

A STUDY OF CONDITIONS WHICH AFFECTED THE CHOICE
OF EITHER AN AGRICULTURAL EDUCATION MAJOR
OR OTHER AGRICULTURAL MAJOR

by *SDO*

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CHAPTER I

INTRODUCTION

This study was based upon the belief held by the author that vocational agriculture has been recognized as an outstanding facet in most of those participating local schools and communities since 1917, when the Smith-Hughes Act was passed by the United States Congress.

The author, at the time of the study, had taught vocational agriculture for a period of 12 years in Unified School District number 330 located at Eskridge, Wabaunsee County, Kansas. During that time enrollment in Vocational Agriculture had increased from 18 to 40. In addition, programs in vocational agriculture for young farmers and adult farmers had been conducted.

During the last decade before the study the number of vocational agriculture departments had been decreasing but the number of students enrolled in that subject had been increasing.

Kansas had 195 vocational agriculture departments in 1960 with an enrollment of 6,303 students. By 1969, the number of departments had dropped to 166 while the number of students had risen to 7,021.¹

In addition to school consolidation, the author believed

¹"Vocational Agriculture Fact Sheets, 1960 through 1969," supplied by the State Department of Vocational Education, Topeka, Kansas.

that part of the reason for the decline in the number of departments was the lack of qualified vocational agriculture teachers.

Due to the lack of sufficient numbers of vocational agriculture teachers within its borders, Kansas had had to recruit teachers from surrounding states. In 1969, 31 per cent of its vocational agriculture teachers were from out of state. Even with this recruitment effort, there was still not enough teachers to meet the demand.²

If vocational agriculture was to continue to have a strong positive effect on the lives of young men in Kansas, a greater number of instructors had to be supplied. To teach vocational agriculture, a person had to successfully complete the agricultural education curriculum in college.

There was a need to investigate the reasons why more students were not enrolling in the agricultural education curriculum at Kansas State University.

In order to meet the overall need, more students had to be enrolled in agricultural education. To insure this increase in numbers, those people or agencies concerned with recruitment must be better able to present career information in this area of study.

As a result of this study, a more effective agricultural education orientation and information program could be developed.

²State Department of Vocational Education, loc. cit.

The Purpose

It was the purpose of this study to survey the beliefs of certain students enrolled in the College of Agriculture at Kansas State University as to:

1. Who had had the greatest degree of influence upon the high school student in the selection of a college major.

2. Which grade level in high school the student decided upon his college major.

3. What factors existed that influenced vocational agriculture students and non-vocational agriculture students in the selection of a college major.

It was further the purpose of this study to summarize the results of the survey and to present the findings which could be used in the improvement of the agricultural education recruitment program.

Definitions Of Terms Used

For the purpose of this study, certain words were set aside as of importance and which must have unanimity of usage for greater understanding and clarity of the report.

Agricultural Education. This term refers to either the curriculum or division of the College of Agriculture which was charged with the responsibility for the developing of teachers of vocational agriculture at the high school level.

Background factors. Those conditions or situations which could influence the thinking of a student prior to his entering college shall be termed "background factors."

College major. Through this report the term "college major" shall refer to the general study area in which the college student was enrolled.

Department. Several references will be made to the "department" which shall be interpreted as a vocational agriculture department at the high school level.

Instructor. This term shall be used synonymous with the teacher of vocational agriculture.

Land-Grant college. The Morrill Act passed by the Congress in 1862 provided for the endowment, maintenance, and support of a college where branches of learning related to agriculture were to be taught. Grants in the form of land were made available to states to accomplish this goal, thus resulted the name "land-grant college." Kansas State University fits into this category.

Occupational possibilities. In this report the term "occupational possibilities" refers to that set of alternatives which indicate the potentiality of a particular career as an area of employment.

Other agricultural majors. Any student who has his major

in the College of Agriculture, other than agricultural education majors, shall be termed as "other agricultural majors."

Relative importance rating. Several parts of this questionnaire dealt with the ranking of several factors. The number one was assigned to indicate the most important factor and the rest of the numbers accordingly. The higher the number the less the importance of that factor.

After the summation of all the questionnaires each factor could have a wide variety and amount of numbers pertaining to it. It became necessary to determine the importance of that particular factor in relation to the other factors in the same list.

To do this the numbers and the power of the numbers were inverted, et. if there were three choices the number one became the power of three and the number three became the power of one. The number powers for a particular factor were totaled and divided by the total number of choices that were available. For example, if five people taking the questionnaire had three choices to make from this list the divisor would be 15.

The resulting number became the "relative importance rating" valuable only in establishing a comparison of factors within the same list.

Sample individuals. This term shall indicate those persons involved in furnishing responses for the questionnaire which was developed for this study.

Subjects. An occasional mention will be made to the "subjects" which for the purpose of this study will be synonymous with sample individual.

Vocational agriculture. The Smith-Hughes Act of 1917 provided federal funds for a cost-share training program to be carried on at the local high school level. This Act was established to encompass those areas of occupational endeavor in which skilled training was desirable. "Vocational agriculture" was one of the major areas covered by this Act.

Vocational agriculture in Kansas has been compounded from classroom teaching, agri-mechanics, supervised agri-experience, and the Future Farmers of America organization.

CHAPTER II

REVIEW OF THE LITERATURE

The shortage of qualified vocational agriculture instructors has been a problem not only in Kansas, but over the entire nation as well. Woodin¹ reported that in 1967 there was a shortage of instructors in 40 of the 50 states. The reasons for this shortage involved both the decline in the number of college students enrolled in agriculture education and the increased number of instructors leaving the field of teaching.

A check of the list of vocational agriculture teachers in Kansas during the years 1959-60 through 1965-66 indicated that 118 teachers had left the profession.² This showed that 12.6 per cent of the teachers were leaving the field each year in Kansas.

The seriousness of the teacher shortage was indicated by Woodin³ when he revealed that departments in 117 high schools could not operate during the 1967-68 school year and that 242 teachers had to be employed with only temporary or emergency certificates. In addition, 232 more teachers were needed but

¹Ralph J. Woodin, "Teacher Shortage Curtails Program Expansion," Agriculture Education, 40:249, May, 1968.

²"Vocational Agriculture Teachers of Kansas, 1959-60 through 1965-66," supplied by the State Department of Vocational Education, Topeka, Kansas.

³Woodin, op. cit., p. 248.

were not available during the same time.

The result of this problem was evident. As Hairr⁴ pointed out, the results of the shortage of certified instructors brought about the closing of existing departments, inability of new departments to become established, and the curtailment of expanding existing departments.

This Master's report concentrated on only one facet of the problem and that was the decline in the number of students who planned to make the teaching of vocational agriculture their life's work.

This segment of the problem had received national prominence. It was reported by Woodin⁵ that in July, 1965, the Agriculture Division of the American Vocational Association appointed a committee on Professional Personnel Recruitment.

There were two Kansans on this committee.⁶ One was the State Supervisor for Vocational Agriculture, C. C. Eustace. The other was Sam Stenzel, A vocational agriculture instructor who was also the executive treasurer for the National Vocational Agriculture Teachers Association.

This committee arrived at the decision that it was the individual instructor who was the key person in the recruitment

⁴V. B. Hairr, "Approach for Relieving the Teacher Shortage. "Agriculture Education, 41:160, January, 1969.

⁵Ralph J. Woodin, "Teacher, Key Man in Recruitment Drive, "Agriculture Education. 38:272, June, 1966.

