

AN ABSTRACT OF THE THESIS OF

LORRAINE HARRIS HOWARD for the Ph.D. in GUIDANCE
(Name) (Degree) (Major)

Date thesis is presented August 14, 1964

Title A COMPARISON OF FRESHMEN ATTENDING SELECTED
OREGON COMMUNITY COLLEGES AND OREGON STATE UNIVER-
SITY IN TERMS OF INTERESTS, VALUES, AND MANIFEST NEEDS

Abstract approved 
(Major professor)

The primary purpose of this study was to determine whether there were significant differences between Oregon community college collegiate freshmen and Oregon State University freshmen in terms of interest, values, and manifest needs.

The study was limited to a representative sample of the freshman population in the lower-division collegiate program at three selected Oregon community colleges and to a representative sample of Oregon State University.

The Strong Vocational Interest Blank for Men, the Allport-Vernon-Lindzey Study of Values, the Edwards Personal Preference Schedule, and a Personal Data Schedule were administered to 499 first-term male and female freshmen who were enrolled at these institutions for the fall term of 1963.

The responses of the freshmen on the psychological tests were treated statistically by analysis of variance, and the responses on the Personal Data Schedule were converted to percentages and analyzed using the t-test.

Significant differences were evident among the responses of the Oregon State University and community college males and females on the Personal Data Schedule. There were 32 items that differentiated between the community college and Oregon State University males at the 1 percent level and six items at the 5 percent level. There were 28 items that differentiated between the community college females at the 1 percent level and four that differentiated at the 5 percent level.

On the Study of Values, Oregon State University males showed a higher mean score on the Theoretical scale than did the community college males. On the Social scale the community college males had a higher mean score than that of the Oregon State University males. Females at Oregon State University showed a higher mean score on the Economic scale than did the community college females, while the community college females had a higher mean score on the Religious scale than did the females at Oregon State University.

There were many significant differences between the interests of Oregon State University males and community college males. Males at Oregon State University had substantially higher interest scores on the Strong Vocational Interest Inventory than did the

community college males in Groups I and II, while community college males had considerably higher interest scores than did Oregon State University males in Groups VIII and IX. None of the scores on the occupational scales yielded significant differences among the mean scores of females attending Oregon State University and the community college females.

Scores on the non-occupational scales, the Specialization Level and Occupational Level, differentiated between Oregon State University and community college males. The Oregon State University males scored higher than the community college males on both of these scales. The Occupational Level scale differentiated between Oregon State University and community college females and the Oregon State University females obtained the higher mean score.

The least amount of difference between the mean occupational scores of the community college males and the mean occupational scores of Oregon State University males in the various major schools was found in the scores of the humanities majors when the miscellaneous category was excluded from the comparison. The greatest discrepancy in these occupational scores was found in the responses of males in engineering and science. The scores of the Oregon State University females in education most closely resembled the scores of the community college females, and the occupational scores of females that were least like the scores of community college females

were those of the females in business and technology.

Responses on the Study of Values and the Strong Vocational Interest Inventory indicated marked differences with respect to population characteristics in interests and values of freshmen attending community colleges and of freshmen attending Oregon State University. However, the responses on the Edwards Personal Preference Schedule show no evidence of differences among the personality characteristics of the freshmen.

A COMPARISON OF FRESHMEN ATTENDING SELECTED
OREGON COMMUNITY COLLEGES AND OREGON STATE
UNIVERSITY IN TERMS OF INTERESTS, VALUES,
AND MANIFEST NEEDS

by

LORRAINE HARRIS HOWARD

A THESIS

submitted to

OREGON STATE UNIVERSITY

in partial fulfillment of
the requirements for the
degree of

DOCTOR OF PHILOSOPHY

August 1964

APPROVED:

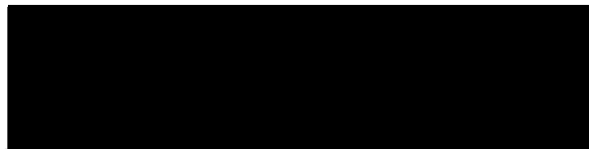


Professor of Psychology

In Charge of Major



Dean of the School of Education



Dean of Graduate School

Date thesis is presented August 14, 1964

Typed by Illa W. Atwood

ACKNOWLEDGMENTS

Grateful acknowledgment is extended to my major professor, Dr. W. R. Crooks, for his guidance in preparation of this thesis, and to Dr. Lester Beals, Professor Delmer Goode, and Dr. Ned Marksheffel for suggestions and advice.

Grateful acknowledgment is expressed to officials at the three community colleges and in the Department of Physical Education of Oregon State University for their cooperation, to the students and all others who so generously gave of their time.

Thanks are due to the statistical department for computations and to Dr. Elizabeth Brody for her kind assistance with statistical proofreading.

To Dr. Franklin R. Zeran, Dean of the School of Education, I extend my sincere appreciation for his counsel and support throughout my entire graduate program.

This study would not have been possible without the cooperation of my sons, Joe, Dan, and Bill.

TABLE OF CONTENTS

Chapter	Page
I INTRODUCTION	1
The Specific Problem	3
Definition of Terms	4
Method and Limitations of the Study	6
II REVIEW OF RELATED LITERATURE	9
Interest, Values, and Personality Variables of College Students	10
Comparison of Vocational Interests of College Students	17
Values Among Groups of College Students	19
Personality Variables and the Major Field of Study of College Students	23
Characteristics of Two-Year College Students	29
Summary	34
III METHODOLOGY AND PROCEDURE	35
<u>Strong Vocational Interest Inventory</u>	35
<u>Study of Values</u>	36
<u>Edwards Personal Preference Schedule</u>	38
Personal Data Schedule	39
Administration of the Tests	40
Treatment of Data	41
IV FINDINGS	43
A. Analysis of the Data Obtained from the Personal Data Schedule	43
Age Group	44
Religious Preference	45
High School Performance	46
High School Location	48
High School Population	48
Graduation Plans	49
College Transference Plans	50
Reasons for Attendance at a Specific Institution	51
General Reasons for College Attendance	54

TABLE OF CONTENTS (Continued)

Chapter	Page
Decision to Attend College	56
Parental Attitude Toward College Attendance	57
Assistance in Occupational Choice	57
Earned College Expenses	60
Parental Attitude Toward Financing College Expenses	61
Income of Parents	62
Age of Parents	63
Parents' Education	63
B. Analysis of Data Obtained From the Psychological Tests	64
The <u>Study of Values</u>	64
The <u>Edwards Personal Preference Schedule</u>	70
The <u>Strong Vocational Interest Inventory</u>	72
V SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	87
Summary of Findings	88
The <u>Study of Values</u>	92
The <u>Edwards Personal Preference Schedule</u>	93
The <u>Strong Vocational Interest Inventory</u>	95
Conclusions	97
Hypotheses of the Study	99
Recommendations for Further Study	101
BIBLIOGRAPHY	103
APPENDICES	
Appendix A	109
Appendix B	114
Appendix C	137

LIST OF FIGURES

Figure		Page
1.	Comparison of Mean Scores with the Normative Group for First-Term Male Freshmen on the <u>Study of Values</u> at Oregon State University and the Community Colleges	68
2.	Comparison of Mean Scores with the Normative Group on the <u>Study of Values</u> for Male Freshmen at Oregon State University and the Community Colleges	69
3.	Comparison of Percentile Scores on the <u>Edwards Personal Preference Schedule</u> for Female Freshmen at Oregon State University and Community Colleges	73
4.	Comparison of Percentile Scores on the <u>Edwards Personal Preference Schedule</u> for Male Freshmen at Oregon State University and Community Colleges	74
5.	Comparison of Mean Scores for Male Freshmen at Oregon State University and the Community Colleges	79
6.	Comparison of Mean Scores for Female Freshmen at Oregon State University and the Community Colleges	80
7.	An Occupational Profile of Letter Grades of the Mean Scores for Male and Female Freshmen on the <u>Strong Vocational Interest Test for Men</u> for the Major Schools at Oregon State University	84

LIST OF TABLES

Table	Page
I. Total Number of Community College Collegiate Freshmen	7
II. Total Number of Oregon State University Freshmen	7
III. The Number and Percentages of Responses of First-Term Male and Female Freshmen in Different Age Groups at Three Community Colleges and at Oregon State University	115
IV. The Number and Percentages of Responses of First-Term Freshmen Regarding Religious Preference: Males and Females at Three Community Colleges and at Oregon State University	116
V. The Number and Percentages Concerning the High School Grade Point Averages of First-Term Freshmen: Males and Females at Three Community Colleges and at Oregon State University	117
VI. The Number and Percentages Concerning the Location of High Schools Attended by First-Term Male and Female Freshmen at Three Community Colleges and at Oregon State University	118
VII. The Number and Percentages Concerning the Population of High Schools Attended by First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University	119
VIII. The Number and Percentages of First-Term Freshmen Planning to Graduate From College: Males and Females at Three Community Colleges and Oregon State University	120
IX. The Number and Percentages of First-Term Freshmen Planning to Transfer to Another College: Males and Females at Three Community Colleges and Oregon State University	121

LIST OF TABLES (Continued)

Table	Page
X. The Most Important Reason for Attendance at a Specific Institution in Terms of the Number and Percentage of Responses Given by First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University	
a. First choices	122
b. All choices	123
XI. The Most Important Reason for Attending College in Terms of the Number and Percentage of Responses Given by the First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University	
a. First choices	124
b. All choices	125
XII. The Number and Percentages of First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University in Terms of Responses to Personal Data Choices	126
XIII. The Attitudes of Parents Toward College in Terms of Responses in Number and Percentages as Given by the First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University	127
XIV. Assistance in Making Occupational Choice in Terms of the Number and Percentages of Responses Given by First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University	
a. Major influences	128
b. Combined major influences	129
XV. Amount of College Expenses Earned in Terms of the Number and Percentage of Responses Given by the First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University	130

LIST OF TABLES (Continued)

Table		Page
XVI.	Parents' Attitude Toward the Financing of College Expenses as Indicated in Number and Percentages of Responses of First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University	131
XVII.	Estimated Yearly Combined Income of Parents as Reported by First-Term Male and Female Freshmen by Number and Percentages at Three Community Colleges and Oregon State University	132
XVIII.	Age of Fathers of First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University in Terms of Number and Percentages	133
XIX.	Age of Mothers of First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University in Terms of Number and Percentages	134
XX.	Education of the Fathers of First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University in Terms of Number and Percentages	135
XXI.	Education of the Mothers of First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University in Terms of Number and Percentages	136
XXII.	Mean Scores for First-Term Male Freshmen on the <u>Study of Values</u> at Oregon State University by Schools and at Three Oregon Community Colleges	138
XXIII.	Mean Scores for First-Term Female Freshmen on the <u>Study of Values</u> at Oregon State University by Schools and at Three Oregon Community Colleges	139

LIST OF TABLES (Continued)

Table		Page
XXIV.	Mean Scores for First-Term Male Freshmen on the <u>Edwards Personal Preference Schedule</u> at Oregon State University by Schools and at Three Oregon Community Colleges	140
XXV.	Mean Scores for First-Term Female Freshmen on the <u>Edwards Personal Preference Schedule</u> at Oregon State University by Schools and at Three Oregon Community Colleges	141
XXVI.	Mean Scores for First-Term Male Freshmen on the <u>Strong Vocational Interest Blank for Men</u> at Oregon State University by Schools and at Three Oregon Community Colleges	142
XXVII.	Mean Scores for First-Term Female Freshmen on the <u>Strong Vocational Interest Blank for Men</u> at Oregon State University by Schools and at Three Community Colleges	143
XXVIII.	The Average Difference in Mean Scores for First-Term Male and Female Freshmen on the <u>Strong Vocational Interest Inventory for Men</u> at Oregon State University by Schools and at Three Oregon Community Colleges	144

A COMPARISON OF FRESHMEN ATTENDING SELECTED OREGON COMMUNITY COLLEGES AND OREGON STATE UNIVERSITY IN TERMS OF INTERESTS, VALUES, AND MANIFEST NEEDS

CHAPTER I

INTRODUCTION

Concurrent with the recent development of the community college program in the state of Oregon, intense interest has risen with respect to the diverse characteristics of the student bodies in the institutions of higher learning. Not the least among the questions which emerge are those pertaining to such non-cognitive characteristics as interests, values, and motives of students attending community colleges. An adequate assessment of the differences and similarities among college populations in terms of these dimensions could be of value in college curriculum planning and in providing useful information to the various college student personnel services.

In view of increased enrollments, more selective admission requirements in institutions of higher learning, and the phenomenal growth of the two-year college since World War II, educators are concerned with two facets of the same problem: what segment of the high school population enters college? of this segment, which

students attend a college best suited to their educational needs?

Heist (23, p. 279) states, "With continued professed concern for the individual in our changing society and with growing needs for more education, investigations of the functional and important differences among students and institutions become increasingly essential."

Current commentaries on the general characteristics of student populations are numerous. McConnell (30, p. 227) states, "...colleges and universities are differentially selective with respect to a wide range of attributes." Medsker (33, p. 30) says, "Diversity is found among junior college students as well as among college students in general, although the junior college students do not necessarily have the same characteristics as their counterparts in four-year colleges." Sanford (42, p. 46) reports, "Different institutions attract or select or develop different types of students." McConnell and Heist (31, p. 236) suggest, "... that institutions are differentially selective or attractive, not only in students' academic ability, but also in their interests, values, attitudes, intellectual dispositions, and social backgrounds."

McConnell and Heist (31, p. 226) affirm, "Knowledge about the student at the time of entry, beyond the widely used academic aptitude scores and records of high school achievement, seems to have been foreign to the interests of college administrators and faculties....

The collection of comprehensive information on interests, values, motives, attitudes, special aptitudes and cultural backgrounds has remained a rarity; . . ." Medsker (32, p. 2) adds, "Although much is known about junior college students, it is generally conceded that additional information is needed."

In addition to curricular and personnel problems, there also exist problems of aiding high school seniors to select the type of institution most suitable to their particular needs. It is hoped that this study will help determine whether there are differences in non-cognitive factors, as revealed by responses on psychological tests among selected community college "collegiate"* freshmen and Oregon State University freshmen.

The Specific Problem

Complete realization of the purpose of this study involves answering two questions: Are there significant differences between Oregon community college collegiate freshmen and Oregon State University freshmen with respect to interests, values, and manifest needs? If differences exist, what is the nature of such differences?

* "Collegiate" is used by the Division of Community Colleges of the Oregon State Department of Education to refer to community college students who are enrolled in the lower-division academic programs.

Definition of Terms

Use of the terms interest, value, and manifest need is based on the psychological definitions of these terms as interpreted by the respective authors of the different tests. In this study, the following psychological definitions, noted in the Comprehensive Dictionary of Psychological and Psychoanalytical Terms (13, p. 271, 576-577, 338-339), will be used:

1. Interest: a tendency to give selective attention to something; an attitude or feeling that an object or event makes a difference or is of concern to oneself; a tendency to engage in an activity for the gratifications from engaging therein. The measure of interest in the present study was the Strong Vocational Interest Blank for Men.

2. Value: the degree of worth ascribed to some object or activity which defines for an individual what ends or means to an end are desirable. The measure of value in the present study was the Allport-Vernon-Lindzey Study of Value.

3. Manifest need: the term need implies the lack of some object or condition which if present would promote biological or psychological efficiency, and the adjective manifest describes a type of need that is easily inferable from behavior. The measure of manifest need in the present study was the Edwards Personal Preference Schedule.

4. Community college collegiate freshmen: those freshmen enrolled in the transfer program at three selected Oregon community colleges: Central Oregon College, Clatsop College, and South Western Oregon College. The Oregon State Department of Education defines a community college as (37, p. 1) "... a public secondary school established by a school district or by an area education district to provide courses of study limited to no more than two years full-time attendance and designed to meet needs of geographical area in either vocational education or lower-division collegiate programs or both."

5. University freshmen: those freshmen enrolled in a four-year undergraduate curriculum at Oregon State University, a co-educational, land-grant university operated under the Oregon State Board of Higher Education. University freshmen are enrolled in the liberal arts and sciences and in seven professional schools: agriculture, business and technology, education, engineering, forestry, home economics, and pharmacy. The majority of students who come to Oregon State University are oriented toward a particular type of specialization. The major field of study is designated by the student at the time of matriculation at the University.

6. Male and female: use of the terms male and female throughout this study refers only to male and female first-term college freshmen.

Method and Limitations of the Study

This comparative study uses the following procedures:

1. Personnel in the Division of Community Colleges of the Oregon State Department of Education, and officials at the three community colleges in Astoria, Bend, and Coos Bay were consulted for authorization to administer the psychological tests and cooperation in collecting other necessary data at the respective colleges.
2. Tests were administered to freshmen enrolled for a minimum of 12 term hours of course work in the lower-division collegiate programs at the three community colleges. Approximately 50 percent of the males and females at Astoria and Coos Bay and approximately 50 percent of the females at Bend were included in the sample. However, because of difficulty in obtaining test results, only 25 percent of the males at Bend were included in this sample.
3. A representative sample of freshmen was taken from the General Hygiene classes at Oregon State University since all students enrolled in the University are required to take the General Hygiene course.
4. Tests were administered to freshmen in General Hygiene classes enrolled for a minimum of 12 term hours of course work. Approximately 10 percent of the males and females from each of the

major schools of Oregon State University were included in the sample.

5. A total of 449 first-term freshmen were used in this study.

Tables I and II show the Distribution:

TABLE I

Total Number of Community College Collegiate Freshmen

Location of Colleges	Male	Female	Total
Astoria	29	15	44
Bend	42	21	63
Coos Bay	34	24	58
Total	105	60	165

TABLE II

Total Number of Oregon State University Freshmen

Major Schools	Male	Female	Total
Agriculture, Forestry, Pharmacy	24	5	29
Business and Technology	13	12	25
Education	14	48	62
Engineering	36	1	37
Home Economics	0	18	18
Humanities and Social Sciences	26	29	55
Science	42	16	58
Total	155	129	284

6. Each student completed the Strong Vocational Interest Blank for Men, the Allport-Vernon-Lindzey Study of Values, the Edwards Personal Preference Schedule, and a Personal Data Schedule.

7. After administration and scoring of the psychological tests, results were tabulated and statistically analyzed to determine whether there were significant differences between the community college and Oregon State University freshmen's test scores.

This study was limited to tests and a Personal Data Schedule administered to a representative sample population of freshmen enrolled fall term, 1963, in the lower division collegiate program of three selected Oregon community colleges and a representative sample of Oregon State University freshmen obtained from those freshmen enrolled in the required General Hygiene classes. The tests administered were the Strong Vocational Interest Blank for Men, the Allport-Vernon-Lindzey Study of Values, and the Edwards Personal Preference Schedule.

CHAPTER II

REVIEW OF RELATED LITERATURE

Literature on student differences in interests, values, and manifest needs can be traced from the year 1896. Studies related to college and university populations are reviewed in the following paragraphs. A summary of findings is made at the end of this chapter.

One of the earliest studies of the differences in the behavior of college students was done by Cattell and Farrand (6, p. 618) at Columbia University in 1896. Their attempt to correlate intelligence with sensory perception was unsuccessful. Not until many years later were data available concerning interests, values, and needs of students on the basis of individual differences.

The practical relationship between an individual's aptitudes, abilities, and ambitions was indicated by Parsons (38, p. 7) as having importance to the achievement and success in different occupations. In 1909 he stated:

The memory is tested and the general intelligence so far as possible, the senses also and delicacy of touch, nerve, sight, and hearing reactions, association-time, etc., where these facts appear to be important elements in the problem. For an example, an artist needs, among other things, good visual memory and delicacy of touch; a tentist should have keen sight, delicate touch, correlation of hand and eye, and plenty of nerve; and if the verbal memory is defective or the auditory reactions are slow, it would probably be difficult to become a thoroughly expert stenographer.

Interest, Values, and Personality Variables
of College Students

In a study of the relationship among scores on the Strong Vocational Interest Blank, the Minnesota Personality Scale, and the Thurstone-Chave Attitude Scale of college sophomores enrolled in a psychology laboratory at the University of Oregon, Tyler (53) found that there was a moderate correlation between religious attitudes and vocational interest for the men, but no correlation for the women. Neurotic tendencies were not significantly related to specific interest scores. Attitudes toward social affairs were related to dominant interests on the Strong Vocational Interest Blank falling in Groups I, II, and IX. She concluded: men who tend to avoid social participation are more likely to show the interests of scientific men; women with high scientific interest are likely to be less happy in social relationships and less well-adjusted to the opposite sex than women who have other interests.

In a study of interests, values, and personality as related to the major field of study of third-year college students at Queens College, using the Kuder Personal Preference Record, Allport-Vernon Study of Values, and the Minnesota Multiphasic Personality Inventory, Sternberg (47, p. 188-195) concluded: there was a significant difference in groups of college students majoring in different subjects in terms of interests, values, and personality; liberal arts

students, majoring in English and music, showed high scores on the Literary, Musical, and Artistic scale and low scores on the scale of Scientific and related activities; science students had a profile pattern which was opposite to that of students enrolled in liberal arts; political science and history students showed high Literary scores, with lower scores on the Scientific and Mechanical scale; economic and political science students obtained high scores on the Business-contact scales; science students appeared to be emotionally the best adjusted and English students the most poorly adjusted.

Heist and Webster (24, p. 95-104) compared two selected samples of high-ability male students from the National Merit Scholarship winners. The samples differed on three scales designed to measure intellectual interests. One of the groups was high on Thinking Introversion, Complexity, and Originality, and the other group was low on these variables. They compared the mean scores of the two groups on the Omnibus Personality Inventory, the Study of Values, the Strong Vocational Interest Blank, and the Minnesota Multiphasic Personality Inventory, with the following results: the Minnesota Multiphasic Personality Inventory, except for small differences in Social Introversion and Hypomania, did not differentiate between the groups; significant differences appeared on the Omnibus Personality Inventory in Authoritarianism, Impulse Expression, Responsibility, Social Maturity, and Social Introversion; on the

Study of Values there were significant differences on the Theoretical, Economic, Aesthetic, and Religious scales; the groups were differentiated on the Group I occupations of the Strong Vocational Interest Inventory; significant differences were found between the groups in terms of their major fields of study, and since the students were all freshmen, the authors predicted that the difference would increase after the students had become familiar with their chosen major; the authors' general conclusions were that there were marked differences in the attitudes and values of students with the same intellectual ability and that these attitudes and values were among the important factors in determining not only their occupational choices, but the kinds of colleges selected by the students.

From a study conducted at Cornell University, McConnell (30, p. 230) reported that when asked to select the educational goal of an ideal institution, students' responses varied at different institutions. Men at Wesleyan, Yale, Harvard, and Dartmouth frequently chose "basic general education", whereas men at the state universities more frequently chose "vocational preparation."

Gee (17, p. 152-154) compared differences among students from different medical schools as well as differences among medical specialties selected within one medical school. She reported that significant differences were evident on the Medical College Admission Test, the Allport-Vernon-Lindzey Study of Values, the Edwards

Personal Preference Schedule, and the Strong Vocational Interest Blank.

Sarbin and Berdie (43) in a study at the University of Minnesota found that interrelations existed among the interest patterns of students on the Strong Vocational Interest Blank and the values measured by the Allport-Vernon Study of Values. They used a random sample of 52 men who were seeking vocational advice. A great deal of overlapping of scores occurred, making individual application of the results hazardous. Values measured by the Allport-Vernon traits which differentiated the occupational groups of the Strong Blank were on the Masculinity-Femininity scale which correlated positively with the Theoretical value scale and negatively with the scale for Aesthetic value.

A study similar to that of Sarbin and Berdie was made by Duffy and Crissy (11, p. 242-244) with entering freshman women at Sarah Lawrence College, using the Strong Vocational Interest Blank for Women and the Allport-Vernon Study of Values. Correlations between vocational interests and attitudes were less than .45. The investigators felt that a higher relationship might be expected with older subjects after a greater maturation of interests and values.

A test of the relationships between eight representative scales from the Strong Vocational Interest Blank and six scales from the Allport-Vernon Study of Values was made by Ferguson, Humphreys,

and Strong (14) at Stanford University, using 93 male undergraduates. On the basis of factor analysis they identified three factors which were common to both the occupational scales and the value scales which corresponded to the three interest categories: language, people, and science.

Pintner and Forlano (41) studied a group of 100 women enrolled in education courses at Teachers College, Columbia University to discover the relation of values to personality, using the Allport-Vernon Study of Values and the Thurstone Personality Schedule. The population, divided into six groups according to the highest and lowest interest value scores, was compared with reference to neurotic tendencies. No statistically significant differences were found among groups, although the high-interest value groups indicated slightly better adjustment, and showed a tendency toward introversion on the Aesthetic scale.

Sisson and Sisson (45) studied a group of freshmen at Wesleyan University. The lowest third or extroverted scores and the highest third or introverted scores on the Bernreuter Personality Inventory were compared to scores on the Aesthetic scale of the Study of Values. The investigators reported that introverts tended to score somewhat higher on the Aesthetic scale of the Allport-Vernon Study of Values. Moreover, they recognized the limitations of the study in that they were dealing with aesthetic attitudes of introverts and

extroverts rather than with the personality traits of aesthetes.

In an investigation administering the Strong Vocational Interest Blank and the Bernreuter Personality Inventory to freshman engineers and liberal arts students at Pennsylvania State University, Goodman (18, p. 721, 733-736) studied the possibility of differentiating between these areas of specialization on the basis of specified interest and personality traits. The results were summarized as follows: the "C" scores rather than the "A" scores discriminated more clearly between the two schools; interests of the engineers were significantly different from those of the liberal arts students on the scales of Chemist, Engineer, Production Manager, Farmer, Carpenter, Printer, Policeman, and Mathematics Physical Science Teacher; liberal arts students tended to have interests similar to those listed for Y.M.C.A. Secretary, High School Social Science Teacher, Musician, Banker, Office Man, Sales Manager, Real Estate Salesman, Life Insurance Salesman, Advertising Man, and Lawyer; on the Bernreuter Personality Inventory the scores of the engineers were "more stable" and "more self-sufficient" than those of the liberal arts students; the greatest differences between these two groups of students were found not in the personality traits but in the vocational and non-vocational interest tendencies.

