estimated Grade					4	5.140	9.488
B to A	54	87	27.6	34.1			
C to C+	113	144	57.7	56.5			
D+ to C	28	24	14.3	9.4			
D to D+	1	0	0.5	-			
D and less	0	0	-	-			
2. Decision to Attend Cal Poly					4	12.453*	9.488
very satisfied	75	133	37.9	51.6			
satisfied	75	87	37.9	33.7			
somewhat doubtful	36	33	18.2	12.8			
dissatisfied	8	3	4.0	1.2			
very dissatisfied	4	2	2.0	0.8			
3. Educational Goal					4	9.143	9.488
Changed							
not any	62	64	31.3	24.8			
slightly	65	110	32.8	42.6			
some	44	60	22.2	23.3			
considerable	17	20	8.6	7.8			
completely	10	4	5.1	1.6			



TABLE G-1.--Continued.

Questionnaire Item	Response		Percentage		df	χ^2	Critical Ratio
	Non-Participant	Participant	Non-Participant	Participant			
B. Yes	50	81	25.3	31.4	1	.0139	3.8415
Reaction easy to find and talk to	14	24	28.0	29.6	4	.2159	9.488
seems interested in me	13	21	26.0	25.9			
he is all right	14	25	28.0	30.9			
difficult to find and talk to	5	4	10.0	5.9			
I would like a new adviser	4	7	8.0	8.6			
7. Fee - Rank							
Academically superior	1	6	0.5	2.3	4	8.668	9.488
superior sometimes	54	45	27.4	17.5			
equal most times	119	176	60.4	68.5			
inferior sometimes	20	27	10.2	10.5			
inferior most times	3	3	1.5	1.2			
8. Study Habits							
good routine	28	22	14.2	8.5	4	7.783	9.488
reasonable routine	71	103	36.0	39.9			
about average	19	41	9.6	15.9			
need to improve	67	80	34.0	31.0			
serious need	12	12	6.1	4.7			

9. Married or Single -
Trouble Getting
Dates

Married	3	0	too	4	14.6500*	9.488
no	0	0				
no, not really	2	0	little			
yes, some	0	0	to be			
yes, considerably	0	0				
haven't tried	1	0	meaningful			
Single	189	258				
no	45	67	95.5 100			
no, not really	32	72	23.8 26.0			
yes, some	24	38	16.9 27.9			
yes, considerably	13	17	12.7 14.7			
haven't tried	75	64	6.9 6.6			
			39.7 24.8			

10. Been to Health
Center?
Reaction to
Service?

No	0	0	not			
excellent	0	0				
good	0	0				
fair	0	0				
not adequate	0	0				
poor	0	0	applicable			
Yes	56	93		4	3.5306	9.488
excellent	22	40	28.3 36.0			
good	21	41	39.3 43.0			
fair	7	8	37.5 44.1			
not adequate	2	2	12.5 8.6			
poor	4	2	3.6 2.2			
			7.1 2.2			