⁶Ralph E. Bender, Letter to Teachers of Vocational Agriculture, April 21, 1969.

of potential vocational agriculture teachers. As a result of this decision, the committee established the "Teachers of Teachers" program which had as its purpose the recognition of those vocational agriculture instructors who had instilled some of their students to become teachers.

Brinkley⁷ stated that the individual instructor should try to inspire the top thirty per cent of his students to become interested in this field. A successful method of his was to utilize some of the boys in senior vocational agriculture in the teaching of lower classes.

In an effort to inform the local teacher of his new responsibility, the committee asked each state to organize a Commission for Recruitment in Agriculture Education.⁸ This Commission would become a part of the state vocational agriculture teachers' organization.

As school consolidation and multi-teacher departments increased, it was possible for Kansas to have found part of the teacher recruitment answer in the procedure used by other states. Martin⁹ related that during the ten years previous to 1967, over fifty per cent of the vocational agriculture instructors that

⁷Harold R. Brinkley, "Basic Concept for Educating Tomorrows Teachers," Agriculture Education, 37:189, February, 1965

⁸Woodin, loc. cit.

⁹W. Howard Martin, "Tomorrow's Teacher, An Agriculture Specialist," Agriculture Education, 37:190, February, 1965.

entered the field in the state of Connecticut received teacher creditation after their work for a Bachelor of Science degree in a specialized area of technical agriculture.

The above procedure would work only where there were a number of multi-teacher departments in which the special competency of each teacher would be valuable. But still, those individuals who received their teacher certificate in this manner had planned to teach even when they entered college.

Concerning the question which existed as to how many young men were needed to enter the agricultural education department at Kansas State University; Woodin¹⁰ claimed that a minimum recruitment goal for any state should be to have a number of future teachers entering the agricultural education program each year equal to one fourth of the number of vocational agriculture teachers in the state.

For Kansas, with 182 vocational agriculture instructors, this meant there should have been 45 students entering the agriculture education curriculum each year. But of that 45 students, only 80 per cent would probably graduate. This left 36 graduates certified to teach. Of that number, only 60 per cent would enter the teaching field. There would then be 22 new instructors each year.

Would that supply have kept pace with the demands? If

¹⁰Ralph J. Woodin, "Shortage Spurs Recruitment Efforts," Agriculture Education, 40:11, July, 1967.

12 per cent of the instructors left the field each year, Kansas, with 182 teachers, would lose around 23. According to national figures,¹¹ there was three per cent growth in demand for vocational agriculture teachers each year. This meant five extra teachers would be needed due to expansion. The total annual demand for Kansas would be 28 while the supply of new teachers would be only 22. If Kansas had followed the national figures it would have not been able to produce enough instructors to satisfy its need.

It was evident that no matter what type of program was followed by the university charged with developing vocational agriculture teachers, recruitment for students to enter agricultural education should have been increased.

If this was true, recruitment efforts preferable would have started at the high school level.

¹¹Ibid.

CHAPTER III

METHOD OF RESEARCH

If this study was to develop any findings which could be used in the recruitment of students into the agricultural education curriculum, it was necessary for it to reveal those factors or conditions which caused a student to enter a particular major field.

There was no standardised test that could uncover these factors. As a result, the author had to develop a questionnaire to match the problem. There were other studies that have been done that were similiar to this study. Several guidelines which could be applied to the author's questionnaire were found by researching some of these studies.

Aldrich¹ in his thesis, found that economic factors were more important to rural boys than non-economic factors in the selection of an occupation. Factors which held priority were wages, job security, working conditions, and availability of employment.

The author of this report believed that students who go into agricultural education also have a high regard for intrinsic factors.

¹G. C. Aldrich, "An Investigation to Identify the Aspects of Occupations Which Rural Boys Consider Important in Choosing an Occupation" (Master's thesis, Washington State University, Pullman.)

Certain factors influencing the college attendance plans of rural high school seniors were revealed in a study conducted by Sahlstrom.² Most significant of these factors were home background, level of education of parents, and the possibility of returning to the farm.

It was thought by the author of this report that these factors also might influence whether a former vocational agriculture student would go into either agricultural education or other agricultural majors.

Several important findings were made by Bentley³ during his study of the factors that influenced the vocational choices of agricultural college freshmen. He found that a combination of economic factors and intrinsic motivation influenced this choice. He also revealed that students with certain backgrounds were influenced by various people in their vocational choice.

A questionnaire was developed by the author for this study to indicate the following;

1. Present educational situation.
2. Background of subject.
3. Influence of associates on the selection of a college major.

²S. D. Sahlstrom, "Factors Influencing College Attendance Plans of Capable Rural High School Seniors" (Ph. D. dissertation, University of Minnesota, Minneapolis, 1965.)

³R. R. Bentley, "Factors Influencing the Vocational Choices of Agriculture College Freshmen" (Studies in Education, Purdue University, Lafayette, Indiana, 1963.)

4. Personal ideas that might affect the selection of a college major.
5. Suggestions for improving aid in selection of a college major.

After the questionnaire was developed, it became necessary to select the subjects for this study. The author believed that the subjects had to be in the College of Agriculture or in some major allied to agriculture. It would be evident that all these subjects saw a future in agriculture as their vocations. The choice of a major would then be due to certain undisclosed factors or reasons. Also, many of these students would be former vocational agriculture students.

To expedite the study, three groups of students were selected to serve as subjects rather than work with individuals. The selection of these particular groups was based on convenience on the author's part and willingness on the subjects' part.

The questionnaire (a copy of which is included in the appendix) was personally administered by the author to the three following groups of subjects.

One group was the Agricultural Education Seminar taught by Professor Howard Bradley. This course was designed for those agricultural education students who would be completing their student teaching requirement the next school year.

In order to gain a sample of other agricultural majors the same questionnaire was administered at special meetings of Farmhouse and Alpha Gamma Rho which were agricultural social

fraternities. These fraternities include in their membership a large proportion of former vocational agriculture students.

Seventeen of the questionnaires from the fraternities were not used in the sample because the students were not in the College of Agriculture or a major which the author felt was allied to agriculture.

As a result of forementioned procedure, the questionnaires from 31 agricultural education majors and 39 other agricultural majors were accepted as the sample.

CHAPTER IV

THE FINDINGS

In order to create better understanding of the findings of this study, this chapter had been subdivided into four areas. These areas are "dividing the subjects into categories," "commonalities of subjects," "comparisons of differences that exist between subjects," and "recommendations by subjects."

Dividing the Subjects Into Categories

Several questions or segments of the questionnaire were used to classify the subjects into a particular category for the purpose of establishing a comparison between the various groups. The category division was based on the subjects' present college and former experience with vocational agriculture.

The three resulting categories were agricultural education majors with experience in vocational agriculture, other agricultural majors with experience in vocational agriculture, and other agricultural majors with no experience in vocational agriculture.

To facilitate the above process, the question was asked "How many years were you in vocational agriculture in high school?" The choices ranged from none to four years. For the purpose of this report, it was felt that a subject must have had at least two years of experience in vocational agriculture before it would make a contribution as a factor in the selection

of a college major. As a result, any questionnaire that was marked with less than two years was classified as non-vocational agriculture background.

The subjects were asked their present major in college. The placing into a category through the use of this information should be obvious with one exception and that being in relation to the veterinary major. Although a veterinary major was not considered as being in the College of Agriculture, for purposes of this report all veterinary majors were classified as other agricultural majors.

The questionnaire furnished space for the subject to indicate his present status in college, et. freshman, sophomore, junior, senior, or graduate. It was believed that a subject's status level could affect his response to several of the questions.

The mean status level of all agricultural education majors was midway between the junior and senior year or 3.5 years of college. The other agriculture majors had a mean attainment of slightly over the sophomore level or 2.3 years of college.