During the academic year 1946-1947, at the University of Wisconsin, Blum (4, p. 45-65) compared the personality

characteristics and interests scores on the Minnesota Multiphasic Personality Inventory and the Strong Vocational Interest Blank of male students enrolled in education with male students enrolled in the four schools of law, medicine, journalism, and mechanical engineering. Significant differences were found among these five schools on three of the ten Minnesota Multiphasic Personality Inventory scales; mechanical engineers scored highest on the Hysteria and Social Introversion scales; medical students scored highest on the Schizophrenia scale, and the mechanical engineers scored lowest. Significant differences were found in the occupational interests of students from the five professional schools on the Strong Interest Inventory; medical students ranked highest in Groups I and II; mechanical engineering students followed closely in rank the medical students in Group II; among all five student groups, Group IV of the Strong Vocational Interest Blank ranked second; education students scored highest in Group V, particularly those in the social sciences; law and journalism students scored highest in Group IX. The author reported that on the non-occupational scales of the Strong Blank, journalism students, followed closely by education students, attained highest scores on the Interest-Maturity scale; law students had the highest scores on the Occupational Level scale. All of these differences were in the direction expected by the investigator.

Comparison of Vocational Interests of College Students

Numerous studies have been conducted concerning relationships among group differences regarding the vocational interests of college students.

Baggaly (3) grouped 185 Harvard College freshmen majoring in various fields of study into two main groups; (1) natural science and (2) humanities and social studies majors, and studied the relationship between their scores on the Kuder Preference Record. He found highly significant differences between the means of the two groups on all of the Kuder scales.

Yum (59) used the Kuder Preference Record to compare the differences of students enrolled in biological, physical, and social science divisions at the University of Chicago. Men scored higher on the Scientific and Persuasive scales, and women higher on the Artistic and Social Service scales. The biological and physical science students obtained mean scores on the Scientific scale significantly higher than the mean scores of students in the social sciences, and significantly lower scores on the Computational and Literary scales than those of social science students. Differences between the scores of physical and biological students were not significant.

Baggaly and Yum in comparing their studies concluded: highest scores were obtained on the Scientific scale by students in physical

and biological science; biology majors tended to score lower on the Scientific scale than were students in physical science; highest scores were obtained on the Literary scale by the social science students.

Sanford (42, p. 195) stated:

...students who attend colleges that are high in 'productivity' of scientists and scholars are relatively high in intellectual interests as measured by the Strong Interest Blank, while students who attend less 'productive' institutions are relatively high in pragmatic or applied orientation.

Engineering and non-engineering freshman students in different major fields were compared on the basis of interest patterns on the Kuder Preference Record by Speer (46) at the Illinois Institute of Technology. He found: scientific engineering students, such as chemical, mechanical, civil, and electrical, scored high on the Computational, Scientific, and Mechanical scales, low on the Persuasive scale, and average on other scales; the non-scientific engineering students, such as those studying industrial and fire protection, obtained high scores on the Computational and Persuasive scales, average scores on the Mechanical and Scientific scales, and low scores on other scales; the business students attained high scores on Computational, Persuasive, Literary, and Clerical scales, low scores on Mechanical, Scientific, and Artistic scales, and average scores on other scales; the architectural students obtained very high scores on the Artistic, Musical, and Literary scales, low scores on the

Scientific and Clerical scales, and average scores on the other scales; engineering students as a whole were found to differ significantly from the non-engineering students on the Kuder Preference Record.

Perry and Shuttleworth (39) administered the Kuder Occupational Preference Record to freshmen at the City College of New York for the purpose of establishing local normatives of the Kuder in relation to degree objectives. The results from their study indicated that the majority of freshmen had made choices in agreement with their measured interests.

Values Among Groups of College Students

The Study of Values has been used by investigators to identify and compare differences between individuals and among groups of students.

Vernon and Allport (54, p. 246-247) at Harvard University compared undergraduate students from various fields of study and reported the following findings: consistent sex differences were evident, men had higher scores on the Theoretical, Economic, and Political scales, whereas women had higher scores on the Aesthetic, Social, and Religious scales; significantly higher scores on the Theoretical scale were attained by students in psychology, science, and lower scores for students in literature; on the Aesthetic scale psychology and literature students placed significantly higher; on the

Economic scale engineers and business students obtained significantly higher scores than did the other students, whereas students in psychology and science obtained significantly lower ones; highest scores on the Political scale were found for students of law; no other significant differences in values were found.

At Dartmouth College, Stone (48), using the Allport-Vernon Study of Values compared interest patterns of sophomore students having different vocational intentions. He found the following patterns: the business group showed significantly high Economic scores but low Theoretical and Aesthetic scores; students in banking made significantly high Economic scores and at the same time scores showed considerable disinterest in religion; students interested in medicine obtained significantly high Theoretical scores but exhibited economic and political indifference; law students scored high on the Political scale but low on the Theoretical scale; education students scored high on the Aesthetic scale but low on the Economic scale; the literary group scored the highest of the groups on the Aesthetic and Religious scale but low on the Economic and Political scale.

Bereiter and Freedman (42, p. 568) in The American College wrote:

More often than not, however, students in social science come out as the most liberal of the groups in attitude studies. With much greater consistency, students in engineering and agriculture appear among the least liberal groups. Literature, arts, and natural science groups are

usually found between these extremes, with the natural science groups tending to be less liberal than the others. Students in education are difficult to pin down. Those in secondary education tend to reflect the attitudes of their prospective teaching fields, and those in elementary and physical education tend to be among the most conservative groups.

The Allport-Vernon Study of Values was administered by Whitely (58) to junior and senior students in general psychology enrolled in the schools of natural science, arts and literature, social science, and business at Franklin and Marshall College. Information obtained from a representative sample of student interviews seemed to validate the test scores. Whitely concluded: students in natural science placed highest on the Theoretical scale; business students scored highest on the Political scale, and business and social science majors obtained the highest scores on the Social scale; students in arts and literature scored highest on the Religious scale.

Pintner (40) selected students enrolled in an educational psychology class at Teachers College, Columbia University, and used the Allport-Vernon Study of Values to measure dominant interests in personality. Men were found to score higher than women on the Theoretical, Economic, and Political scales, while women scored higher on the Aesthetics, Social, and Religious scales. Political scores of both groups were found to be higher than those listed in the manual.

Findings noted in the Pintner study are similar to those reported by Harris (21) who used the Allport-Vernon Study of Values in a comparative study of 50 percent of the total student population enrolled in the arts, engineering, and business curricula at Lehigh University. The combined average scores of all students were close to those of the standarization group. The Social and Economic scales were omitted because of their low reliability. The following differences were noted: medical students had high scores on the Theoretical and Aesthetic scales and low scores on the Political scale; engineering students also had high scores on the Theoretical scale, but scored low on the Aesthetic scale; law students placed high on the Aesthetic and Political scales; students in business courses obtained high scores on the Political scale and low scores on the Theoretical and Aesthetic scales; students in education scored high on the Aesthetic scale, but low on the Political scale. This investigation indicated that relatively clear-cut differences exist in these students' interest patterns.

Seashore (44), using two well-defined college groups, health and physical education majors and applied social science majors at Springfield College, compared the differences between these groups on the Allport-Vernon Study of Values. The health and physical education majors had high Political scores in a combination with either or both Social and Religious scores, but obtained low Economic and

Aesthetic scores. The social science majors were high on the Social and Religious scales, but relatively low on the Political, Economic, and Aesthetic scales.

Personality Variables and the Major Field of Study of College Students

Some investigators have reported significant differences in terms of various personality variables, while others have found very little difference among students in different fields of study.

Dashiell (9) attempted to rate ten personality traits considered by professors to be most important for success in the five careers of medicine, commerce, teaching, engineering, and law at the University of North Carolina. These traits were ranked in order of importance by teachers in the five professional schools. The investigator suggested that discrimination by this method was not fruitful because the traits rated were not true measuring units of the personality characteristics needed for success in these areas of specialization. Dashiell concluded that an analysis of occupational interest by Freyed, Strong, and Remmers was most promising.

Wells and Wood (57, p. 129-135) observed more than 250 Harvard undergraduates during the years of 1938-1942, noting that students majoring in various fields of study showed significantly different personality traits. However, the study was somewhat

limited by the ambiguity in the trait names, since the traits were interrelated, either positively or negatively, to the point of being statistically significant. A series of 25 traits were inductively evolved from the life history of the participants, described and related to the choice of major for each student who was then rated according to the relative strength of the trait.

Lough (29, p. 444) compared the results of the Minnesota Multiphasic Personality Inventory scores of woman students approximately 19 years of age, enrolled in nursing, music, liberal arts, and elementary education at Skidmore College, to determine whether differences existed among these groups. She found no significant differences among the groups. However, she then concluded: on the basis of the T-scores the nurse cadets were more masculine, more stable, and less emotional than the other groups; the liberal arts group had fewer fears or compulsions and its members were more self-confident than those in the teaching curricula; education students portrayed good morale, less than average depression, and showed little concern about physical health to obtain sympathy; her overall conclusion was: "... the MMPI has little or no value in educational selection; it is not a useful instrument for differentiating between those who are more suited for one occupation than another."

Bereiter and Freedman (42, p. 571) have stated:

As with attitudes, the differences among groups are not large and are not found with absolute consistency. The groups reporting the most fears, worries, conflicts, and the like are almost always in the literary or fine arts fields, however, and applied majors, such as engineering, business, agriculture, education, regularly show the fewest of these psychological problems. In between, the natural-science students tend to show less disturbance than social-science students....

Borg (5), using the Guilford-Martin personality test, compared scores of students enrolled in applied art with those enrolled in other schools and colleges at the University of Texas. He concluded: art students showed significantly greater tendencies toward depression and cycloid disposition than the normative groups; art students were no more homogeneous than are other college students in terms of the personality traits measured; a larger percentage of art students obtained markedly deviant scores than did college students in general.

Norman and Redlo (36) compared scores of the Minnesota Multiphasic Personality Inventory of male seniors and graduate students at the University of Mexico to determine the relationship of personality to seven major fields of study. They concluded: the Minnesota Multiphasic Personality Inventory is a valid instrument for differentiating among students with different majors; individual students who were satisfied with their major field of study or who would have rechosen this same field deviated less from their own groupings than students who would have rechosen a different major field of study.

Clark (8) at the University of California at Santa Barbara compared the Minnesota Multiphasic Personality Inventory profiles among entering students with various college majors. The majors for men students were: art, biological science, economics, education, English and foreign language, industrial arts, mathematics and physical science, music, physical education, psychology, social science, and speech. The majors for women were: art, biological science, education, English and foreign language, home economics, mathematics and physical science, music, physical education, psychology, social science, and speech. He concluded that the Minnesota Multiphasic Personality Inventory profiles of students in the various major fields do not differ significantly from each other.

The Minnesota Multiphasic Personality Inventory was administered to students enrolled in engineering, liberal arts and sciences, and commerce and business administration at the Galesburg Undergraduate Division of the University of Illinois. Hancock and Carter (2) concluded: the average profiles of liberal arts and science students were similar to those of commerce students; there were marked differences between engineering students and students in the other two groups.

Using the Blacky Pictures, Teevan (51) studied differences among three groups of college majors at Wesleyan University, ranging from 17 to 25 years of age, and found a number of significant

personality differences. The study indicated less personality disturbance among students in natural science than among those in social science and the humanities. Humanities students tended to seek satisfaction from verbal activities. The social science group tended toward aggressive and sadistic tendencies.

Vineyard (55) at Panhandle A. and M. College in Texas used the Guilford-Zimmerman Temperament Survey to determine the relationship of personality traits of freshman and sophomore science and non-science majors. He concluded that science majors tended to differ from non-science majors in two personality traits, being either definitely impulsive or somewhat serious and restrained, and being more dominant than submissive as a group.

Bereiter and Freedman (5), in a study of 739 Vassar girls, made comparisons according to the major field of study on the basis of two personality variables, "Impulse Expression" indicating unconventional attitudes and attributes, and "Dominance and Confidence" indicating a willingness to assume dominant roles and to be confident and at ease in social situations. They concluded: students in philosophy, psychology, drama, and English received high scores in "Impulse Expression", while students in physiology, Spanish, mathematics, child study, religion, and political science received low scores; students in drama, political science, anthropology, sociology, and child study received high scores on "Dominance and

Confidence", whereas students in literary and natural science fields obtained low scores.

Garrison and Scott (16) used the Edwards Personal Preference Schedule to determine the manifest needs of junior and senior college students at the University of Georgia preparing to teach in different areas. The results indicated: prospective women teachers were differentiated by the needs for Achievement, Nurturance, Order, and Succorance; they were not differentiated by the needs for Intraception, Endurance, Deference, Aggression, and Dominance.

To determine the need structure of male students in the first year of professional pharmacy and junior students in teacher education at Southwestern State College, the Edwards Personal Preference Schedule was administered by Vineyard, Drinkwater, and Dickison (56) who reported the following results: students in education had a significantly higher mean score in the need for Intraception, and their scores were significantly less variable than pharmacy students with respect to needs for Achievement, Affiliation, Nurturance, and Change; the pharmacy students were more homogeneous with respect to the need for Order than students in education.

Graves (19, p. 499) reported on studies made at the University of Michigan which showed that relatively permanent personality dimensions existed in every student. The extreme combinations were described as follows:

Type I--Individuals who are highly outgoing and low in anxiety tend to be changeable, sociable, impulsive, sensitive, imaginative, and secure.

Type II--Those who are relatively rigid and low in anxiety tend to be conservative, independent, conscientious, somewhat unsociable, and stable.

Type III--Those who are rigid and anxious tend to be conscientious, withdrawn, aggressively independent, suspicious, and when in extreme disequilibrium, given to paranoid delusions.

Type IV--The combination of anxiety and extroversion results in individuals who are disorganized, sensitive (especially in interpersonal relations), imaginative, and excessively dependent.

Characteristics of Two-Year College Students

A few of the articles and studies are presented as representative of findings regarding characteristics of two-year college students. However, Morrison (35, p. 128) stated: "A dynamic, fast-growing institution such as the two-year college seldom has the time to examine where it is going or what the future holds, for most of its driving force is consumed in meeting day-to-day problems."

Hillway (25, p. 12, 89) reported:

Convenience of location, financial savings, and the availability of desirable two-year vocational programs probably constitute the most powerful forces impelling students to enter the junior and community colleges of America.

In general, then, we might say that the student who should attend the two-year college is definitely not the student with inferior ability. He is, instead, (1) the student who,

for any reason, does not wish to commit himself immediately to more than two years of collegiate education; (2) the student who plans to enter one of the semiprofessions; (3) the student who has not yet made up his mind with regard to his future plans; (4) the student who cannot afford to attend college away from home or who wishes to save money for his later education; or (5) the student who still is relatively immature and who for that reason should live at home for another two years. There are other types of young people for whom the junior college is beneficial, but these five are the main groups.

Fields (15, p. 80) stated:

1. Some community college students are as able academically as those in the freshman and sophomore years of typical four-year colleges; they constitute, however, a smaller proportion of the total group.
2. The community-college type of institution accepts and attracts students not ordinarily attracted to or generally admitted to other types of colleges.
3. There is, therefore, greater academic heterogeneity in the student body of the community college.
4. Community colleges also attract a more representative group of students with respect to socioeconomic status.
5. Community colleges attract students with a greater age range than the typical four-year institution.

Havighurst and Neugarten (22, p. 255) reported that in the representation of social class structure within institutions of higher learning, about five percent of the upper-class and upper-middle-class could be found in the "opportunity college", defined by the authors as follows:

Opportunity college . . . is always characterized by low costs, easy admission standards, and a predominance of students from working-class families . . . Opportunity college is primarily a place for youth who desire social mobility Students tend to think of attaining mobility more by learning middle-class vocational skills than by learning middle-class social skills.

In 1934, Anderson (2) reported an investigation of the socio-economic level of 8,330 students attending public, tax-supported, non-tuition junior colleges in California. He found that 64 percent of the students were from the upper socio-economic levels, and 24 percent were from the lower socio-economic levels. He also reported that Reynolds sampled 55 colleges and universities in 1924 and that, including agricultural occupation, approximately 83 percent were from the upper socio-economic levels and 12 percent were from the lower levels.

Koos (26, p. 272-274) in 1944, published the results of a comparative study of 11,932 high-school graduates from 61 high schools in 12 states, with students from junior college systems. He concluded: the number of degree-seeking college students would be two and one-half times the present number if junior colleges were introduced; enrollment was not restricted to lower socio-economic groups, although the increase in attendance was greater from the lower than from the upper classes; one and one-half times as many students were from lower economic groups than from other economic groups.

In a recent study determining the dominant factors for student enrollment in a public junior college in a multi-college city, Mellinger (34) reported the following conclusions on the basis of information obtained from questionnaires and randomly selected interviews of the 1959-60 male freshmen; ninety-six percent of the freshmen population was from the lower and lower-middle classes, when such a class was defined by Warner's version of Hollingshead's criteria; fifty-eight percent of the families had annual incomes over \$8,000; sixty percent of the interviewees received income from part-time employment; preference for a local college to out-of-town residential colleges was based on the cost factor; accessibility of the junior college was of less concern to the students than cost of attendance, reputation of the institution, and ability to meet minimum entrance requirements; the desire to identify with a "prestige college" was found to be a factor in the selection of the local junior college.

Clark (7, p. 51-61) compared the socio-economic background of students enrolled in San Jose Junior College with that of students entering Stanford University, University of California at Berkeley, and a four-year college somewhat less selective than the state university. He reported: enrollment in the universities was primarily from the upper-class, the enrollment at Stanford being somewhat more selective; three-fourths of the junior college students came from lower-class "white- and blue-collar" homes; the junior

college enrollment was almost an exact representative sample of the occupational classification of the city of San Jose.

In a study on hours of employment while attending Orange Coast Junior College, Thornton (52, p. 154) reported students' weekly working hours as follows: thirty-three percent of the students worked less than 10 hours; thirty-four percent worked between 10 and 21 hours; nineteen percent worked between 20 and 30 hours; fourteen percent worked more than 30 hours.

Between 1954 and 1957, Medsker (33, p. 41) studied 5,000 students enrolled in six junior colleges in California. He reported the following data: one-fourth of the student enrollment was from the upper socio-economic levels; approximately one-third of the student enrollment came from a skilled-labor background; one-tenth of the student enrollment was drawn from families of professional groups.

In studying the age range of 13,304 regular day students enrolled in 10 junior colleges, Medsker (33, p. 43) found: twenty-six percent were 18 years of age or younger; twenty-seven percent were between 19 and 22 years of age; thirty-seven percent were 23 years of age or older. Recently, however, Medsker (32, p. 9) reported that the age level of junior college students was decreasing. At the Junior College Personnel Conference, in 1964, Medsker (32, p. 7) stated: "In general, junior college students show a greater tendency

toward authoritarianism and less tendency for reflective thinking and intellectual commitments than students in four-year colleges."

On the basis of a study by Stern, McConnell (30, p. 237) concluded that "... there is a tendency for students to attend institutions which will support their need structures."

Davis (10, p. 258) concluded similarly: "One may hazard the guess that the trend is for the student's own personal characteristics to become increasingly important and the socio-economic status of his parents to play a lesser part in determining who will reach the elite positions."

Summary

Numerous studies have been made involving the general areas of vocational choice, values, and manifest needs of students. Findings from these studies indicate that psychological tests of interests, values, and manifest needs differentiate among people majoring in different major fields of study. Several studies have been conducted on differences in the characteristics of college populations. A few psychological studies of differences between students enrolled at different institutions for higher education have also been reported. However, to the writer's knowledge no studies have been conducted on the subject of this investigation--a comparison of non-cognitive differences between students from community colleges and students from institutions granting college degrees.

CHAPTER III

METHODOLOGY AND PROCEDURE

The Strong Vocational Interest Inventory, the Allport-Vernon-Lindzey Study of Values, the Edwards Personal Preference Schedule, and a Personal Data Schedule were administered by the writer to 499 first-term males and females enrolled for the fall term of 1963 at the three community colleges and Oregon State University.

After administration of the psychological tests, results were scored, tabulated, and statistically analyzed to determine whether there were significant differences between test scores of the community college freshmen and of the Oregon State University freshmen.

Strong Vocational Interest Inventory

The Strong Vocational Interest Inventory (49, p. 5, 13, 14) is an inventory that has been developed by empirical procedures, and the score on each occupational scale expresses the extent to which a person possesses likes and dislikes which distinguish members of the occupational group from men or women in general.

The 45 occupations have been grouped on the Men's Blank as follows:

- I. Biological sciences
- II. Engineering and physical science

- III. Production manager
- IV. Technical and/or skilled trades
- V. Social Service or welfare
- VI. Musician
- VII. Certified public accountant
- IX. Sales or business contact
- X. Verbal or linguistic
- XI. President-manufacturing concern

Besides the occupational scales, the Strong Inventory has four additional scales designed to measure the specialization level, interest maturity, occupational-level, and masculinity-femininity.

The Strong Vocational Interest Inventory was chosen for this study because it predicts with considerable accuracy the actual occupation which individuals ultimately select.

Study of Values

The Allport-Vernon-Lindzey Study of Values (1, p. 3-5) is a questionnaire designed to measure activities toward six basic motives, interests, or attitudes. The value categories are named and defined as follows:

1. Theoretical--is characterized by the dominant interest in the discovery of truth by an empirical, critical, and rational approach.

2. Economic--emphasizes the useful and practical values closely conforming to the stereotype of the "average American business man".

3. Aesthetic--places the highest value in form and harmony and each experience is enjoyed from the standpoint of its grace, symmetry, or fitness.

4. Social--is defined as love of people with regard for the interest of others and love for mankind.

5. Political--is interested primarily in personal power, influence, and renown which are not necessarily limited to the field of politics.

6. Religious--is mystical and concerned with the unity of all experience, seeking to comprehend the cosmos as a whole.

The total scores for the six values can be plotted on a profile which reflects relative strength in the six areas. Tables of normatives indicate sex differences as well as collegiate and occupational differences.

The Study of Values was chosen because it has been demonstrated that values are an intrinsic aspect of both interests and personality and that motivation is related to the individual's system of values.

Edwards Personal Preference Schedule

"The Edwards Personal Preference Schedule (EPPS) is designed primarily as an instrument for research and counseling purposes, to provide quick and convenient measures of a number of relatively independent normal personality variables." (12, p. 5, 11)

Manifest needs that are associated with each of the 15 Edwards Personal Preference Schedule variables are named and briefly described:

Achievement--to do one's best

Deference--to get suggestions from others

Order--to have written work neat and organized

Exhibition--to say witty and clever things

Autonomy--to be able to come and go as one desires

Affiliation--to be loyal to friends and to form as many friends
as possible

Intracception--to analyze one's motives and feelings

Succorance--to have others provide help

Dominance--to settle others' troubles, to be a leader

Abasement--to feel need for punishment for wrong doing

Nurturance--to forgive others, to sympathize with others

Change--to do new and different things

Endurance--to keep at a job until it is finished

Heterosexuality--to be in love with the opposite sex

Aggression--to attack contrary points of view, to blame others.

The Edwards Personal Preference Schedule was selected for use because it was standardized on college men and women.

One of the problems in devising questionnaires dealing with personality is the tendency for individuals to answer in the direction of social desirability. The Edwards Personal Preference Schedule has been specifically constructed to eliminate this response bias by using a forced choice technique.

Personal Data Schedule

A Personal Data Schedule was constructed by the writer to help define more accurately characteristics of the population. The preliminary form was presented to a number of individual students and to a group organization. All were encouraged to question items that they did not understand. The Schedule was briefly discussed after completion. A trial test was given by the writer for the purpose of clarifying directions, to determine sufficient time for answering questions, and for refinement of questions. Minor changes were made in the grammatical construction and general format of some questions.

Administration of the Tests

Each group of freshmen met with the writer or a qualified examiner. The students were told that the purpose of the study was: to determine the potential value that the data could have for higher education within the state of Oregon; to determine the guidance implication for pupil personnel programs; to help ascertain interests, values, and manifest needs of students entering Oregon State University and the three community colleges; and to provide information about the type of students enrolling in the institutions studied.

To reduce the possibility of distortion of responses to the test, the writer met with those freshmen who desired interpretation of test results. The students were assured that all personal information would remain anonymous and confidential.

To help prevent boredom and fatigue, the Strong Vocational Interest Inventory was administered during one class period and the Edwards Personal Preference Schedule, the Allport-Vernon-Lindzey Study of Values, and the Personal Data Schedule at a second meeting. For freshmen who were unable to attend the second meeting, a third meeting was arranged.

Some variation occurred in administering tests among the community colleges and Oregon State University. At Central Oregon College, the Edwards Personal Preference Schedule was not

completed in a group situation, but on an individual basis. Detailed instructions were given each student, and the instruments were returned to the writer. Clatsop College set aside a day for testing, thus providing freshmen with considerable time between tests to help prevent boredom and fatigue. At South Western Oregon College the tests were administered by a competent test administrator who followed standardized testing procedures.

For the purpose of this study the Male Form of the Strong Vocational Interest Inventory for both sexes was used, thereby providing a larger number of occupational scales and answers which facilitated comparisons between men and women.

Treatment of Data

1. All data for this study were tabulated separately for males and females.

2. Frequency distributions of responses from the Personal Data Schedule were tabulated for Oregon State University and for each of the three community colleges.

3. Percentages were calculated for each of the distributions to facilitate comparisons.

4. Comparisons of data were made among the three community colleges as well as between the combined community colleges and Oregon State University.

5. Some of the personal data were categorized to test for significant differences between the combined community colleges and Oregon State University. Lawshe's* nomograph (27) was used to obtain the significance of the difference between two percentages.

6. Means and standard error of the means were computed for each of the schools at Oregon State University and for the total Oregon State University population for each of the scales of the Strong Vocational Interest Inventory, the Allport-Vernon-Lindzey Study of Values, and the Edwards Personal Preference Schedule.

7. The schools of agriculture, forestry, and pharmacy at Oregon State University were combined for statistical analysis because of the small number of cases.

8. The means and standard error of the means were computed for the psychological tests for each of the community colleges as well as for the combined community colleges.

9. Analysis of variance (28, p. 151-243) was applied to determine whether there were significant differences among schools at Oregon State University, among different community colleges, and between Oregon State University and the combined community colleges.

* The formula for t is the difference between the two percentages divided by the standard error of the difference. Lawshe's nomograph gives the value of ω in which

$$\omega = \frac{t}{\sqrt{\frac{2N_1 + N_2}{N_1 + N_2}}} \quad \text{or} \quad t = \omega \sqrt{\frac{2N_1 N_2}{N_1 + N_2}}$$

CHAPTER IV

FINDINGS

The findings of this investigation are presented in two parts: Section A includes the findings from the Personal Data Schedule. Section B includes the findings from the three psychological tests.