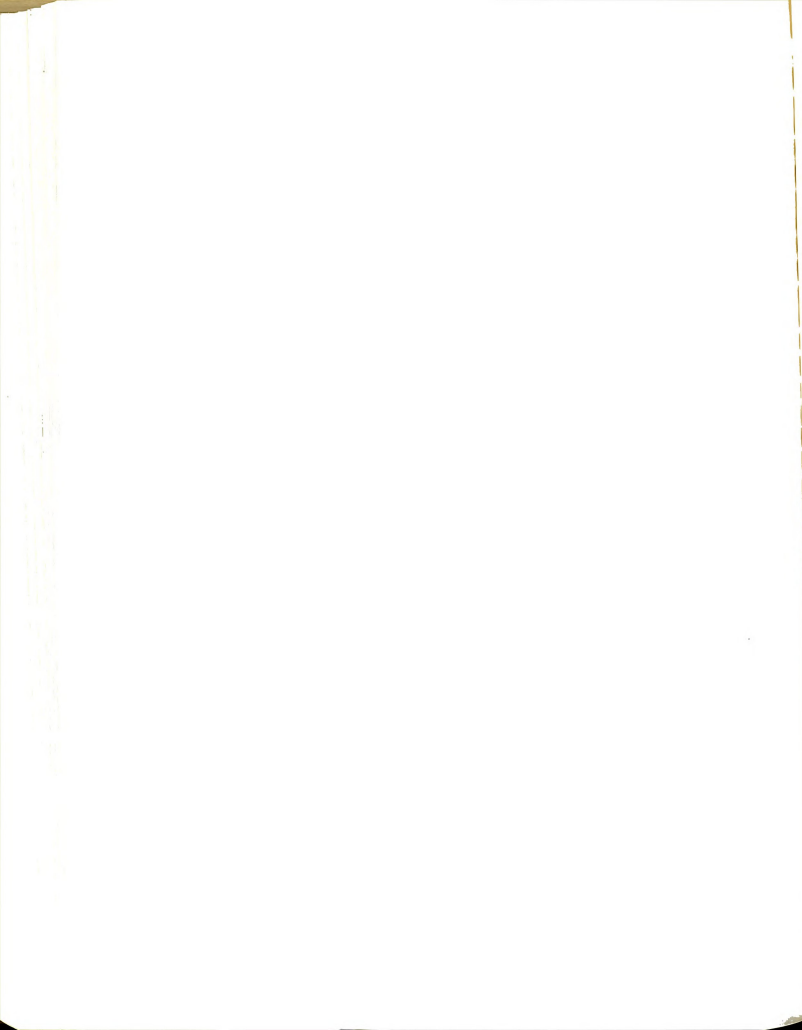


TABLE G-1.--Continued.

Questionnaire Item	Response		Percentage		df	χ^2	Critical Ratio
	Non-Participant	Participant	Non-Participant	Participant			
11. Sought Religious Guidance? Reaction to help?							
No	0	0					
excellent	0	0					
good	0	0					
fair	0	0					
not adequate	0	0					
poor	0	0					
Yes	13	44	6.6	17.1	4	too	
excellent	7	18	53.8	40.9		few	
good	2	14	15.4	31.8		for	
fair	3	9	23.1	20.5		adequate	
not adequate	1	3	7.7	6.8		measure-	
poor	0	0	-	-		ment	
12. Work Part-time? Reaction to place-							
ment?							
No	1	0					
excellent	0	0					
good	1	0					
adequate	0	0					

12. Continued

not very adequate poor	0 0	0 0		
Yes	5	8		
excellent	3	5	not	
good	2	1		
adequate	0	1	applicable	
not very adequate	0	0		
poor	0	1	too few	
13. Been to Counseling? Reaction to Center				
No	2	2		
great value	0	0	not	
considerable value	0	2		
some value	0	0	applicable	
little value	2	0		
waste of time	0	0	too few	
Yes	12	43		
great value	6	14	6.1	16.7
considerable value	3	18	50.0	32.3
some value	3	9	25.0	41.9
little value	0	1	25.0	20.9
waste of time	0	1	-	2.3
		1	-	2.3
14. Take Part in Recreational Activities? Your Reaction?			4	too few for adequate measure- ment



TABLE G-1.--Continued.

Questionnaire Item	Response		Percentage		df	X ²	Critical Ratio
	Non- ipant	Partic- ipant	Non- ipant	Partic- ipant			
14. Continued.							
No	0	3					
great value	0	1		not			
considerable value	0	1		applicable			
some value	0	1					
little value	0	0		too few			
waste of time	0	0					
Yes	112	151			4	4.2250	9.488
great value	23	29	20.5	19.2			
considerable value	58	91	51.8	60.3			
some value	28	29	25.0	19.2			
little value	2	2	1.8	1.3			
waste of time	1	0	.9	-			
15. Belong: Department							
Club?							
Hobby Club?							
Reaction to these							
No - Department	36	21	18.2	8.1			numbers in
great value	3	2	8.3	9.5			
considerable value	8	6	22.2	28.6			each category
some value	21	12	58.3	57.1			
little value	3	1	8.3	4.8			too few for
waste of time	1	0	2.8	-			