Commonalities of Subjects

All of the subjects who took the questionnaire had several background factors in common. One of these factors was the level of education attained by the parents. Table I, page 18, shows that the differences between the attainment levels of the parents of the agricultural education majors and those of the

TABLE I
YEARS OF FORMAL EDUCATION OF PARENTS
OF AGRICULTURAL EDUCATION MAJORS AND
OTHER AGRICULTURAL MAJORS

MAJOR	YEARS FOR MOTHERS	YEARS FOR FATHERS
AGRICULTURAL EDUCATION	12.8	11.4
OTHER AGRICULTURAL	13	11.9

parents of the agricultural education majors and those of the other agricultural majors were insignificant as to being a factor in the selection of a college major.

Fathers of agricultural education majors had 11.4 years of education, while the fathers of other agricultural majors had 11.9 years. It was noted that the mothers of both groups of subjects had over one year more education than did the fathers. The mothers of agricultural education majors had 12.8 years of education as compared to 13 for the other agricultural majors' mothers.

Another factor in common was the farm background experience of both groups. Eighty eight per cent of other agricultural majors had a farm background while 93.3 per cent of the agricultural education subjects had a similiar upbringing. About two-thirds (agricultural education - - 63.3 per cent and other agricultural - - 66.6 per cent) of all subjects believed they could either return to the farm or in some manner become established in farming. Table II, page 20, shows both of the above factors relating to farming.

A question which brought out another common denominator asked if any member of the subject's family was employed in agri-business. When the questionnaire was developed, it was thought by the author that some of the students in the other agricultural majors category had entered their particular major due to the influence, either direct or indirect, by a member of their family who was employed in agri-business or areas of

TABLE II
PER CENT OF AGRICULTURAL EDUCATION MAJORS AND OTHER
AGRICULTURAL MAJORS WHO HAD A BACKGROUND IN FARM
OPERATION AND POSSIBILITY OF RETURNING TO
FARMING AS AN OCCUPATION

MAJOR	PERCENTAGE WHO LIVED ON OR OPERATED A FARM	PERCENTAGE WITH POSSIBILITY OF BECOMING ESTABLISHED IN FARMING
AGRICULTURAL EDUCATION	93.3	63.3
OTHER AGRICULTURAL	88	66.6

of employment allied to agriculture.

This theory was not upheld when the tabulations were made. As shown in Table III, page 22, 23.3 per cent of the agricultural education majors and 26.1 per cent of the other agricultural majors did have relatives so employed. Apparently, the influence exerted by a member of the family employed in agri-business was constant within both groups of subjects.

The subjects were asked "At what grade level in high school did you decide what your college major would be?" The results of this question are presented in Table IV, page 23. The majority of the agricultural education majors, or 61 per cent, arrived at a decision during their junior or senior year in high school. Table IV also presents a trend for these subjects in selecting their major with the aid of advancing years of education. This is not the situation with the other agricultural majors category.

There was no emerging pattern with the other agricultural majors. While 51 per cent of these subjects said they decided during their senior year or later, there was an abrupt jump to the other end of the scale when 25 per cent marked that they had decided during their freshman year of high school.

A question of interest pertained to what degree the students have changed their major since they have been in college. In response to this question, 43.3 per cent of the agricultural education majors had changed while 33.3 per cent of the other agricultural majors have switched majors.

TABLE III

PER CENT OF AGRICULTURAL EDUCATION MAJORS AND OTHER
AGRICULTURAL MAJORS WHO HAD RELATIVES EMPLOYED IN
AGRI-BUSINESS OR AREAS OF WORK ALLIED TO FARMING

MAJOR	PERCENTAGE WHO HAD RELATIVES EMPLOYED IN AGRI-BUSINESS OR AREAS OF WORK ALLIED TO FARMING
AGRICULTURAL EDUCATION	23.3
OTHER AGRICULTURAL	26.1

TABLE IV
NUMBER OF SUBJECTS WHO MADE A PRELIMINARY CHOICE
OF A COLLEGE MAJOR AT A PARTICULAR LEVEL
IN HIGH SCHOOL

LEVEL IN HIGH SCHOOL	31 AGRICULTURAL EDUCATION MAJORS	39 Other AGRICULTURAL MAJORS
FRESHMAN	1	10
SOPHOMORE	2	5
JUNIOR	8	3
SENIOR	11	11
LATER	8	10

Before any conclusions were drawn from these percentages it was observed that the agricultural education majors had a mean class level of 3.5 years of college where as the other agricultural majors had achieved only 2.3 years. This means that the agricultural education majors had 1.2 additional years, or 52 per cent more time, in college during which they could change their major.

Each subject who changed his college major was asked why he changed. Most of the answers related in some manner that the student didn't actually know what the major or curriculum consisted of before he enrolled in it. This was true in over 90 per cent of the cases. Some insight on the cause of this lack of understanding was brought out by a question pertaining to a study of agricultural occupational opportunities.

Question eight asked each subject who had taken vocational agriculture if he had a course of study in opportunities in agricultural occupations while in high school. Only 15 per cent of the agricultural education subjects said they had such a course of study where as 50 per cent of the subjects in other agricultural majors responded in the affirmative.

Again it was noted that the agricultural education majors had been out of high school 1.2 years longer than the other subjects. It had been during the last three or four years that many of the vocational agriculture instructors in Kansas have become more interested in presenting the facts of opportunities in the various agricultural occupations. This could account for

the differences between the groups in regards to this factor.

Comparisons Of Differences That Exist Between Subjects

Parts of the questionnaire were developed in hopes of revealing certain factors that affect or influence the thinking or attitudes of the subjects.

Item nine on the questionnaire had the subjects rank three of six listed associates as to the influence they had on the subject's selection of a college major. The number one indicated the most important, then two and three accordingly. The subjects were to pick from the following associates; mother, father, high school counselor, vocational agriculture instructor, county agricultural agent, and other, which the subject was to indicate their position or title.

The agricultural education majors gave the vocational agriculture instructor a relative importance rating of 82.7 which was higher than the father rating of 53. The mother rating of 27.4 was one-half that of the father. "Others" received a rating of 25.9. People mentioned in the "other" category included relatives, livestock fieldman, teachers of subjects other than vocational agriculture, and peer group. Figure 1, page 26, presents the rating of associates by the agricultural education majors in bar graph form.

The vocational agriculture instructor was still an important influence of the other agricultural majors who have had vocational agriculture in high school. These instructors