A. Analysis of the Data Obtained from the Personal Data Schedule

The Personal Data Schedule was used primarily to obtain information regarding the characteristics of the population with respect to such factors as geographic location, economic level, and education of parents, as well as such subjective data as reasons for attending college and occupational choice.

A copy of the Schedule is presented in Appendix A. Some of the questions of the Personal Data Schedule were not tabulated because the data were ambiguous or insufficient. The word omitted indicates that the question was not used in the analysis.

The Schedule data are tabulated separately for males and females, for each of the three community colleges, and for Oregon State University.

Table III through Table XXI, presented in Appendix B, give the number and percentage of first-term males and females attending

community colleges and Oregon State University in terms of their responses to the various items on the Personal Data Schedule.

Community colleges are referred to in all Tables by using the initial letter of the city in which the college is located: A--Astoria, Clatsop College; B--Bend, Central Oregon College; C-Coos Bay, South Western Oregon College.

T-values are given between percentages for the combined community colleges and Oregon State University first-term freshmen, using Lawshe's technique for determining the significance of the difference between two percentages. Differences significant at the 1 percent and 5 percent levels are indicated on the Tables.

Age Groups

The number and percentages of responses of freshmen in different age groups at the three community colleges and at Oregon State University are shown in Table III (p. 115). The males at the community colleges were significantly older than those attending Oregon State University. The difference between the percentages was significant at the 1 percent level, but there was not a significant difference in age among the two groups of females. Field (15, p. 80), Medsker (33, p. 43), and others reported similar findings, in that there was a greater age range of students in the two-year colleges than in the four-year colleges.

However, it will be noted that the percentage of freshmen nineteen years of age and older at College A closely approximated the percentage in the same age group at Oregon State University. The day program at College A is conducted within its own buildings; the other two colleges use the local high school buildings for evening programs. Hence, students tend to continue their studies at College A which provides the student with a schedule similar to that of his high school.

Relevant to the age of freshmen, Medsker (32, p. 9) reported that the average age has been decreasing in two-year colleges.

Religious Preference

The number and percentages of responses of freshmen regarding religious preference of males and females at the three community colleges and at Oregon State University, form the background data for Table IV (p. 116). The responses indicated that the population was predominantly Protestant, though a somewhat smaller proportion of Protestants was evident at Oregon State University than at the combined community colleges. While this difference was significant at the 5 percent level for males, the difference was not statistically significant between the two groups of females.

High School Performance

The number and percentages concerning the high school grade point averages of males and females at the three community colleges and at Oregon State University are shown in Table V (p. 117). The males at the community colleges performed academically at a much lower level in high school, as indicated by their grade point averages, than did the freshmen at Oregon State University. The percentage of males with grade point averages below 2.49 was 46.6 percent and 14.5 percent respectively. Only 1.2 percent of the community college males acquired a grade point average above 3.50, whereas 16.4 percent of the males at Oregon State University gained a high school grade point average above 3.50. Thus, significant differences were evident at the 1 percent level at both ends of the grade point distribution.

Oregon residents, to be eligible for admission to Oregon State University, must have at least a 2.00 or higher grade point average and non-residents must have at least a 2.75 or higher grade point average. This grade point average is not an admission requirement to the community colleges and therefore the community colleges admit students with a wider range of academic ability.

Community college males differed in high school grade point averages in that 80.9 percent of the males at College B completed

high school with a grade point average above 2.50. Only 43.6 percent of the males at College A and 40.6 percent of the males at College C had grade point averages higher than 2.50 in high school.

Responses showed that 32.1 percent of community college females and 8.6 percent of Oregon State University females had grade point averages below 2.50, a difference that is significant at the 1 percent level. No significant difference was evident between the two groups of females for grade point averages above 3.50, although a significantly larger percentage of Oregon State University females had grade point averages above 3.00.

Affirming the above-noted averages, Fields (15, p. 80), Medsker (32, p. 8), and others reported that the average academic aptitude of two-year college students was somewhat lower than that of students entering four-year colleges.

Interesting differences were exhibited by the responses of community college females. Percentages of grade point averages above 2.50 at Colleges A, B, and C, respectively, were 65.6, 50, and 60. Particularly striking was the 41.7 percent of females indicating a grade point average below 2.00 at College B, which may reflect a difference in entrance requirements.

Although community college and Oregon State University freshmen differed in high school grade point averages for both males

and females, this average was somewhat higher for females than for males in both types of institutions.

Responses indicated mean grade point average of 2.98 and 2.47 for males, and 3.11 and 2.70 for females at Oregon State University and the community colleges, respectively.

High School Location

The location of high schools attended by males and females at the three community colleges and Oregon State University are shown in Table VI (p. 118). Of the males who attended community colleges 94.3 percent were from Oregon high schools, whereas only 78.9 percent of the males who attended Oregon State University were from Oregon high schools. This difference was significant at the 1 percent level. Geographical differences were affirmed by Hillway (25, p. 12, 89), Koos (26, p. 272-274) and others, whose studies indicated that community colleges provide for the educational needs of students of the geographical area in which they are located.

With respect to the location of high schools attended there was no significant difference between the two groups of females.

High School Population

The number and percentages concerning the size of high schools attended by males and females at the three community

colleges and Oregon State University are shown in Table VII (p. 119). Both male and female community college freshmen were from high schools with smaller enrollments than were the male freshmen at Oregon State University. The difference was significant at the 1 percent level.

More community college males enrolled at College A and C had attended high schools with smaller populations than those at College B. This difference appeared to reflect the size of the high school populations in the different communities.

Graduation Plans

The number and percentages of males and females at the three community colleges and Oregon State University planning to graduate from college are compared in Table VIII (p. 120). A significantly larger proportion of Oregon State University males planned to graduate, while a significantly larger proportion of community college males remained undecided. There were no significant differences between the two corresponding groups of females.

It is interesting to note that a larger percentage of both males and females at College C indicated that they planned to graduate in comparison with the indications of those at Colleges A and B. Findings concerning students' educational goals made by Hillway (25,

p. 12, 89), Medsker (32, p. 8), Fields (15, p. 80) and others were similar to those indicated in this study.

College Transference Plans

The number and percentages of males and females at the three community colleges and Oregon State University planning to transfer are shown in Table IX (p. 121). Approximately 80 percent of the community college males indicated that they planned to transfer to another college, and 17.3 percent reported that they were undecided, while only 10.9 percent of males from Oregon State University planned to transfer, 30.9 percent were undecided. These differences in percentages between the community college and Oregon State University males were significant at the 1 percent level.

Of the community college females, 81.3 percent planned to transfer and 11.9 percent were undecided, and at Oregon State University, 18.6 percent of females planned to transfer and 28.7 percent were undecided. These differences in percentages between the community college and Oregon State University males were significant at the 1 percent level. At College A 66.7 percent of the females planned to transfer and at College C all expected to transfer.

Reasons for Attendance at a Specific Institution

The most important reasons for attendance at a specific institution in terms of number and percentages of responses by males and females at the three community colleges and Oregon State University are shown in Table X-a (p. 122).

A number of possible choices were listed on the Personal Data Schedule for question 15--reasons for attending college. Students indicated first, second, and third choices, and these data were analyzed in two different ways: the percentage of students who chose a particular item as the most important reason (see Table X-a, p. 122); the percentage of students who chose an item as one of the three most important reasons (see Table X-b, p. 123). Seventy-one and two-tenths percent of the Oregon State University males selected "less expensive" as the primary reason, but 40.5 percent selected "less expensive" as one of the three most important reasons.

The most important reason given by males for attending Oregon State University was that the institution offered courses related to their interests. Approximately 69 percent of the Oregon State University males selected this reason as their first choice, while only 4.8 percent of the community college males chose this item. Courses related to interest were included among the three reasons for choice by 86.3 percent of Oregon State University males, in contrast to

56.7 percent of the community college males who included this item as one of the three choices.

In addition to the reasons stated above, community college males selected "better part-time work opportunity" to a significantly higher extent than did Oregon State University males. None of the other items differentiated the two groups of males in terms of first choice, and all but one of the items differentiated between the two groups of males on the basis of the three most important reasons. The sole item that failed to differentiate was "parental influence."

Community college females selected the "expense" item as the most important reason for college attendance while Oregon State University females selected the "courses of interest" items. These differences were significant at the 1 percent level.

The other first-choice item "attending college while remaining at home" differentiated between the female populations. Even though 15.5 percent of community college females and 2.3 percent of Oregon State University females indicated this item, it was ambiguous since most Oregon State University freshmen come from other areas to attend college.

Two items--"parental influence" and "to be with friends"--did not differentiate between the females with respect to all three choices, the former being the only non-differentiating item between the male groups. Of interest was the fact that the item "to be with friends"

was chosen by 17.6 percent of the Oregon State University males, and by only 7.7 percent of the community college males, a difference which was significant at the 5 percent level.

The data from Table X-b are summarized below in terms of the rank order of importance of the various reasons given for attending the specific institutions:

<u>Reasons for attending college</u>	<u>Rank Order</u>			
	<u>Males</u>		<u>Females</u>	
	Combined Community Colleges	OSU	Combined Community Colleges	OSU
a. Less expensive	1	4	1	3
b. Better part-time work opportunity	3	7	3	7
c. Parental influence	6	5	5	4
d. Available courses related to my interests	2	1	4	1
e. In order to attend college and remain at home	4	8	2	8
f. To be with my friends	7	6	6	6
g. Provides a chance to get away from home	8	2	7	2
h. Other	5	3	8	5

Similar findings relative to reasons for students' choice of community rather than four-year colleges or universities were reported by Medsker (32, p. 8), Hillway (25, p. 12, 89), Mellinger

(34), and others. Lower expenses and better opportunity for part-time work were available in community college areas.

General Reasons for College Attendance

The most important reason for attending college in terms of number and percentages of responses by the males and females at the three community colleges and Oregon State University is given in Table XI-a (p. 124). In Table XI-b (p. 125) are listed the combined first, second, and third choices.

Provision of vocational training for better employment was given by 58.5 percent of the community college males as the most important reason for college attendance. Seventy-seven percent of the Oregon State University males indicated that college provided vocational training necessary for better employment. Both of these items differentiated at the 1 percent level.

A combination of the choices showed that 95.4 percent of Oregon State University males and 80.2 percent of community college males selected provision of vocational training as one of their three choices, a difference that was significant at the 1 percent level. However, 81 percent of males at both institutions indicated that college provided a basic general education. As would be expected, a significantly larger percentage of Oregon State University males

selected the item, "provides a chance to get away from home", than did community college males.

The same items concerning the most important reasons for attending college differentiated the two groups of females. Approximately 40 percent of the community college females indicated that the availability of vocational training for better employment was the most important reason for attending college, while 53.4 percent of these females indicated that college provided a basic general education. Fifty-six and two-tenths percent of the Oregon State University females selected as a reason the availability of vocational training, and 35.9 percent indicated as a reason the provision of a basic general education. These differences were significant only at the 5 percent level for females.

A combination of all choices showed the differences between community college and Oregon State University females as insignificant, except for the females who indicated that the item "getting away from home" was one of the reasons for attending college. Approximately 58 percent of the females at Oregon State University selected this reason and of the community college females only 13.8 percent indicated it as a reason. This difference was significant at the 1 percent level, although as in the case of the males, a difference would be expected in the response of this item.

Interesting differences in rank order for the various reasons

given in terms of the percentages from Table XI-b which were noted as follows:

<u>Reasons for choice of a college</u>	<u>Rank Order</u>			
	<u>Males</u> Combined Community Colleges	OSU	<u>Females</u> Combined Community Colleges	OSU
a. Provides vocational training necessary for better employment	2	1	2	2
b. Provides a basic general education	1	2	1	1
c. Provides an opportunity to make friends with the opposite sex	3.5	5	3	4
d. It is the popular thing to do	5	6	6	6
e. Provides a chance to get away from home	6	4	5	3
f. Others	3.5	3	4	5

Decision to Attend College

The number and percentages of males and females at the three community colleges and Oregon State University in terms of responses to Personal Data choices are shown in Table XII (p. 126). Males attending community colleges and those attending Oregon State University in the majority of cases were primarily satisfied with the decision to go to college rather than the selection of employment,

military, or marital status. For the most part, males indicated satisfaction with their choice of courses, although 21.3 percent of the females at Oregon State University indicated a desire to have taken a different course of study. In contrast to this selection, only 5.5 percent of the community college females indicated this desire. This difference was significant at the 1 percent level, but none of the other items concerning decisions differentiated between either males or females at Oregon State University and the community colleges.

Parental Attitude Toward College Attendance

Attitudes of parents toward college, in terms of responses in number and percentages, as given by the males and females at the three community colleges and Oregon State University form the background data for Table XIII (p. 127). Responses to items concerning parental attitudes showed that the majority of males and females at the community colleges and at Oregon State University believed that their parents were extremely favorable toward college attendance. There were no significant differences between college groups for either males or females.

Assistance in Occupational Choice

Assistance in making occupational choice, in terms of the number and percentages of responses, by males and females at the

three community colleges and Oregon State University is shown in Table XIV. The first choice of influence is presented in Table XIV-a (p. 128) and the combined first, second, and third choices are presented in Table XIV-b (p. 129).

Sixty-six and seven-tenths percent of the males at the community colleges and 78.2 percent of the males at Oregon State University indicated that their occupational choices were primarily their personal decisions.

Among the various persons listed as sources of assistance in their choices, parents were the only ones that a number of males regarded as directly influential. While 18.8 percent of the community college males listed assistance from parents as the primary influence, only 6.8 percent of the Oregon State University males regarded their parents as primary influences. Except for this difference, the responses of Oregon State University and community college males were similar. Even this difference disappeared when all choices were combined.

The majority of females listed their personal decision, rather than assistance from others, as having had primary importance in their occupational choices. There were no significant differences between the females at the community colleges and Oregon State University with respect to the most important source of influence.

A combination of all choices showed a significant difference

between the Oregon State University and the community college females with respect to the influence of friends in occupational choice. Thirty-five and seven-tenths percent of the females at Oregon State University and 64.9 percent of the females at the community colleges indicated friends as important influences. Of interest is the fact that community college females listed the influence of teachers rather than that of their parents as more important in the determination of their occupational choice.

The order of importance of various sources of assistance in the decision of occupational choice as presented in Table X-b is listed below:

<u>Sources of financial assistance</u>	<u>Rank Order</u>			
	<u>Males</u> Combined Community Colleges	OSU	<u>Females</u> Combined Community Colleges	OSU
a. Parents	2	2	2	2
b. Relatives	6	6	6	6
c. Counselors	3	4	5	5
d. Teachers	5	3	4	3
e. Friends	4	5	3	4
f. Principal	8	8	8	8
g. Own personal decision	1	1	1	1
h. Other	7	7	7	7

Earned College Expenses

Amount of college expenses earned in terms of number and percentages of responses of males and females at the three community colleges and Oregon State University are given in Table XI (p. 124). Responses showed that 50.9 percent of the community college males and 27.3 percent of Oregon State University males paid all of their own college expenses. This difference was significant at the 1 percent level.

In contrast to the males, the proportion of self-supported females was small, and the difference between the two female populations was also significant at the 1 percent level. Approximately 24 percent of the community college females and 7 percent of Oregon State University females earned all of their expenses.

A difference was evident among the community college females, in that no females at College B were completely self-supporting, whereas 38.1 percent at College A and 25 percent at College C paid all of their college expenses.

Studies concerning earned college expenses reported by Mellinger (34), Hillway (25, p. 12, 89), Medsker (32, p. 6) and others verify the fact that many two-year college students found it necessary to support themselves in some measure while attending college.

Parental Attitude Toward Financing College Expenses

Parents' attitude toward financing college expenses as indicated in number and percentages of responses of males and females at the three community colleges and Oregon State University is given in Table XVI (p. 131). Both males and females at Oregon State University indicated a larger proportion of parents willing to provide for all expenses than did the males and females at community colleges, these differences being significant at the 5 percent level.

The only differences significant at the 1 percent level were of parents' willingness to furnish board and room for both males and females. This willingness was greater among parents of community college freshmen since, obviously, very few freshmen at Oregon State University would be able to live at home because of geographical considerations.

An interesting notation was that a larger number of females than males indicated willingness of parents to provide all college expenses. These responses were consistent with the data regarding higher education of females' parents and the relative academic superiority of females in terms of high school grade point averages.

A surprisingly larger percentage of freshmen indicated willingness on the part of the parents to provide total support, in comparison with the number of freshmen who indicated receipt of total support.

For example, at Oregon State University 11.7 percent of the males indicated that parents provided all college expenses, yet 36.2 percent stated that their parents were willing to pay all costs. Similarly, 18.8 percent of the females' parents financed all college expenses, and 52.8 percent indicated that parents were willing to pay all of the expenses. Similar findings were evident in the community college groups.

Income of Parents

Estimated yearly combined income of parents as reported by males and females by number and percentages at the three community colleges and Oregon State University is presented in Table XVII (p. 132). The responses of community college males and females showed parental income to be less than \$20,000. A significantly large number of incomes were reported in this category by males and females at Oregon State University.

A combination of the three high income categories showed striking differences in the income totals of parents of Oregon State University and community college males and females. Approximately 38 percent of the males and 51.3 percent of the females at Oregon State University reported incomes of \$9,000 and more, and only 18.8 percent of the males and 23.8 percent of the females at the community colleges reported incomes of \$9,000 and more.

These differences in income between the combined percentages were significant at the 1 percent level for both males and females.

Age of Parents

The ages of fathers and mothers of males and females at the three community colleges and Oregon State University, in terms of number and percentages, are shown in Table XVIII for males (p. 133), and in Table XIX for females (p. 134). No significant difference in ages were evident.

Parents' Education

The education of the fathers and mothers of males and females at the three community colleges and Oregon State University, in terms of number and percentages, is shown in Table XX for males (p. 135), and in Table XXI for females (p. 136). More fathers of Oregon State University males and females received college training than did fathers of the community college freshmen. The differences were significant at the 1 percent level.

Although there was no difference in the amount of education of the mothers of males at the two types of institutions, there was a difference at the 1 percent level in the amount of the mothers' education for females. Approximately 44 percent of Oregon State University freshmen and only 23.3 percent of the community college

freshmen indicated that their mothers had college educations.

Relative to levels of parental education, Medsker (32, p. 6) reported that a large percentage of the parents of junior college students had received only a high school education.

B. Analysis of Data Obtained From the Psychological Tests

The mean scores and the standard errors of the means on the Study of Values, the Edwards Personal Preference Schedule, and the Strong Vocational Interest Inventory are given for the males and females separately in Table XXII through Table XXVIII in Appendix

C. Analysis of variance (28, p. 151-243) was used to determine the significance of differences among the schools listed in the above-noted Tables at Oregon State University, among the three community colleges, and between Oregon State University and the three community colleges combined. Differences significant at the 1 percent and 5 percent levels are indicated on the Tables.

The Study of Values

Results obtained on the Allport-Vernon-Lindzey Study of Values are presented in Table XXII for males (p. 138) and Table XXIII for females (p. 139).

There was a significant difference among the schools at Oregon

State University at the 1 percent level for both males and females on the Theoretical scale. Scores of males in engineering and science were notably higher on the Theoretical scale than those of males in the other schools. Similar findings have been reported by Stone (48), Whitely (58), Sternberg (47, p. 188-195) and others.

Significant differences between Oregon State University and community college males were found in scores on the Theoretical and Social scales. However, there were no significant differences on these two scales for the females. The difference between Oregon State University and community college males was significant at the 5 percent level, a difference attributable to the relatively large proportion of males who attended Oregon State University because of scientific interests. Males in other schools at Oregon State University showed mean scores on the Theoretical scale no higher than those of males at the community colleges. The Theoretical scale thus identified the science and engineering majors, but did not differentiate the males with other majors at Oregon State University from those in the community colleges.

Other than the Theoretical, the only scale that significantly differentiated the Oregon State University males from the community college males was the Social scale, on which the community college males scored higher than those at Oregon State University, and this difference was significant at the 5 percent level. Highest scores on

the Social scale at Oregon State University were made by males with humanities majors, but these students constituted a relatively small percentage of the freshman student body. This percentage suggested the probability that students at institutions designed on the liberal arts pattern would obtain higher mean scores on the Social scale than would students at Oregon State University.

Significant differences between Oregon State University and community college females were found in scores on the Economic and Religious scales. The Economic scale had the highest differentiation. The mean score of the Oregon State University females was higher than the mean score of the community college females and was significant at the 1 percent level. Data reported on the Personal Data Schedule indicated that families of Oregon State University females had higher incomes and more education than the families of the females at the community colleges. This difference was probably related to the difference in Economic values as measured by the Study of Values. The Economic scale also differentiated among the schools at Oregon State University at the 5 percent level. Females enrolled in business and technology had the highest mean score. Difference in Religious values was probably attributable to the differential selection of students in terms of socio-economic status. The Religious scale also differentiated among females at the community colleges at the 5 percent level of significance and among the males at the 1 percent level.

More variation occurred in the Religious values of students among community colleges than of those in the schools at Oregon State University. It was apparent from the mean scores that females at the community colleges tended to place more value on religion than did the Oregon State University females but this was not true for the males. The mean score of females at Astoria on the Religious scale was higher for females than for any other subgroup, whereas the males scored unusually low on this scale.

To compare the results obtained on the Study of Values, profiles were constructed which presented the mean scores for males and females at Oregon State University and the community colleges in comparison with those of the college sample as presented by the authors (1, p. 11). The profiles are shown in Figure 1 for males and Figure 2 for females.

Patterns of values for males were noted to be similar in all three populations. The community college males approximated the normative group somewhat more closely than did the Oregon State University males. The only differences were the slightly higher mean score on the Economic scale and the slightly lower mean score on the Aesthetic scale for the community college males in comparison with the college normative data.

Much less similarity was noted in the profile pattern of females. The female college normative group scored highest on the Aesthetic

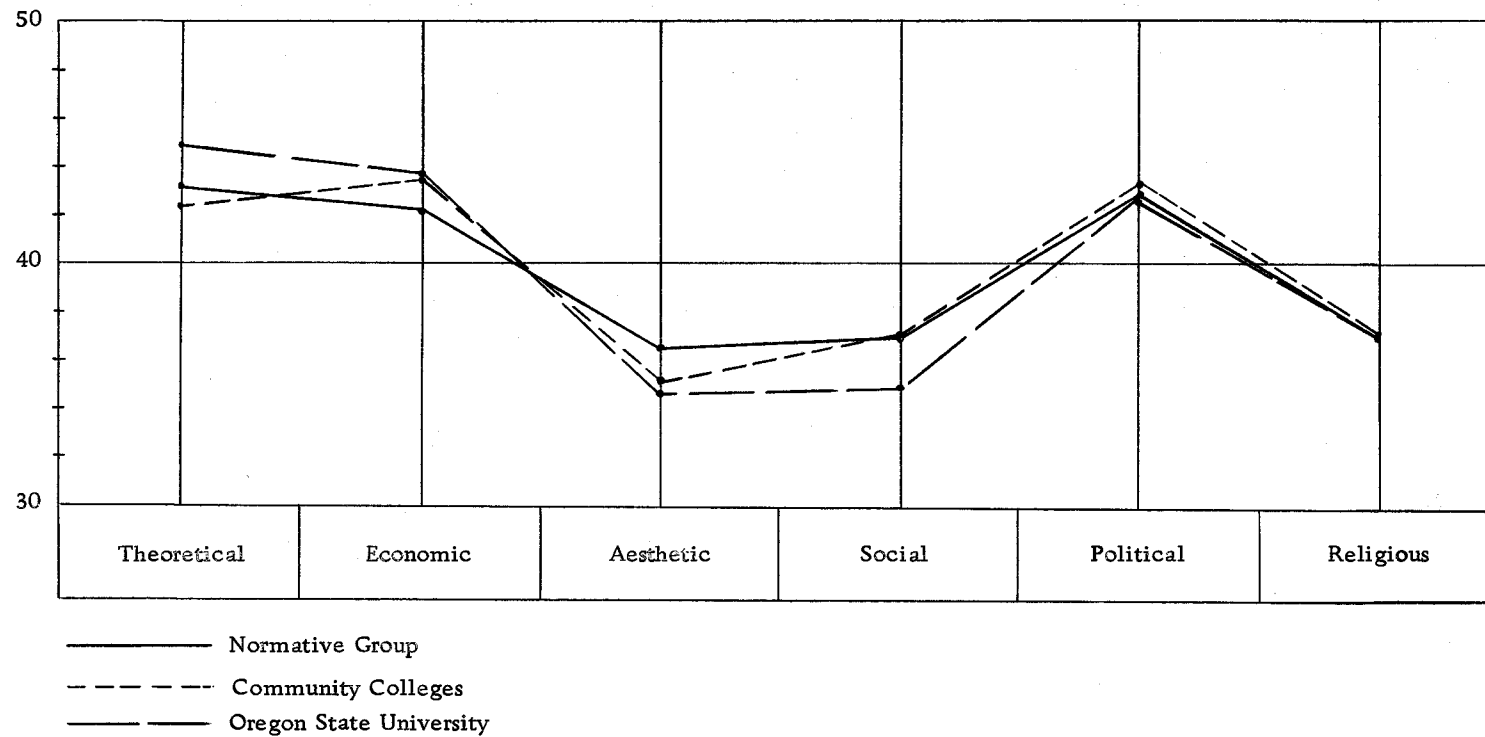


Figure 1. Comparison of Mean Scores with the Normative Group for First-Term Male Freshmen on the Study of Values at Oregon State University and the Community Colleges.

Reproduced by special permission of Allport-Vernon-Lindzey Study of Values, Houghton Mifflin Company.

