

R E P O R T R E S U M E S

ED 011 916

VT 000 035

THE ENTERING STUDENT, COLLEGE OF AGRICULTURE, A STUDY OF THE BACKGROUNDS, MOTIVATIONS, AND GOALS OF ENTERING STUDENTS IN THE COLLEGE OF AGRICULTURE AT DAVIS IN 1963 AND 1964.

BY- REGAN, MARY C. THOMPSON, O. E.

CALIFORNIA UNIV., DAVIS

REPORT NUMBER RES-MONGR-1

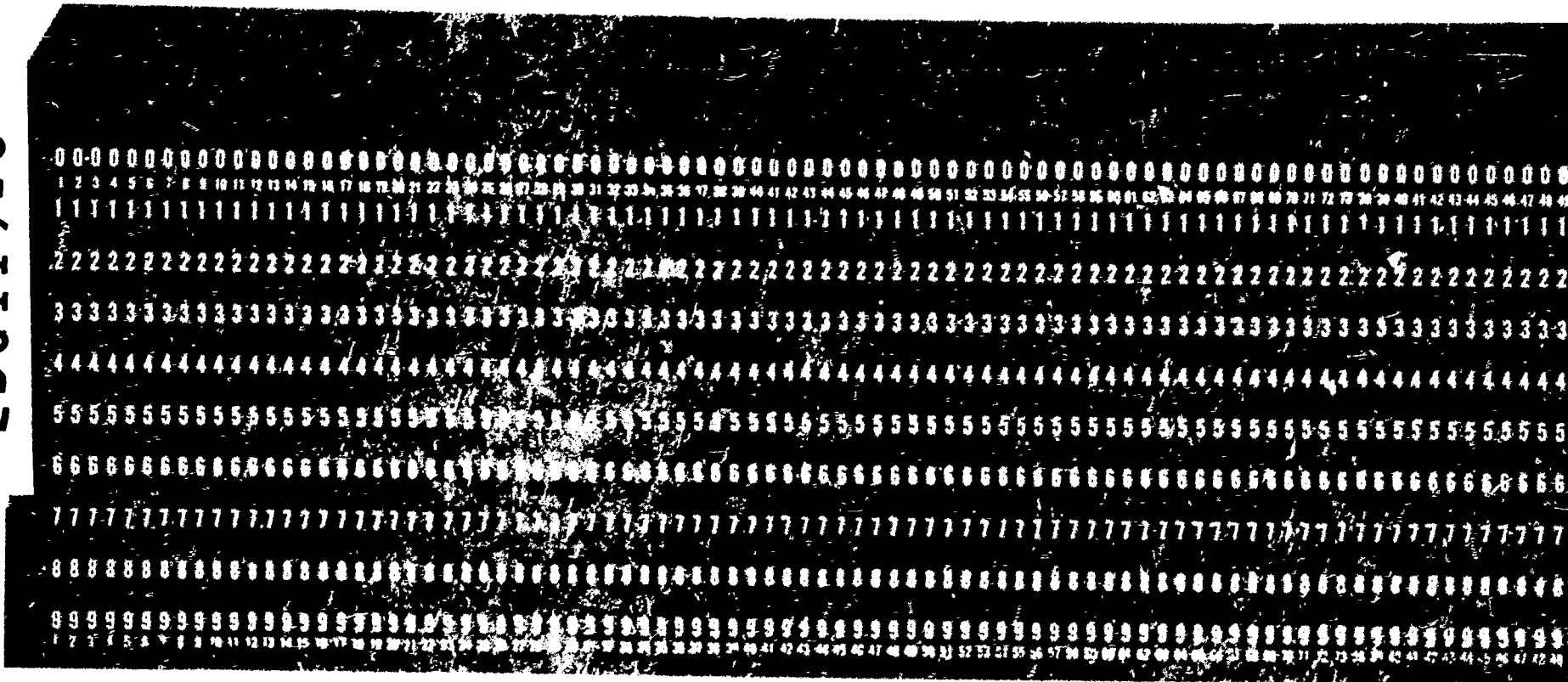
PUB DATE DEC 65

EDRS PRICE MF-\$0.09 HC-\$1.32 33P.

DESCRIPTORS- *COLLEGE STUDENTS, *VOCATIONAL INTERESTS, *STUDENT ATTITUDES, GRADE POINT AVERAGE, FAMILY BACKGROUND, HOME ECONOMICS, TRANSFER STUDENTS, VETERINARY MEDICINE, STUDENT MOTIVATION, *PERSONALITY ASSESSMENT, ENVIRONMENTAL INFLUENCES, *AGRICULTURE,