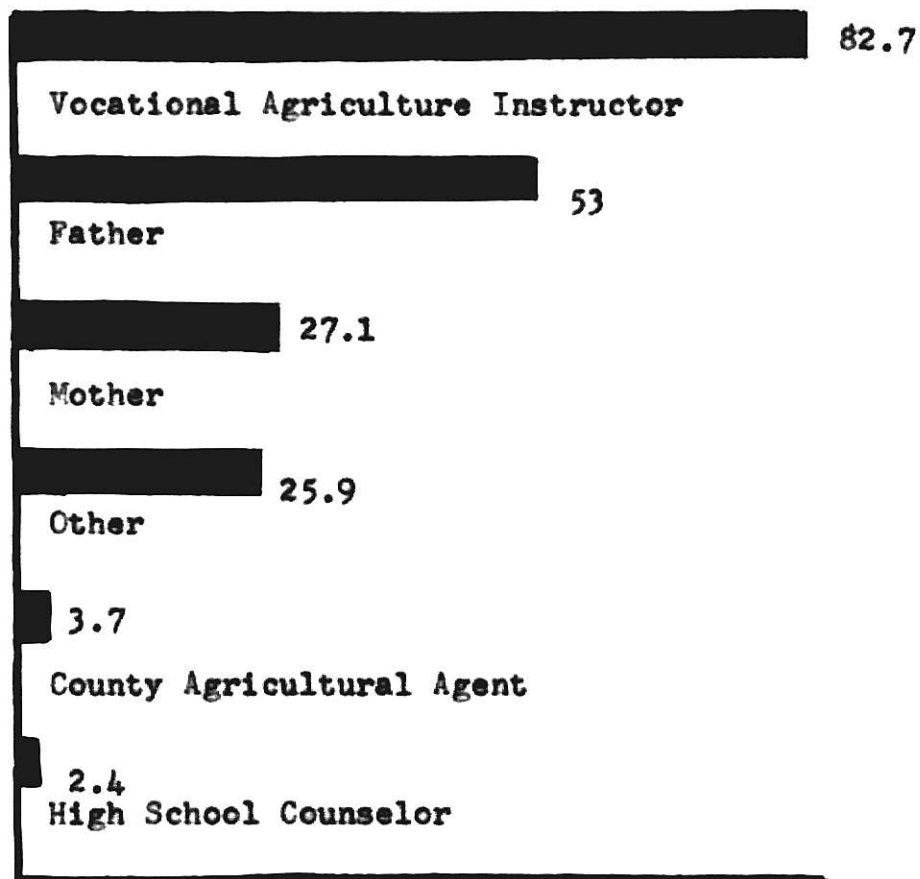


Figure 1. Relative importance of associates as to influence they had on the selection of a college major by 31 agricultural education students with at least two years of vocational agriculture.

had a relative importance rating of 34.8 and was the second most influential associate of this group of subjects. In this category of majors, Figure 2, page 28, illustrates that "father", with a rating of 63.9, has the most influence.

As in the previous group, "mother" was just slightly higher than "others" with a rating of 23.2 and 21.3 respectively. "Others" included relatives, veterinary, banker, plant breeder, and peer group.

The results of the other agricultural majors with no background experience in vocational agriculture were surprising to the author. These results can be seen in Figure 3, page 29. The "other" category was the most important with a rating of 78.9. Upon closer inspection it was found that 74 per cent of the subjects in this group had marked "other" as one of the three choices and went on to explain in some manner that it was their choice alone or that no one influenced their choice.

With this group of subjects, "father" was the second most influential and "mother" was third with ratings of 57.8 and 35.7 respectively.

Item 10 on the questionnaire dealt with personal feelings and ideals which the subjects had toward their college major.

The subjects were asked to rank five items on a list of eleven as to the influence these items had on the subject in the selection of a college major. They were to have the number one indicate the most important and the rest of the numbers accordingly.

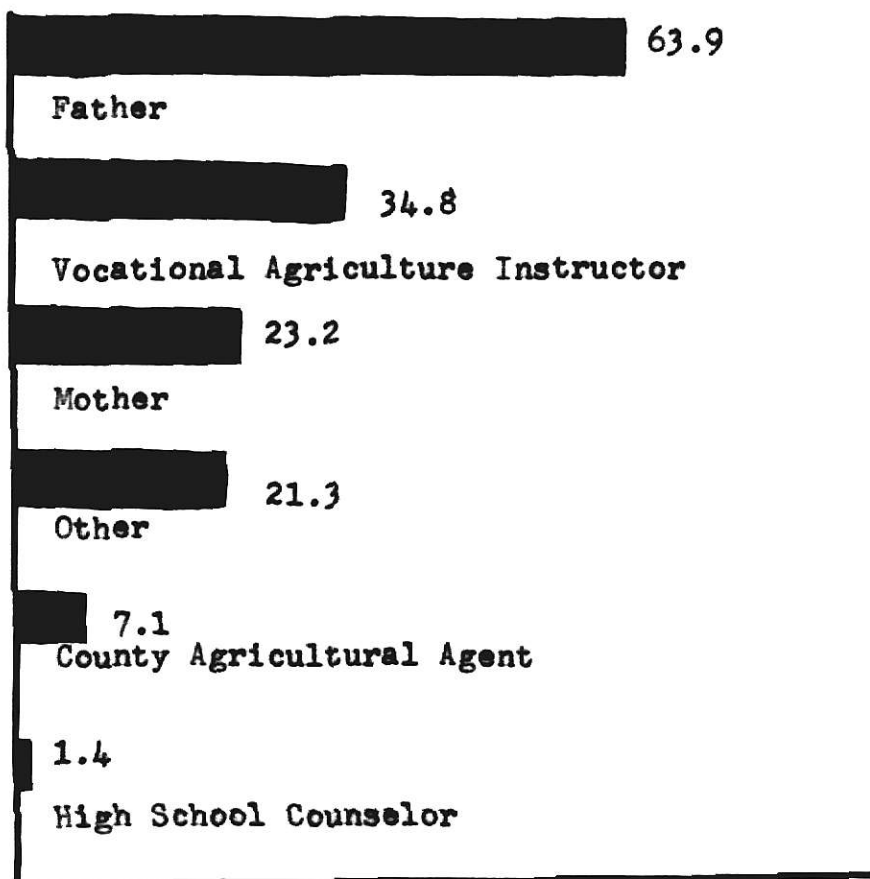


Figure 2. Relative importance of associates as to influence they had on the selection of a college major by 24 other agricultural major students with at least two years in vocational agriculture.

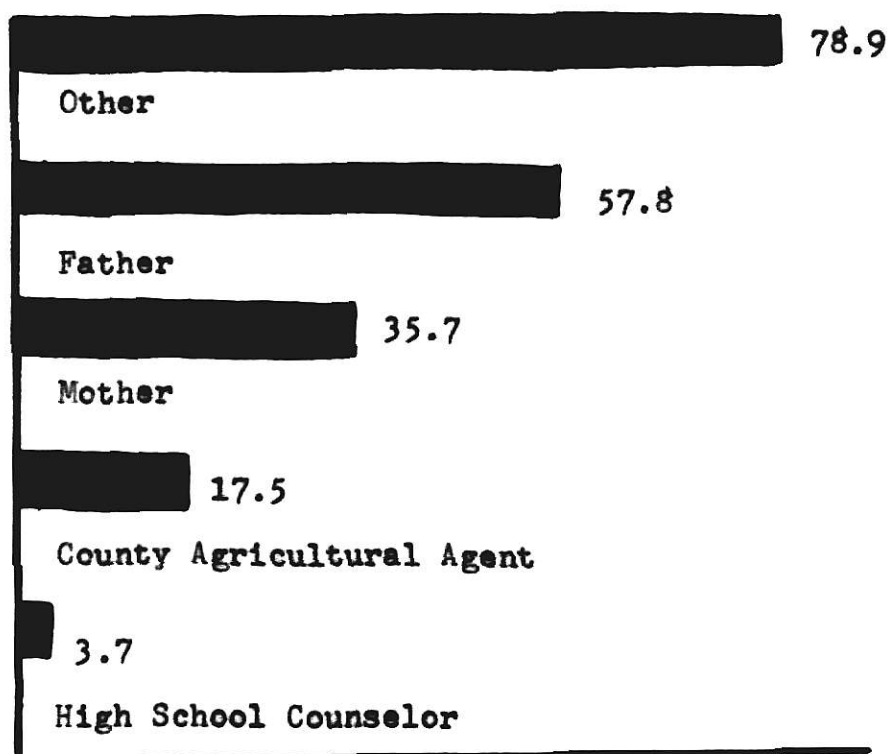


Figure 3. Relative importance of associates as to influence they had on the selection of a college major by 15 other agricultural major students who had none or one year of vocational agriculture.