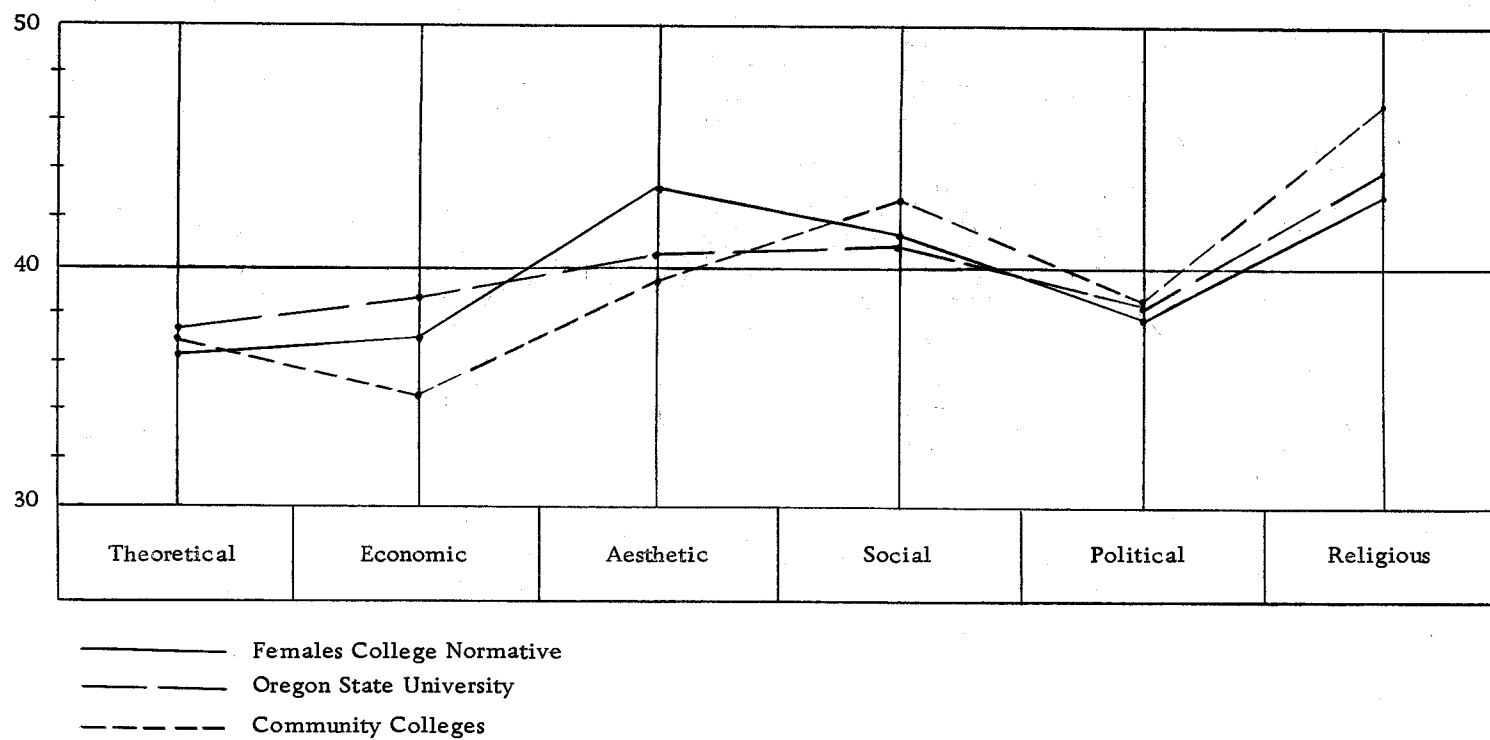


Figure 2. Comparison of Mean Scores with the Normative Group on the Study of Values for Male Freshmen at Oregon State University and the Community Colleges.

Reproduced by special permission of Allport-Vernon-Lindzey Study of Values, Houghton Mifflin Company.

scale, which tended to be low for both groups of college females in this study. In contrast to the college normative group, community college females scored relatively high on the Religious scale and low on the Economic scale. As indicated previously, only these two scales differentiated community college females from Oregon State University females.

The Edwards Personal Preference Schedule

The results on the Edwards Personal Preference Schedule revealed very few significant differences for either males or females as shown in Table XXIV for males (p. 140) and in Table XXV for females (p. 141).

On the Exhibition scale, the community college males had a higher mean score than the males at Oregon State University, and the difference was significant at the 1 percent level. It appeared that the need for Autonomy was somewhat greater among Oregon State University males than among community college males, since there was a significant difference at the 5 percent level.

Deference was the only scale that differentiated between community college and Oregon State University females. The community college females obtained a significantly higher mean score than the Oregon State University females. Other significant differences among means were on Intraception which differentiated among Oregon

State University males, and on Exhibition and Autonomy which differentiated among community college females.

A number of the significant differences among the groups occurred among variances rather than among means. For example, on the need for Change there was a significant difference in the variance among the schools at Oregon State University for males at the 1 percent level; on the need for Endurance a difference appeared in variance among the females at Oregon State University; and there was a significant difference in variance on the need for Succorance among the males at the community colleges.

Vineyard, Drinkwater, and Dickison (56), used the Edwards Personal Preference Schedule to determine the need structure of college students, and found significant differences in variability. They interpreted this finding as support for the premise that different persons found different need satisfactions in the same major field of study.

Although there were very few differences which were significant on the Edwards Personal Preference Schedule between the community college and Oregon State University freshmen, some rather striking differences occurred in the personality profiles of males and females in comparison with the published normative data (12, p. 12).

The percentile scores of the community college and Oregon

State University freshmen are presented in Figure 3 for males and Figure 4 for females. The most significant deviation from the college female in the normative sample was in the need for Dominance and Abasement, which showed that the females in this study had less need for Dominance and more need for Abasement. To an even greater extent this was also true for the males in the present study.

Heterosexuality and Dominance did not differentiate between community college and Oregon State University males or females, but mean scores on both scales appeared markedly lower than the college normative group on these variables; the mean scores on Succorance, Abasement, and Endurance scales were considerably higher in the present sample of Oregon freshmen than were the means of the college normative group.

The Strong Vocational Interest Inventory

The results obtained on the Strong Vocational Interest Inventory are presented in Appendix C in Table XXVI for males (p. 142) and Table XXVII for females (p. 143) in terms of the means and the standard error of the means. The Strong Vocational Interest Inventory clearly differentiated among males in the different schools at Oregon State University. Of the 45 occupations, 28 differentiated among schools at the 1 percent level and six at the 5 percent level. Occupations that differentiated among the males at the 1 percent level

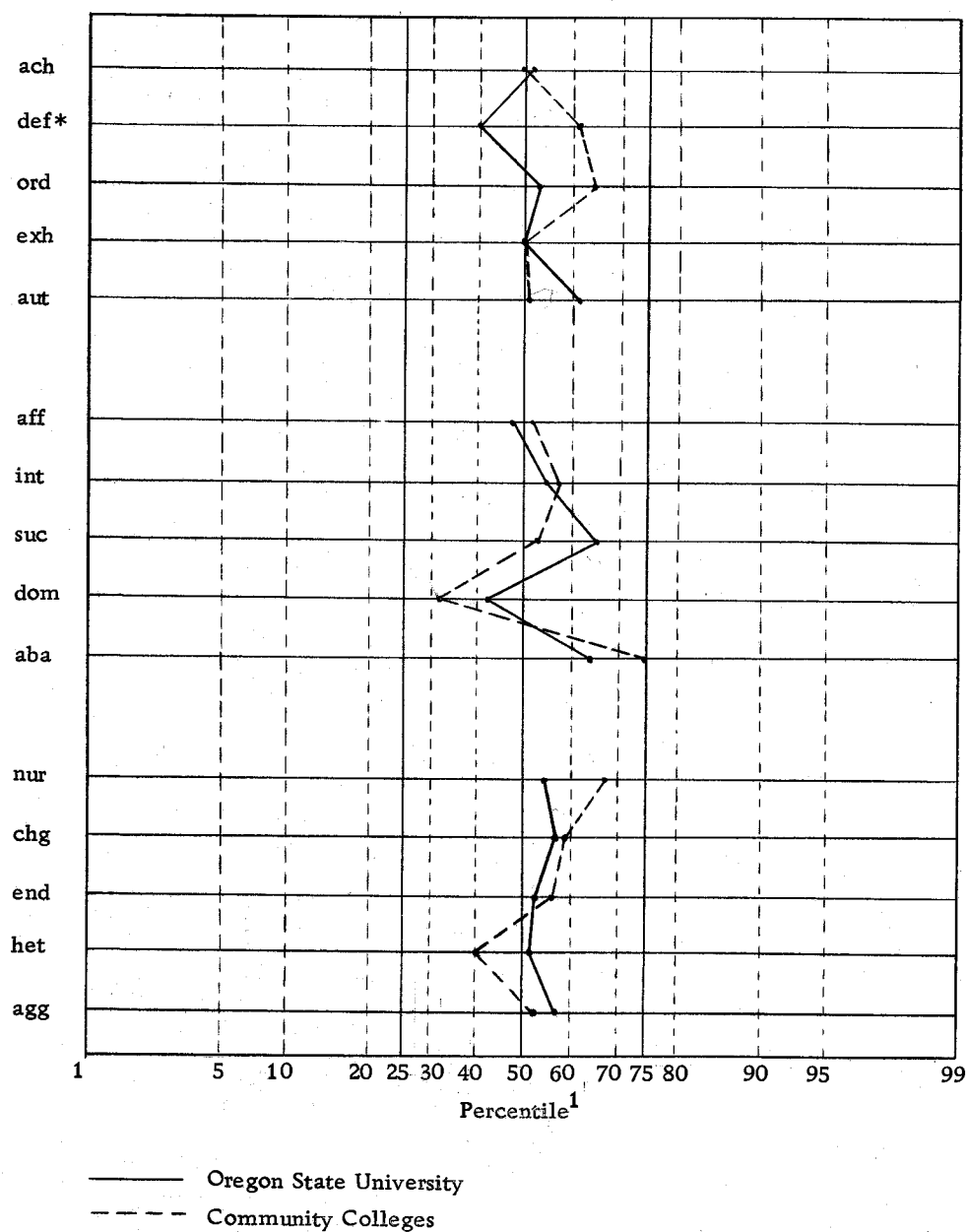


Figure 3. Comparison of Percentile Scores on the Edwards Personal Preference Schedule for Female Freshmen at Oregon State University and Community Colleges.

¹ Based on college female normatives.

* Significant at 0.05 level

Reproduced by special permission from The Psychological Corporation.

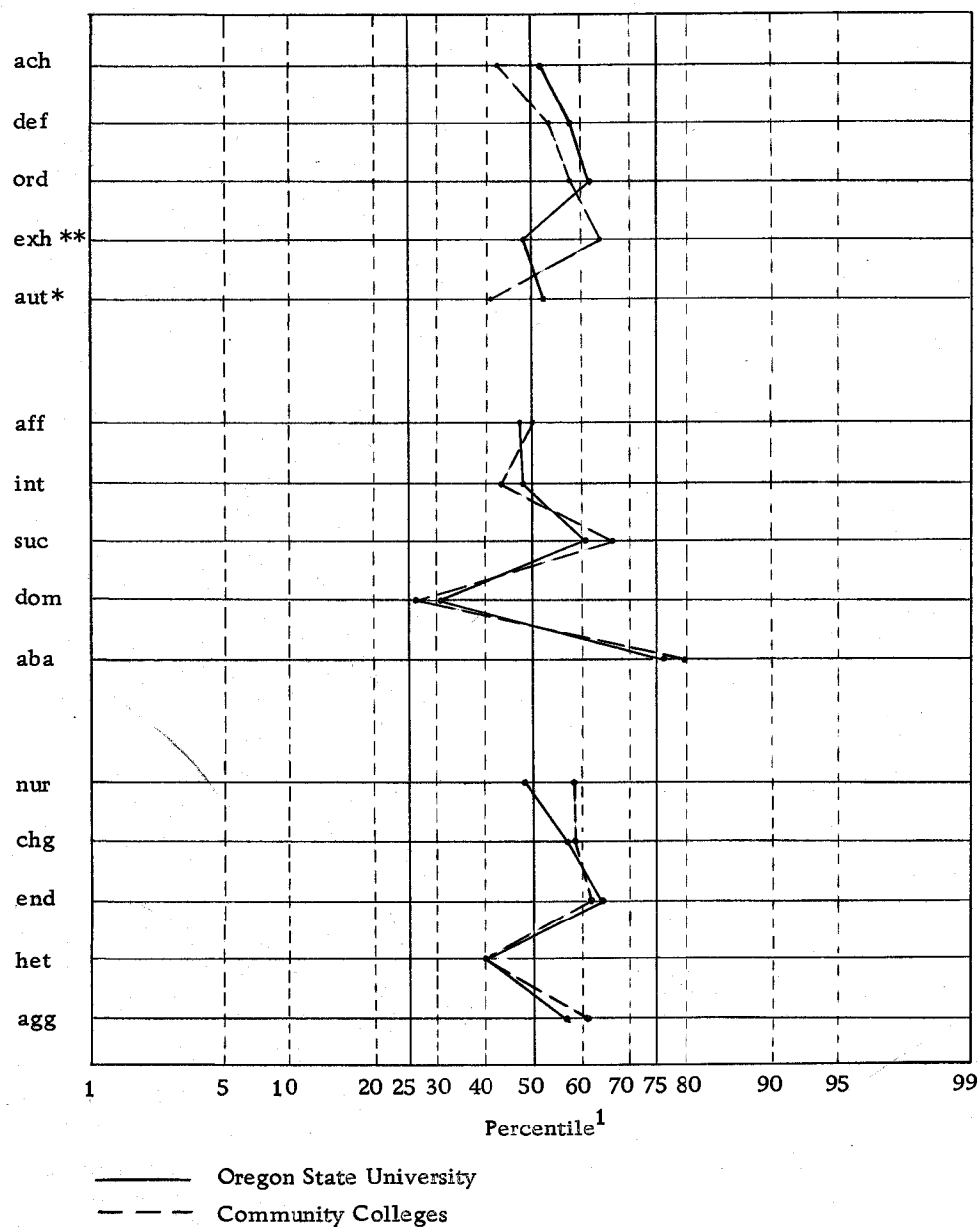


Figure 4. Comparison of Percentile Scores on the Edwards Personal Preference Schedule for Male Freshmen at Oregon State University and Community Colleges.

¹ Based on college male normatives.

* Significant at 0.05 level

** Significant at 0.01 level

Reproduced by special permission from The Psychological Corporation.

were: Artist, Psychologist, Architect, Physician, Dentist, Mathematician, Physicist, Engineer, Chemist, Production Manager, Aviator, Mathematics Physical Science Teacher, Y.M.C.A. Physical Director, Y.M.C.A. Secretary, Social Science High School Teacher, City School Superintendent, Social Worker, Minister, Musician, Accountant, Office Man, Purchasing Agent, Banker, Mortician, Sales Manager, Real Estate Salesman, Life Insurance Salesman, and Lawyer. The occupations that differentiated among the males at the 5 percent level were: Osteopath, Farmer, Carpenter, Advertising Man, and Author-Journalist. The Strong Interest Inventory for Men also differentiated surprising well among females at Oregon State University; 17 of the occupations differentiated at the 1 percent level and five at the 5 percent level. The occupations that differentiated among the females at the 1 percent level were: Psychologist, Physician, Mathematician, Physicist, Engineer, Chemist, Production Manager, Aviator, Mathematics Physical Science Teacher, Purchasing Agent, Banker, Mortician, Pharmacist, Sales Manager, Real Estate Salesman, Life Insurance Man, and President-Manufacturing Concern. The occupations that differentiated among the females at the 5 percent level were: Osteopath, Industrial-Arts Teacher, Forest Service Man, Senior C.P.A., Office Man, and Advertising Man. A more detailed analysis of the differences at Oregon State University is given on pages 95 to 97. Of the

non-occupational scales Masculinity-Femininity was the only one that differentiated among the mean scores at Oregon State University.

Males in engineering obtained by far the highest Masculinity-Femininity scores and males in education had the lowest scores. Strong (49, p. 14) found that engineers had the most "masculine" scores among men. The Occupational Level scale differentiated among the various groups of Oregon State University males with respect to variance at the 5 percent level.

A difference in Masculinity-Femininity was evident at the 1 percent level for females in different majors at Oregon State University. The females with science majors had the highest Masculinity-Femininity scores and those in home economics had the lowest scores on this scale.

In general, freshmen at Oregon State University were markedly heterogeneous with respect to occupational interest, since there were clear-cut differences in interest patterns among males and females in terms of the major field selected. Sternberg (47, p. 188-195), Goodman (18, p. 733-736), Heist and Webster (24, p. 95-104), and others concluded that there were significant differences in groups of college students majoring in different subjects.

Although there were a few significant occupational differences among freshmen in the three community colleges, these differences were much less distinct. Only one of the occupations differentiated

among males at the community colleges at the 1 percent level, and eight differentiated at the 5 percent level. There were three occupational scales that differentiated among community college females at the 1 percent level and eight at the 5 percent level.

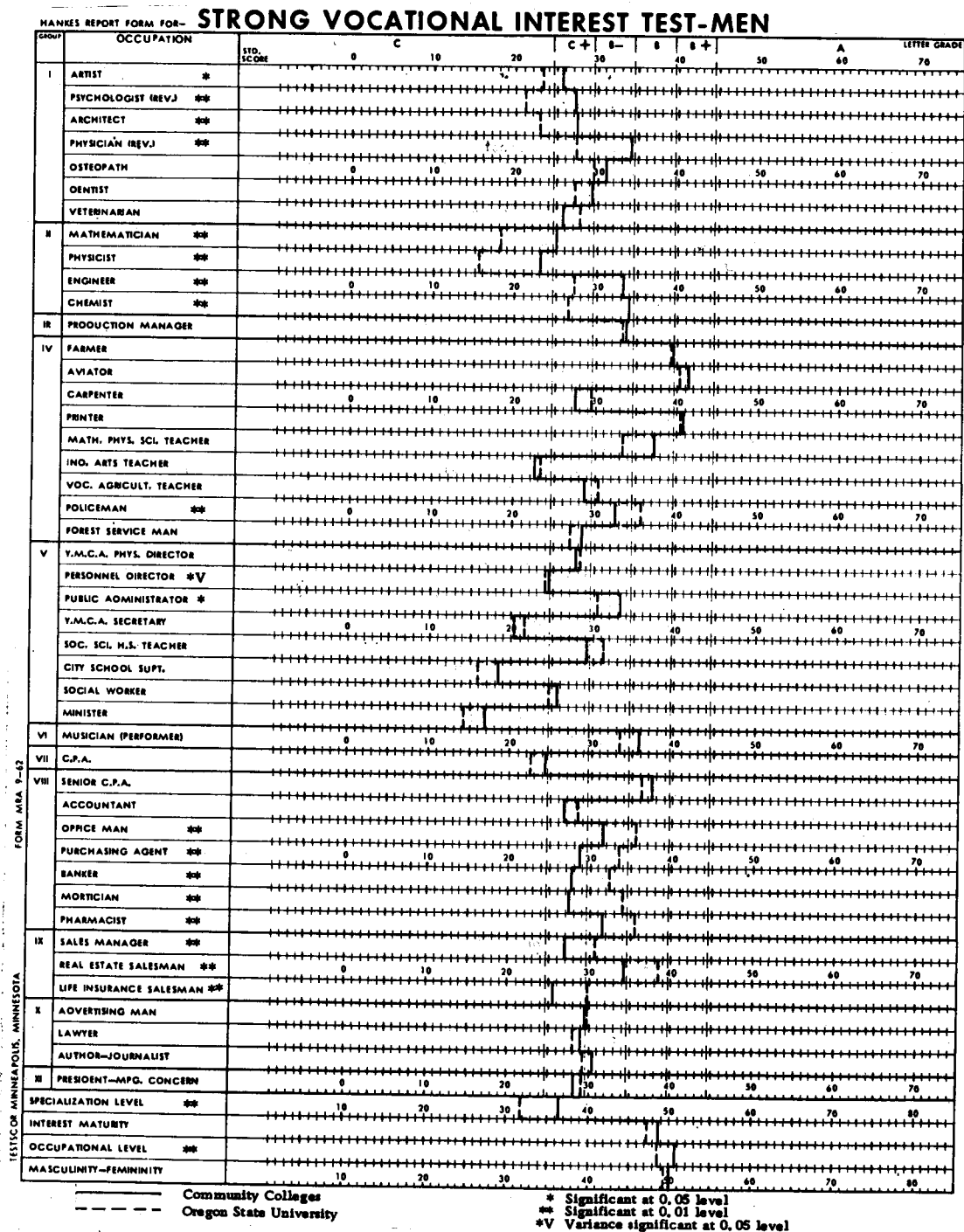
Little evidence indicated that there were substantial differences among the community colleges with respect to vocational interests of the freshmen students. This was to be expected, since reasons given for attending a specific community college were primarily those of convenience and accessibility rather than receipt of specialized vocational training. The differences which did occur among community college males tended to be concentrated in the Group V occupations; for example, males at Coos Bay obtained considerably higher mean scores on the Group V occupations, and those at Bend obtained considerably lower mean scores than did the males at Astoria. Differences among the community colleges with respect to the interests of females tended to be concentrated in occupational Groups I and II. Thus, for the most part, interests of males attending different community colleges varied with respect to the social welfare occupations, while among females interests varied with respect to the scientific occupations.

Males at the different community colleges differed in Interest-Maturity at the 1 percent level. Inspection of the mean scores revealed that the males at Bend obtained much lower mean scores

in Interest-Maturity than those at the other two community colleges. A difference at the 5 percent level was evident among the community colleges on the Specialization Level, the males at Bend obtained the lowest mean scores. None of the non-occupational scales differentiated among the community college females.

Mean scores of the Oregon State University males are contrasted with those of the community college males in graphic form in Figure 5 for males and Figure 6 for females. The occupations for which the differences were statistically significant are marked with asterisks. Males at Oregon State University differed significantly from the males at the community colleges with respect to eight of the 11 occupations in Groups I and II, and with respect to eight of the 10 occupations in Groups VIII and IX. The differences were all consistent in showing that the Oregon State University males obtained higher scores in the scientifically oriented occupations, and that the community college males obtained significantly higher scores in the business and sales occupations.

In marked contrast to the differences between Oregon State University and community college males was the lack of differentiation on the occupational scales between females at Oregon State University and those at the community colleges. On the occupational scales there were no significant differences in means, but there were differences (at the 5 percent level) in variance in three instances.



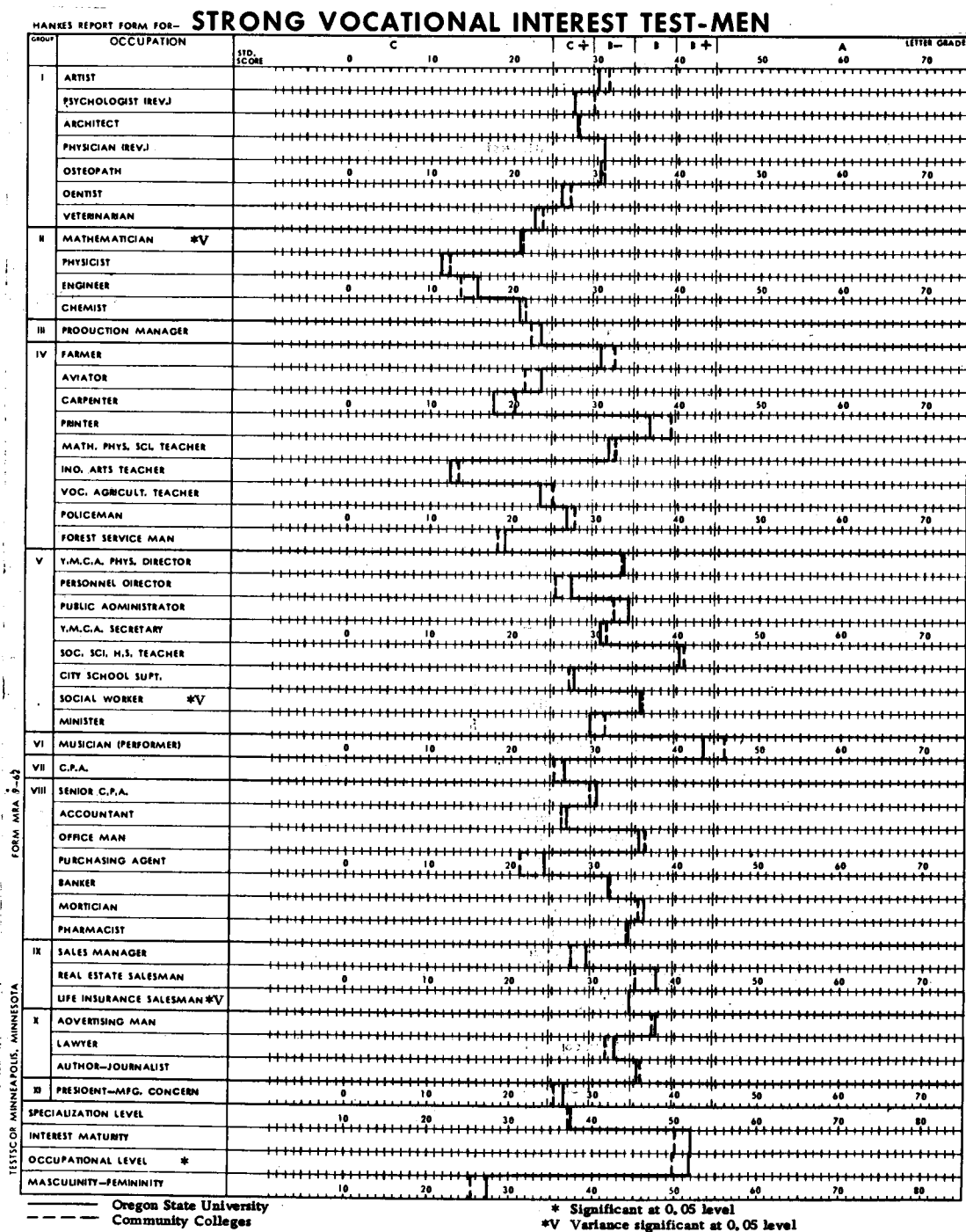


Figure 6. Comparison of Mean Scores for Female Freshmen at Oregon State University and the Community Colleges

Reproduced by special permission from Strong Vocational Interest Blank by Edward K. Strong, Jr. Copyright 1945 by Brd. of Trustees of Leland Stanford, Jr. University. Published by Consulting Psychologists Press, Inc., Palo Alto, California.

On the non-occupational scale, both the Specialization Level and Occupational Level differentiated between Oregon State University and community college males at the 1 percent level. The Oregon State University males obtained higher scores. The non-occupational scales did not differentiate as well among the various groups of females as among the males. The Occupational Level differentiated the Oregon State University and community college females at the 5 percent level. The mean scores were somewhat lower for the community college females than for those at Oregon State University, which result was expected in terms of the socio-economic level reported on the Personal Data Schedule.

Since very significant differences appeared among freshmen enrolled in different schools at Oregon State University, the writer decided to prepare occupational profiles for both males and females in terms of letter grades for each of the major schools at Oregon State University. This profile is presented in Appendix C.