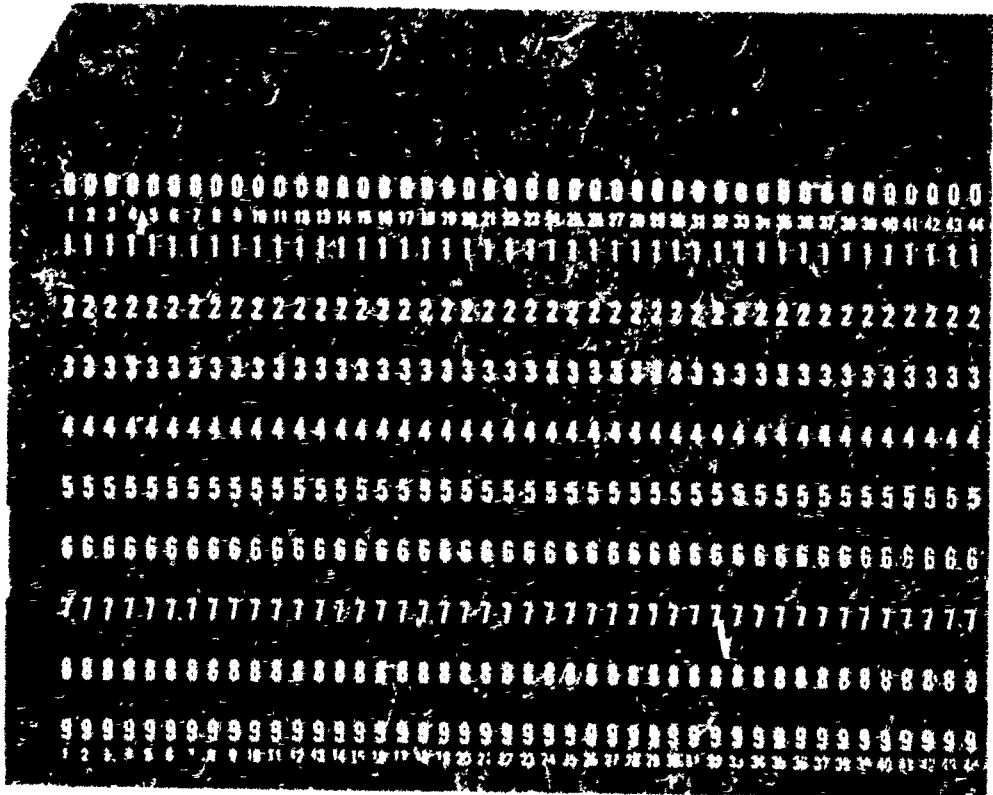
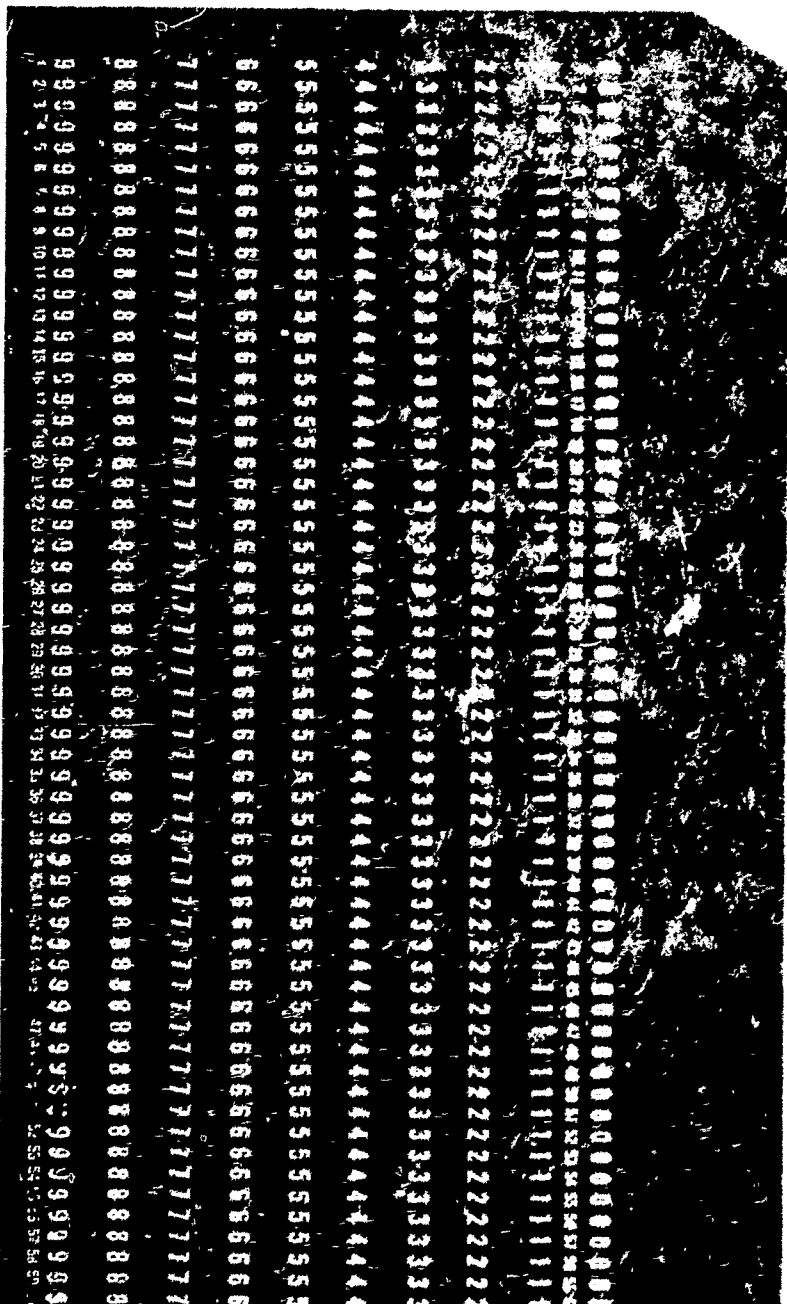
BIOGRAPHICAL, ATTITUDE, AND PERSONALITY INVENTORIES WERE ADMINISTERED TO FRESHMEN COLLEGE STUDENTS IN ALL FIELDS IN THE FALL OF 1963 AND 1964 TO IDENTIFY BACKGROUND, PRESENT ATTITUDES, AND PERSONALITY FACTORS OF THE AGRICULTURAL STUDENT. IN ADDITION, THEIR ACADEMIC PERFORMANCE IN COLLEGE HAD BEEN FOLLOWED. THE STUDENTS IN AGRICULTURE WERE GROUPED ACCORDING TO THE MAJOR SUBDIVISIONS OF THE COLLEGE--PREVETERINARY MEDICINE, AGRICULTURAL SCIENCES, AND HOME ECONOMICS. COMPARISONS WERE MADE WITH THE COLLEGES OF LETTERS, AND SCIENCE AND ENGINEERING. THE AGRICULTURE STUDENT WAS UNLIKE HIS PEERS IN OTHER COLLEGES. HIS APPRECIATION OF SCIENCE WAS LIMITED PRIMARILY TO ITS APPLICATION IN SOLVING IMMEDIATE PROBLEMS. HE WAS FRAGMATIC AND THOUGHT IN PRACTICAL RATHER THAN ABSTRACT TERMS. HE LEANED TOWARD CONSERVATISM IN POLITICS AND IN HIS GENERAL ORIENTATION. HE MADE HIS DECISION TO ENROLL IN AGRICULTURE EARLIER THAN ENTERING STUDENTS IN OTHER COLLEGES, AND HE VIEWED COLLEGE AS PREPARATION FOR A VOCATION. THE PREVETERINARY MEDICINE STUDENT WAS MORE COMMITTEED TO HIS MAJOR, TO GRADUATION, AND TO GRADUATE SCHOOL THAN THE AGRICULTURAL SCIENCE STUDENT. THE HOME ECONOMICS STUDENT WAS LESS INTERESTED IN SCIENCE, MORE ALTRUISTIC, MORE DEPENDENT UPON OTHERS FOR GUIDANCE, AND MORE CONSERVATIVE THAN HER FELLOW AGRICULTURE STUDENTS. THE TRADITIONAL 4-YEAR UNDERGRADUATE CURRICULUM SHOULD BE RESTRUCTURED TO MAKE IT MORE LIBERAL. (PS)

ED011916



THE ENTERING STUDENT COLLEGE OF AGRICULTURE

MARY C. REGAN
ORVILLE E. THOMPSON



DEPARTMENT OF
AGRICULTURAL EDUCATION
UNIVERSITY OF CALIFORNIA
DAVIS CAMPUS

Research Monograph #1

THE ENTERING STUDENT
College of Agriculture

A study of the backgrounds, motivations, and goals of entering students in the College of Agriculture at Davis in 1963 and 1964.

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Mary C. Regan and O. E. Thompson
Department of Agricultural Education
University of California, Davis

December, 1965

This study has been supported by funds from the Agricultural Experiment Station, Campus Research Committee, and the Office of the Chancellor.

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION: The Entering Student - College of Agriculture	1
CHAPTER I: The Student, His Background, and His Goals	2
CHAPTER II: The Student and His Motivations	6
CHAPTER III: The Student and His Environment	10
CHAPTER IV: The Student and His Occupational Values	12
SUMMARY AND IMPLICATIONS	14
APPENDIX I: Student Traffic and Performance	16
APPENDIX II: The College of Agriculture Transfer Student	18
APPENDIX III: Tables	19
APPENDIX IV: Personality Profiles	22
APPENDIX V: Description of Scales	27

INTRODUCTION

The Entering Student - College of Agriculture

The agricultural student is immersed in change; his environment is expanding rapidly with the physical growth of the University and the growing diversity among his classmates. How does he fare in the transitions of the mid-sixties as Davis, along with the smaller campuses, absorbs the major increase in the numbers of University students? How does he compare with his fellow students campus-wide? Are his backgrounds, goals, motivations, and values distinct from those of students in other colleges and majors?

To answer these and other questions--to identify the agricultural student in terms of background and present attitudes and personality factors--freshman students entering Davis in all fields were tested in the fall of 1963 and 1964. In addition, their academic performance in college has been followed.

Biographical, attitude, and personality inventories were administered to all entering freshmen. The biographical inventory gathered certain information on the student's background, with a special section assessing his attitudes and aspirations. The Omnibus Personality Inventory (O.P.I.)¹ measures intellectual and motivational personality attributes directly relevant to the college population. College grade-point averages provided an indication of the student's academic aptitude and achievement.