No - Hobby	23	66	11.6	25.6	
great value	7	18	30.4	27.3	
considerable value	9	34	39.1	51.5	adequate
some value	7	13	30.4	19.7	
little value	0	1	-	1.5	measurement
waste of time	0	0	-	-	
Yes - Department	22	36	11.1	14.0	
great value	7	10	31.8	27.8	
considerable value	10	17	45.5	47.2	
some value	4	8	18.2	22.2	
little value	1	1	4.5	2.8	
waste of time	0	0	-	-	
Yes - Hobby	15	46	7.6	17.8	
great value	7	20	46.7	43.5	
considerable value	6	17	40.0	37.0	
some value	2	8	13.3	17.4	
little value	0	1	-	2.2	
waste of time	0	0	-	-	
Both					
No	7	14	3.5	5.4	
great value	7	13	100	92.9	
considerable value	0	1	-	7.1	
some value	0	0	-	-	
little value	0	0	-	-	
waste of time	0	0	-	-	
Yes	2	9	1.0	3.5	
great value	2	8	100	88.9	
considerable value	0	1	-	11.1	
some value	0	0	-	-	

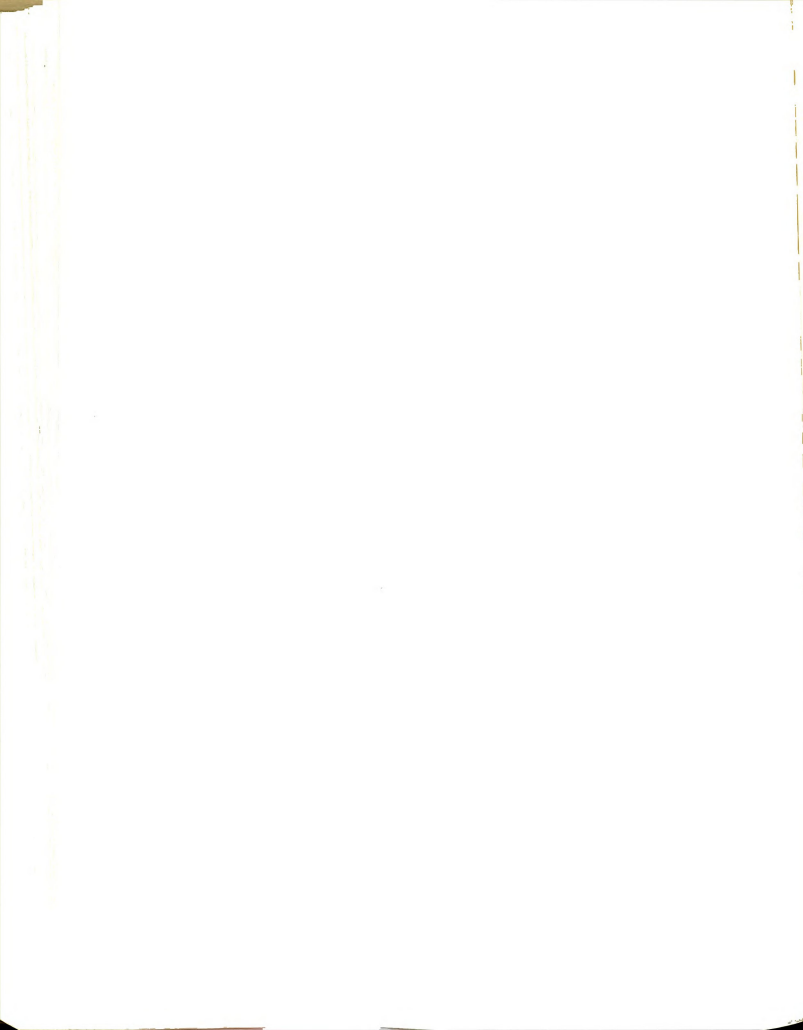


TABLE G-1.--Continued.

