

THE RELATIONSHIP OF PERSONALITY TRAITS AND VOCATIONAL INTERESTS  
TO SUCCESS IN TEACHING VOCATIONAL AGRICULTURE

A THESIS

PRESENTED TO THE DEPARTMENT OF AGRICULTURAL EDUCATION  
THE DEAN OF THE SCHOOL OF AGRICULTURE AND  
THE COMMITTEE ON GRADUATE PROGRAMS  
OF  
THE VIRGINIA POLYTECHNIC INSTITUTE

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FOR THE DEGREE OF  
MASTER OF SCIENCE

BY

<sup>James</sup>  
J. FRANK BROWN

BLACKSBURG, VIRGINIA

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APPROVED:

\_\_\_\_\_  
HEAD OF MAJOR DEPARTMENT

\_\_\_\_\_  
DEAN OF THE COLLEGE OF AGRICULTURE

\_\_\_\_\_  
DIRECTOR OF GRADUATE STUDIES

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This study was begun under the direction of the late  
Professor Edmund C. Magill  
Department of Agricultural Education

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TABLE OF CONTENTS

	<u>Page</u>
I. Introduction .....	1
II. Experimental Procedure .....	4
A. Collection of Data .....	5
B. General Nature of Data .....	5
1. "The Personality Inventory" by Robert G. Bernreuter .....	5
2. "Vocational Interest Blank for Men" by Ed- ward K. Strong, Jr. ....	7
3. Average Score of Agriculture Teachers .....	9
4. Number of Years Teaching .....	11
5. Average Scores for the First Ten Years Teaching .....	12
C. Organization of Data .....	13
1. Coding .....	13
2. Punching Cards .....	14
3. Sorting Cards .....	14
4. Tabulating Cards .....	15
5. Averaging the Tabulations .....	16
6. Arranging the Data on Tables .....	17
D. Information on Tables .....	18
1. In general what does each table show? .....	18
2. Why are there so few cases in the upper and lower groups? .....	18

3. Why are some of the values combined and others not? .....	18
4. Why does the sorting factor always increase? .....	19
III. Explanation of Findings .....	25
A. Introduction .....	25
B. Number of Years Teaching .....	30
C. Neurotic Tendency .....	33
D. Self-Sufficiency .....	39
E. Introversiion-Extroversiion .....	44
F. Dominance-Submission .....	48
G. Confidence in Oneself .....	53
H. Sociability .....	57
I. Interest in the Work of a Physician .....	62
J. Interest in the Work of an Engineer .....	66
K. Interest in the Work of a Farmer .....	70
L. Interest in the Work of a Lawyer .....	74
M. Interest in the Work of a Salesman .....	78
N. Interest in the Work of a Teacher .....	81
IV. Conclusions .....	84
Bibliography .....	88

List of Forms

1. Form I Letter .....	20
2. Form II Rating of Virginia Departments of Vocational Agriculture 1931-1932 .....	21



	<u>Page</u>
3. Form III Rating of Virginia Departments of Vocational Agriculture 1938 .....	22
4. Form IV Personality Score Sheet .....	27
5. Form V Vocational Interest Score Plan .....	28

#### List of Tests

1. "The Personality Inventory" by Robert G. Bernreuter .	23
2. "Vocational Interest Blank for Men" by Edward K. Strong, Jr. ....	24

#### List of Tables

1. Table I - The Relation of Number Years Teaching Vocational Agriculture to Average Score .....	29
2. Table II - The Relation of Neurotic Tendency to Average Rating of Teachers and Certain Other Factors ..	32
3. Table III - The Relation of Self-Sufficiency to Average Rating of Teachers and Certain Other Factors ..	38
4. Table IV - The Relation of Introversiion-Extroversiion to Average Rating of Teachers and Certain Other Factors .....	43
5. Table V - The Relation of Dominance-Submission to Average Rating of Teachers and Certain Other Factors ..	47
6. Table VI - The Relation of Confidence in Oneself to Average Rating of Teachers and Certain Other Factors	52
7. Table VII - The Relation of Sociability to Average Rating of Teachers and Certain Other Factors .....	56