The occupational profile of males majoring in business and technology showed that the highest scores were on the business occupations of Senior C.P.A. and Office Man with B+ ratings, and on those of Accountant, Purchasing Agent, Banker, Sales Manager, and Real Estate Salesman, which had B ratings. The only occupations with ratings of B or higher, other than the business occupations, were those of Production Manager, and three of the Group IV

occupations: Farmer, Aviator, and Printer. The males in business and technology did not have interests that were like those of males in the science-oriented occupations listed in Groups I and II.

Males in education had the highest scores in Group V occupations with a B+ rating on the occupational scales of Social Science High School Teacher and B ratings on the occupational scale of Y.M.C.A. Physical Director and Public Administrator. Males in education resembled the business and technology males in having interests unlike those engaged in Group I and II occupations.

As might be expected, males in engineering scored extremely high on the Engineering scale on which they had an A rating. They also had a B+ rating on the Chemist scale, and placed generally above average in the Group I and II categories. In addition to interests similar to those in scientifically oriented occupations, males in engineering tended to have high scores in the Group IV area, particularly the occupations of Aviator, Farmer, Printer, Mathematics Physical Science Teacher, and they scored the lowest in the Group V occupations.

Males who were in science had an interest profile which was similar to that of males in engineering, although in their interests they resembled the occupation of Physician more closely than that of Engineer. Similarly, they tended to have low scores in the Group V occupations.

The males enrolled in humanities tended to have scores which were in the chance range. The only exception was a tendency to have interests like men in the Group V occupations, but no scores indicated ratings higher than B.

As previously stated, occupational Groups I and II most clearly differentiated among the males enrolled in the different schools at Oregon State University. Males in engineering and science had high interest in the Group I and II occupations, while males in all of the other major fields of study scored low in these two areas. The most clear-cut patterns of interest were found among the Oregon State University males in engineering and science; the least differentiation of interests occurred for males in the humanities.

In general, females with different majors were not as clearly differentiated as the males on the major occupational groupings of the Strong Vocational Interest Inventory, as shown in Figure 7. However, significant differences appeared with respect to some of the specific occupations. Females in business and technology had the highest interest rating on the occupational scale of Office Man, Musician* excluded. Females in home economics had the highest scores on the Mortician scale, females enrolled in humanities had

* The Musician scale tends to be high for all females.

Group	Occupation	Males					Females				
		B & T	Ed.	Eng.	Hum.	Sci.	B & T	Ed.	H. Ec.	Hum.	Sci.
I.	Artist	C	C	C+	C	B-	C	B-	C+	B-	B-
	Psychologist (Rev.)	C	C	C+	C+	B-	C	C+	C	C+	B-
	Architect	C	C	B-	C	B	C	C+	C+	C+	C+
	Physician (Rev.)	C	C+	B	C+	B+	C	B-	C+	C+	B
	Osteopath	C	C+	B-	C+	B-	C	B-	C+	C+	C+
	Dentist	C	C	B-	C	B	C	C+	C	C	B-
	Veterinarian	C	C+	C+	C	C+	C	C	C	C	C+
II.	Mathematician	C	C	B-	C	B-	C	C	C	C	C
	Physicist	C	C	B-	C	B-	C	C	C	C	C
	Engineer	C	C	A	C	B	C	C	C	C	C+
	Chemist	C	C	B+	C	B+	C	C	C	C	B-
III.	Production Manager	B	B-	B+	B-	B-	C+	C	C	C	C+
IV.	Farmer	B	B	B+	B	B+	C+	B-	C+	C+	B-
	Aviator	B	B-	A	B	B+	C	C+	C	C	C+
	Carpenter	C+	C	B-	C	C+	C	C	C	C	C
	Printer	B	B	B+	B	B+	B	B	B-	B	B
	Math. Phys. Sci. Teacher	B-	B	B+	B-	B+	B-	B-	C	C+	B
	Ind. Arts Teacher	C	C	C+	C	C	C	C	C	C	C
	Voc. Agri. Teacher	C+	B-	C+	C+	C+	C	C+	C	C	C
	Policeman	B-	B	B-	B-	B-	C+	C+	C	C	C+
	Forest Service Man	C	C+	C+	C+	C+	C	C	C	C	C+
V.	YMCA Phys. Director	C+	B	C	B-	C+	B-	B	B-	B-	B-
	Personnel Director	C+	C+	C	C+	C	C+	C+	C	C+	C+
	Public Administrator	B-	B	C+	B	B-	B-	B-	B-	B-	B
	YMCA Secretary	C	C+	C	C+	C	B-	B-	B-	B-	C+
	Soc. Sci. HS Teacher	B-	B+	C	B	C+	B+	B+	B	B+	B-
	City School Supt.	C	C+	C	C	C	C+	C+	C	C+	C+
	Social Worker	C	B-	C	B-	C	B-	B	B-	B	B
	Minister	C	C	C	C	C	C	B-	C+	B-	C+
VI.	Musician (Performer)	C+	B-	B-	B	B	B	A	B	B+	B+
VII.	CPA	C+	C	C+	C+	B-	C+	C+	C	C	C+
VIII.	Senior CPA	B+	B	B+	B-	B	B-	B-	C+	C	B-
	Accountant	B	C+	C+	C+	C	B	C+	C+	C	C+
	Office Man	B+	B	C+	B-	C+	B+	B-	B	B	B-
	Purchasing Agent	B	B-	B-	C+	C+	B-	C	C+	C	C
	Banker	B	B-	C+	B-	C	B+	B-	B-	B-	C+
	Mortician	B	B	C+	B-	C	B+	B-	B+	B	B-
	Pharmacist	B	B	B-	C+	B-	B	C+	B+	B-	B
IX.	Sales Manager	B	B-	C	B-	C	B	C+	B-	C+	C+
	Real Estate Salesman	B+	B	B-	B	B-	B+	B	B+	B+	B-
	Life Ins. Salesman	C+	B	C	B-	C	B-	B-	B	B	B-
X.	Advertising Man	C+	B-	C+	B-	C+	B	B	B+	B+	B-
	Lawyer	C	B-	C+	B-	B-	B-	B-	C+	B	B-
	Author-Journalist	C	C+	C+	B-	B-	B-	B	B-	B	B-
XI.	Pres. --Mfg. Concern	B-	C+	B-	C+	C+	B-	C	B-	C+	C+

Figure 7. An Occupational Profile of Letter Grades of the Mean Scores for Male and Female Freshmen on the Strong Vocational Interest Test for Men for the Major Schools at Oregon State University.

the highest scores on the scale of Social Science High School Teacher, and science majors had the highest scores on the Physician scale.

In an attempt to assess the differences between the vocational interests of community college freshmen and Oregon State University freshmen, the mean scores made by Oregon State University freshmen on each of the occupational scales was subtracted from the respective mean scores of the community college freshmen. The summation of the differences in mean scores between the community college freshmen and those at Oregon State University in the different major fields of study is shown in Table XXVIII for males and females (p. 144).

Except for the miscellaneous category, the least discrepancy occurred between the mean scores of community college males and Oregon State University males in humanities. The greatest discrepancy was found for males in engineering and science who were, therefore, least like males at the community colleges in their interests. Males in education also indicated interests more similar to those of males at the community colleges than those in engineering and science at Oregon State University. The Oregon State University females in education most closely resembled community college females, and the females who were least like the community college females were those in business and technology.

In general, it may be concluded that the vocational interests of males at the community colleges were similar to the vocational interests of Oregon State University males in the humanities, and that the vocational interests of females at the community colleges resembled those of the Oregon State University females in education.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The primary purpose of this study was to determine whether there were significant differences between Oregon community college collegiate freshmen and Oregon State University freshmen in terms of interests, values, and manifest needs.

The study was limited to a representative sample of the freshman population in the lower-division collegiate program enrolled for a minimum of 12 term hours of course work at three selected Oregon community colleges, and to a representative sample of Oregon State University freshmen from those enrolled in the General Hygiene classes.

The Strong Vocational Interest Blank for Men, the Allport-Vernon-Lindzey Study of Values, the Edwards Personal Preference Schedule, and a Personal Data Schedule were administered to 499 first-term male and female freshmen who were enrolled for the fall term of 1963.

Responses of the freshmen to the psychological tests were treated statistically by analysis of variance, and the Personal Data Schedule Responses were converted to percentages and analyzed using the t-test.

Summary of Findings

This investigation was divided into two parts. Section A includes the findings from the Personal Data Schedule, and Section B the findings from the three psychological tests.

A. Results comparing responses on the Personal Data Schedule for males and females at the three community colleges and Oregon State University were as follows:

1. Males at the community colleges were significantly older than those attending Oregon State University. No significant differences in age existed between females at the community colleges and Oregon State University.

2. The population was predominantly Protestant, although a somewhat smaller proportion of Protestants attended Oregon State University than the community colleges. The difference was statistically significant for males, but not for females.

3. The community college males showed significantly lower high school grade point averages than the Oregon State University males. More community college females had low grade point averages than those at Oregon State University, but the proportion with high grade point averages was similar between the two female groups.

4. A significantly greater proportion of males at Oregon State University attended high schools located outside the state of Oregon than those at the community colleges. No difference was evident in the proportion of females at the community colleges and Oregon State University who attended high school outside the state.

5. Community college freshmen graduated from less populated high schools than those attending Oregon State University.

6. A significantly larger proportion of males at Oregon State University indicated that they planned to graduate than did community college males. In contrast, a larger proportion of community college males stated that they were undecided. No significant differences were noted between the two corresponding groups of females.

7. A significantly larger proportion of Oregon State University males than community college males and females indicated that they planned to transfer to another college.

8. The most important reason given by community college males and females for attendance at the specific institution in which they were enrolled was financial considerations, while the most important reason given by Oregon State University males and females was that their chosen institution offered courses related to their interests.

9. The most important reason given for attending college was availability of vocational training, according to males at Oregon

State University, and receipt of a general education according to males at the community colleges. Both groups of females regarded general education as the most important reason for college attendance.

10. The majority of males attending the community colleges and Oregon State University expressed satisfaction with their decision to go to college, rather than the selection of employment, military, or marital status, as well as satisfaction with their courses of study. Females at the community colleges and Oregon State University also indicated satisfaction with their decision to go to college. Although the majority of females were satisfied with their courses of study, more of those attending Oregon State University indicated a desire to have taken a different course of study.

11. The majority of all freshmen believed that their parents were extremely favorable toward their attendance at college.

12. The majority of both males and females stated that their occupational choices were primarily their own personal decisions. Among the various persons listed as possible sources of assistance in this choice, parents were the only ones that any considerable number of males regarded as directly influential. The influence of parents was indicated more frequently by the community college males than by the Oregon State University males. The community college females, on the other hand, listed the influence of teachers rather than that of their parents as more important in

occupational choice, but none of these differences between the females were significant. Little difference was noted between males and females at Oregon State University with respect to choice of major sources of influence, but the males and females at the community colleges did differ in the relative amount of influence attributed to parents and teachers. Although friends were not regarded as a primary source of influence on occupational choice, they were regarded as a secondary influence by a large number of freshmen. Approximately two-thirds of the community college females indicated that friends had some influence on their occupational choices, while at Oregon State University the proportion of females influenced by friends was close to one-third. Slightly more than one-fourth of all the males regarded their friends as having exerted influence.

13. A far larger number of freshmen attending community colleges reportedly paid the major part of their college expenses than did those attending Oregon State University.

14. More freshmen at Oregon State University indicated that their parents were willing to provide for all the expenses of attending college than were the parents of the freshmen at the community colleges.

15. Reported parental income of Oregon State University freshmen was significantly higher than that of the community college freshmen.

16. There were no significant differences between the age of parents of freshmen at Oregon State University and the age of parents of freshmen attending the community colleges.

17. More of the fathers of freshmen attending Oregon State University had college training than fathers of the freshmen at the community colleges. However, there was no difference in the amount of education of the mothers of males at the two types of institutions, but significantly more mothers of Oregon State University females than mothers of community college females had attended college.

B. Results from analysis of data obtained from the psychological tests were as follows:

The Study of Values

1. The Theoretical scale differentiated significantly among Oregon State University freshmen in different major fields. The mean score of Oregon State University males on the Theoretical scale was significantly higher than the mean of the community college males.

2. Community college males placed relatively higher in Social values than Oregon State University males.

3. Oregon State University females scored significantly higher on the Economic scale than did community college females.

4. The Economic scale differentiated among schools at

Oregon State University with business and technology females having obtained the highest mean scores.

5. The Aesthetic scale differentiated among community college males with respect to the mean scores, and the Economic scale differentiated among community college males with respect to the variance.

6. Community college females placed relatively more value on religion than did the Oregon State University females, but no difference was evident in the mean scores of community college and Oregon State University males. Scores on the Religious scale did not differentiate among Oregon State University males and females in the various schools, but there were significant differences in the scores among the community colleges for both males and females. The mean scores of females at Astoria were higher than those of females of any other subgroup, whereas males at Astoria scored unusually low.

7. Females in business and technology placed significantly higher on the Political scale than did females in other major fields of study.

The Edwards Personal Preference Schedule

1. The Edwards Personal Preference Schedule did not differentiate to any appreciable extent between Oregon State

University and community college freshmen, nor did it differentiate among freshmen in different major fields of study. Differences found were as follows:

a. Community college males had a significantly higher mean score than the Oregon State University males on the Exhibition scale, and the Autonomy scores were higher among Oregon State University males than among community college males.

b. Deference scores differentiated between community college and Oregon State University females, community college females having obtained the higher mean score.

c. Intraception scores differentiated among Oregon State University males with males in humanities having obtained the highest mean score.

d. Exhibition and Autonomy scores differentiated among the community college females at the 5 percent level, and the females at Bend obtained the highest mean scores on both of these scales.

e. There was a significant difference in the variance among the schools at Oregon State University for males on the Change scale and for females on the Endurance scale. A significant difference was noted in the variance on the Succorance scores among the males at the community colleges.

2. Heterosexuality and Dominance scores did not differentiate between community college and Oregon State University freshmen, but both samples of Oregon freshmen obtained mean scores below the college normatives, and mean scores on Succorance, Abasement, and Endurance scales were considerably higher than for the college normative group.

The Strong Vocational Interest Inventory

1. Male freshmen majoring in different fields of study at Oregon State University differed significantly in interest patterns on the Strong Vocational Interest Inventory. Of the 45 occupations, 28 differentiated among males in the various schools at the 1 percent level and six at the 5 percent level. Scores of female freshmen with different majors also differentiated on the Strong Vocational Interest Inventory for Men. Seventeen of the occupations differentiated at the 1 percent level, and five at the 5 percent level. Since there are a number of occupations on the Vocational Interest Inventory for Men which are almost exclusively masculine, such as those included in Group IV, one would expect to find a somewhat smaller number of significant differences.

2. For the most part, the Strong Vocational Interest Inventory did not differentiate among either males or females attending the community colleges.

3. Many significant differences were evident between the interests of Oregon State University males and community college males. At Oregon State University, the males had substantially higher interest scores in occupational Groups I and II, whereas community college male scores in occupational Groups VIII and IX were considerably higher. None of the occupational scales yielded significant differences between the mean scores of females attending Oregon State University and those attending the community colleges. Thus, the average Oregon State University male indicated interests which were similar to those of men in scientifically oriented occupations, in contrast to the average community college male who showed evidence of interests similar to those of men engaged in business and sales occupations.

4. The least difference between the mean occupational scores of the community college and Oregon State University males in the various major schools was noted for humanities majors, excluding the miscellaneous category. The greatest discrepancy in scores was found for males enrolled in engineering and science. The Oregon State University females enrolled in education most closely resembled community college females, and the Oregon State University females least like the community college females were those enrolled in business and technology.

5. On the non-occupational scales, both the Specialization Level and Occupational Level scores differentiated between Oregon State University and community college males. The Oregon State University males obtained higher scores on both of these scales. Scores on the Occupational Level scale differentiated between Oregon State University and community college females, the Oregon State University females having obtained a higher mean score.

6. The Masculinity-Femininity scale differentiated among freshmen in different major fields of study at Oregon State University for both males and females.

There were marked differences with respect to population characteristics in interests and values of freshmen attending community colleges and of freshmen attending Oregon State University; however, there was no evidence of differences in freshmen personality characteristics.

Conclusions

The typical male freshman at Oregon State University was primarily oriented toward specific vocational goals in the scientific and technological areas. He attended high school in a relatively large community in Oregon, and obtained a B grade point average. Although practically self-supporting, he believed his family capable of paying his college expenses. His interest was in acquiring

knowledge because it was useful, but he had relatively little concern for aesthetic or social values. The community college male, who was somewhat older because his schooling had been interrupted, believed that education had value in attaining economic success. The income of his family was not sufficient to provide for college training, and he was expected to provide the financial cost himself. He expressed more concern for social welfare than his counterpart at Oregon State University, and the values most important to him were political and economic.

The female at Oregon State University came from a home in which economic level was high and the parents were college trained. She expressed more concern with maintenance of her high economic status and placed value on the activities which furthered this goal, in contrast to the community college female who placed less value on economic goals than on any other. The Oregon State University female was less religious than the community college female. However, there was no clear-cut differentiation between females at Oregon State University and the community college, other than the difference in socio-economic status and variables related to this status.

Hypotheses of the Study

The purpose of this study was to determine whether there were significant differences between Oregon community college collegiate freshmen and Oregon State University freshmen with respect to interests, values, and manifest needs. Results obtained from testing of the initial hypotheses were as follows:

Hypothesis 1: The vocational interest of community college freshmen does not differ from that of Oregon State University freshmen.

This hypothesis was not supported for males, but it was supported for females. There were many significant differences between the interests of Oregon State University males and community college males. Males at Oregon State University had substantially higher interest scores in Groups I and II, while community college males had considerably higher interest scores in Groups VIII and IX. None of the occupational scales yielded significant differences between the mean scores of females who attended Oregon State University and the community colleges.

Hypothesis 2: Community college collegiate freshmen resemble Oregon State University freshmen enrolled in humanities.

This hypothesis was supported for males, but was not supported for females. The mean scores of the males in the community colleges

were more like the mean scores of males in humanities than those in any of the other schools, and females in education were more like community college females than those in humanities.

Hypothesis 3: The manifest needs of community college collegiate freshmen are not significantly different from those of Oregon State University freshmen.

This hypothesis was supported since there were very few significant differences for either males or females on the Edwards Personal Preference Schedule.

Hypothesis 4: There are no significant differences between community college collegiate freshmen and Oregon State University freshmen with respect to values.

This hypothesis was not supported for males or females. Oregon State University males had a higher mean score on the Theoretical scale and community college males had a higher mean score on the Social scale. Oregon State University females had a significantly higher mean score on the Economic scale and community college females had a higher mean score on the Religious scale.

Hypothesis 5: There are no significant differences between community college collegiate freshmen and Oregon State University freshmen with respect to their choices of intended college majors.

This hypothesis was not answered because of insufficient data for the question on the Personal Data Schedule.

Hypothesis 6: There are no significant differences with respect to individual characteristics between community college collegiate freshmen and Oregon State University freshmen.

This hypothesis was not supported for males or females. Significant differences were evident between Oregon State University and community college males and females on the Personal Data Schedule which was used primarily to describe the population samples. Between the two male samples, 32 of the items differentiated at the 1 percent level and six at the 5 percent level, and between the two female population samples, 28 of the items differentiated at the 1 percent level and four at the 5 percent level.

Recommendations for Further Study

1. Using the present data for an investigation, a follow-up study would be useful to determine whether there are differences in terms of interests, values, and manifest needs between the community college freshmen who enter a four-year college or university and those who drop-out at the end of the two-year collegiate program.
2. A follow-up study would help to determine whether there are differences in interests within a particular major field of study

between students who have transferred from a community college and those who have not transferred.

3. It would be desirable to administer the Personal Data Schedule to new groups of community college freshmen in order to determine the stability of the present sample.

4. Similar studies need to be conducted periodically to determine the extent to which there are changes in the population characteristics and interests of freshmen at different institutions of higher learning.

BIBLIOGRAPHY

1. Allport, Gordon W., Philip E. Vernon and Gardner Lindzey. The study of values. 3d ed. Boston, Houghton Mifflin, 1960. 19 p.
2. Anderson, H. Dewey. Whose children attend junior college? Junior College Journal 4:165-172. 1934.
3. Baggaly, Andrew R. The relation between scores obtained by Harvard freshmen on the Kuder preference record and their fields of concentration. Journal of Educational Psychology 38:421-427. 1947.
- ✓4. Blum, Lawrence Philip. A comparative study of students preparing for five selected professions including teaching. Journal of Experimental Education 16:31-65. 1947.
5. Borg, Walter R. Personality characteristics of a group of college art students. Journal of Education Psychology 43:149-156. 1952.
6. Cattell, J. McKeen and L. Farrand. Physical and mental measurements of the students of Columbia University. Psychological Review 3:618-648. 1896.
- ✓7. Clark, Burton R. The open door college. New York, McGraw-Hill, 1960. 207 p.
- ✓8. Clark, Jerry H. The interpretation of the MMPI profiles of college students: A comparison by college major subject. Journal of Clinical Psychology 9:382-384. 1953.
- ✓9. Dashiell, J. F. Personality traits and the different professions. Journal of Applied Psychology 14:197-201. 1930.
10. Davis, James A. Higher education: Selection and opportunity. School Review 71:249-265. 1963.
- ✓11. Duffy, Elizabeth and W. J. E. Crissy. Evaluative attitudes as related to vocational interests and academic achievement. Journal of Abnormal and Social Psychology 35:226-245. 1940.

12. Edwards, Allen L. Edwards personal preference schedule. Rev. ed. New York, Psychological Corporation, 1959. 27 p.
13. English, Horace B. and Ava Champney English. A comprehensive dictionary of psychological and psychoanalytical terms. New York, McKay, 1958. 594 p.
14. Ferguson, Leonard W., Lloyd H. Humphries and Frances W. Strong. A factorial analysis of interests and values. *Journal of Educational Psychology* 32:197-204. 1941.
- ✓15. Fields, Ralph R. The community college movement. New York, McGraw-Hill, 1962. 360 p.
- ✓16. Garrison, Karl C. and Mary Hughie Scott. Comparison of the personal needs of college students preparing to teach in different teaching areas. *Educational and Psychological Measurement* 21:955-964. 1961.
17. Gee, Helen Hofer. Differential characteristics of student bodies--implications for the study of medical education. In: T. R. McConnell (ed.) Selection and educational differentiation. Berkeley, University of California, Field Service Center and Center for the Study of Higher Education, 1959. p. 125-154.
- ✓18. Goodman, Charles H. A comparison of the interests and personality traits of engineers and liberal arts students. *Journal of Applied Psychology* 26:721-737. 1942.
19. Graves, Walter A. Today's college students. *National Education Association Journal* 47:498-500. 1958.
20. Hancock, John W. and Gerald C. Carter. Student personality traits and curriculae of enrollment. *Journal of Educational Research* 48:225-227. 1954.
21. Harris, Daniel. Group differences in values within a university. *Journal of Abnormal and Social Psychology* 29:95-102. 1934.
22. Havighurst, Robert J. and Bernice L. Neugarten. Society and education. New Jersey, Allyn and Bacon, 1957. 465 p.
- ✓23. Heist, Paul. Diversity in college student characteristics. *Journal of Educational Sociology* 33:279-291. 1960.

24. Heist, Paul and Harold Webster. Implications for selection and study of undergraduates. In: T. R. McConnell (ed.) Selection and educational differentiation. Berkeley, University of California, Field Service Center and Center for the Study of Higher Education, 1959. p. 91-106.
- ✓25. Hillway, Tryus. The American two-year college. New York, Harper and Brothers, 1958. 276 p.
- ✓26. Koos, Leonard V. How to democratize the junior college level. School Review 52:271-284. 1944.
- ✓27. Lawshe, C. H., Jr. A nomograph for estimating the validity of test items. Journal of Applied Psychology 26:846-849. 1942.
28. Li, Jerome C. R. Introduction to statistical inference. Michigan, Edwards Brothers, 1961. 568 p.
29. Lough, Orpha Maust. Women students in liberal arts, nursing, and teacher training curricula and the MMPI. Journal of Applied Psychology 31:437-445. 1947.
30. McConnell, T. R. Problems of distributing students among institutions with varying characteristics. North Central Association Quarterly 35:226-238. 1961.
- ✓31. McConnell, T. R. and Paul Heist. The diverse college student population. In: Nevitt Sanford (ed.) The American college. New York, Wiley, 1962. p. 225-252.
- ✓32. Medsker, Leland L. The junior college student. Talk at Junior College Personnel Conference, Chicago, Illinois, April 14, 1964.
33. _____ The junior college: Progress and prospect. New York, McGraw-Hill, 1960. 367 p.
- ✓34. Mellinger, Morris. Changing trends among public junior college student bodies. Junior College Journal 33:167-176. 1962.
- ✓35. Morrison, D. G. Research and the two-year college. Junior College Journal 29:128-132. 1958.

36. Norman, Ralph D. and Mirian Redlo. MMPI personality patterns for various college major groups. *Journal of Applied Psychology* 36:404-409. 1952.
- ✓37. Oregon. State Department of Education. Division of Community Colleges. Summary of existing legislation pertaining to education centers and community colleges. Salem, Oregon, September 1963. 11 numb. leaves.
38. Parsons, Frank. *Choosing a vocation*. Boston, Houghton Mifflin, 1909. 165 p.
- ✓39. Perry, James D. and Frank K. Shuttleworth. Kuder profiles of college freshmen by degree objectives. *Journal of Educational Research* 41:363-365. 1948.
40. Pintner, Rudolph. A comparison of interest, abilities and attitudes. *Journal of Abnormal and Social Psychology* 27:351-357. 1933.
- ✓41. Pintner R. and C. Forlano. Dominant interest and personality characteristics. *Journal of General Psychology* 21:251-260. 1939.
42. Sanford, Nevitt (ed.) *The American college*. New York, Wiley, 1962. 1084 p.
43. Sarbin, Theodore R. and Ralph F. Berdie. Relation of measured interests to the Allport-Vernon study of values. *Journal of Applied Psychology* 24:287-296. 1940.
44. Seashore, Harold G. Validation of the study of values. *Educational and Psychological Measurements* 7:757-763. 1947.
45. Sisson, E. Donald and Bette Sisson. Introversion and the aesthetic attitude. *Journal of General Psychology* 22:203-208. 1940.
46. Speer, George S. The vocational interests of engineering and non-engineering students. *Journal of Psychology* 25:357-363. 1948.