Items which the subjects had available to select from and rank included the following:

1. Greater financial security.
2. More desirable working conditions.
3. Can have more time to call my own.
4. The field appears to be expanding.
5. Greater chance for self-satisfaction from work.
6. More chance for advancement.
7. Like to work with people.
8. More of an opportunity to make my own decisions.
9. Have had background experience in this area.
10. Feel that this area best prepares me for any occupational opportunity that might later develop.
11. Other (Please explain).

Due to the ranking system, each factor or item was given a relative importance score as determined in the definition of terms section of this report.

Figure 4, page 31, illustrates a ranking of these items from the summation of 31 agricultural education majors. The five highest ranking items checked were as follows:

1. Feel that this area best prepares me for any occupational opportunity that might later develop.
2. Greater chance for self-satisfaction from work.
3. Like to work with people.
4. Have had background experience in this area.
5. The field appears to be expanding.

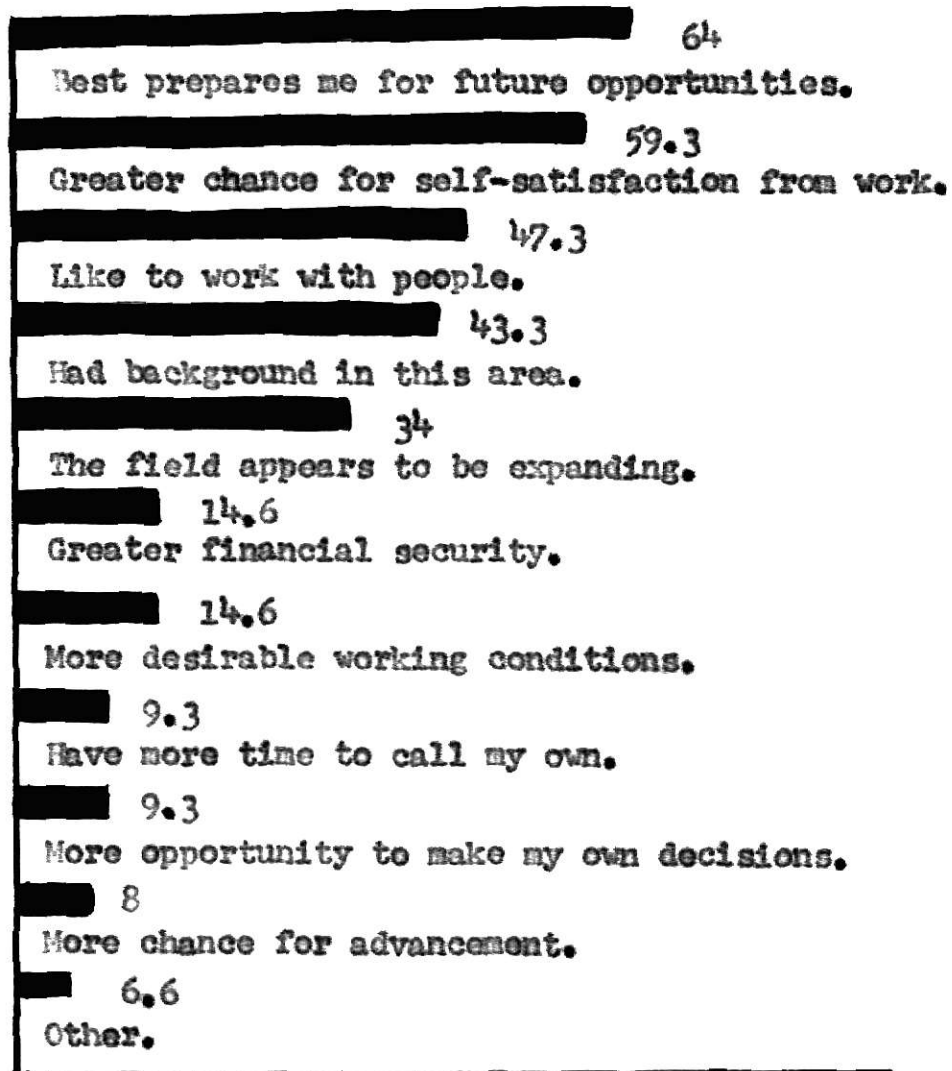


Figure 4. Relative importance of factors that influenced the choice of a college major by 31 agricultural education majors.

The author believed that the highest ranking item pertaining to preparation for future opportunities may have surprised some people but it shouldn't. Woodin¹ reported that on an average about 60 percent of the agricultural education graduates enter the teaching profession upon graduation. The balance go into other occupational areas and are not likely to come back to teaching.

This fact was illustrated when one of the agricultural education majors responded to the question as to why he changed majors. His reason for switching majors was he thought the mechanics he got in the agricultural education curriculum would do him more good when he returned to the farm than what he was previously studying.

Woodin² also pointed out that the vocational agricultural teacher annual turnover of 10.4 per cent was higher than for any other group of teachers according to national studies. Although some of this turnover was due to retirement, the majority were teachers going into other fields of employment.

The second ranking factor described the greater self-satisfaction from work. This should be a leading prerequisite with any occupational field, for to be successful in any undertaking, the author believes that man must be self-satisfied with himself.

¹Ralph J. Woodin, "Teacher Shortage Curtails Program Expansion," Agriculture Education, 40:249, May, 1968.

²Ralph J. Woodin, "Shortage Spurs Recruitment Efforts," Agriculture Education, 40:10, July, 1967.

liking to work with people. Froehlich and Bundy³ mentioned that this trait was very important to a person entering the teaching profession.

Having had background experience in the area was the fourth leading reason for selection of the agricultural education major. This could be expected in as much as 27 of the 31 agricultural education majors had taken vocational agriculture in high school.

The agricultural education subjects selected as the fifth most important factor the one that stated the field appears to be expanding. This was especially refreshing to the author in light of the fact that some uninformed people believed that vocational agriculture was becoming passe. The truth was there 10,221 positions in teaching vocational agriculture in the United States during 1967 and it was estimated that this number would be 11,246 by 1970.⁴

The response of the other agricultural majors to the question pertaining to the factors that influenced the choice of a college major is illustrated on Figure 5, page 34. The five highest ranking factors with this group were as follows:

1. Greater chance for self-satisfaction from work.
2. Have had background experience in this area.

³Loren H. Froehlich and Clarence E. Bundy, "Why Qualified Vo Ag Teachers Don't Teach," Agriculture Education, 39:135, December, 1966.