8.	Table VIII - The Relation of Interest in the Work of a Physician to Average Rating of Teachers and Certain Other Factors .....	61
9.	Table IX - The Relation of Interest in the Work of An Engineer to Average Rating of Teachers and Certain Other Factors .....	65
10.	Table 10 - The Relation of Interest in the Work of a Farmer to Average Rating of Teachers and Certain Other Factors .....	69
11.	Table XI - The Relation of Interest in the Work of a Lawyer to Average Rating of Teachers and Certain Other Factors .....	73
12.	Table XII - The Relation of Interest in the Work of a Salesman to Average Rating of Teachers and Certain Other Factors .....	77
13.	Table 13 - The Relation of Interest in the Work of a Teacher to Average Rating of Teachers and Certain Other Factors .....	80

THE RELATIONSHIP OF PERSONALITY TRAITS AND VOCATIONAL INTERESTS  
TO SUCCESS IN TEACHING VOCATIONAL AGRICULTURE

I. INTRODUCTION

"The Relationship of Personality Traits and of Vocational Interests to Success in Teaching Vocational Agriculture" grew out of a guidance need of the Vocational Educational Department, Blacksburg, Virginia. It was suggested by Mr. Edmund C. Magill, who hoped this study would help in guiding into Vocational Agriculture only those men whom tests and other data showed suited for the work. By so doing, the men thus guided would be happily adjusted, would do more effective work, and the Department of Vocational Education would be strengthened.

This study was a direct outgrowth of the one made by Ulyssee Cormier, "The Evaluation of Some of the Influences Which May Relate to Success in Teaching Vocational Agriculture". His thesis deals with specific personal features such as "sense of humor", "vision", and "belief in profession" whereas the problem involved herein deals with certain general personality traits which are composed of more defined ones, and also with vocational interests.

The data in all the tables were based upon a group of 109 Vocational Agriculture teachers, which fact should be borne in mind as it accounts for some of the results shown. The objective

tests used for measuring personality traits and grading vocational interests were: "The Personality Inventory" by Robert G. Bernreuter and the "Vocational Interest Blank for Men" by Edward K. Strong, Jr. The only available criteria for objectively estimating success in teaching Vocational Agriculture were the departmental rating of teachers.

In the first place the object in doing this piece of work was to determine the relationship between the results shown by the Bernreuter personality and the Strong vocational interests tests and the success of Vocational Agriculture teachers in Virginia, as rated by Vocational Agriculture Department. From this, other and more substantial research work, college records, and results from objective testing, men on the basis of their personality traits and vocational interests could be advised as to the soundness of their entering the Vocational Agriculture field; that is, the amount of success they were likely to achieve from a comparative basis. This idea is not a new one at all but has been practiced by corporations, business firms, and schools for some time. It is hoped that this work may help to make the Department of Vocational Education, Blacksburg, Virginia more conscious of its guidance need. Should this research serve the need in a small way or even call attention to it, thereby resulting in additional research or putting into practice some of the facts already known, this study would have been more than

worthwhile.

Finally, the author does not offer this study as being free from errors and complete, but he does offer it as a sincere piece of work, accurate as the data permit.

## II. EXPERIMENTAL PROCEDURE

### A. Collection of Data

The first step in establishing relationships between certain personality traits, certain vocational interests, and success of teachers of Vocational Agriculture was the securing of objective data on all the factors involved in the study. To obtain the necessary information on the personality features and interests in occupations allied with the teaching field, two well known standardized tests were selected for this purpose: "The Personality Inventory" by Robert G. Bernreuter and the "Vocational Interest Blank for Men", Form M, (Revised), by Edward K. Strong, Jr. The criteria for the success of teaching Vocational Agriculture are the departmental ratings of those who had taught all or any part of the period from 1928 to 1938. Tests were sent to 238 of these men from whom 109 responses were received. A letter of explanation, which is included in this study on page 20, accompanied the tests. After sufficient time had elapsed, a follow-up letter was sent to those individuals from whom no responses had been received.

Next, it was necessary to grade the tests. With the exception of about 15 of the personality inventories which had already been given and graded by the Vocational Agricultural Department of the Virginia Polytechnic Institute, the remaining

cases were checked by the author. About 40 of the usable cases of the vocational interest blanks had been administered and graded previously by the same department. The remaining blanks were mailed for scoring to the Psychological Corporation, New York. Both sets were administered and scored during the school year 1939-1940.