- ✓47. Sternberg, Carl. The relation of interests, values and personality to the major field of study in college. Ph.D. thesis. New York, New York University, 1953. 215 numb. leaves.
- 48. Stone, Charles Leonard. The personality factor in vocational guidance. *Journal of Abnormal and Social Psychology* 28:274-275. 1933.
- 49. Strong, Edward K., Jr. Manual for Strong vocational interest blanks for men and women. Palo Alto, California, Consulting Psychologists Press, 1959. 40 p.
- ✓50. Students with different majors have different personalities. *Science Digest* 48:30. Dec. 1960.
- 51. Teevan, Richard C. Personality correlates of undergraduate field of specialization. *Journal of Consulting Psychology* 18:212-214. 1954.
- ✓52. Thornton, James W., Jr. The community junior college. New York, Wiley, 1960. 300 p.
- 53. Tyler, Leona H. Relationships between Strong vocational interest scores and other attitude and personality factors. *Journal of Applied Psychology* 29:58-67. 1945.
- 54. Vernon, Philip E. and Gordon W. Allport. A test for personal values. *Journal of Abnormal and Social Psychology* 26:231-248. 1931.
- 55. Vineyard, Edwin E. A study of the independence of choice of science or non-science major and measures of personality traits. *Science Education* 43:130-133. 1959.
- 56. Vineyard, Edwin E., Ruby Drinkwater and Walter L. Dickison. Teacher education and pharmacy students: A comparison of their need structure. *Journal of Teacher Education* 13:409-413. 1962.
- ✓57. Wells, F. L. and W. L. Woods. Outstanding traits: In a selected college population, with some reference to career interests and war records. *Genetic Psychology Monographs* 33:127-249. 1946.

58. Whitely, Paul L. A study of the Allport-Vernon tests for personal values. *Journal of Abnormal and Social Psychology* 28:6-13. 1933.
59. Yum, Y. S. Student preferences in divisional studies and their preferential activities. *Journal of Psychology* 13:193-200. 1942.

APPENDICES

APPENDIX A

A COMPARISON OF FRESHMEN ATTENDING SELECTED OREGON
COMMUNITY COLLEGES AND OREGON STATE UNIVERSITY
IN TERMS OF INTERESTS, VALUES AND MANIFEST NEEDS

Fall 1963

Schedule

CODE NO. _____

An attempt is being made to ascertain interests, values and manifest needs of students entering Oregon Community Colleges as compared to those entering Oregon State University.

You can help by completing the following schedule. All information will be anonymous and confidential.

1. Age _____ 2. Marital status omitted 3. Sex: Male omitted Female _____
4. Religious preference _____ 5. High School GPA _____
6. Name of High School omitted 7. Year graduated omitted
8. Location of High School _____
(City) (State)
9. Size of High School enrollment:

_____ a. Less than 100	_____ f. Between 1,000 and 1,499
_____ b. Between 100 and 249	_____ g. Between 1,500 and 1,999
_____ c. Between 250 and 499	_____ h. Between 2,000 and 2,499
_____ d. Between 500 and 749	_____ i. Between 2,500 and 2,999
_____ e. Between 750 and 999	_____ j. Over 3,000
10. Do you plan to graduate from college?

_____ a. Yes
_____ b. No
_____ c. Undecided
11. Do you plan to transfer to another college:

_____ a. Yes
_____ b. No
_____ c. Undecided
12. ^{omitted} If you plan to transfer: (a) When? _____ (b) Where? _____
(c) Why? _____
13. ^{omitted} If you do not plan to graduate, how many years do you plan to complete?

_____ a. Less than one
_____ b. One
_____ c. Two
_____ d. Three
_____ e. Undecided
14. At the present, in what field are you planning to major? omitted

15. Indicate the three most important reasons for your attending the college in which you are now enrolled. Place number (1) beside your first reason; number (2) beside the second; number (3) beside the third.

- ☐ a. Less expensive
- ☐ b. Better part-time work opportunity
- ☐ c. Parental influence
- ☐ d. Available courses related to my interests
- ☐ e. In order to attend college and remain at home
- ☐ f. To be with my friends
- ☐ g. Provides a chance to get away from home

Other--list

16. Indicate as above your personal reasons for attending college:

- ☐ a. Provides vocational training necessary for better employment
- ☐ b. Provides a basic general education
- ☐ c. Provides an opportunity to make friends with the opposite sex
- ☐ d. It is the popular thing to do
- ☐ e. Provides a chance to get away from home

Others--list

17. Now that you are attending college do you wish that you had:

- Yes ☐ No ☐ a. Chosen a different course of study
- Yes ☐ No ☐ b. Gone to work instead
- Yes ☐ No ☐ c. Married
- Yes ☐ No ☐ d. Entered the military service

Others--list

18. Check the attitude of your parents toward college.

- ☐ a. Extremely favorable to having me attend
- ☐ b. Favored my attending
- ☐ c. Somewhat opposed
- ☐ d. Definitely opposed
- ☐ e. Indifferent about it

omitted

19. List your future occupational choices in order of preference:

1st _____ 2nd _____

3rd _____

20. Who helped you most in making your occupational choice? Place number (1) beside the most important; number (2) beside the second; number (3) beside the third, etc.

- ☐ a. Parents
- ☐ b. Relatives
- ☐ c. Counselors

- ☐ d. Teachers
- ☐ e. Friends
- ☐ f. Principal
- ☐ g. Own personal decision
- Others--list

21. What part of your college expenses do you earn?

- ☐ a. All
- ☐ b. Approximately three-fourths
- ☐ c. Approximately one-half
- ☐ d. Approximately one-fourth
- ☐ e. Less than one-fourth
- ☐ f. None

omitted
22. If you earn part of your college expenses, check your purpose for working:

- ☐ a. To help pay college expenses
- ☐ b. To provide aid for parents at home
- ☐ c. To provide spending money other than for necessities
- ☐ d. To maintain an automobile
- ☐ e. To increase social opportunities--dates, clubs, fraternal membership, etc.
- Others--list

omitted
23. Indicate your sources of support while in college:

- ☐ a. Part-time employment--Kind?
- ☐ b. Full-time employment--Kind?
- ☐ c. Loans-----Kind?
- ☐ d. Scholarships-----Kind?
- ☐ e. Fellowships-----Kind?
- ☐ f. Grants-----Kind?
- ☐ g. Assistance from parents or relatives.--How much per term? \$
- Others--list

24. Check how your parents feel about financing your college expenses:

- ☐ a. Willing to furnish all
- ☐ b. Willing to furnish some aid
- ☐ c. Willing to furnish board and room
- ☐ d. Unwilling to furnish any aid
- ☐ e. Unable to furnish any aid
- ☐ f. Able but unwilling to furnish aid

25. Estimated yearly combined income of your parents:

- ☐ a. Less than \$3,000
- ☐ b. Between \$3,000 and \$4,999
- ☐ c. Between \$5,000 and \$6,999
- ☐ d. Between \$7,000 and \$8,999
- ☐ e. Between \$9,000 and \$14,999
- ☐ f. Between \$15,000 and \$19,999
- ☐ g. Over \$20,000

26. Do not include yourself, but supply the following information regarding your immediate family. Include all your brothers and sisters, and if you are married also include your spouse and children:

A. (1) Fill in the blanks under age, (occupation, and type of school last attended. (2) Type of school last attended refers to high school, college, law school, business school, nursing, trade school, etc. (3) Check the marital status of each family member:)

Relationship	Age	Occupation	Type of school last attended	Single	Married	Separated	Divorced	Deceased
Father		omitted	omitted					
Mother		omitted	omitted					

B. (1) List the relationship in the same order as you did in part A. (2) For each family member check the appropriate number of years of education completed:

Relationship	Elementary								High School				College							
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8
Father																				
Mother																				

APPENDIX B

TABLE III

The Number and Percentages of Responses of First-Term Male and Female Freshmen in Different Age Groups
at Three Community Colleges and at Oregon State University

Age Groups	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C		No.	Percentage	No.	Percentage	
	No.	Percentage	No.	Percentage	No.	Percentage					
<u>Males:</u>											
19+	11	26.2	20	66.7	18	53.0	49	46.2	31	20.0	NS
17-18	31	73.8	10	33.3	16	47.0	57	53.8	124	80.0	4.88 **
<u>Females:</u>											
19+	3	14.0	2	14.0	5	21.0	10	16.9	12	9.3	NS
17-18	18	86.0	12	86.0	19	79.0	49	83.2	117	90.8	NS

** Significant at 0.01 level

TABLE IV

The Number and Percentages of Responses of First-Term Freshmen Regarding Religious Preference:
Males and Females at Three Community Colleges and at Oregon State University

Religious Preference	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C		No.	Percentage	No.	Percentage	
	No.	Percentage	No.	Percentage	No.	Percentage					
<u>Males:</u>											
Protestant	34	81.0	22	73.0	26	76.0	82	77.3	103	66.5	2.07 *
Other	3	7.0	3	10.0	3	9.0	9	8.5	18	11.6	NS
None	5	12.0	5	17.0	5	15.0	15	14.2	34	21.9	NS
<u>Females:</u>											
Protestant	18	86.0	13	93.0	16	67.0	47	79.6	93	72.1	NS
Other	3	14.0	0	0.0	4	17.0	7	11.7	22	17.1	NS
None	0	0.0	1	7.0	4	17.0	5	8.5	14	10.8	NS

* Significant at 0.05 level

TABLE V

The Number and Percentages Concerning the High School Grade Point Averages of First-Term Freshmen:
Males and Females at Three Community Colleges and at Oregon State University

G. P. A.	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C		No.	Percentage	No.	Percentage	
	No.	Percentage	No.	Percentage	No.	Percentage					
<u>Males:</u>											
3.50-3.99	0	0.0	0	0.0	1	3.7	1	1.2	25	16.4	4.71 **
3.00-3.49	5	12.8	4	15.4	4	14.8	13	14.1	53	34.9	3.75 **
2.50-2.99	12	30.8	17	65.5	6	22.1	35	38.1	52	34.2	NS
2.00-2.49	19	48.7	5	19.2	15	55.6	39	42.4	22	14.5	4.82 **
1.50-1.99	3	7.7	0	0.0	1	3.7	4	4.2	0	0.0	3.21 **
<u>Females:</u>											
3.50-3.99	4	19.0	2	16.7	0	0.0	6	11.3	29	22.7	NS
3.00-3.49	7	33.3	4	33.3	6	30.0	17	32.1	57	44.5	NS
2.50-2.99	7	33.3	0	0.0	6	30.0	13	24.5	31	24.2	NS
2.00-2.49	3	14.3	1	8.3	8	40.0	12	22.7	11	8.6	2.42 *
1.50-1.99	0	0.0	5	41.7	0	0.0	5	9.4	0	0.0	3.90 **

* Significant at 0.05 level

** Significant at 0.01 level

TABLE VI

The Number and Percentages Concerning the Location of High Schools Attended by First-Term Male and Female Freshmen
at Three Community Colleges and at Oregon State University

Location of High School	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C		No.	Percentage	No.	Percentage	
	No.	Percentage	No.	Percentage	No.	Percentage					
<u>Males:</u>											
Oregon	41	97.6	30	100.0	29	85.3	100	94.3	122	78.7	4.27 **
Other	1	2.4	0	0.0	5	14.7	6	5.7	33	21.3	
<u>Females:</u>											
Oregon	20	95.2	14	100.0	22	95.6	56	96.6	117	90.7	NS
Other	1	4.8	0	0.0	1	4.4	2	3.4	12	9.3	

** Significant at 0.01 level

TABLE VII

The Number and Percentages Concerning the Population of High Schools Attended by First-Term Male and Female Freshmen
at Three Community Colleges and Oregon State University

Size of High School	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C		No. Percentage		No. Percentage		
	No.	Percentage	No.	Percentage	No.	Percentage					
<u>Males:</u>											
1,500 +	0	0.0	3	10.0	9	26.4	12	11.5	63	40.6	5.79 **
750-1,499	13	32.5	20	66.6	7	20.6	40	38.5	50	32.3	NS
Below 750	27	67.5	7	23.4	28	52.9	52	50.0	42	27.1	4.05 **
<u>Females:</u>											
1,500 +	2	9.5	1	7.1	12	50.0	15	25.4	69	53.9	3.69 **
750-1,499	5	23.8	12	85.8	5	20.8	22	37.3	34	26.6	NS
Below 750	14	66.7	1	7.1	7	29.1	22	37.3	25	19.5	2.61 **

** Significant at 0.01 level

TABLE VIII

The Number and Percentages of First-Term Freshmen Planning to Graduate From College:
Males and Females at Three Community Colleges and Oregon State University

Graduation Plans	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C						
	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	
<u>Males:</u>											
Yes	29	69.0	20	66.7	30	88.2	79	75.5	147	94.8	4.88 **
No	1	2.4	0	0.0	1	2.9	2	1.9	4	2.6	NS
Undecided	12	28.6	10	33.3	3	8.8	25	23.6	4	2.6	5.86 **
<u>Females:</u>											
Yes	15	71.4	11	78.5	22	91.6	48	81.3	97	75.2	NS
No	2	9.5	1	7.1	0	0.0	3	5.1	9	6.9	NS
Undecided	4	19.0	2	14.3	2	8.4	8	13.6	23	17.8	NS

** Significant at 0.01 level

TABLE IX

The Number and Percentages of First-Term Freshmen Planning to Transfer to Another College:
Males and Females at Three Community Colleges and Oregon State University

College Transfer	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C						
	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	
<u>Males:</u>											
Yes	32	78.0	23	76.7	28	84.8	83	79.8	17	10.9	12.74 **
No	2	4.9	0	0.0	1	3.0	8	2.9	90	58.1	11.58 **
Undecided	7	17.1	7	13.3	4	12.2	18	17.3	48	30.9	3.47 **
<u>Females:</u>											
Yes	14	66.7	10	71.4	24	100.0	48	81.3	24	18.6	8.55 **
No	3	14.3	1	7.1	0	0.0	4	6.8	68	52.7	6.93 **
Undecided	4	19.0	3	21.4	0	0.0	7	11.9	37	28.7	2.70 **

** Significant at 0.01 level

TABLE X

The Most Important Reason for Attendance at a Specific Institution in Terms of the Number and Percentage of Responses Given by First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University

a. - First choices

Attendance at a specific institution	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C						
	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	
<u>Males:</u>											
a. Less expensive	36	87.8	19	63.3	19	57.6	74	71.2	11	7.2	11.60 **
b. Better part-time work opportunity	1	2.4	5	16.7	2	6.1	8	7.7	1	0.6	3.38 **
c. Parental influence	1	2.4	0	0.0	0	0.0	1	1.0	7	4.6	NS
d. Available courses related to my interest	1	2.4	1	3.3	3	9.1	5	4.8	105	68.6	12.05 **
e. In order to attend college and remain at home	1	2.4	0	0.0	3	9.1	4	3.8	5	3.3	NS
f. To be with my friends	0	0.0	0	0.0	0	0.0	0	0.0	2	1.3	NS
g. Provides a chance to get away from home	1	2.4	0	0.0	1	3.0	2	1.9	4	2.6	NS
h. Other reasons	0	0.0	5	16.7	5	12.1	10	9.6	18	11.8	NS
<u>Females:</u>											
a. Less expensive	11	52.4	7	50.0	14	60.9	32	55.2	10	7.8	7.16 **
b. Better part-time work opportunity	0	0.0	0	0.0	1	4.3	1	1.7	2	1.6	NS
c. Parental influence .	5	14.3	3	21.4	0	0.0	8	13.8	11	8.5	NS
d. Available courses related to my interest	2	9.5	1	7.1	1	4.3	4	6.9	77	59.7	7.78 **
e. In order to attend college and remain at home	2	9.5	1	7.1	6	26.1	9	15.5	3	2.3	3.13 **
f. To be with my friends	1	4.8	0	0.0	0	0.0	1	1.7	1	0.8	NS
g. Provides a chance to get away from home	0	0.0	1	7.1	1	4.3	2	3.4	12	9.3	NS
h. Other reasons	0	0.0	1	7.1	0	0.0	1	1.7	13	10.1	3.31 **

Continued

TABLE X (Continued)

b - All choices

Attendance at a specific institution	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C		No.	Percentage	No.	Percentage	
	No.	Percentage	No.	Percentage	No.	Percentage					
<u>Males: (N)</u>	41		30		33		104		153		
a. Less expensive	40	99.6	26	86.7	26	78.8	92	88.5	62	40.5	8.67 **
b. Better part-time work opportunity	15	36.6	15	50.0	17	51.5	47	45.2	20	13.1	5.86 **
c. Parental influence	8	19.5	8	26.7	4	12.1	20	19.2	41	26.8	NS
d. Available courses related to my interest	25	16.0	16	53.3	18	54.5	59	56.7	132	86.3	5.41 **
e. In order to attend college and remain at home	19	46.3	6	30.0	18	54.5	43	41.3	12	7.8	6.76 **
f. To be with my friends	8	19.5	1	3.3	0	0.0	8	7.7	27	17.6	2.37 *
g. Provides a chance to get away from home	2	4.9	0	0.0	2	6.1	5	4.8	75	49.0	8.79 **
h. Other reasons	6	14.6	13	43.3	8	24.2	37	35.6	63	41.2	NS
<u>Females: (N)</u>	21		14		23		58		129		
a. Less expensive	19	90.5	13	92.9	21	91.3	53	91.4	55	42.6	7.16 **
b. Better part-time work opportunity	6	28.6	9	64.3	9	39.1	24	41.4	15	11.6	4.47 **
c. Parental influence	9	42.9	6	42.9	5	21.7	20	34.5	53	41.1	NS
d. Available courses related to my interest	6	28.6	4	28.6	13	56.5	23	39.7	109	84.5	6.17 **
e. In order to attend college and remain at home	11	52.4	7	50.0	13	56.5	31	53.4	14	10.9	6.26 **
f. To be with my friends	7	33.3	0	0.0	2	8.7	9	15.5	21	16.3	NS
g. Provides a chance to get away from home	2	9.5	2	14.3	3	13.0	7	12.1	75	58.1	6.44 **
h. Other reasons	2	9.5	1	7.1	1	4.3	4	6.9	35	27.1	3.49 **

* Significant at 0.05 level

** Significant at 0.01 level

TABLE XI

The Most Important Reason for Attending College in Terms of the Number and Percentage of Responses Given by the
First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University
a - First choices

Most important reason for attending college	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C						
	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	
<u>Males:</u>											
a. Provides vocational training necessary for better employment	25	59.5	21	70.0	16	47.0	62	58.5	118	77.0	3.21 **
b. Provides a basic general education	16	38.1	8	26.6	18	53.0	42	39.6	26	17.0	4.16 **
c. Provides an opportunity to make friends with the opposite sex	0	0.0	0	0.0	0	0.0	0	0.0	1	0.7	NS
d. It is the popular thing to do	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	NS
e. Provides a chance to get away from home	0	0.0	0	0.0	0	0.0	0	0.0	2	1.3	2.14 *
f. Other reasons	1	2.4	1	3.3	0	0.0	2	1.9	6	3.9	NS
<u>Females:</u>											
a. Provides vocational training necessary for better employment	8	38.1	8	57.1	7	30.4	23	39.7	72	56.2	2.06 *
b. Provides general education	12	57.1	5	35.7	14	60.9	31	53.4	46	35.9	2.41 *
c. Provides an opportunity to make friends with the opposite sex	0	0.0	0	0.0	1	4.3	1	1.7	0	0.0	NS
d. It is the popular thing to do	1	4.8	0	0.0	0	0.0	1	1.7	1	0.8	NS
e. Provides a chance to get away from home	0	0.0	0	0.0	0	0.0	0	0.0	5	3.9	2.68 **
f. Other reasons	0	0.0	1	7.1	1	4.3	2	3.4	4	3.1	NS

Continued

TABLE XI (Continued)

b - All choices

Most important reason for attending college	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C		No.	Percentage	No.	Percentage	
	No.	Percentage	No.	Percentage	No.	Percentage					
<u>Males:</u> (N)	42		30		34		106		153		
a. Provides vocational training necessary for better employment	32	76.2	25	83.3	28	82.4	85	80.2	146	95.4	4.16 **
b. Provides a basic general education	37	88.1	21	70.0	28	82.4	86	81.1	124	81.0	NS
c. Provides an opportunity to make friends with the opposite sex	7	16.7	7	23.3	10	29.4	24	22.6	40	26.1	NS
d. It is the popular thing to do	10	23.8	3	10.0	3	8.8	16	15.1	18	11.8	NS
e. Provides a chance to get away from home	8	19.0	3	10.0	2	5.9	13	12.3	61	39.9	4.52 **
f. Other reasons	6	14.3	8	26.7	10	29.4	24	22.6	34	62.1	6.90 **
<u>Females:</u> (N)	21		14		23		58		128		
a. Provides vocational training necessary for better employment	15	71.4	13	92.9	16	69.6	44	75.9	112	87.5	NS
b. Provides a basic general education	19	90.5	14	100.0	21	91.3	54	93.1	121	94.5	NS
c. Provides an opportunity to make friends with the opposite sex	7	33.3	3	21.4	13	56.5	23	39.7	39	30.5	NS
d. It is the popular thing to do	5	23.8	0	0.0	2	8.7	7	12.1	7	5.5	NS
e. Provides a chance to get away from home	2	9.5	3	21.4	3	13.0	8	13.8	74	57.8	6.08 **
f. Other reasons	2	9.5	3	21.4	5	21.7	10	17.2	18	14.1	NS

* Significant at 0.05 level

** Significant at 0.01 level

TABLE XII

The Number and Percentages of First-Term Male and Female Freshmen at Three Community Colleges
and Oregon State University in Terms of Responses to Personal Data Choices

Choices		Community Colleges						Combined Community Colleges		Oregon State University		t	
		A		B		C		No.	Percentage	No.	Percentage		
		No.	Percentage	No.	Percentage	No.	Percentage						
Males:													
a. Chosen a different course of study:	Yes	8	19.5	4	13.8	8	25.8	20	19.8	18	12.5	NS	
	No	33	80.5	25	86.2	23	74.2	81	80.2	126	87.5	NS	
b. Gone to work instead:	Yes	1	2.5	2	6.9	2	6.9	5	5.1	2	1.4	NS	
	No	39	97.5	27	93.2	27	93.2	93	94.9	144	98.6	NS	
c. Married:	Yes	1	2.5	0	0.0	1	3.6	2	2.1	6	4.1	NS	
	No	39	97.5	29	100.0	27	96.4	95	97.9	139	95.9	NS	
d. Entered the military service:	Yes	1	2.5	1	3.4	1	3.7	3	3.1	4	3.6	NS	
	No	39	97.5	28	96.6	26	96.3	93	96.9	142	96.4	NS	
Females:													
a. Chosen a different course of study:	Yes	1	5.3	2	14.3	0	0.0	3	5.5	27	21.3	3.07 **	
	No	18	94.7	12	85.7	22	100.0	52	94.5	100	78.7	NS	
b. Gone to work instead:	Yes	2	10.5	0	0.0	1	4.5	3	5.5	4	3.2	NS	
	No	17	89.5	14	100.0	21	95.5	52	94.5	120	96.8	NS	
c. Married:	Yes	1	5.3	0	0.0	0	0.0	1	1.9	5	4.0	NS	
	No	18	94.7	14	100.0	21	100.0	53	98.1	120	96.0	NS	

** Significant at 0.01 level

TABLE XIII

The Attitudes of Parents Toward College in Terms of Responses in Number and Percentages as Given by the First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University

Attitudes of Parents	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C		No.	Percentage	No.	Percentage	
	No.	Percentage	No.	Percentage	No.	Percentage					
<u>Males:</u>											
a. Extremely favorable to having me attend:	31	73.8	25	83.3	25	73.5	81	76.5	130	84.4	NS
b. Favored my attending:	8	19.0	5	16.7	7	20.6	20	18.9	20	14.3	NS
c. Somewhat opposed:	2	4.8	0	0.0	0	0.0	2	1.9	0	0.0	NS
d. Definitely opposed:	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	NS
e. Indifferent about it:	1	2.4	0	0.0	2	5.9	3	2.8	2	1.3	NS
<u>Females:</u>											
a. Extremely favorable to having me attend:	12	57.1	12	85.8	20	86.9	44	75.9	112	86.7	NS
b. Favored my attending:	8	38.1	1	7.1	3	13.1	12	20.7	13	10.1	NS
c. Somewhat opposed:	0	0.0	0	0.0	0	0.0	0	0.0	2	1.6	NS
d. Definitely opposed:	0	0.0	0	0.0	0	0.0	0	0.0	2	1.6	NS
e. Indifferent about it:	1	4.8	1	7.1	0	0.0	2	3.4	0	0.0	NS

TABLE XIV

Assistance in Making Occupational Choice in Terms of the Number and Percentages of Responses Given by
First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University
a - Major Influences

Major influences:	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C						
	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	
<u>Males:</u>											
a. Parents	2	5.4	8	30.8	8	24.2	18	18.8	10	6.8	2.91 **
b. Relatives	0	0.0	1	3.8	1	3.0	2	2.1	3	2.0	NS
c. Counselors	2	5.4	0	0.0	3	9.1	5	5.2	3	2.0	NS
d. Teachers	2	5.4	0	0.0	1	3.0	3	3.1	5	3.4	NS
e. Friends	0	0.0	1	3.8	1	3.0	2	2.1	6	4.1	NS
f. Principal	1	2.7	0	0.0	0	0.0	1	1.0	0	0.0	NS
g. Own personal decision	30	81.1	15	57.7	19	57.6	64	66.7	115	78.2	NS
h. Other reasons	0	0.0	1	3.8	0	0.0	1	1.0	5	3.4	NS
<u>Females:</u>											
a. Parents	2	9.5	0	0.0	3	13.0	5	8.8	9	7.1	NS
b. Relatives	1	4.8	0	0.0	0	0.0	1	1.8	2	1.6	NS
c. Counselors	2	9.5	1	7.7	1	4.3	4	7.0	1	0.8	NS
d. Teachers	2	9.5	1	7.7	3	13.0	6	10.5	8	6.3	NS
e. Friends	1	4.8	0	0.0	0	0.0	1	1.8	4	3.2	NS
f. Principal	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8	NS
g. Own personal decision	13	61.9	10	76.9	15	65.2	38	66.6	99	78.6	NS
h. Other reasons	0	0.0	1	7.7	1	4.3	2	3.5	2	1.6	NS