For convenience, the students in the College of Agriculture (Ag) were grouped according to the major subdivisions of the college; preveterinary medicine (prevet), the agricultural sciences (ag sci), and home economics (home ec). Comparisons are made with the colleges of Letters and Science (L&S) and Engineering (Eng). Unless otherwise specified, the results reported are based primarily on the students entering in the fall of 1964.

¹Paul Heist et al., Center for the Study of Higher Education, University of California, Berkeley.

CHAPTER I

The Student, His Background, and His Goals

Most Davis students come from an urban background. Three out of four have graduated from large high schools and live in cities with populations of over 10,000. Of Ag students, only those in ag sci tend to come from the rural areas, with about one out of two from small high schools. Students in prevet and home ec, in contrast, come from larger cities.

All Davis students tend to come from stable home environments; nearly all lived with both parents. For a majority of them, college was the first major venture away from home.

Over two-thirds of the mothers of all prevet and ag sci women worked outside their homes for pay. This proportion differs from that for ag sci men and L&S students of both sexes: only about half of their mothers worked outside the home. Almost without exception the mothers were employed in white-collar positions: secretarial, clerical, business, and teaching.

The average family income for all freshmen was over \$12,250. The parents of L&S students, however, had incomes one to two thousand dollars higher than those of the parents of Ag and Eng students, whose mean incomes were about equal. The educational level of the parents was also high.

Ag sci women come from homes in which over two-thirds of the fathers and one-half of the mothers had college degrees. In contrast, only 40 percent of the fathers of home ec women had a college degree. Nearly half the fathers and over one-third of the mothers of other Davis freshmen were college graduates, and almost half of the fathers with degrees had done graduate work. More than two-thirds of the fathers had at least some college experience. The state average of adult males with college degrees, in contrast, is only 9 percent.

Most fathers of Davis students were employed in one of three major occupational categories: white-collar, merchant, or professional. Practically none were in the manual, semi-skilled or skilled, or artisan groups. A few (6.5 percent) were farmers. These tended to be fathers

of ag sci freshmen. Prevet students, coming from urban areas, had few parents involved in agricultural occupations.

Fathers of ag sci freshman men tended to work for themselves. Since they come primarily from an agricultural rural environment, it may be assumed that, in the main, they own their own farms or businesses. In contrast, less than 30 percent of the fathers of prevet students and of home ec and ag sci women were self-employed, as was also true of other students at Davis.

Politics. Students in general tended to come from homes which were predominantly Republican--about 45 percent of the fathers Republican and 32 percent Democrat. Family political background did not seem related to the college which students chose to enter.

The students themselves, however, differed in political orientation when grouped by college and major. Students tended to view themselves as "independent" on most political matters. In general, only one-fourth considered themselves Democrats, and another one-fourth considered themselves Republicans. The other half declared themselves "independent," apparently not yet having their allegiances and preferring "to consider each issue and each campaign on its own merits."

In general, Ag men were more conservative in their political beliefs than L&S men. Differences between ag sci and prevet students were only small. Home ec students lacked the political commitment of other Ag students, choosing the middle of the road as a basic position.

Two-thirds of the students indicated that if they had been able to vote for president, they would have supported Johnson. Goldwater supporters were predominantly men, with the highest proportion--45 percent--being prevet.

Religion. Davis students tend to come from protestant backgrounds, primarily Methodist, Presbyterian, or Episcopalian. Less than 20 percent come from homes in which the father is Roman Catholic. This division remains essentially the same among students.

In religious beliefs, the students tend to follow the family patterns, with more than three out of five having protestant affiliation. Home ec students seem to find religion an important source of satisfaction; 70 percent attend church at least several times a month. Prevet men are the least dedicated to religious practices, with 55 percent attending only several times a year or never.

Decision. The age at which the decision to enroll at Davis was

made related to the choice of major. While only 36 percent of all freshmen said they decided on Davis before the senior year in high school, 48 percent of prevet men and 60 percent of prevet women had decided on Davis in or before junior high school. For the most part, ag sci and home ec majors made their decisions by the sophomore or junior year.

The student's reasons for selecting Davis were related to his choice of college or major. A desire to prepare for a specific occupation was given as a reason by over 90 percent of prevet majors, by 70 percent in home ec, by 59 percent in ag sci, but by less than 35 percent in L&S. The last group tended to base its decision more on general training objectives and the desire to use Davis as a place to start college without a strong dedication to a curriculum or the institution.

Low tuition was not a particularly important reason to Ag students, but was of some concern to L&S and Eng students, because of alternative universities which have higher tuition rates. Neither family tradition nor friends appear to be strong incentives to enroll at Davis. However, the smallness of the campus is especially appealing to those in L&S, Eng, and home ec. The main attraction to the University for students in all majors, especially in Ag, is the reputation of the University and the subjects offered.

Goals. The educational goals that freshmen desired to achieve during college tended to agree with their reasons for attending Davis. Most Ag students give high priority to the goal of learning techniques that will be needed in a career. This was also true for Eng students. L&S was the only group that placed much emphasis upon general education as a primary goal in college, and even within this group the men placed twice as much emphasis upon careers as upon general education. That emphasis was reversed for the women. The second-most important educational goal for Ag students was to learn how to get along with people. The goal of preparation for happy marriage and family life was listed in first place by only 7 percent of the entire group of freshmen. Ag sci and home ec women gave this the highest rating, but it was rated first by less than 20 percent. Generally, freshmen do not feel that preparation for marriage is a function of college education.

The strength of the student's dedication to enter a particular college or major varied among the groups. The groups most dedicated were prevet and women in L&S. Those who had been the most indecisive about which major and college to attend were Ag and Eng students. The reason is perhaps the availability of these majors in the state college and junior college systems, where career orientation receives greater stress.

More men than women placed personal importance upon graduation from college except in prevet, where 80 percent of the women stated that graduation was extremely important. By contrast, 30 percent of the women in ag sci rated graduation as extremely important. These figures compare with 80 percent of prevet and ag sci men, and 50 percent in home ec.

Few Ag students planned to transfer, although many in L&S indicated that they were considering a move to other institutions.

Graduate work was anticipated by three-fourths of the Davis freshmen. Except in prevet, the proportion of students planning graduate work was considerably lower in Ag than the all-campus average.

CHAPTER II

The Student and His Motivations

From data gathered through an attitude questionnaire and the O.P.I., it can be concluded that the Ag student not only comes from an environment different from that of L&S and Eng students, but is different in personality characteristics and in his views of himself.

Freshmen entering at Davis regarded themselves as more mature, more academic, and more altruistic than their high school classmates, and at the same time more ready for and capable of assuming responsibility. They felt themselves more keenly interested in science and scientific activities and better able to cope with problems of a practical nature. Humanitarian values were also important.

Differences were apparent even between the various majors within colleges, but, generally speaking, Ag students regarded themselves as strongest on practical and scientific orientation and helping their fellow men. Few rated themselves as having interests above average in literature, music, politics, or world affairs.

Student self-comparisons with their high school peers were highly indicative of the larger personality traits measured by the O.P.I. In addition, self-ratings and personality scores were related to certain predispositions for choice of major in college.

The O.P.I. focuses on measurement of the intellectual, liberal, and social-emotional aspects of personality (the specific scales are defined in Appendix V).

On the basis of self-rating and O.P.I. scores, majors in home ec, prevet, and ag sci described themselves as follows:

Home Economics. The home ec student stands below the "average" entering student at Davis in intellectual orientation toward learning. Her motivation for education could be described as involving some interest in academic matters and achievement, but these would be primarily a means toward some vocational or practical end.