The average scores compiled from the departmental ratings were obtained through the kind assistance of Ulysse Cormier who had spent much time in securing the necessary information from the Vocational Agricultural Department of the Virginia Polytechnic Institute and converting it into a usable form for this study.

In the following paragraphs are given an explanation of the derivation of the average scores with sample score sheets, and an original copy of each of the tests along with a discussion of their general meaning, purpose, validity, and new values. Much of this information may be gained by simply glancing at the tests themselves.

#### B. General Nature of Data

##### 1. "The Personality Inventory" by Robert G. Bernreuter

"The Personality Inventory" has many advantages over other tests of its kind. One is that it measures several different

personal features at one time, which is a saving both in the cost and in the time required for administration. Also, it measures traits not readily detectable by observation or other means, and in addition to this it has been proved to possess a high degree of reliability which accounts for its wide use in vocational guidance.

Being composed of six scales, the inventory measures at one time six general personality traits which are designated by symbols, given and described briefly below:

(1) B1-N is the symbol for neurotic tendency. Those scoring high on this scale tend to be emotionally unstable. Persons with scores above the 98 percentile would probably benefit from psychiatric advice. Those who score low tend to be very well balanced emotionally.

(2) B2-S is the symbol for self-sufficiency. Persons who score high on this scale prefer to be alone, rarely seek sympathy or encouragement, and tend to ignore the advice of others, whereas those who score low tend to dislike solitude and often ask for encouragement and help from others.

(3) B3-I is the symbol measuring introversion-extroversion. It bears a high relationship to scale B1-N which may be detected from the description here and the results found on the tables in the following section. Persons who score high on the B3-I scale tend to live within themselves. Those who score above the 98 percentile would probably benefit from psychiatric advice.



Those scoring low are extroverted; they seldom worry, rarely become upset, and do not often substitute day-dreaming for action.

(4) B4-D is the symbol for dominance-submission. Those scoring high have a tendency to dominate others in face-to-face situations, whereas those scoring low have a tendency to be submissive.

(5) F1-C is the symbol for confidence in oneself. Persons who score high on this scale tend to be hamperingly self-conscious and to have feelings of inferiority. Those who score low show a tendency of being wholesomely self-confident and of being very well adjusted to their surroundings.

(6) F2-S is the symbol for sociability. Those who score high tend to be nonsociable, solitary, or independent, whereas those who score low tend to be sociable and gregarious.

A further understanding of this test may be gained from the score sheet form IV, page 27, on which is given in tabular form the personality features with the significance of scores and with the new values set upon them.. It is included in section 11 rather than here for convenience in analyzing the tables, which require frequent references to the information on the score sheet.

2. "Vocational Interest Blank for Men" by Edward K. Strong, Jr.

The purpose of the vocational interest blank is to measure

how nearly a man's interests coincide with those of the average man successfully engaged in a certain occupation. It has been found that a man will be more effective in his vocational career if he is engaged in work he likes than if he is engaged in work he dislikes. From surveys made at Stanford University, it is apparent that if a man is given his own free will in choosing his life's work his general interest will to a surprising extent influence his choice.

The validity of this test has not yet been proved. However, results so far show that it has genuine merit, especially in the field of vocational guidance.

The occupations for which each teacher was graded were: physician, engineer, lawyer, farmer, salesman, and teacher. These occupations were selected as being the most closely allied with the teaching of Vocational Agriculture. The results shown on the interest blanks would have been far more significant had they been administered to the men when they were freshmen or sophomores in college. Then their interests would not have been conditioned by training and experience in one certain field.

Each blank was first graded for all the selected occupations in terms of raw scores which were converted into letter ratings of A+, A, A-, B+, B, B-, C+, C, C-, D+, D, and D-. Being of no distinct advantage to the problem involved here, the raw scores were omitted. The letter ratings with their new values are given in the next section, page .

### 3. Average Score of Agriculture Teacher

About 1923-1924, a score card was devised for rating the departments of Vocational Agriculture throughout the state of Virginia. It was designed to serve as a motivation to agriculture teachers and at the same time to offer some criteria on which the work of one department might be compared with that of another. About two years ago, the agriculture teachers, in a meeting, voted that this score sheet no longer be used. So while the departments are not rated by this means now, they are still rated in other ways.