Continued

TABLE XIV (Continued)
b - Combined Major Influences

Major influences:	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C						
	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	
<u>Males:</u> (N)	37		26		33		96		147		
a. Parents	22	59.5	20	76.9	22	66.7	64	66.7	88	59.9	NS
b. Relatives	2	5.4	4	15.4	6	18.2	12	12.5	22	15.0	NS
c. Counselors	16	43.2	6	23.1	16	48.5	38	39.6	43	29.3	NS
d. Teachers	8	21.6	4	15.4	8	24.2	20	20.8	46	31.3	NS
e. Friends	10	27.0	9	34.6	8	24.2	27	28.1	40	27.2	NS
f. Principal	3	8.1	0	0.0	0	0.0	3	3.1	1	0.7	NS
g. Own personal decision	36	97.3	20	76.9	28	84.8	84	87.5	136	92.5	NS
h. Other reasons	2	5.4	2	7.7	0	0.0	4	4.2	14	9.5	NS
<u>Females:</u> (N)	21		13		23		57		126		
a. Parents	12	57.1	10	76.9	16	69.6	38	66.6	82	65.1	NS
b. Relatives	3	14.3	2	15.4	3	13.0	8	14.0	11	8.7	NS
c. Counselors	8	38.1	4	30.8	4	17.4	16	28.1	34	27.0	NS
d. Teachers	8	38.1	3	23.1	9	39.1	19	33.3	57	45.2	NS
e. Friends	11	52.4	4	30.8	12	52.2	37	64.9	45	35.7	3.54 **
f. Principal	0	0.0	0	0.0	0	0.0	0	0.0	2	1.6	NS
g. Own personal decision	17	81.0	12	92.3	21	91.3	50	87.7	120	95.2	NS
h. Other reasons	0	0.0	2	15.4	4	17.4	6	10.5	5	4.0	NS

** Significant at 0.01 level

TABLE XV

Amount of College Expenses Earned in Terms of the Number and Percentage of Responses Given by the
First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University

Amount of college expenses earned	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C		No.	Percentage	No.	Percentage	
	No.	Percentage	No.	Percentage	No.	Percentage					
<u>Males:</u>											
a. All	20	47.6	15	50.0	19	55.9	54	50.9	42	27.3	4.22 **
b. Approximately three- fourths	11	26.2	5	16.7	3	8.8	19	17.9	22	14.3	NS
c. Approximately one-half	5	11.9	3	10.0	3	8.8	11	10.4	24	15.6	NS
d. Approximately one-fourth	3	7.1	3	10.0	2	5.9	8	7.5	26	16.9	2.41 *
e. Less than one-fourth	2	4.8	1	3.3	5	14.7	8	7.5	22	14.3	NS
f. None	1	2.4	3	10.0	2	5.9	6	5.7	18	11.7	NS
<u>Females:</u>											
a. All	8	38.1	0	0.0	6	25.0	14	23.7	9	7.0	3.15 **
b. Approximately three- fourths	2	9.5	4	28.6	0	0.0	6	10.2	7	5.5	NS
c. Approximately one-half	2	9.5	2	14.3	1	4.2	5	8.5	24	18.8	NS
d. Approximately one-fourth	2	9.5	2	14.3	2	8.3	6	10.2	23	18.0	NS
e. Less than one-fourth	3	14.3	4	28.6	9	37.5	16	27.1	41	32.0	NS
f. None	4	19.0	2	14.3	6	25.0	12	20.3	24	18.8	NS

* Significant at 0.05 level

** Significant at 0.01 level

TABLE XVI

Parents' Attitude Toward the Financing of College Expenses as Indicated in Number and Percentages of Responses of First-Term Male and Female Freshmen at Three Community Colleges and Oregon State University

Parents' Attitude	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C						
	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	
<u>Males:</u>											
a. Willing to furnish all:	9	21.4	9	33.3	7	20.6	25	24.3	55	36.2	2.11 *
b. Willing to furnish some aid:	18	42.9	11	40.8	16	47.1	45	43.7	64	42.1	NS
c. Willing to furnish board and room:	8	19.0	4	14.8	5	14.7	17	16.5	9	5.9	2.66 **
d. Unwilling to furnish any aid:	0	0.0	0	0.0	0	0.0	0	0.0	1	0.7	NS
e. Unable to furnish any aid:	7	16.7	3	11.1	6	17.6	16	15.5	21	13.8	NS
f. Able but unwilling to furnish aid:	0	0.0	0	0.0	0	0.0	0	0.0	2	1.3	NS
<u>Females:</u>											
a. Willing to furnish all:	5	23.8	5	38.5	9	40.9	19	33.9	67	52.8	2.39 *
b. Willing to furnish some aid:	8	38.1	5	38.5	8	36.4	21	37.5	51	40.2	NS
c. Willing to furnish board and room:	5	23.8	2	15.4	3	13.6	10	17.9	2	1.6	3.98 **
d. Unwilling to furnish any aid:	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8	NS
e. Unable to furnish any aid:	3	14.3	1	7.7	2	9.1	6	10.7	6	4.7	NS
f. Able but unwilling to furnish aid:	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	NS

* Significant at 0.05 level

** Significant at 0.01 level

TABLE XVII

Estimated Yearly Combined Income of Parents as Reported by First-Term Male and Female Freshmen
by Number and Percentages at Three Community Colleges and Oregon State University

Estimated Yearly Combined Income of Parents	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C		No.	Percentage	No.	Percentage	
	No.	Percentage	No.	Percentage	No.	Percentage					
<u>Males:</u>											
g. Over \$20,000	0	0.0	0	0.0	0	0.0	0	0.0	7	4.7	5.07 **
f. Between 15,000 & 19,999	2	4.9	2	6.9	0	0.0	4	3.9	8	5.4	NS
e. Between 9,000 & 14,999	6	14.6	6	20.7	6	18.8	18	17.6	41	27.5	NS
d. Between 7,000 & 8,999	7	17.1	11	37.9	6	18.8	24	23.5	38	25.5	NS
c. Between 5,000 & 6,999	14	34.1	5	17.2	14	43.7	33	32.4	33	22.1	NS
b. Between 3,000 & 4,999	7	17.1	5	17.2	6	18.8	18	17.6	15	10.1	NS
a. Less than 3,000	5	12.2	0	0.0	0	0.0	5	4.9	7	4.7	NS
<u>Females:</u>											
g. Over \$20,000	0	0.0	0	0.0	0	0.0	0	0.0	13	11.5	6.24 **
f. Between 15,000 & 19,999	1	4.8	2	14.3	1	4.8	4	7.1	7	6.2	NS
e. Between 9,000 & 14,999	1	4.8	5	35.7	4	19.0	10	17.8	38	33.6	3.25 **
d. Between 7,000 & 8,999	3	14.3	2	14.3	9	42.9	14	25.0	20	17.7	NS
c. Between 5,000 & 6,999	7	33.3	4	28.6	4	19.0	15	26.8	17	15.0	NS
b. Between 3,000 & 4,999	6	28.6	1	7.1	2	9.5	9	14.3	14	12.4	NS
a. Less than 3,000	3	14.3	0	0.0	1	4.8	4	7.1	4	3.5	NS

** Significant at 0.01 level

TABLE XVIII

Age of Fathers of First-Term Male and Female Freshmen at Three Community Colleges
and Oregon State University in terms of Number and Percentages

Age of fathers	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C		No.	Percentage	No.	Percentage	
	No.	Percentage	No.	Percentage	No.	Percentage					
<u>Males:</u>											
60+	1	2.9	1	3.7	3	9.7	5	5.4	10	7.2	NS
55-59	5	14.7	5	18.5	2	6.5	12	13.0	22	15.8	NS
50-54	8	23.5	9	33.3	12	38.7	29	31.5	40	28.8	NS
45-49	11	32.4	6	22.2	9	29.0	26	28.3	33	23.7	NS
40-44	7	20.6	4	14.8	4	12.9	15	16.3	28	20.1	NS
35-39	2	5.9	2	7.4	1	3.2	5	5.4	6	4.3	NS
<u>Females:</u>											
60+	4	23.5	2	16.7	0	0.0	8	15.1	7	5.8	NS
55-59	3	17.6	1	8.3	2	9.1	6	11.3	14	11.7	NS
50-54	4	23.5	6	50.0	3	13.6	13	24.5	26	21.7	NS
45-49	5	29.4	1	8.3	12	54.5	18	34.0	42	35.0	NS
40-44	1	5.9	2	16.7	5	22.7	8	15.1	29	24.2	NS
35-39	0	0.0	0	0.0	0	0.0	0	0.0	2	1.7	NS

TABLE XIX

Age of Mothers of First-Term Male and Female Freshmen at Three Community Colleges
and Oregon State University in terms of Number and Percentages

Age of Mothers	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C						
	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	
<u>Males:</u>											
60+	1	2.4	1	3.6	1	3.1	3	2.9	2	1.4	NS
55-59	2	4.8	4	14.3	1	3.1	7	6.9	8	5.4	NS
50-54	10	23.8	4	14.3	5	15.6	19	18.6	29	19.7	NS
45-49	11	26.2	9	32.1	11	34.4	31	39.2	43	29.3	NS
40-44	10	23.8	8	28.6	8	25.0	26	25.5	44	29.9	NS
35-39	7	16.7	2	7.1	6	18.8	15	14.7	19	12.9	NS
30-34	1	2.4	0	0.0	0	0.0	1	1.0	2	1.4	NS
<u>Females:</u>											
60+	0	0.0	0	0.0	1	4.2	1	1.8	4	3.2	NS
55-59	3	15.8	1	8.3	0	0.0	4	7.3	10	8.0	NS
50-54	4	21.1	4	33.3	4	16.7	12	21.8	17	13.6	NS
45-49	7	36.8	3	25.0	7	29.2	17	30.9	34	27.2	NS
40-44	4	21.1	4	33.3	9	37.5	17	30.9	50	40.0	NS
35-39	1	5.3	0	0.0	3	12.5	4	7.3	9	7.2	NS
30-34	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8	NS

TABLE XX

Education of the Fathers of First-Term Male and Female Freshmen at Three Community Colleges
and Oregon State University in Terms of Number and Percentages

Education of Fathers	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C		No.	Percentage	No.	Percentage	
	No.	Percentage	No.	Percentage	No.	Percentage					
<u>Males:</u>											
College	9	24.3	2	7.1	4	12.5	15	15.5	47	32.2	3.02 **
High School	20	54.1	14	50.0	24	75.0	58	59.8	80	54.8	NS
Elementary	8	21.6	12	42.9	4	12.5	24	24.7	19	12.9	2.27 *
<u>Females:</u>											
College	4	21.1	3	23.1	5	22.7	12	22.2	65	51.6	3.91 **
High School	11	57.8	8	61.5	14	63.6	33	61.1	48	38.1	2.96 **
Elementary	4	21.1	2	15.4	3	13.6	9	16.7	13	10.3	NS

* Significant at 0.05 level

** Significant at 0.01 level

TABLE XXI

Education of the Mothers of First-Term Male and Female Freshmen at Three Community Colleges
and Oregon State University in Terms of Number and Percentages

Education of Mothers	Community Colleges						Combined Community Colleges		Oregon State University		t
	A		B		C		No.	Percentage	No.	Percentage	
	No.	Percentage	No.	Percentage	No.	Percentage					
<u>Males:</u>											
College	10	24.4	2	7.1	6	18.8	18	17.8	40	26.8	NS
High School	28	68.3	23	82.2	22	68.7	73	72.3	94	63.1	NS
Elementary	3	7.3	3	10.7	4	12.5	10	9.9	15	10.0	NS
<u>Females:</u>											
College	5	26.3	4	30.8	4	16.7	13	23.2	56	44.1	2.73 **
High School	12	63.2	9	69.2	19	79.1	40	71.4	61	48.0	3.09 **
Elementary	2	10.5	0	0.0	1	4.2	3	5.4	10	7.9	NS

** Significant at 0.01 level

APPENDIX C

TABLE XXII

Mean Scores for First-Term Male Freshmen on the Study of Values at Oregon State University
by Schools and at Three Oregon Community Colleges

	Schools:	Bus. & Tech.	Educ.	Eng.	Hum.	Sci.	Agri. Forestry Pharmacy	Total OSU	Astoria	Bend	Coos Bay	Combined Community Colleges	OSU vs CC Diff in \bar{X}
	N:	13	14	36	26	42	24	155	42	29	34	105	
<u>Scale:</u>													
Theoretical	\bar{X}	42.07	38.85	48.33	41.03	49.42	39.91	44.72 **	43.38	42.31	42.17	42.69	+ 2.03 *
	$\sigma_{\bar{X}}$	2.47	1.62	1.12	1.25	.98	1.30	.63	.86	1.04	1.30	.61	
Economic	\bar{X}	46.46	44.21	46.00	42.00	42.09	44.50	43.91	43.76	43.51	43.44	43.59 ^{V*}	+ .32
	$\sigma_{\bar{X}}$	1.85	1.62	1.22	1.46	1.16	1.31	.58	1.07	1.21	.96	.62	
Aesthetic	\bar{X}	33.69	35.28	33.02	35.76	34.92	36.83	34.85	35.73	37.75	32.64	35.29*	- .43
	$\sigma_{\bar{X}}$	2.85	2.12	1.23	1.70	1.27	1.57	.66	1.35	1.67	.91	.79	
Social	\bar{X}	34.76	36.14	34.55	37.53	34.09	35.58	35.25	35.92	38.68	37.76	37.28	-2.03 *
	$\sigma_{\bar{X}}$	1.65	1.44	1.35	1.35	1.06	1.38	.56	.95	1.23	1.10	.63	
Political	\bar{X}	45.46	44.71	41.83	45.42	43.04	42.37	43.41	45.28	42.65	42.55	43.67	- .26
	$\sigma_{\bar{X}}$	1.63	1.70	1.63	1.34	1.06	1.06	.53	.53	.88	1.00	.58	
Religious	\bar{X}	37.00	40.78	36.36	38.07	35.92	40.87	37.68	35.68	35.48	41.70	37.57 **	+ .11
	$\sigma_{\bar{X}}$	2.23	2.28	1.75	2.22	1.48	1.83	.79	1.30	1.33	1.37	.82	

* Significant at 0.05 level

** Significant at 0.01 level

V* Variance significant at 0.05 level

+ A higher mean score at Oregon State University

- A higher mean score at the three community colleges

TABLE XXIII

Mean Scores for First-Term Female Freshmen on the Study of Values at Oregon State University
by Schools and at Three Oregon Community Colleges

Schools:	Bus. & Tech.	Educ.	Eng.	Hum.	Sci.	Agri. Forestry Pharmacy	Total OSU	Astoria	Bend	Coos Bay	Combined Community Colleges	OSU vs CC Diff in \bar{X}
N:	12	48	18	29	16	5	129	21	15	24	60	
<u>Scale:</u>												
Theoretical	\bar{X} 34.91	36.25	33.88	38.13	42.00	44.80	37.28 **	33.90	37.73	37.66	36.36	+ .92
	$\sigma_{\bar{X}}$ 2.23	.86	1.50	1.29	2.22	3.20	.64	1.40	2.05	1.27	.89	
Economic	\bar{X} 43.66	37.97	41.27	38.75	35.43	38.20	38.84 *	35.38	33.66	35.16	34.86	+3.98 **
	$\sigma_{\bar{X}}$ 1.50	.97	1.17	1.65	1.90	2.68	.64	1.14	1.76	1.46	.82	
Aesthetic	\bar{X} 37.83	41.16	41.33	41.34	38.37	41.20	40.47	38.33	44.86	38.25	39.93	+ .54
	$\sigma_{\bar{X}}$ 1.74	.98	1.66	1.67	1.75	5.84	.67	1.79	2.63	1.56	1.14	
Social	\bar{X} 39.08	40.35	42.16	42.82	40.37	32.60	40.90	43.42	41.06	43.62	42.91	-2.01
	$\sigma_{\bar{X}}$ 2.70	.98	1.87	1.21	2.29	2.91	.68	1.46	1.80	1.72	.96	
Political	\bar{X} 41.75	39.60	37.05	35.93	37.18	43.00	38.41 *	37.52	38.33	39.54	38.53	- .12
	$\sigma_{\bar{X}}$ 2.59	.77	1.52	.91	1.41	1.73	.53	1.11	2.28	1.30	.85	
Religious	\bar{X} 42.75	44.43	43.27	43.37	46.62	40.20	44.00	51.19	44.06	45.75	47.23 *	-3.23 *
	$\sigma_{\bar{X}}$ 2.94	1.09	2.21	1.64	2.19	4.79	.75	1.47	2.48	1.77	1.12	

* Significant at 0.05 level

** Significant at 0.01 level

+ A higher mean score at Oregon State University

- A higher mean score at the three community colleges

TABLE XXIV

Mean Scores for First-Term Male Freshmen on the Edwards Personal Preference Schedule
at Oregon State University by Schools and at Three Oregon Community Colleges

Schools:	Bus. & Tech. 13	Educ. 14	Eng. 36	Hum. 26	Sci. 42	Agri. Forestry Pharmacy 24	Total OSU 155	Astoria 42	Bend 29	Coos Bay 34	Combined Community Colleges 105	OSU vs CC Diff in \bar{X}
N:												
Scale:												
ach	\bar{X} 14.46 $\sigma_{\bar{X}}$ 1.27	13.28 1.09	16.22 .61	14.80 .76	16.30 .68	14.04 .64	15.25 .33	14.09 .66	13.68 .47	15.17 .75	14.33 .38	+ .92
def	\bar{X} 11.38 $\sigma_{\bar{X}}$.96	12.00 .70	11.61 .54	10.92 .66	11.40 .64	12.79 .73	11.63 .28	10.38 .38	11.55 .56	11.76 .62	11.15 .30	+ .48
ord	\bar{X} 12.23 $\sigma_{\bar{X}}$.86	11.14 1.08	12.13 .86	9.61 .87	10.16 .74	10.83 .69	10.89 .36	10.16 .59	11.17 .83	10.47 .82	10.54 .42	+ .35
exh	\bar{X} 14.07 $\sigma_{\bar{X}}$.93	14.00 1.10	13.75 .58	13.15 .68	13.97 .52	15.12 .87	13.97 .29	15.50 .65	15.96 .49	14.76 .64	15.39 .36	-1.42 **
aut	\bar{X} 12.84 $\sigma_{\bar{X}}$ 1.41	11.92 1.07	14.38 .77	13.65 1.03	15.52 .63	13.29 .83	14.05 .37	13.19 .75	13.06 .71	12.05 .73	12.79 .43	+1.26 *
aff	\bar{X} 12.84 $\sigma_{\bar{X}}$ 1.36	15.64 .75	14.25 .55	14.80 .71	14.14 .68	14.20 .90	14.31 .32	14.90 .56	14.82 .65	14.08 .77	14.61 .40	- .30
int	\bar{X} 14.61 $\sigma_{\bar{X}}$ 1.33	17.42 1.22	14.50 1.03	18.19 1.02	14.30 .64	16.33 1.05	15.62 * .42	14.59 .61	14.62 .92	15.20 .92	14.80 .46	+ .82
suc	\bar{X} 12.76 $\sigma_{\bar{X}}$ 1.48	11.57 1.26	10.83 .75	12.57 .85	11.21 .70	10.45 .93	11.40 .37	12.45 .68	12.24 .70	12.38 .75	12.37 .41 V*	- .97
dom	\bar{X} 18.00 $\sigma_{\bar{X}}$ 1.35	16.21 1.30	14.80 .80	14.30 .90	13.61 .82	15.04 .91	14.83 .40	12.80 .58	14.72 .63	14.17 .73	13.78 .38	+1.05
aba	\bar{X} 13.69 $\sigma_{\bar{X}}$ 1.42	15.42 1.34	14.33 .83	15.84 .83	15.66 .64	16.45 .81	15.32 .36	16.69 .72	15.03 .56	15.70 .87	15.91 .43	- .59
nur	\bar{X} 12.69 $\sigma_{\bar{X}}$ 1.44	14.28 1.17	12.13 .81	15.61 .76	12.76 .77	13.20 .96	13.29 .39	14.80 .73	14.17 .70	14.26 .89	14.45 .45	-1.16
chg	\bar{X} 15.15 $\sigma_{\bar{X}}$ 1.21	15.78 1.11	16.38 .83	15.88 .96	15.95 .84	16.29 .70	16.01 V** .38	16.45 .61	16.89 .85	15.67 .71	16.32 .41	- .31
end	\bar{X} 12.69 $\sigma_{\bar{X}}$ 1.68	12.07 1.30	15.75 1.04	12.11 1.03	14.85 .76	14.50 1.03	14.11 .44	13.50 .69	12.65 .76	14.70 .97	13.65 .47	+ .46
het	\bar{X} 18.53 $\sigma_{\bar{X}}$ 1.70	14.50 1.58	16.25 .92	15.26 1.06	16.85 .78	15.62 1.19	16.18 .44	17.07 .85	16.13 1.21	15.32 1.02	16.24 .58	- .06
agg	\bar{X} 14.00 $\sigma_{\bar{X}}$ 1.14	14.71 1.40	12.63 .62	13.23 .84	13.21 .59	11.79 .95	13.06 .34	13.38 .74	13.24 .66	13.94 .70	13.52 .41	- .46
con	\bar{X} 11.92 $\sigma_{\bar{X}}$.54	11.64 .45	11.69 .25	11.23 .29	11.54 .28	11.20 .34	11.51 .13	11.30 .30	11.13 .41	11.64 .29	11.37 .19	+ .14

* Significant at 0.05 level

** Significant at 0.01 level

V* Variance significant at 0.05 level

V** Variance significant at 0.01 level

+ A higher mean score at Oregon State University

- A higher mean score at the three community colleges

TABLE XXV

Mean Scores for First-Term Female Freshmen on the Edwards Personal Preference Schedule
at Oregon State University by Schools and at Three Oregon Community Colleges

Schools:	Bus. & Tech. 12	Educ. .48	Eng. 18	Hum. 29	Sci. 16	Agri. Forestry Pharmacy 5	Total OSU 129	Astoria 21	Bend 15	Coos Bay 24	Combined Community Colleges 60	OSU vs CC Diff in \bar{X}
Scale:												
ach \bar{X}	14.41	12.20	10.77	12.34	13.56	11.60	12.41	12.66	12.46	11.93	12.28	+ .13
$\sigma_{\bar{X}}$	1.53	.61	.74	.71	.83	1.81	.36	.96	.89	.96	.55	
def \bar{X}	11.08	12.35	11.44	10.72	10.06	9.40	11.44	12.95	11.86	13.54	12.91	-1.47 *
$\sigma_{\bar{X}}$	1.23	.53	.84	.65	.94	1.99	.33	.85	.88	.77	.48	
ord \bar{X}	10.50	10.27	11.16	9.65	7.93	8.60	9.91	11.52	10.20	11.20	11.06	-1.15
$\sigma_{\bar{X}}$	.84	.53	.89	.92	1.22	.60	.36	.90	.86	.85	.51	
exh \bar{X}	16.00	13.81	13.66	13.13	13.43	14.40	13.80	12.00	15.46	14.20	13.75 *	+ .05
$\sigma_{\bar{X}}$	1.01	.44	.96	.63	1.22	2.57	.33	.47	.78	.80	.44	
aut \bar{X}	11.25	12.20	13.72	13.62	13.81	14.60	12.92	11.76	13.73	10.29	11.66 *	+1.26
$\sigma_{\bar{X}}$	.95	.57	1.14	.81	1.24	2.32	.38	.84	1.22	.70	.53	
aff \bar{X}	15.50	17.33	17.83	15.65	17.18	16.00	16.75	16.90	18.33	16.62	17.15	- .40
$\sigma_{\bar{X}}$	1.40	.58	.94	.80	.94	1.70	.36	.73	1.16	.57	.45	
int \bar{X}	15.66	17.66	15.94	19.03	19.06	18.20	17.72	18.76	17.73	17.54	18.01	- .28
$\sigma_{\bar{X}}$	1.16	.72	.93	.93	.83	1.50	.40	.98	1.21	.91	.58	
suc \bar{X}	16.50	12.58	13.88	14.31	13.87	13.80	13.76	13.19	11.60	11.62	12.16	+1.60
$\sigma_{\bar{X}}$	1.23	.73	1.11	.88	1.26	3.10	.44	.92	1.58	.84	.61	
dom \bar{X}	14.66	13.39	11.44	12.44	13.87	10.40	12.96	12.19	10.60	12.29	11.83	+1.13
$\sigma_{\bar{X}}$	1.67	.68	.71	.69	1.33	.93	.39	1.37	1.20	.75	.64	
aba \bar{X}	15.08	16.97	16.05	17.13	16.43	18.20	16.74	19.14	17.00	18.04	18.16	-1.42
$\sigma_{\bar{X}}$	1.69	.62	1.47	.87	.95	1.53	.42	.94	1.05	.91	.56	
nur \bar{X}	14.50	16.54	18.22	16.96	16.56	13.60	16.57	18.42	17.20	16.95	17.53	- .96
$\sigma_{\bar{X}}$	1.59	.74	1.04	.96	1.10	1.72	.44	.82	1.28	.89	.55	
chg \bar{X}	19.75	18.58	18.33	16.10	16.37	21.40	17.90	16.90	19.33	18.04	17.96	- .06
$\sigma_{\bar{X}}$	1.45	.68	1.07	.93	1.31	2.21	.44	.92	.87	.93	.54	
end \bar{X}	12.00	12.56	11.94	12.17	13.25	11.80	12.37 ^{V*}	12.28	12.93	13.54	12.95	- .58
$\sigma_{\bar{X}}$	1.07	.72	1.03	1.03	1.42	1.24	.43	.97	1.56	.71	.58	
het \bar{X}	14.33	13.14	15.27	13.93	14.00	15.60	14.02	11.52	11.06	13.75	12.30	+1.72
$\sigma_{\bar{X}}$	1.60	.97	1.21	1.05	1.30	1.33	.52	1.39	1.40	1.27	.79	
agg \bar{X}	8.75	10.37	10.27	12.89	9.56	12.40	10.70	9.76	10.46	10.50	10.23	+ .47
$\sigma_{\bar{X}}$	1.28	.74	1.32	.95	.83	2.02	.44	.91	1.13	.63	.49	
con \bar{X}	11.91	11.25	11.83	11.62	11.68	11.00	11.52	11.90	11.26	11.62	11.63	- .11
$\sigma_{\bar{X}}$	.26	.26	.49	.34	.55	.71	.16	.46	.33	.32	.22	