⁴News and Views of NVATA, 11:2, August, 1968

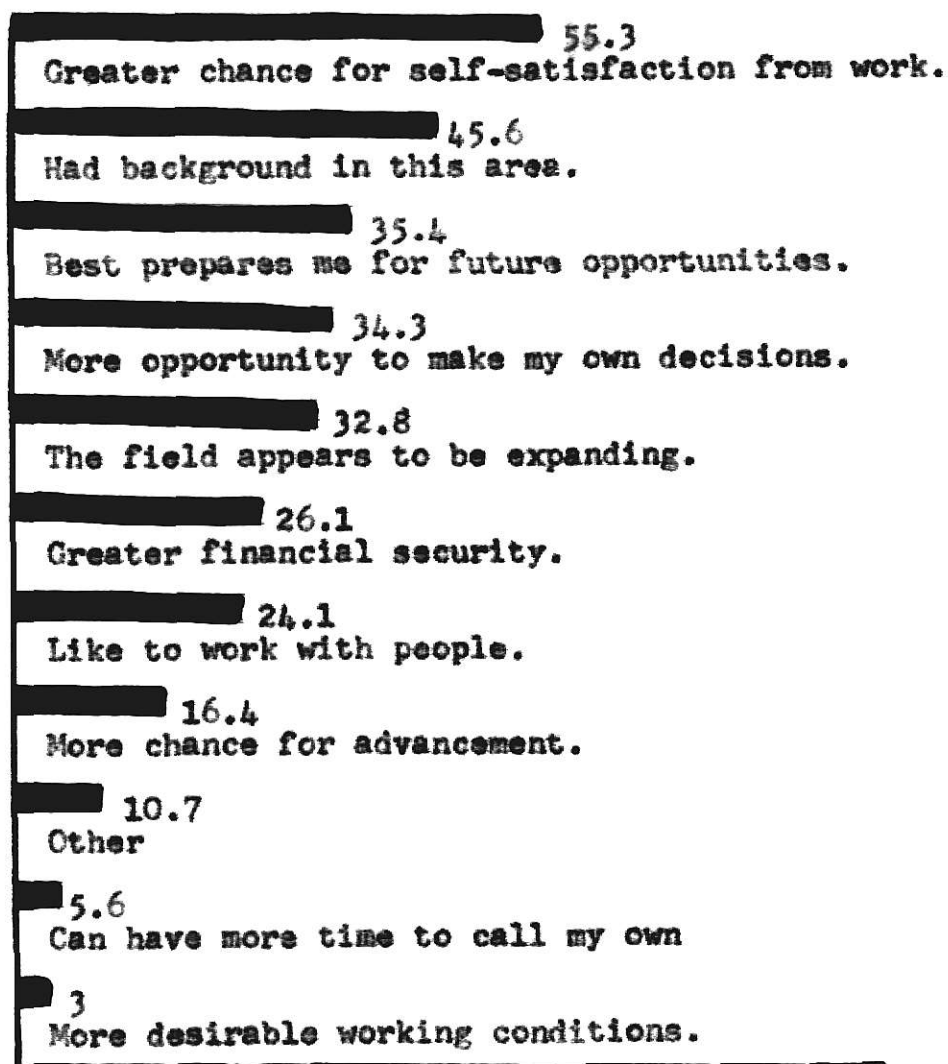


Figure 5. Relative importance of factors that influenced the choice of a college major by 39 other agricultural majors.

3. Feel that this area best prepares me for any occupational opportunity that might later develop.
4. More opportunities to make my own decisions.
5. The field appears to be expanding.

The author felt that one of the most interesting results of this question was the comparison of each group of subjects in their response to each factor as shown by Figure 6, page 36.

Figure 6 illustrates that both groups rated three factors with a similar relative importance rating. These factors were "the field appears to be expanding," "greater chance for self-satisfaction from work," and have had background experience in this area." On the average the two groups of subjects differed only 2.7 points in the rating on each of these three factors.

Of greater importance were the differences that were brought out between the two groups of subjects. The other agricultural majors placed much greater importance on "more opportunity to make my own decisions," than did the agricultural education subjects. The rankings of relative importance were 34.4 and 9.3 respectively.

The agricultural education majors scored 64 on the factor that stated they felt that their major best prepared them for any future occupational opportunity that might later develop. They seemed nearly twice as confident as the other agricultural subjects who gave this factor a score of 35.4.

"Like to work with people," was another factor where the agricultural education majors placed twice as much importance

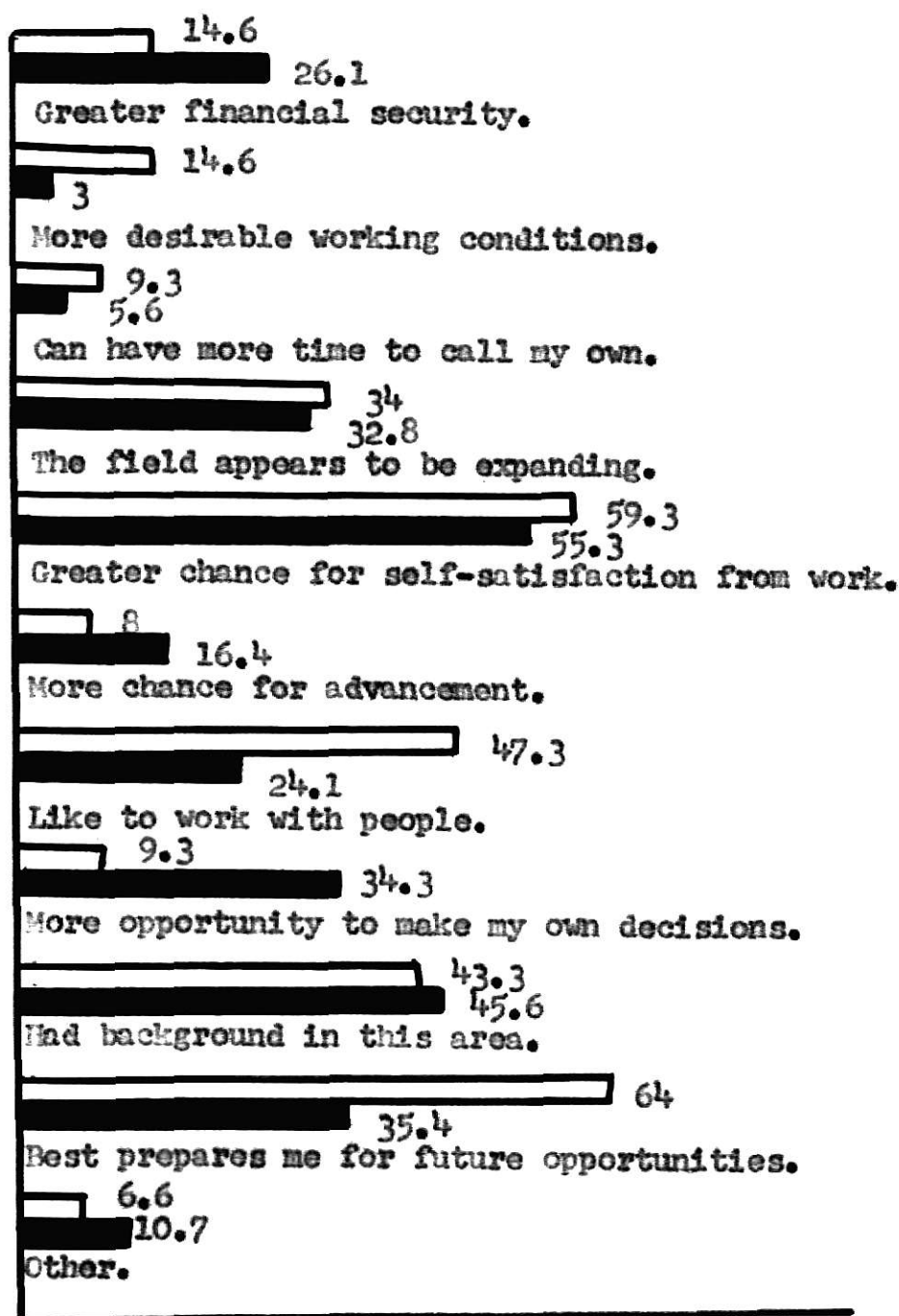


Figure 6. Comparison of the relative importance of factors that influenced the choice of a college major by 31 agricultural education majors and 39 other agricultural majors.

Agricultural Education

Other Agricultural

(47.3 to 24.1) as did the other agricultural majors.

Greater financial security was more important to the other agricultural majors who gave this factor nearly 12 points than did the agricultural education group. Likewise, the agricultural education majors placed 12 points more emphasis on "more desirable working conditions" than did their counterparts.