Questionnaire Item	Response		Percentage		df	χ^2	Critical Ratio
	Non- ipant	Partic- ipant	Non- ipant	Partic- ipant			
15. Continued.							
little value	0	0	-	-			
waste of time	0	0	-	-			
16. Made Friends?							
How Difficult?							
No	1	0		not			
extremely easy	0	0					
quite easy	1	0		applicable			
not too difficult	0	0					
somewhat difficult	0	0		too few			
very difficult	0	0					
Yes	187	253			4	5.6372	9.488
extremely easy	46	79	24.6	31.2			
quite easy	80	113	42.8	44.7			
not too difficult	52	49	27.8	19.4			
somewhat difficult	10	10	4.8	3.4			
very difficult	0	2	-	.8			
17. How Friendly is Col- lege?					4	12.023*	9.488
very friendly	66	118	33.5	45.9			
friendly	101	115	51.3	44.7			

neither unfriendly very unfriendly	25 3 2	18 6 0	12.7 1.5 1.0	7.0 2.3 _		
18. Living Quarters?					4	5.919
very satisfactory	49	90	26.1	35.7		9.488
reasonably						
satisfactory	70	79	37.2	31.3		
all right	41	55	21.8	21.8		
somewhat						
unsatisfactory	21	23	11.2	9.1		
definitely						
unsatisfactory	7	5	3.7	2.0		