In comparison with all other entering Davis freshmen on specific scales measuring intellectual orientation, the mean for home ec students on Theoretical Orientation stands at the 25th percentile. On the

Complexity scale the group mean is at the 36th percentile. In Estheticism (see Appendix IV, Figure I), however, home ec students are at the 54th percentile.

A measure of liberal orientation (Autonomy) reveals that, on the average, home ec students are somewhat more dependent upon authority, less open-minded, and more structured than other Davis students; their mean score falls at the 27th percentile. Their Religious Liberalism (slightly above the 27th percentile) also was below the Davis norm. A major source of satisfaction and guidance in their life experience is probably their commitment to religious beliefs and ideals.

Women entering home ec tend to be somewhat less impulsive and imaginative than their counterparts, with a mean score on Impulse Expression at approximately the 31st percentile, but they tend to be somewhat more socially extroverted than the "average" Davis student.

Major motivational orientations of home ec students clustered on Practical Outlook and Altruism, above the 60th percentile. These women tend to view the world in concrete terms. Their interests lie primarily in practical and applied activities. Ideas are evaluated almost solely in terms of utility. They do have a concern for the welfare and feelings of others, however, and are warm and trusting in interpersonal relations.

When home ec students were asked how they compared with their high school peers, over half felt that they were superior to their high school counterparts in their desire to help other people and their ability to get along with others. Almost 60 percent felt that they were above average in readiness to assume responsibility. They were generally above average in their ability to work with their hands, to cope with practical problems, and to organize and plan, again emphasizing their practical orientation.

Less than one-tenth of the home ec students felt superior to their high school peers in scientific interests, even though over three-fourths of the prevet students and over one-half of the ag sci students felt they were above average in their interest in science.

Of students entering home ec in 1963, about one-half remained after three semesters. In intellectual and liberal orientation, these persisting students had personality patterns almost identical with those of entering home ec students (Appendix IV, Figure II). Significant differences occurred in the social-emotional adjustment patterns. Students remaining in home ec

were at the 65th percentile on Social Introversion.

Mean scores on Interest in Ideas were lower for students who transferred from home ec to L&S than for those who stayed (below the 16th percentile), and were more esthetically oriented (at the 80th percentile). These transfers were also more socially extroverted than entering home ec students.

These data indicate the possibility that students who enter home ec because of their interest in and desire to work with people might not see the application of the curriculum to their vocational orientation. Thus, one possible cause for attrition is that their attitudes and motivational patterns do not mesh with the scientific orientation of home ec.

Preveterinary Medicine. Freshmen entering prevet also differ from the "average" entering freshmen at Davis and, further, prevet women differ somewhat from prevet men in intellectual disposition. Prevet women have mean scores above average on all scales that measure intellectual orientation. Scores on Theoretical Orientation and on Complexity are at the 66th and 69th percentile and indicate that prevet women approach education from an experimental standpoint (Appendix IV, Figure III). These women are average in liberal and social-emotional orientation except for Social Introversion, on which they measure at the 62nd percentile.

As freshmen, prevet men were above average on the scale measuring scientific interests but below average on other scales measuring intellectual orientation. Mean scores stood at the 69th percentile on Practical Outlook and at the 66th on Impulse Expression, indicating a more pragmatic and applied orientation toward education than that of prevet women. Prevet students rated themselves above their high school peers in interest in science and in ability to handle animals. Prevet women generally appreciated classical music and serious literature, unlike prevet men.

The prevet women who withdrew from the University tended to be low on Liberal Orientation (at the 30th percentile). Other personality dimensions tended to be similar to the general pattern for women entering prevet (Appendix IV, Figure IV).

Prevet women who changed their major were higher than entering prevet women on the Autonomy and the Interest in Ideas scales, with mean scores at the 70th percentile. Also, these women were less interested in social interaction with others and felt a degree of social alienation.

Prevet men who withdrew from the University tended to have a non-intellectual orientation toward learning. In fact, for these students the

mean score on Interest in Ideas was a standard deviation below (16th percentile) that for all entering prevet men, and was at the 12th percentile in comparison with all entering freshmen. The men who changed majors tended to be less committed to scientific activities than those who remained (Appendix IV, Figure V).

Agricultural Sciences. Men and women entering ag sci as freshmen were similar to each other in intellectual orientation, with scores falling near the average for all entering freshmen. The men, however, were less interested in the world of ideas and art and literature than the women, and less dependent. Both the men and women were near the mean on Theoretical Orientation.

The women who withdrew from ag sci had mean scores at the 85th percentile on Complexity and at the 94th percentile on Social Alienation and the 90th percentile on Social Introversion. Those who changed majors were somewhat more interested in the world of ideas than those who did not, were more independent, and tended to adjust well to their social environment. Men who withdrew from ag sci tended to be less committed to an intellectual orientation to learning than those who remained.

Among entering ag sci students the men felt themselves above the average of their high school peers in interest in science, machinery, sports, and popular music, as well as in the ability to cope with both practical problems and abstract theory. Few, however, felt above average in their readiness to assume responsibility and their ability to organize and plan.

The women entering ag sci felt themselves above average in interest in science and in the ability to handle animals. Few of the women felt themselves more capable than their high school peers in the ability to work with their hands or cope with practical problems. They also indicated little interest in popular music and had little concern for community problems.

CHAPTER III

The Student and His Environment

Entering freshmen have certain preconceived notions about what the students in the various colleges within the University are like. These preconceived images probably affect the reasons why a student does or does not enter a certain college or major. To determine the college stereotypes which students have, they were asked to indicate whether certain attributes were more true of students in Ag, Eng, and L&S.

As described by all entering freshmen, the colleges were separated into three distinct environments.

Ag students were described as friendly and helpful to others and somewhat tolerant of people from different backgrounds. These students were seen as vocationally oriented, but not interested in making a high income. Further, Ag students were not seen as competitors for high grades.

Eng students were typed as materialistic and vocational, interested in making a lot of money and sure of what they wanted to do in life. They were not seen as altruistic or social in their orientation to college.

L&S students were seen in the environment of having a good time in college. They were also seen as competitors for high grades, interested in classical music and literature, concerned about the nation and the world, and willing to accept new and unusual ideas.

In all cases, students actually enrolling in these colleges concurred with the general images of their colleges.

Students entering Ag varied some among themselves in how they saw their environment. While only 3 percent of all students saw Ag students as competitors for high grades, 21 percent of the prevet students felt this was a part of the environment. A willingness to accept new and unusual ideas was felt to be more descriptive of Ag than of the other colleges by 25 percent of the prevet and home ec students and 15 percent of other Ag students, while only 7 percent of all freshmen felt this to be a unique attribute of Ag. Also, well over 70 percent of the home ec, prevet, and ag sci students, as compared to 50 percent of all students, felt that Ag students were more friendly and helpful than were students in

the other colleges. Being tolerant of people from other backgrounds was thought descriptive by 60 percent of the home ec students, as compared to 35 percent of all freshmen. Eighteen percent of the home ec majors also felt that Ag students were more concerned than students in other colleges about the state of the nation and world, as compared to 5 percent of all freshmen and only 4 percent of the men in ag sci.

Personal Problems. For some students, college is their first real experience away from home. Decisions relative to personal, social, and intellectual life become more complex as the student enters the college environment. Most students indicated that they would seek advice first from their parents. Friends at college were the second source of assistance, with less than 5 percent choosing the Dean's office or the Counseling Service. Faculty was also considered a source of help by 5 percent of the students, while 8 percent would turn first to their minister.

Although men are less prone to seek advice from parents than are women students, they still tend to feel that parents are a prime source of advice. The prevet male seems to have a closer rapport with his faculty adviser than do other students, for over twice as many prevet students as other students would consider faculty as a prime source of advice for personal problems.