The other agricultural majors were twice as concerned with advancement as the agricultural education students. The scores on "more chance for advancement" were 16.4 to 8.

Those subjects who checked the "other" factor included such reasons as "personal preference," "was looking for a purpose in life," and "as close to farming as I could get."

Recommendations By Subjects

The last part of the questionnaire was an open end question which asked "What do you think could be done in high school to help others in the selection of a college major?"

Most of the answers could be grouped into the following four areas:

1. Tell of job opportunities and fuller explanation of college curriculums.
2. Have college representatives visit high schools.
3. Encourage students to start thinking earlier in high school about college or occupations.
4. Closer work with students by high school counselor.

The number of subjects who answered with these replies can be found in Figure 7, page 38.

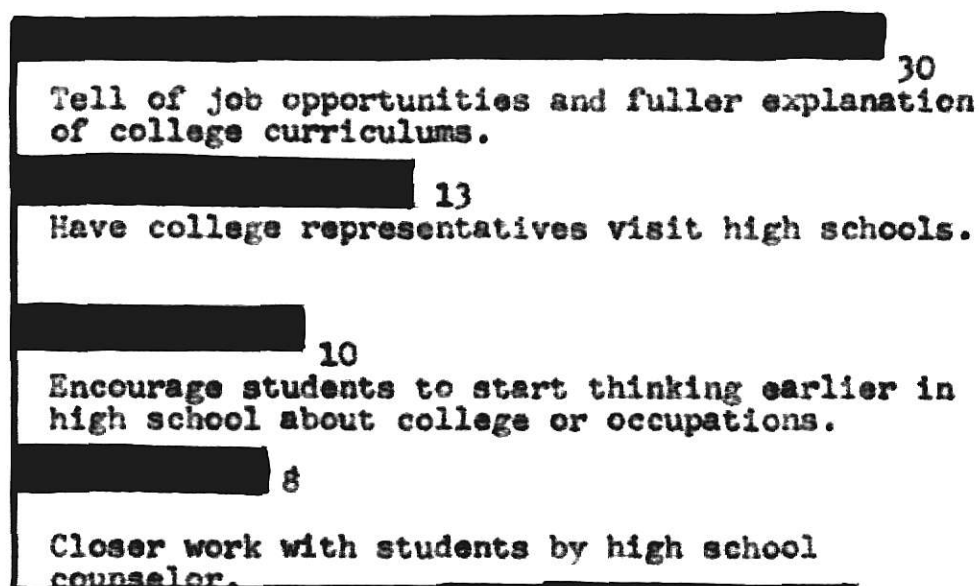


Figure 7. Recommendations and number of responses in each recommendation made by a combined group of 69 agricultural education majors and other agricultural majors in answer to the question "What do you think could be done in high school to help others in the selection of a college major?"

In the author's opinion, validity could be given these responses in view of the fact, as previously pointed out, that 38 per cent of the subjects had changed their college major at least once.

CHAPTER V

SUMMARY AND IMPLICATIONS

Summary

The basic concern of this study was to ascertain what relationship existed between the background factors and the choice of a college major of certain students in the College of Agriculture at Kansas State University.

Of the students included in this study, 31 were former vocational agriculture students enrolled in agricultural education, 24 were former vocational agriculture students enrolled in other agricultural major areas, and 15 were other agricultural majors who had no experience in vocational agriculture.

A cross-section of college majors was obtained by administering a questionnaire to an Agricultural Education Seminar and special meetings of Farmhouse and Alpha Gamma Rho fraternities.

The results of the questionnaire indicated all groups of subjects in this study had various factors in common. These factors are as follows:

1. The parents of all subjects had a similiar education background.
2. Nearly 90 per cent of the subjects had lived on or operated a farm.

3. A similiar percentage of the groups (65 per cent) felt there was a possibility of them becoming established in farming.

4. Twenty five per cent of the subjects in each group had relatives employed in agri-business or areas related to farming.

5. An average of 38 per cent of the subjects had changed their college major at least once.

Several differences between the groups of subjects were indicated by the questionnaire.

One difference pertained to the influence of associates of the subjects on the selection of a college major by the subjects. The subjects were to rank the three associates who had influenced the coice of a college major. The list from which the subjects were to select were mother, father, high school counselor, vocational agriculture instructor, county agricultural agent, and "other", which the subject was to indicate their position or title.

The agricultural education majors ranked the vocational agriculture instructor, father, and mother in that order as to the degree of influence these associates had when it came to selecting a college major.

The other agricultural majors with a background in vocational agriculture changed the ratings to father, vocational agriculture instructor, and mother.

The other agricultural majors with no experience in vo-

cational agriculture ranked "others" as most important, and then father and mother in that order.

A second major difference was found in the area of ideals and personal feelings which the subjects had toward their college major.

The subjects were to rank five of the following eleven conditions which influenced their choice of a college major.

1. Greater financial security.
2. More desirable working conditions.
3. Can have more time to call my own.
4. The field appears to be expanding.
5. Greater chance for self-satisfaction from work.
6. More chance for advancement.
7. Like to work with people.
8. More of an opportunity to make my own decisions.
9. Have had background experience in this area.
10. Feel that this area best prepares me for any occupational opportunity that might later develop.
11. Other (Please explain).

The agricultural education majors gave the following ranking.

1. Feel that this area best prepares me for any occupational opportunity that might later develop.
2. Greater chance for self-satisfaction from work.
3. Like to work with people.
4. Had background experience in this area.

5. The field appears to be expanding.

The other agricultural majors placed the following as the most important:

1. Greater chance for self-satisfaction from work.
2. Have had background experience in this area.
3. Feel that this area best prepares me for any occupational opportunity that might later develop.
4. More opportunity to make my own decisions.
5. The field appears to be expanding.

Of more importance to the writer were the comparisons between the groups in regard to their attitudes towards each of the factors that influenced their choice of a college major.

Both groups had an equal relative importance score for "had background experience in this area," "greater chance for self-satisfaction from work," and "the field appears to be expanding."

The other agricultural majors were twice as concerned as were the agricultural education majors with "greater financial security" and "more chance for advancement." Furthermore, they were nearly four times as concerned with "more opportunity to make my own decisions" as were the agricultural education majors.

The agricultural education majors placed twice as much value on "like to work with people" and "feel that this area best prepares me for any occupational opportunity that might later develop" than did the other agricultural majors.

The last part of the questionnaire was an open end question which asked "What do you think could be done in high school to help others in the selection of a college major?"

Most of the answers could be grouped as follows:

1. Tell of job opportunities and fuller explanation of college curriculums.
2. Have college representatives visit high schools.
3. Encourage students to start thinking earlier in high school about college or occupations.
4. Closer work with students by high school counselor.

Implications

What implications can be drawn from this study that can aid in the solution of the problem concerning the lack of certified agricultural education majors being graduated? This can best be done by reacting to the recommendations made by the subjects who answered the questionnaire.

The first and foremost recommendation mentioned was to tell high school students about job opportunities and give them a fuller explanation of college curriculums. The vocational agriculture instructor obviously falls heir to this assignment regarding agricultural education. The questionnaire brought out the fact that the vocational agriculture instructor is the most influential person in affecting the choice of a college major by the agricultural education majors.

The vocational agriculture instructor has at his disposal any number of teaching career pamphlets, brochures, and posters

from the American Vocational Association, Kansas State University, and the National Vocational Agriculture Teachers Association.

After the vocational agriculture instructor has done the basic work of arousing an interest of agricultural education in some of his students, he should then refer them to the teacher trainer staff at the state university for further information.