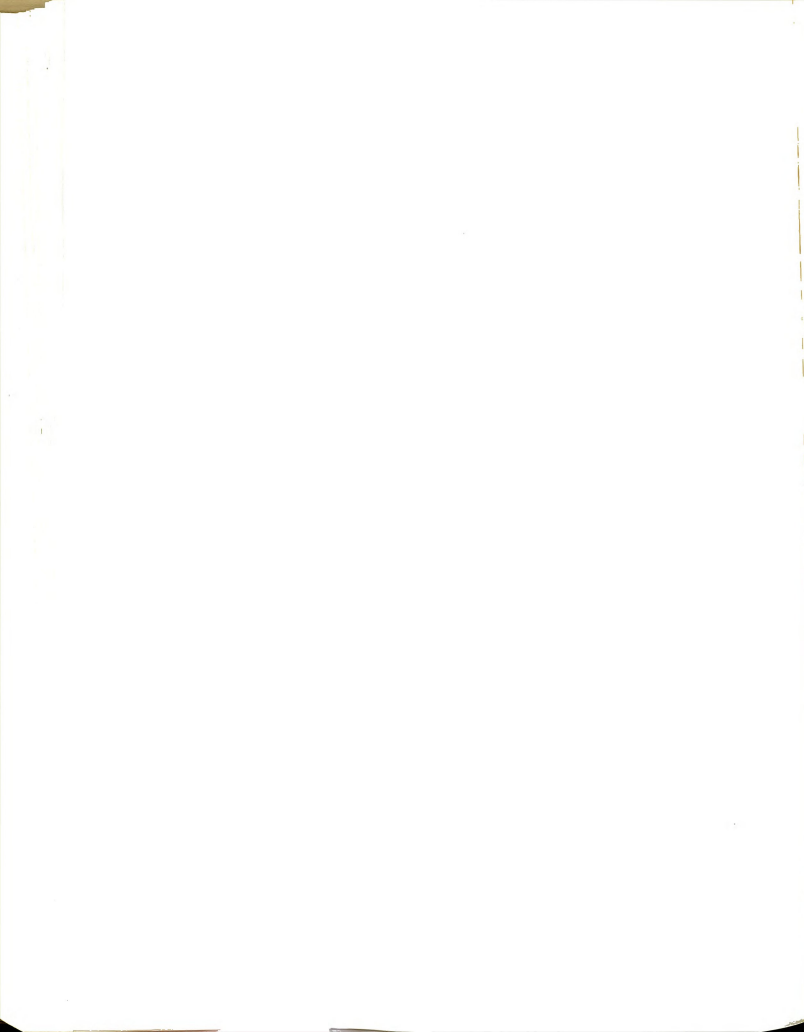


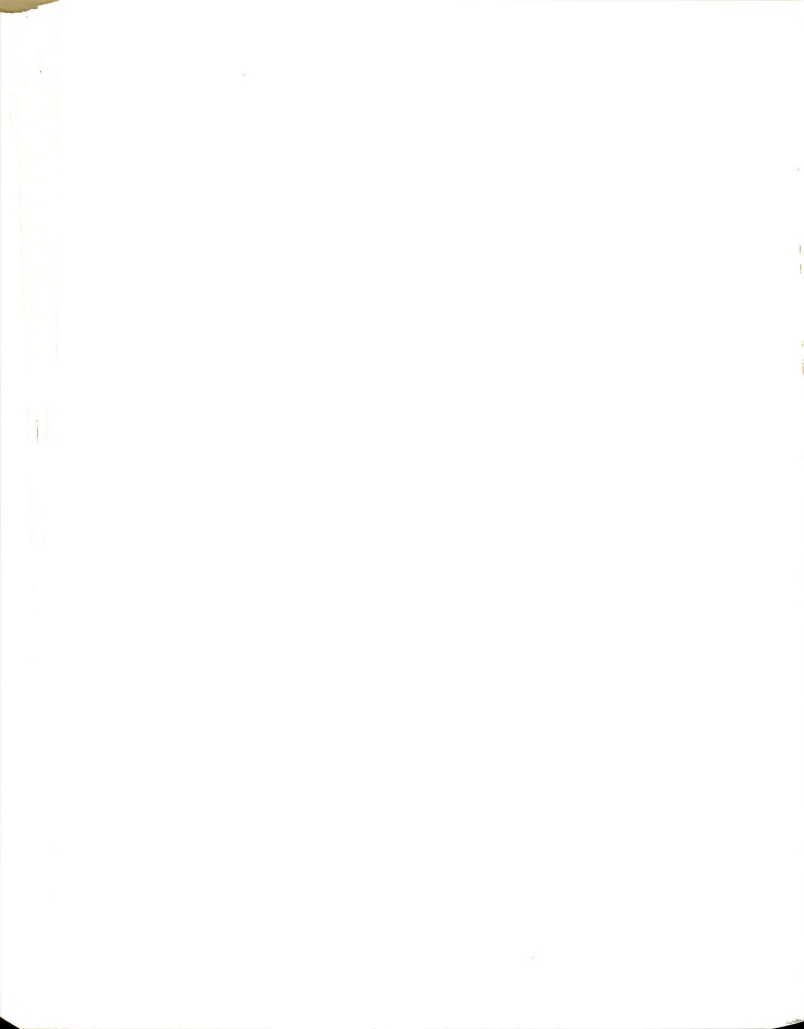
TABLE G-2.--Summary of two free-response items--opinion questionnaire.

<u>Participants</u>		<u>Non-Participants</u>	
Likes	Dislikes	Likes	Dislikes
1. Conservative = 7	1. Conservative = 21	1. Conservative = 8	1. Conservative = 12
2. Teaching-dept. adm. = 47	2. Teaching-dept. adm. = 14	2. Teaching-dept. adm. = 37	2. Teaching-dept. adm. = 17
3. Friendly = 107	3. Unfriendly = 2	3. Friendly = 49	3. Unfriendly = 1
4. Facilities-grounds = 29	4. Facilities-grounds = 16	4. Facilities-grounds = 29	4. Facilities-grounds = 5
5. Atmosphere = 45	5. Atmosphere = 2	5. Atmosphere = 30	5. Atmosphere = 2
6. Location = 31	6. Location = 5	6. Location = 31	6. Location = 4
7. -	7. Res. Hall noise = 7	7. -	7. Res. Hall noise = 7
8. -	8. Res. Hall rules = 10	8. -	8. Res. Hall rules = 11
9. Activities = 21	9. Activities = 5	9. Activities = 14	9. Activities = 5
10. Food-cafe = 3	10. Food-cafe = 38	10. Food-cafe = 2	10. Food-cafe = 29
11. -	11. Parking = 14	11. -	11. Parking = 20