* Significant at 0.05 level

** Significant at 0.01 level

V* Significant at 0.05 level

+ A higher mean score at Oregon State University

- A higher mean score at the three community colleges

TABLE XXVI														
Mean Scores for First-Term Male Freshmen on the Strong Vocational Interest Blank for Men at Oregon State University by Schools and at Three Oregon Community Colleges														
Schools			Bus. & Tech. 13	Educ. 14	Eng. 36	Hum. 26	Sci. 42	Agri. Forestry Pharmacy 24	Total OSU 155	Astoria 42	Bend 29	Coos Bay 34	Combined Community Colleges 105	OSU vs CC Diff in \bar{X}
N:														
Scale:														
I	Artist	\bar{X} $\sigma_{\bar{X}}$	16.30 2.55	21.42 2.98	25.36 1.62	24.84 2.20	30.04 1.76	28.70 2.27	26.00 ** .91	21.89 1.52	26.62 2.28	22.23 1.51	23.35 1.02	+2.65*
	Psychologist (Rev)	\bar{X} $\sigma_{\bar{X}}$	18.38 1.69	21.35 2.07	29.83 1.56	27.19 1.91	32.50 1.55	23.37 1.60	27.31 ** .80	20.79 1.51	19.72 1.52	22.61 1.49	21.09 .88	+6.22 **
	Architect	\bar{X} $\sigma_{\bar{X}}$	17.69 2.05	19.57 3.43	30.72 1.83	23.92 2.21	32.54 1.61	28.92 2.15	27.72 ** .94	22.48 1.78	25.89 2.01	21.52 1.57	23.13 1.04	+4.59 **
	Physician (Rev)	\bar{X} $\sigma_{\bar{X}}$	19.15 2.10	26.85 3.63	38.52 1.81	28.96 2.24	42.61 1.81	30.96 2.25	34.12 ** 1.06	26.46 2.29	28.03 2.07	27.88 2.02	27.38 1.24	+6.74 **
	Osteopath	\bar{X} $\sigma_{\bar{X}}$	23.46 1.47	29.78 2.94	33.16 1.14	29.50 1.75	34.02 1.68	29.70 1.84	31.10 * .76	28.79 1.96	29.03 1.70	30.67 1.49	29.49 1.01	+1.61
	Dentist	\bar{X} $\sigma_{\bar{X}}$	20.38 2.08	24.42 2.76	33.22 1.44	23.34 2.00	35.02 1.70	29.11 2.00	29.53 ** .88	27.12 1.84	29.62 1.58	25.35 1.71	27.24 1.01	+2.29
	Veterinarian	\bar{X} $\sigma_{\bar{X}}$	20.92 2.78	28.78 3.03	25.83 1.39	24.50 2.29	26.52 1.76	27.70 1.97	25.97 .84	27.38 1.63	30.20 2.28	26.55 1.79	27.91 1.08	-1.94
II	Mathematician	\bar{X} $\sigma_{\bar{X}}$	16.00 3.38	15.92 2.85	30.80 2.03	19.03 2.17	31.35 1.29	22.81 2.03	25.11 ** .97	17.02 1.61	19.89 2.22	19.20 1.79	18.56 1.06	+6.55 **
	Physicist	\bar{X} $\sigma_{\bar{X}}$	10.84 2.85	9.28 2.61	33.11 2.44	13.38 2.32	30.26 1.64	20.88 2.51	23.07 ** 1.20	14.89 1.78	17.34 2.22	15.67 1.90	15.85 1.12	+7.22 **
	Engineer	\bar{X} $\sigma_{\bar{X}}$	24.07 3.18	20.71 2.55	45.05 1.87	22.42 2.46	38.64 1.34	32.14 2.51	33.53 ** 1.12	28.20 2.11	28.48 2.05	25.11 2.42	27.25 1.28	+6.28 **
	Chemist	\bar{X} $\sigma_{\bar{X}}$	22.46 2.97	18.21 2.73	44.69 2.25	24.11 2.09	41.88 1.43	30.55 2.54	33.96 ** 1.19	27.43 1.99	26.96 1.85	25.41 2.23	26.62 1.18	+7.34 **
III	Production Manager	\bar{X} $\sigma_{\bar{X}}$	36.23 2.60	31.14 2.49	40.11 1.05	30.46 1.43	32.23 1.06	31.51 2.02	33.84 ** .69	35.00 1.23	33.24 1.49	31.94 1.56	33.48 .82	+ .36
IV	Farmer	\bar{X} $\sigma_{\bar{X}}$	35.61 3.30	35.00 2.04	42.41 1.44	36.15 2.03	41.26 1.40	42.70 2.12	39.91 * .80	39.66 1.51	42.89 2.02	36.94 1.89	39.67 1.04	+ .24
	Aviator	\bar{X} $\sigma_{\bar{X}}$	38.00 3.48	32.92 2.82	48.61 1.96	37.50 2.36	43.83 1.47	40.74 2.54	41.90 ** .98	41.82 2.07	42.44 1.98	36.00 2.26	40.05 * 1.25	+1.85
	Carpenter	\bar{X} $\sigma_{\bar{X}}$	26.92 4.21	23.50 2.30	33.33 2.04	21.26 2.37	27.09 1.79	28.11 2.03	27.39 * .97	30.12 1.91	32.51 2.14	26.05 2.52	29.45 1.28	-2.06
	Printer	\bar{X} $\sigma_{\bar{X}}$	39.84 2.94	37.71 1.59	43.75 1.94	38.88 2.05	41.14 1.24	40.74 2.54	40.88 .76	42.10 1.38	40.55 1.98	39.08 1.60	40.65 .94	+ .23
	Math. Phys. Sci. Teacher	\bar{X} $\sigma_{\bar{X}}$	34.30 3.41	36.57 2.72	41.30 1.94	32.42 1.67	40.57 1.37	33.11 1.95	37.25 ** .85	35.79 1.74	31.75 2.50	35.05 2.12	34.40 1.20	+2.85
	Ind. Arts Teacher	\bar{X} $\sigma_{\bar{X}}$	21.00 4.28	21.42 3.49	28.30 2.43	17.65 2.07	21.95 1.73	23.00 1.97	22.74 1.00	24.92 2.03	23.62 2.44	20.97 2.51	23.23 1.33	- .49
	Voc. Agr. Teacher	\bar{X} $\sigma_{\bar{X}}$	28.46 4.10	32.64 3.93	28.22 2.01	28.80 2.06	26.80 1.73	31.40 2.09	28.89 .94	30.41 2.00	31.89 2.87	29.20 1.92	30.43 1.28	-1.54
	Policeman	\bar{X} $\sigma_{\bar{X}}$	34.07 3.32	37.14 2.52	32.75 1.58	32.34 1.71	30.57 1.42	32.37 1.89	32.53 .76	37.56 1.35	35.20 2.00	34.02 1.63	35.71 .94	-3.18 **
	Forest Service Man	\bar{X} $\sigma_{\bar{X}}$	22.38 4.35	28.42 3.69	29.08 1.78	26.84 2.14	28.66 1.58	33.33 2.41	28.72 .94	27.89 1.88	28.44 2.00	24.67 1.98	26.98 1.13	+1.74
	YMCA Phys. Director	\bar{X} $\sigma_{\bar{X}}$	28.30 2.97	39.57 2.90	23.13 1.64	30.61 2.34	25.88 1.51	27.33 2.55	27.69 ** .93	28.76 1.66	25.55 2.57	29.64 1.70	28.14 1.12	- .45
	Personnel Director	\bar{X} $\sigma_{\bar{X}}$	28.53 2.82	29.28 3.59	23.20 2.12	29.38 2.66	22.35 1.74	21.77 2.86	24.75 1.03	26.71 1.69	19.75 2.24	25.70 2.07	24.40 * 1.17	+ .35 V*
V	Public Admin.	\bar{X} $\sigma_{\bar{X}}$	30.69 2.21	35.07 2.76	32.36 1.32	37.69 2.11	31.83 1.39	31.85 2.04	33.11 .76	31.84 1.80	27.20 1.74	31.47 1.46	30.40 .99	+2.71 *
	YMCA Secretary	\bar{X} $\sigma_{\bar{X}}$	24.07 2.16	29.92 2.42	14.25 1.71	26.30 2.61	17.02 1.54	20.59 2.62	20.25 ** .96	21.97 1.61	17.31 2.43	24.38 1.83	21.45 * 1.13	-1.20
	Soc. Sci. HS Teacher	\bar{X} $\sigma_{\bar{X}}$	33.38 2.20	42.28 2.62	23.11 1.74	36.50 2.27	25.33 1.42	28.96 2.72	29.44 ** .98	31.97 1.89	26.44 2.43	34.44 1.81	31.22 * 1.20	-1.78
	City School Supt.	\bar{X} $\sigma_{\bar{X}}$	15.30 1.76	28.14 1.68	13.25 1.61	24.38 2.22	17.66 1.68	16.96 2.38	18.37 ** .89	16.07 1.69	10.62 1.75	20.44 1.90	15.98 ** 1.09	+2.39
	Social Worker	\bar{X} $\sigma_{\bar{X}}$	23.69 2.21	31.78 2.50	20.77 1.69	33.38 2.43	24.66 1.66	24.44 2.53	25.72 ** .93	25.71 1.90	20.31 2.16	27.32 1.88	24.71 * 1.16	+1.01
	Minister	\bar{X} $\sigma_{\bar{X}}$	12.46 1.98	23.42 2.52	11.80 1.44	21.07 2.43	17.61 1.69	17.55 2.65	16.94 ** .90	14.71 1.99	10.03 2.15	17.67 1.79	14.37 * 1.17	+2.57
	Musician (Performer)	\bar{X} $\sigma_{\bar{X}}$	28.38 2.71	35.14 2.14	33.47 1.59	36.80 2.00	39.69 1.48	35.00 1.95	35.66 ** .80	32.69 1.46	33.17 1.85	34.00 1.49	33.26 .91	+2.40
VII	CPA	\bar{X} $\sigma_{\bar{X}}$	26.15 2.09	23.78 2.12	25.05 1.59	25.73 2.27	25.97 1.64	18.70 1.55	24.30 .79	21.56 1.51	20.44 1.46	25.41 1.27	22.52 .85	+1.78
VIII	Senior CPA	\bar{X} $\sigma_{\bar{X}}$	41.46 3.30	35.35 2.42	41.44 1.64	36.92 2.15	38.42 1.51	33.44 1.95	37.99 .83	37.05 1.61	33.96 2.28	37.50 1.96	36.32 1.11	+1.67
	Accountant	\bar{X} $\sigma_{\bar{X}}$	39.00 2.97	29.21 2.83	28.52 1.95	25.84 2.38	24.35 1.86	21.81 1.98	26.75 ** .97	28.84 1.69	24.82 2.47	29.97 1.99	28.07 1.17	-1.32
	Office Man	\bar{X} $\sigma_{\bar{X}}$	44.76 2.73	38.21 2.57	29.91 1.95	32.92 2.21	27.69 1.60	28.77 1.97	31.58 ** .93	36.17 1.23	32.75 2.28	37.70 1.75	35.71 * 1.00	-4.13 **
	Purchasing Agent	\bar{X} $\sigma_{\bar{X}}$	39.69 2.05	31.00 2.44	30.94 1.84	28.23 2.10	25.19 1.53	26.44 1.51	28.92 ** .83	34.61 1.82	32.44 1.67	32.94 1.45	33.44 .97	-4.52 **
	Banker	\bar{X} $\sigma_{\bar{X}}$	36.38 2.07	33.92 2.17	25.38 1.40	31.53 1.47	22.97 1.29	27.77 1.40	27.82 ** .71	31.07 1.52	32.86 1.43	33.55 1.37	32.41 .84	-4.59 **
	Mortician	\bar{X} $\sigma_{\bar{X}}$	35.46 1.94	35.28 1.83	25.25 1.34	30.88 1.81	21.97 1.28	28.62 1.60	27.61 ** .74	33.79 1.28	34.06 1.45	34.02 1.57	33.95 .82	-6.34 **
	Pharmacist	\bar{X} $\sigma_{\bar{X}}$	35.23 2.00	35.14 2.16	32.19 1.29	29.80 1.87	31.97 1.33	28.96 1.44	31.70 .66	35.43 1.32	35.27 1.65	35.79 1.44	35.50 .83	-3.80 **
IX	Sales Manager	\bar{X} $\sigma_{\bar{X}}$	35.84 2.95	32.92 2.25	23.86 1.51	30.26 1.82	23.33 1.01	26.40 1.65	27.00 ** .74	31.33 1.72	30.17 1.86	30.64 1.53		

* Significant at 0.05 level

** Significant at 0.01 level

V* Variance Significant at 0.05 level

+ A higher mean score at Oregon State University

- A higher mean score at the three community colleges

TABLE XXVII
Mean Scores for First-Term Female Freshmen on the Strong Vocational Interest Blank for Men
at Oregon State University by Schools and at Three Oregon Community Colleges

Schools:			Bus. & Tech. 12	Educ. 48	Eng. 18	Hum. 29	Sci. 16	Agri. Forestry Pharmacy 5	Total OSU 129	Astoria 21	Bend 15	Coos Bay 24	Combined Community Colleges 60	OSU vs CC Diff in \bar{X}
N:														
Scale														
I	Artist	\bar{X} $\sigma_{\bar{X}}$	24.25 1.68	31.39 1.48	29.83 3.17	31.79 2.02	30.25 1.91	28.57 5.03	30.29 .91	30.47 1.70	35.60 3.31	30.04 2.40	31.62 1.43	-1.33
	Psychologist (Rev)	\bar{X} $\sigma_{\bar{X}}$	23.00 2.47	28.27 1.19	21.50 2.48	27.68 1.48	32.18 2.64	29.71 4.88	27.33 **.82	23.78 1.99	31.06 2.56	26.87 1.94	26.94 *.126	+ .39
	Architect	\bar{X} $\sigma_{\bar{X}}$	23.00 1.89	28.12 1.49	26.11 2.96	27.75 2.20	29.93 1.81	30.71 6.35	27.70 .93	26.00 2.63	31.73 3.24	26.87 2.50	27.84 1.59	- .14
	Physician (Rev)	\bar{X} $\sigma_{\bar{X}}$	21.66 3.11	33.37 1.46	25.11 3.21	29.17 1.93	39.00 2.85	33.00 6.18	31.01 **.105	24.15 2.69	33.20 2.76	34.95 2.53	30.96 **.165	+ .05
	Osteopath	\bar{X} $\sigma_{\bar{X}}$	24.66 3.37	31.22 1.44	29.05 2.84	28.51 1.88	36.62 2.28	29.14 2.51	30.34 *.91	27.78 1.90	26.86 2.60	36.08 1.81	30.98 **.129	- .64
	Dentist	\bar{X} $\sigma_{\bar{X}}$	21.75 1.93	27.00 1.29	24.11 2.48	23.62 2.11	30.81 1.97	28.14 3.56	25.94 *.84	24.36 2.48	25.40 3.23	29.75 1.86	26.86 1.41	- .92
	Veterinarian	\bar{X} $\sigma_{\bar{X}}$	20.16 3.07	24.47 1.44	22.27 3.03	18.93 2.03	26.00 2.81	20.00 3.52	22.51 *.95	20.78 1.92	20.20 3.62	27.00 2.02	23.20 1.44	- .69
	II	Mathematician	\bar{X} $\sigma_{\bar{X}}$	15.08 2.03	22.62 1.20	15.88 1.91	19.34 1.72	24.81 2.28	24.00 5.26	20.70 **.80	18.42 2.48	26.53 2.71	19.58 2.29	21.00 *.1.47	-2.58 V*
Physicist		\bar{X} $\sigma_{\bar{X}}$	6.08 1.49	12.04 1.53	6.61 1.83	8.44 1.93	18.87 2.73	15.85 6.64	11.12 **.94	8.94 2.89	16.80 3.43	11.58 2.78	12.36 1.76	- .94
Engineer		\bar{X} $\sigma_{\bar{X}}$	11.66 1.79	16.31 1.39	11.83 1.77	12.17 1.70	25.06 2.50	23.28 6.36	15.93 **.89	10.57 2.99	16.80 2.98	14.20 2.42	13.68 1.60	+2.25
Chemist		\bar{X} $\sigma_{\bar{X}}$	14.66 1.90	21.47 1.33	15.27 2.25	17.86 1.75	31.00 2.36	28.00 6.21	20.82 **.92	17.10 3.10	26.46 3.40	21.58 3.00	21.37 *.1.86	- .55
III	Production Manager	\bar{X} $\sigma_{\bar{X}}$	24.91 1.15	22.95 .73	23.27 1.44	21.34 1.01	27.93 1.29	25.00 1.59	23.64 **.48	21.26 1.45	21.46 1.67	23.25 1.28	22.13 .83	+1.51
IV	Farmer	\bar{X} $\sigma_{\bar{X}}$	29.16 2.85	32.64 1.34	28.72 2.37	27.89 1.67	33.43 2.54	31.42 3.39	30.85 .83	31.89 2.25	32.40 2.54	32.50 1.99	32.27 1.26	-1.42
	Aviator	\bar{X} $\sigma_{\bar{X}}$	19.58 2.05	26.41 1.39	19.72 2.19	20.17 1.44	27.75 2.55	22.71 5.12	23.58 **.85	17.36 2.81	22.13 2.41	23.62 2.62	21.18 **.1.57	+2.40
	Carpenter	\bar{X} $\sigma_{\bar{X}}$	18.16 1.95	19.00 1.45	17.55 2.70	14.10 1.47	19.93 2.76	17.00 5.40	17.74 *.86	19.89 2.99	21.66 2.76	20.00 1.75	20.39 1.39	-2.65
	Printer	\bar{X} $\sigma_{\bar{X}}$	35.75 1.97	37.93 .97	34.66 1.59	36.51 1.23	36.25 2.11	37.57 5.21	36.83 *.63	38.15 2.42	39.80 1.56	39.12 1.58	38.98 1.09	-2.15
	Math. Phys. Sci. Teacher	\bar{X} $\sigma_{\bar{X}}$	30.33 2.65	33.29 1.26	28.05 2.83	28.27 1.47	36.56 2.05	35.57 3.29	31.89 **.84	30.57 2.16	32.66 2.78	34.33 2.33	32.67 1.39	- .78
	Ind. Arts Teacher	\bar{X} $\sigma_{\bar{X}}$	10.91 3.14	14.06 1.51	11.94 2.81	6.93 1.72	14.62 2.62	14.28 3.53	12.16 *.94	13.47 2.56	12.53 3.02	13.33 2.22	13.17 1.44	-1.01
	Voc. Ag. Teacher	\bar{X} $\sigma_{\bar{X}}$	24.75 3.27	26.47 1.87	22.88 3.50	18.68 2.25	24.62 2.74	22.00 3.87	23.74 *.110	24.73 2.29	22.86 3.15	26.62 2.25	25.03 1.43	-1.29
	Policeman	\bar{X} $\sigma_{\bar{X}}$	25.83 2.11	29.00 1.30	24.66 2.60	24.20 1.19	27.81 1.82	26.57 4.58	26.87 *.76	25.73 1.97	24.53 2.55	31.20 1.83	27.68 *.1.24	- .81
	Forest Service Man	\bar{X} $\sigma_{\bar{X}}$	14.41 2.37	21.39 1.64	15.38 3.28	16.27 1.57	25.25 2.19	21.14 3.88	19.32 *.95	15.26 2.53	16.80 3.27	21.62 2.62	18.29 1.62	+1.03
	V	YMCA Phys. Director	\bar{X} $\sigma_{\bar{X}}$	30.08 2.63	36.45 1.72	32.88 2.94	30.06 1.66	32.50 2.74	33.14 3.49	33.39 *.96	32.00 1.95	28.33 3.46	37.33 2.12	33.25 *.1.46	+ .14
Personnel Director		\bar{X} $\sigma_{\bar{X}}$	29.50 3.30	26.64 1.68	25.66 2.49	26.93 1.88	27.68 2.66	30.28 4.55	27.22 *.94	24.52 2.20	22.66 3.17	27.20 2.33	25.15 1.45	+2.07
Public Admin.		\bar{X} $\sigma_{\bar{X}}$	32.75 2.75	34.22 1.37	31.44 2.19	34.27 1.50	37.93 1.63	33.42 3.91	34.19 *.77	30.10 1.91	31.26 3.16	34.87 1.82	32.37 1.28	+1.82
YMCA Secretary		\bar{X} $\sigma_{\bar{X}}$	29.91 2.01	30.89 1.76	32.94 2.42	31.13 1.83	28.56 2.94	30.71 3.29	30.88 *.93	33.36 2.04	28.06 3.32	32.62 2.24	31.68 1.43	- .80
Soc. Sci. HS Teacher		\bar{X} $\sigma_{\bar{X}}$	41.16 1.83	41.75 1.69	39.55 2.49	41.13 1.60	35.00 2.45	39.00 5.68	40.30 *.90	42.84 2.53	38.00 3.09	41.45 2.45	41.01 1.53	- .71
City School Supt.		\bar{X} $\sigma_{\bar{X}}$	25.83 1.70	29.16 1.59	24.22 2.10	28.13 1.52	26.00 2.67	29.00 4.61	27.59 *.84	26.94 2.48	25.06 2.87	28.16 1.87	26.96 1.33	+ .63
Social Worker		\bar{X} $\sigma_{\bar{X}}$	33.50 3.11	36.16 1.63	34.27 2.34	37.37 1.84	35.06 2.81	32.71 2.71	35.61 *.91	35.21 2.46	35.20 3.08	36.91 1.93	35.91 1.37	- .30 V*
Minister		\bar{X} $\sigma_{\bar{X}}$	23.41 2.92	30.54 1.55	28.11 2.61	30.27 1.95	29.12 2.92	29.57 2.05	29.30 *.92	31.47 2.13	29.40 3.17	32.29 1.73	31.27 1.28	-1.97
VI	Musician (Performer)	\bar{X} $\sigma_{\bar{X}}$	38.25 1.77	45.93 1.17	42.05 2.19	43.17 1.80	40.75 2.75	40.14 4.07	43.20 *.80	42.94 2.09	49.46 2.69	45.62 1.74	45.74 *.1.23	-2.54
VII	CPA	\bar{X} $\sigma_{\bar{X}}$	29.91 1.88	26.08 1.03	22.77 2.10	28.51 1.61	27.87 2.36	27.14 2.16	26.74 *.70	22.73 1.97	28.93 2.54	24.70 1.46	25.15 1.13	+1.59
VIII	Senior CPA	\bar{X} $\sigma_{\bar{X}}$	33.08 1.98	32.06 1.31	26.44 2.98	28.34 1.55	33.56 1.77	32.57 4.35	30.89 *.83	26.05 1.92	30.13 2.94	32.62 1.90	29.82 1.29	+1.07
	Accountant	\bar{X} $\sigma_{\bar{X}}$	36.50 1.94	25.79 1.45	26.55 2.99	25.55 2.11	26.75 2.59	27.57 2.84	27.09 *.93	26.15 1.54	23.13 3.76	28.45 2.27	26.32 1.44	+ .77
	Office Man	\bar{X} $\sigma_{\bar{X}}$	44.83 1.88	33.91 1.42	37.16 3.36	35.55 1.87	33.06 2.28	36.28 4.62	35.80 *.93	38.00 1.66	32.93 2.77	37.70 2.19	36.56 1.29	- .76
	Purchasing Agent	\bar{X} $\sigma_{\bar{X}}$	33.66 1.64	20.79 1.22	28.50 2.40	23.00 1.85	23.75 2.23	22.71 2.40	24.01 **.83	23.21 2.18	18.60 2.28	21.58 1.98	21.34 1.24	+2.67
	Banker	\bar{X} $\sigma_{\bar{X}}$	41.00 2.70	30.20 1.24	34.38 2.64	33.00 1.31	28.75 2.29	26.57 4.10	32.00 **.82	32.68 1.93	30.46 2.60	32.54 1.84	32.05 1.18	- .05
	Mortician	\bar{X} $\sigma_{\bar{X}}$	41.41 1.96	34.97 1.10	43.66 1.80	36.55 1.68	33.00 1.55	30.71 3.80	36.63 **.75	37.36 2.00	30.20 2.73	37.29 1.99	35.48 *.1.31	-1.15
	Pharmacist	\bar{X} $\sigma_{\bar{X}}$	37.66 2.07	33.04 1.02	40.16 1.94	33.72 1.45	36.37 1.51	30.85 3.86	34.88 **.68	33.84 1.47	31.26 2.67	37.45 1.51	34.67 *.1.08	+ .21
	IX	Sales Manager	\bar{X} $\sigma_{\bar{X}}$	35.58 1.82	27.10 .95	34.66 2.19	29.62 1.94	26.56 2.09	26.85 2.20	29.30 **.76	28.05 2.33	26.40 2.10	28.33 1.82	27.74 1.18	+1.56
Real Estate Salesman		\bar{X} $\sigma_{\bar{X}}$	41.58 1.96	37.29 .79	42.72 1.76	39.96 1.37	33.50 1.69	33.42 3.56	38.24 **.64	38.68 2.24	35.86 2.10	36.75 1.66	37.15 1.13	+1.09
Life Ins. Salesman		\bar{X} $\sigma_{\bar{X}}$	38.33 2.37	33.81 .98	39.38 1.76	36.68 1.80	30.50 2.40	30.14 3.80	34.92 **.76	36.57 2.76	31.06 2.19	35.87 2.09	34.86 1.38	+ .06 V*
X	Advertising Man	\bar{X} $\sigma_{\bar{X}}$	38.08 2.48	37.85 1.09	41.00 2.93	41.06 1.73	33.31 2.37	36.14 2.14	38.25 *.81	38.00 1.92	39.20 2.31	36.58 1.57	37.72 1.07	+ .53
	Lawyer	\bar{X} $\sigma_{\bar{X}}$	30.75 1.88	33.29 1.03	30.16 2.12	35.86 1.30	32.68 2.13	30.85 2.8						

TABLE XXVIII

The Average Difference in Mean Scores for First-Term Male and Female Freshmen on the Strong Vocational Interest Inventory
for Men at Oregon State University by Schools and at Three Oregon Community Colleges

	Major Schools at Oregon State University										Agri. Forestry Pharmacy	
	Bus. & Tech.		Educ.		Eng.	Home Ec.	Hum.		Science		M	F
	M	F	M	F	M	F	M	F	M	F		
Difference in Mean Scores between the Community Colleges and Major Schools *	93.36	-109.92	64.25	-16.86	98.86	-94.87	66.33	-71.56	98.92	-48.69	70.24	-58.69
	-61.16	86.06	-101.45	37.08	-155.41	44.66	-85.41	32.46	-147.09	108.14	-60.00	58.59
Absolute Difference	154.52	195.98	165.70	53.94	254.27	139.53	151.74	104.02	246.01	156.83	130.24	117.28
Average Scale Difference	3.44	4.35	3.68	1.20	5.65	3.10	3.37	2.31	5.46	3.48	2.90	2.61

* A minus (-) indicates that the Community College score was less than that at Oregon State University.