The Recruitment Committee of the American Vocational Association states that if each vocational agriculture teacher would get one of his students to enter the agricultural education curriculum every four years, there would be no teacher shortage.¹

Another student recommendation was to have college personnel visit the high schools and tell the students about college. Alpha Tau Alpha, the agricultural education honorary student fraternity, at Kansas State University has had a program operating in a similiar manner for several years. Their presentation includes a slide program and general career information. They have also had a career booth at the Kansas Future Farmer State Convention for several years. But who is it that must arrange for this program to be presented at the local level? It is the individual vocational agriculture instructor.

The University of Kentucky has a similiar outreach program with its Agricultural Education Society.² The Sears

¹News and Views of NVATA, 11:2, August, 1968.

²Herbert Bruce, Jr. and William Bingham, "AG ED Society Helps in Recruiting," Agriculture Education, 40:62, September, 1967.

Foundation in Kansas has financed a program for the last two years where college personnel go into each FFA district and present general college and career information to vocational agriculture students.

The third recommendation was to encourage students to start thinking about occupations or college earlier in high school. The questionnaire revealed that 61 per cent of the agricultural education students said they had made their preliminary choice of a college major during their junior or senior year of high school.

At the present time, much of the recruitment by college personnel is aimed at the junior or senior in high school. This would be fine for indepth presentations but there should be additional effort exerted at the lower levels in high school.

Some college personnel might feel that their efforts would be wasted by working with high school students at the lower levels. If this were true, who would have the responsibility for starting the younger high school students to thinking about agricultural education? Again, it is the vocational agriculture instructor. More of the teachers in Kansas need to be made aware of this obligation. This was brought out when the questionnaire showed that 35 per cent of the subjects who had taken vocational agriculture had a course of study in high school pertaining to opportunities in agri-business or areas of work allied to farming.

The fourth recommendation from the subjects responding to the questionnaire was to promote closer work with the students by the high school counselor. The results of the questionnaire revealed that the influence of the high school counselor on agricultural education students was almost nil in regards to the influence they had on the selection of a college major. In fact, one can only wonder if there could have been a negative affect.

Nash³ brought out some considerations the local vocational agriculture instructor can use to develop and maintain harmonious working relationships with the local guidance personnel. They are as follows:

1. Point out that farming and agriculture are not synonymous. Off-farm agriculture occupations have more than offset the decrease in on-farm employment.
2. Obtain suggestions from guidance counselors when revising curricula and/or expanding course offerings.
3. Provide sufficient flexibility in high school vocational agriculture courses to allow for scheduling of college preparatory subjects.
4. Take advantage of the counselor's services by obtaining various data on agricultural pupils and through student referral for special counseling.

These ideas are not guaranteed to get more students into agricultural education but they will help get the guidance

³J. Alex Hash, "Guidance or Recruitment? Some Reinterpretations," Agriculture Education, 38:209, March, 1966.

counselor in a better frame of mind toward agriculture and the people associated with it.

All agencies associated with vocational agriculture, et. teacher trainer staff at state universities, state and national teacher organizations, and the state vocational agriculture departments are all concerned and acting with the problem of insufficient numbers of agricultural education majors graduating each year. Without the combined efforts of the local vocational agriculture instructor, much of the efforts of the others goes to waste.

As was pointed out by Woodin,⁴ the key man in the recruitment drive for more teachers entering the field, is the local vocational agriculture instructor.

⁴Ralph J. Woodin, "Teacher, Key Man in Recruitment Drive," Agriculture Education, 38:272, June, 1966.

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APPENDIX

SPRING 1969 QUESTIONNAIRE
ON SELECTING A MAJOR AREA OF STUDY IN AGRICULTURE AT
KANSAS STATE UNIVERSITY

1. Indicate your present status in college.

____ Freshman

____ Sophomore

____ Junior

____ Senior

____ Graduate

2. What is your present major area of study in college?

3. Have you changed your major since you have been in college?

____ Yes

____ No

If you have;

How many times have you changed? _____

What was (were) your previous major area(s)?

Why did you change?

4. At what grade level in high school did you decide what your college major would be?

____ Freshman

____ Sophomore

____ Junior

____ Senior

____ Later

5. What level of education did your parents attain?

Mother _____

Father _____

6. Did you live on a farm?

____ Yes

____ No

If you did, please state the size and type of operation.

Is there an opportunity for you to return to your home farm or to become established in farming?

____ Yes

____ No

7. Is any member of your family employed in agri-business?

____ Yes

____ No

If the answer is yes, please explain who that person is and the nature of employment.

8. How many years were you in vocational agriculture in high school?

____ None

____ One

____ Two

____ Three

____ Four

If you were in vocational agriculture, did you have a course of study in agriculture occupations?

____ Yes

____ No

9. Rank three of the following as to the influence they had on your selection of a college major. Let the number one indicate the most important, then two and three accordingly.

____ Mother

____ Father

____ High School Counselor

____ Vocational Agriculture Instructor

____ County Agricultural Agent

____ Other (Please indicate) _____

10. Rank five of the following as to the influence they had on your selection of a college major. Let the number one indicate the most important, then the rest accordingly.

____ Greater financial security.

____ More desirable working conditions.

____ Can have more time to call my own.

____ The field appears to be expanding.

____ Greater chance for self-satisfaction from work.

____ More chance for advancement.

____ Like to work with people.

____ More of an opportunity to make my own decisions.

____ Have had background experience in this area.

____ Feel that this area best prepares me for any occupational opportunity that might later develop.

____ Other (Please explain)

-
11. What do you think could be done in high school to help others in the selection of a college major?

A STUDY OF CONDITIONS WHICH AFFECTED THE CHOICE
OF EITHER AN AGRICULTURAL EDUCATION MAJOR
OR OTHER AGRICULTURAL MAJOR

by

TERRY DEAN FANNING

B. S., Kansas State University, 1958

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1969

ABSTRACT

The basic concern of this study was to ascertain what relationship existed between the background factors and the choice of a college major of certain groups of students in the College of Agriculture.

This study was prompted by the lack of sufficient numbers of students graduating from the agricultural education curriculum to meet the demands.

Of the subjects accepted for this study, 31 were former vocational agriculture students enrolled in agriculture education, 24 were former vocational agriculture students enrolled in other agricultural majors, and 15 were other agricultural majors who had no experience in vocational agriculture.

The results of the study indicated all groups of subjects had various factors in common. These factors are as follows:

1. The parents of all students had a similiar education background.
2. Nearly 90 per cent of the subjects had lived on or operated a farm.
3. A similiar percentage of the groups (65 per cent) felt there was a possibility of them becoming established in farming.
4. Twenty five per cent of the subjects in each group had relatives employed in agri-business or areas related to farming.

5. An average of 38 per cent of the subjects had changed their college major at least once.

Several differences between the groups of subjects were indicated by this study. The main differences are;

1. The background of the student had an affect as to what associates of his had the most influence on the student in his selection of a college major.

2. The reaction of the student toward certain economic and intrinsic factors influenced the choice of a college major.

The last part of the questionnaire developed for this study asked "What do you think could be done in high school to help others in the selection of a college major?" Most of the answers could be grouped as follows:

1. Tell of job opportunities and fuller explanation of college curriculums.

2. Have college representatives visit high schools.

3. Encourage students to start thinking earlier in high school about college or occupations.

4. Closer work with students by high school counselor.

The conditions as disclosed by the questionnaire seemed to give validity to the recommendations made by the subjects.

By considering the differences that existed among the groups of students and the recommendations made by the subjects, a more influential recruitment program could be developed for channeling more of the qualified students into agricultural education.