CHAPTER IV

The Student and His Occupational Values

To ascertain the degree of importance of future areas of life, students were asked to rank in order of importance things or activities which would give them the most satisfaction. Family relationships were considered first in importance by the entering students, and career or occupation second in importance. Students felt that leisure time and recreational activities were the third-most satisfying activities that would be facing them in the future.

Strong commitment to careers tends to be related to the professions. Prevet and Eng students felt their work would give them the most satisfaction in life. Family relationships were considered most important by ag sci students, but career was a close second for ag sci men. Home ec majors also saw family relationships as the most satisfying activity in life.

L&S men were split about evenly on whether they felt family relationships or career would give them the most satisfaction, but L&S women were more family-oriented than career-oriented.

In general, except for prevet women, entering freshman women do see family relationships as giving them more satisfaction than a career. Men, though career-oriented, also tend to value family relationships as highly important.

When students say that they expect their careers to provide a major source of satisfaction in their lives, just what kinds of satisfactions do they have in mind? The Davis students feel that values which permit self-expression and altruism are among the most valuable to attain. Almost all students felt it was important to have a job that was interesting, one in which they could express their talents, skills, and abilities, and one in which they could be of service. Freshmen also felt that it was important to have a job in which they could work more or less on their own.

Self-expression and contribution to others were more important goals than status or money. An opportunity to be boss or leader or to make a name for themselves was not an important vocational goal. On the other hand, a job where they could be looked on highly by their fellow men was considered important.

Prevet men differed in that they felt that the opportunity to be boss was an important aspect of the job.

Job security and high pay were of much more importance to individuals going into the professions than to most students. For example, 74 percent of the prevet students and 71 percent of the Eng students felt that job security was an important factor, and money was also important to them.

In general, women were more interested than were men in obtaining a job that would be helpful to others, but home ec and prevet women felt more strongly than other women that this value was important.

SUMMARY AND IMPLICATIONS

The Ag student is unlike his peers in other colleges. His appreciation of science is limited primarily to its application in solving immediate problems. He is pragmatic in his approach to life and thinks in practical, rather than abstract, terms. He prefers to operate in situations which have definite structure and is frustrated when concrete answers are not readily visible. He leans to conservatism in politics and in his general orientation. His life is dominated by generally accepted ideas; he made his decision to enroll in agriculture at Davis earlier than did entering students in other colleges, and he views college as preparation for a vocation.

Differences were also found among the majors within agriculture. The prevet student is more committed to his major, to graduation, and to graduate school than is the ag sci student. The home ec student is less interested in science, more altruistic, more dependent upon others for guidance, and is more conservative than her fellow Ag students.

Like his peers in other colleges, however, the Ag student comes from an upper middle-class home, in which the parents are of protestant faith, Republican, and probably have a college education.

Recognition of diversity among Ag students by faculty and administrators is essential if students are to be served adequately by the rapidly expanding Davis campus. An understanding of the pragmatic, practical, utilitarian motivations of students in agriculture can provide innovations in curriculum development such as those suggested below:

1. Theories and principles should be presented to students not only in terms of abstraction, but with examples structured in such a way that the student can grasp the significance in terms of application. Presentation of subject matter might well go beyond the straight lecture method to include demonstrations and visual aids, giving concrete examples which capture the student's imagination and, through understanding, inspire him toward independent thought.
2. Ag students (home ec and ag sci in particular) could profit by an early association with a course or courses having a direct tie to their vocational interests, strengthening the bond between

the educational goals of the University and the vocational goals of the students.

3. Innovations in curriculum development should be explored to meet the interests and intellectual disposition of the home ec students. The strong altruistic drives of some of these students, combined with their practical outlook, would seem to indicate a need for a curriculum based on behavioral sciences which would parallel a curriculum based on physical and biological sciences.
4. Careful counseling of students at the time of initial decision, during junior and senior high school, might lower the high rate of Ag student drop-out and transfer in college. Concerted efforts should be made to "educate" high school advisors about the programs in agriculture and the nature of the student who enters agriculture at the University.
5. The College of Agriculture faculty advisors should understand and be concerned about his advisees' intellectual motivations. Time should be set aside for consulting and guiding students, particularly during the early part of their college careers. An "open door" policy should be encouraged and special follow-up conferences with advisees should be established when necessary.
6. Curriculums within the College of Agriculture should be designed to lead students toward independence in thought, innovations, and ideas. The traditional four-year undergraduate curriculum should be restructured to make it more liberal, at the same time maintaining emphasis in the sciences. This would entail planned flexibility, necessary for creative thinking.

APPENDIX I

Student Traffic and Performance

The class entering in 1963 included 132 women and 86 men in the College of Agriculture. By the end of the third semester (fall, 1964) the original group of 218 had decreased to 135--a loss of over one-third. About one-fourth had withdrawn, while one in seven had transferred to Letters and Science (Table I). Girls in preveterinary medicine had the poorest persistence record. Of the 32 preveterinary majors in this group, only 12 survived the first three semesters. One-half of those who left entered Letters and Science, and the other half withdrew. Another major with heavy loss was general home economics, which decreased from 50 to 30 during three semesters (Table II).

Little difference in grade-point average was found between men and women who completed three semesters in the College of Agriculture (2.38 and 2.34, respectively). However, the 21 students who transferred to Letters and Science had a higher grade-point average (2.61 for women, 2.52 for men). Those who withdrew after one and two semesters had averages of 2.03 and below (Table II).

Agriculture freshmen in 1964 totaled 284 (125 men, 159 women) (Table III). The largest major by far was preveterinary medicine, with 128 students (67 men and 61 women). General home economics attracted 50. No other major had more than 12 new students. Women in preveterinary medicine doubled in number, while men in preforestry went from none to 12. Increases took place in no other major.

Here again, the mean grade-point average for men and women was almost identical (2.16 for men, 2.14 for women), but it was considerably lower than the overall average of 2.33 for all freshmen (2.32 for men, 2.34 for women), fall semester, and lower than the grade-point averages of 2.23 and 2.26 for the 1963 freshman men and women during their first semester. In comparison, the 1964 Letters and Science freshmen had an average of 2.38; Engineering students had 2.33.

The first semester took a toll of 30 of the 1964 freshmen in Agriculture (Table IV). Fourteen students (5 male, 9 female) transferred to Letters and Science, while 16 (3 male, 13 female) did not register for the spring semester. Of those leaving Agriculture, 15 (3 male, 12 female) were preveterinary majors and 4 were home economics majors.

While there was an outflow of students, there also was an in-movement of 21 freshmen (6 male, 15 female) from Letters and Science at the end of the first semester (Table V). Nine elected preveterinary medicine, 7 chose home economics, and the remainder chose other majors. Thus, the net loss for the fall semester was 9 students. Those who transferred into Agriculture had a grade-point average of 2.44, considerably above the overall grade-point average of 2.14 for freshmen in Agriculture and the overall grade-point average of all freshmen. Most of those moving from Letters and Science had been undeclared majors.

The reason for withdrawal is not given. However, about half of those who did not register for the spring semester had grade-point averages below 2.00. Low scholarship was obviously an important factor.

APPENDIX II

The College of Agriculture Transfer Student

In the fall semester of 1964, 121 students (47 females, 74 males) entered the College of Agriculture after completing two years of college elsewhere. Of this group, about 60 percent transferred from junior college and the rest were from four-year colleges, mostly in California. The most popular major was preveterinary medicine, selected by 28 men. Seven men chose animal husbandry, 6 agricultural production, and 6 agricultural economics, with the remaining 27 men divided among 12 majors. Transfer women selected home economics primarily: 20 a general major, 6 dietetics, 5 design, and the other 16 divided among 7 majors.