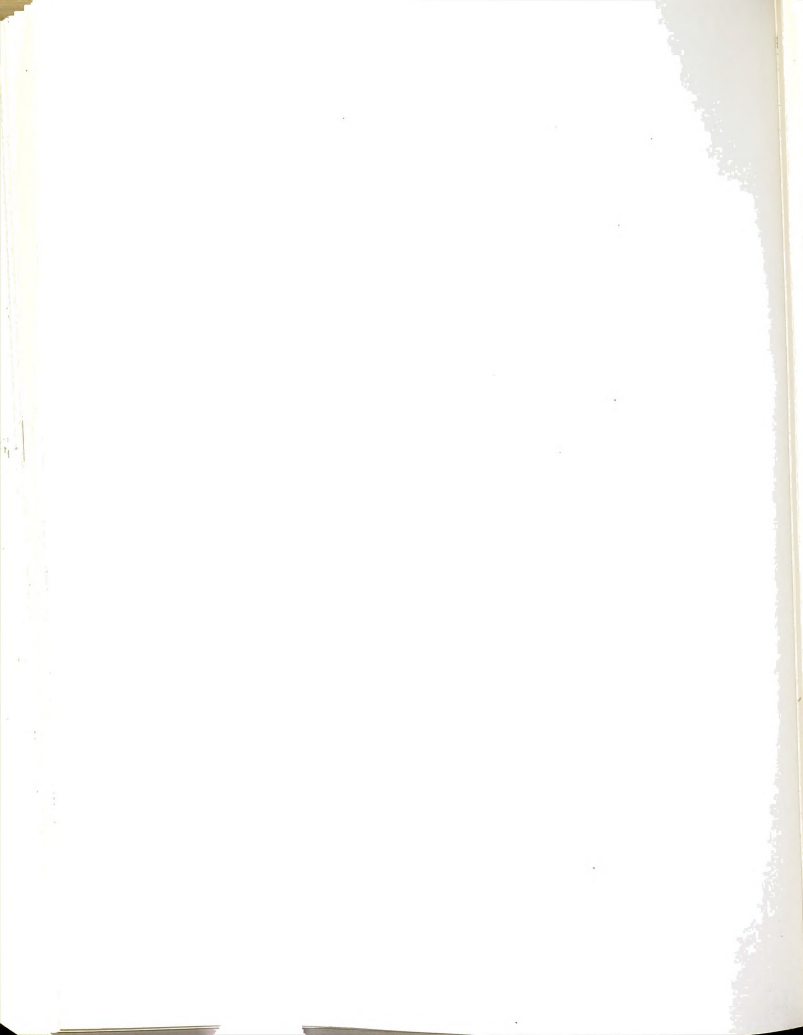
TABLE G-2.--Continued.

12.	Curriculum = 15	12.	Curriculum = 18	12.	Curriculum = 8	12.	Curriculum = 18
13.	Enough Girls/ boys = 3	13.	Not Enough girls/ boys = 9	13.	Enough girls/ boys = 1	13.	Not Enough girls/ boys = 8
14.	-	14.	Registration schedule = 5	14.	-	14.	Registration schedule = 4
15.	Freedom = 5	15.	Overcrowded = 1	15.	Freedom = 3	15.	Overcrowded = 7
16.	Services = 1	16.	Services = 2	16.	Services = 1	16.	Services = 2
17.	Expenses low = 0	17.	Expenses high = 1	17.	Expenses low = 1	17.	Expenses high = 2
18.	WOW = 5	18.	WOW = 1	18.	WOW = 0	18.	WOW = 0
19.	Size = 2	19.	Size = 2	19.	Size = 0	19.	Size = 2









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