Transfer students earned slightly higher grades (2.26 for females, 2.28 for males) than did entering freshmen. However, their grade-point average was considerably lower than the average of 2.48 for all undergraduates, fall semester.

Mobility of the transfer students included 8 withdrawing from Davis, 3 transferring to the College of Letters and Science, and 5 changing their majors within the College of Agriculture.

About one-half of the male transfers and nearly three-fourths of the female transfers had been eligible for admission to the University upon graduation from high school. Ten percent of each group didn't know whether they had been qualified for entry from high school. The primary reason for ineligibility was scholarship. Only 15 transfers had subject deficiencies as high school graduates.

Those eligible for the University gave three major reasons for enrolling elsewhere: finances; desire to go to a particular school other than the University; a realization that they were not ready for University work when they entered college.

These students obviously looked forward to transferring to the University, for most had decided upon enrollment at Davis while in high school. Furthermore, two-thirds said they would have transferred to Davis from their previous colleges even if that school had had the program they desired. These students elected Davis over other schools because of the courses in their fields of interest, and many came to prepare for Veterinary School.

APPENDIX III

Tables

TABLE I. 1963 Agriculture freshmen--status at end of three semesters.

<u>Students</u>	<u>Total</u>	<u>Withdrew.</u>		<u>Transfer to L&S</u>		<u>Remaining in Ag</u>	
	<u>N</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Women	132	34	25.7	27	20.5	71	53.8
Home economics	76	22	28.9	10	13.1	44	57.9
Other	56	12	21.4	17	30.4	27	48.2
Men	86	17	19.8	5	5.8	64	74.4
All Ag freshmen	218	51	23.4	32	14.7	135	61.9

TABLE II. 1963 Agriculture freshmen--grades and status after three semesters.

<u>Status and Major</u>	<u>Male</u>		<u>Female</u>	
	<u>N</u>	<u>GPA</u>	<u>N</u>	<u>GPA</u>
<u>Still at Davis</u>				
Preveterinary medicine	31	2.41	12	2.49
Agricultural business management	9	2.19		
Agricultural production	4	2.35		
Animal husbandry	4	1.96	6	2.33
General home economics			30	2.24
Other home economics majors			14	2.32
Food science			5	2.62
Other Agriculture majors	16	2.54	4	2.42
Total	64	2.38	71	2.34
<u>Transferred to Letters & Science</u>	5	2.52	26	2.61
<u>Withdrew at end of two semesters</u>	10	2.03	18	2.02
<u>Withdrew at end of one semester</u>	4	1.25	12	1.71

TABLE III. 1964 Agriculture freshmen--grades by major, first semester.

<u>Major</u>	<u>Male</u>		<u>Female</u>	
	<u>N</u>	<u>GPA</u>	<u>N</u>	<u>GPA</u>
Preveterinary medicine	67	1.94	61	2.09
Preforestry	12	2.15		
Agricultural business management	7	2.34		
Food science	6	2.60		
Agricultural economics	4	2.21		
General home economics			50	2.22
Animal husbandry			12	2.09
Dietetics			10	2.34
Foods			12	1.96
Other Agriculture majors	29	2.34	14	2.29
All Agriculture students	125	2.12	159	2.16

TABLE IV. Status changes of 1964 Agriculture freshmen, beginning of spring semester, 1965.

<u>Status and Major</u>	<u>Male</u>		<u>Female</u>	
	<u>N</u>	<u>GPA</u>	<u>N</u>	<u>GPA</u>
<u>Did not register, spring, 1965</u>				
Range management	1	2.00		
Preveterinary medicine	2	2.69	7	1.64
General home economics			3	2.06
Animal husbandry			1	0.56
Foods			1	2.44
Food science			1	1.38
Total	3	2.47	13	1.67
<u>Changed major within Agriculture</u>	5	2.53	5	2.93
<u>Transferred to Letters & Science</u>	5	2.52	9	2.35

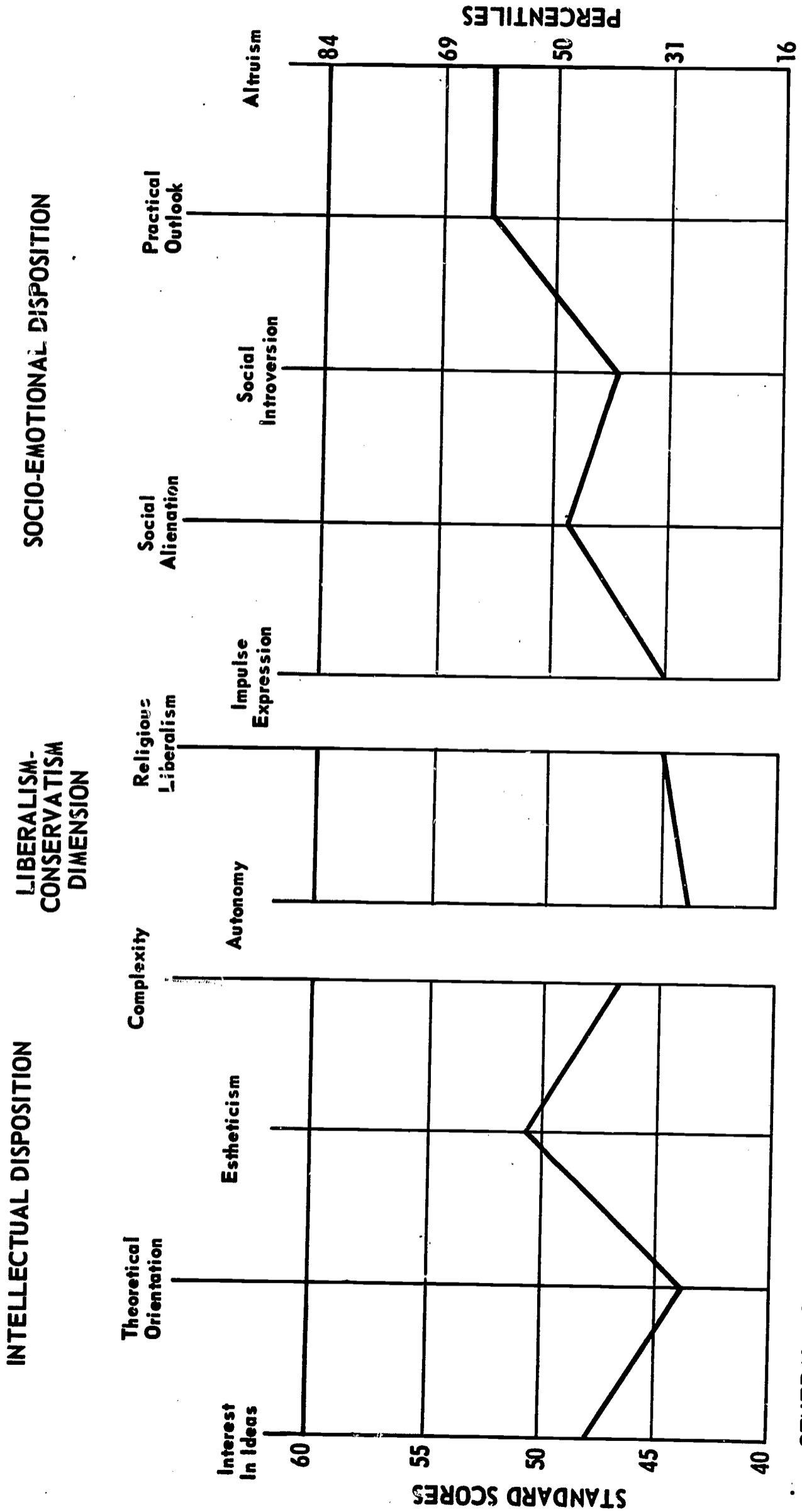
TABLE V. 1964 freshmen transferring from College of Letters & Science to College of Agriculture during first semester.

<u>Majors</u>	<u>Male</u>		<u>Female</u>	
	<u>N</u>	<u>GPA</u>	<u>N</u>	<u>GPA</u>
<u>From Letters & Science to:</u>				
Preveterinary medicine	5	2.16	4	2.27
Animal physiology	1	2.79	1	3.00
General home economics			7	2.55
Food Science			3	2.62
Total	6	2.26	15	2.52

APPENDIX IV

Personality Profiles

FIGURE I
1963 AND 1964 GENERAL HOME ECONOMICS FRESHMEN
ATTITUDE INVENTORY SCORES



GENERAL HOME ECONOMICS (N = 113)

FIGURE III
1963 AND 1964 PREVETERINARY MEDICINE MALES AND FEMALES
ATTITUDE INVENTORY SCORES

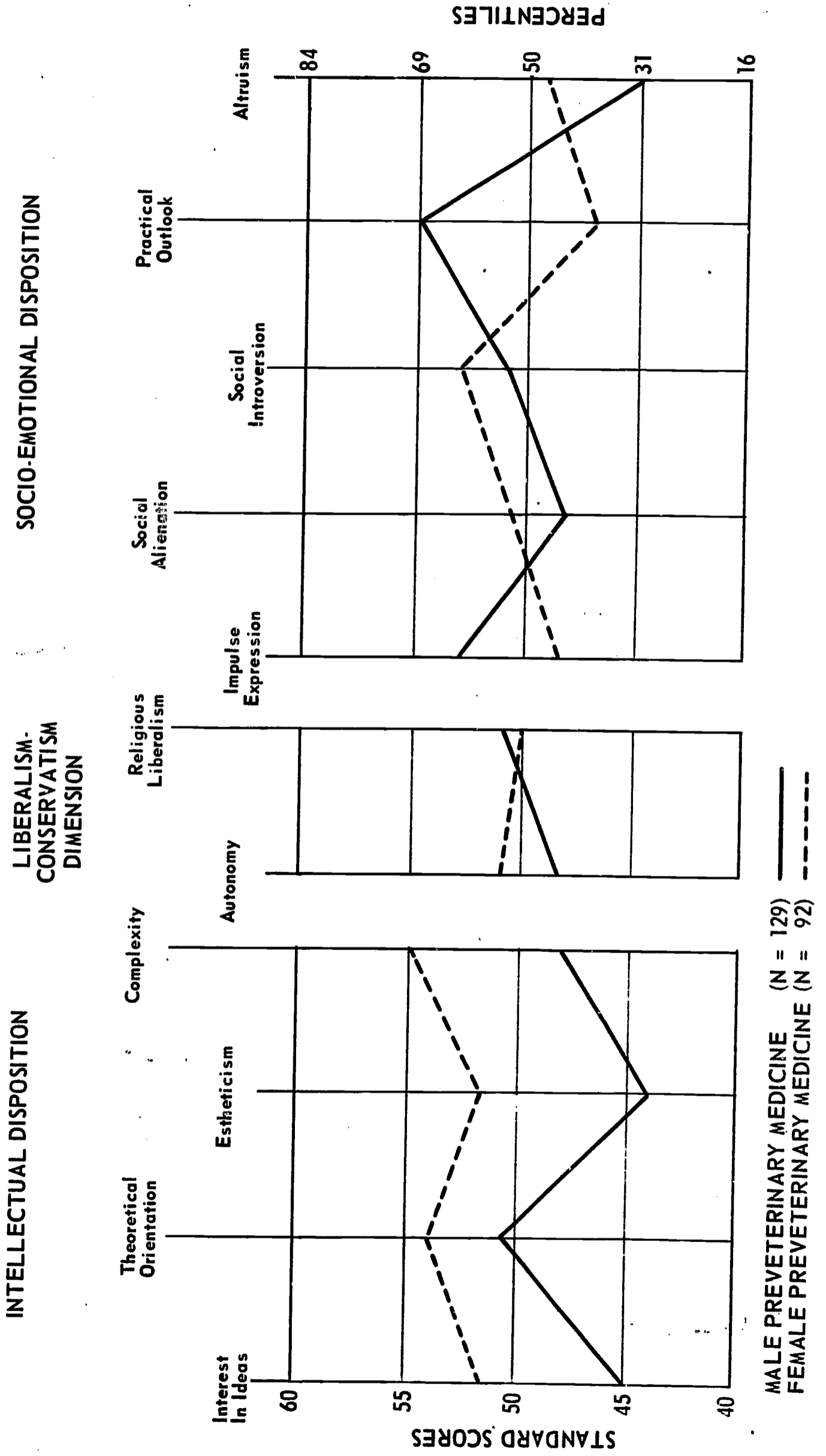
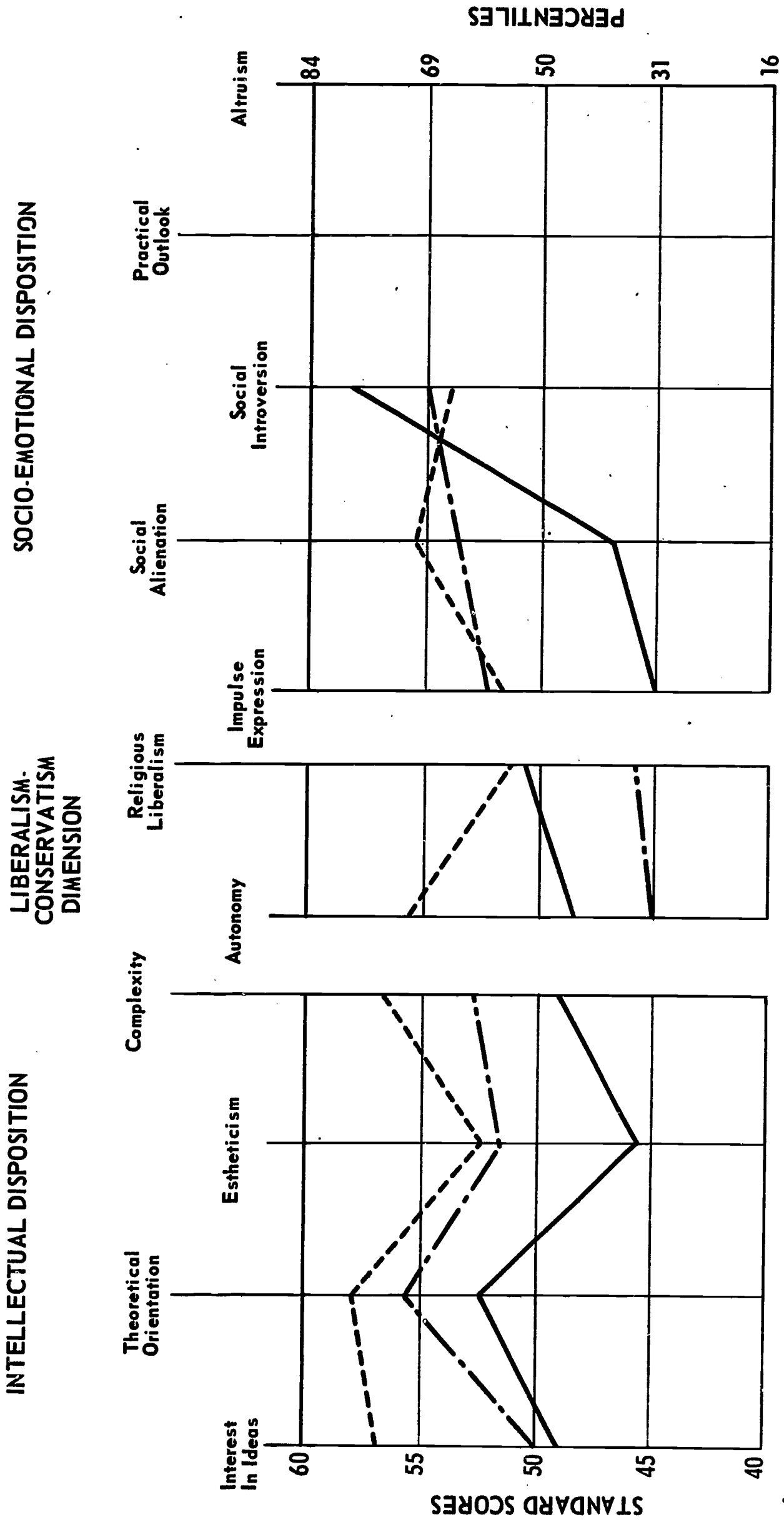
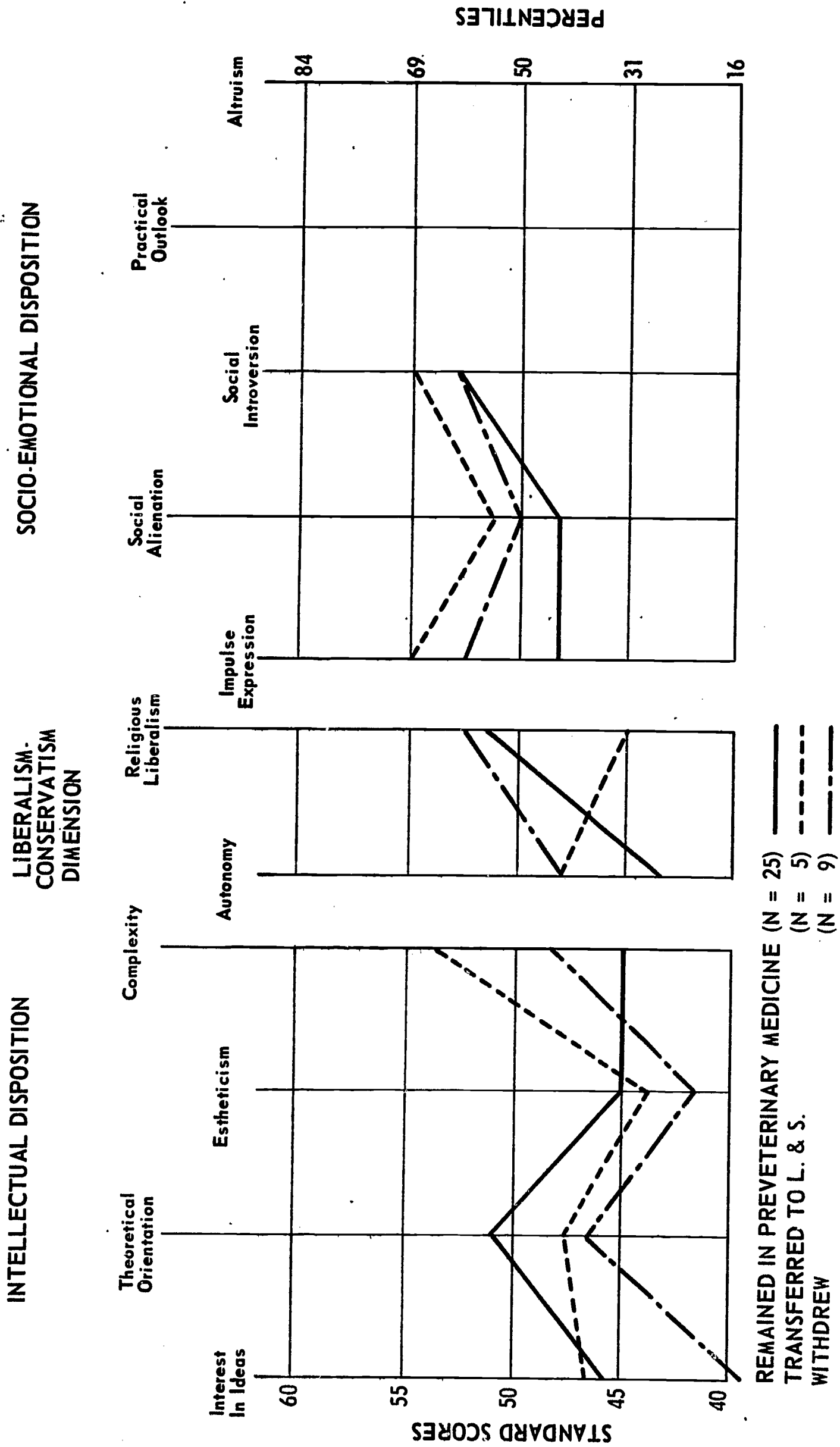


FIGURE IV
1963 PREVETERINARY MEDICINE FEMALES - ACADEMIC STATUS
ATTITUDE INVENTORY SCORES



REMAINED IN PREVETERINARY MEDICINE (N = 9) ———
 TRANSFERRED TO L. & S. (N = 11) - - -
 WITHDREW (N = 9) — · —

FIGURE V
1963 PREVETERINARY MEDICINE MALES - ACADEMIC STATUS
ATTITUDE INVENTORY SCORES



APPENDIX V

Description of Scales

Omnibus Personality Inventory Form D

I. Intellectual Orientation

Interest in Ideas: High scorers possess a strong liking for reflective thought, particularly of an abstract nature, and express interest in a variety of areas such as literature, art, music, and philosophy.

Theoretical Orientation: High scorers possess a strong interest in science and scientific activities, including a preference for using the scientific method in thinking. They are generally logical, rational, and critical in their approach to problems.

Estheticism: High scorers have diverse interests in artistic matters and activities, including literature and dramatics.

Complexity: High scorers show an experimental orientation rather than a fixed way of organizing and viewing phenomena; they are tolerant of ambiguities and enjoy diversity and novel situations and ideas, as opposed to those who perceive and react primarily to the simple and obvious.

II. Liberal Orientation

Autonomy: High scorers are tolerant of viewpoints other than their own, and are nonjudgmental, realistic, and intellectually liberal. They are nonauthoritarian in their thinking, have a need for independence, and oppose infringements on the rights of individuals.

Religious Orientation: High scorers are skeptical of religious beliefs and practices and tend to reject most of them, especially those that are orthodox or fundamentalistic. Low scorers are generally

politically conservative and somewhat rejecting of other viewpoints.

III. Social-Emotional Adjustment

Social Introversion: High scorers tend to withdraw from social contacts and responsibilities.

Impulse Expression: High scorers possess a general readiness to express impulses and seek gratification either in conscious thought or in overt action. They have an active imagination and their thinking is often dominated by feelings and fantasies.

Social Alienation: High scorers possess attitudes and behaviors that characterize socially alienated and highly anxious persons.

Altruism: High scorers are warm and trusting in their relations with others. They have a strong concern for the welfare and feelings of people they meet or hear about.

Practical Outlook: High scorers are interested in practical, applied activities. The criterion used most often to evaluate ideas and things is one of immediate utility. High scorers also tend to value material possessions and concrete accomplishments.