From time to time as necessity arose, a few changes were made on the score cards. In some instances, there was a slight increase or decrease in the possible score for one or more factors. For example, on the score sheet of 1924-1925, the possible score for enrollment was 20, whereas on the score sheet of June 1938 the possible score for the same factor was 16. In the other instances, new factors were added or old ones dropped. The organization, "Future Farmers of America", did not come into existence until 1926. Because of its importance in the Vocational Agriculture field, it was added to the score sheet. For the most part, however, the sheets remained about the same. This fact may be observed by comparing form II, page 21 and form III, page 22.

Copies of the score sheets for rating Agriculture departments for the sessions of 1931-1932 and of June 1938 with some explanation about them are included in this study for several reasons: (1) to give some idea on what factors the departments

rated, (2) to show the possible scores for the various factors, (3) to reveal some of the slight changes made and yet to show how basically the sheet remained the same, (4) to explain the derivation of the average scores, and (5) to make clear the meanings of "average score" and "departmental ratings" and the relationship between them as used in this particular study.

On form II and form III, the factors on which the departments were rated may be seen and compared, and also the possible values given them which indicate their comparative importance. The total score for the year of each department was found simply by adding the scores made on all the factors. For the years 1929, 1930, 1931, 1932, 1933, 1935, and 1936, the total possible score for the year was 102. For the remaining years covered in this study, the total possible score for the year was 100. For statistical convenience, it was necessary to convert the scores based on 102 points to percentage by allowing 102 to equal 100 percent. The average scores of the years in which the 102 was used were derived on the basis of 100 percent, the same basis used for finding the average scores of the years in which 100 was the total possible score.

The average score for the teacher over the ten-year period from 1928 to 1938 was found by adding the ratings of the departments in which he taught during that period and dividing by ten. Many of the men, however, had taught only a part of the period when this study was begun. Their average scores were obtained

by adding their ratings for the number of years they had taught and dividing by the same number. For illustration, if case one had taught only three years and his ratings were: first year, 78 percent; second year, 81,percent; and third year, 84 percent, his average score, then, would be 78 percent plus 81 percent plus 84 percent, divided by three which would be 81 percent.

As inferred in the preceding paragraphs, the average score of an individual is the average of the ratings given the department or departments he has headed. The rating of a department is identical to the rating of the instructor in charge of that particular department. It is essential that all the facts relating to the average score of the individual teacher be clear, because it is the criterion on which teaching success is based and with which correlations of personal traits and vocational interests are made.

#### 4. Number of Years Teaching

It was important to secure data on the number of years teaching so that the average number of years experience for each degree of the factor sorted would be found. This information along with the average scores for a definite number of years teaching is essential in interpreting the results of the tables, which fact may be seen more clearly as the problem unfolds.

## 5. Average Scores for the First Ten Years Teaching

The average scores for the first ten years teaching Vocational Agriculture are not to be confused with the average scores on the tables. The former are found on the basis of number of years experience beginning with one and extending through ten, whereas those on the tables are the average scores of a definite group of individuals sorted out on the basis of varying degrees of a certain factor, regardless of teaching experience.

The average score for the first year was found by adding the average scores of all the teachers included in this study, because all had had at least one year's experience and then dividing by the total number of teachers. The average scores for second year of all those who had had as many as two years experience were added and the sum divided by the total number of cases. This gave the average for the second year. To find the average for both years, it was necessary to add the averages of the first and second years and divide by two. Next the average scores for the third year's experience were added and divided by the average for the third year. In order to find the average score for the three years, the average scores for the first year, the second year, and the third year were added and divided by three. In a like manner, the average scores for the remaining of the ten years were found. Each year the number

of cases decreased because the number of years' experience increased.

There were two reasons for obtaining the average scores for the first ten years teaching experience. The first was to see how experience affected the average score of a teacher of Vocational Agriculture. The second was to find the average score for the first ten years only, because on the sorting of the factors no average number of years teaching exceeded ten. So that was all it was necessary to find. By knowing how experience generally affects the success of a teacher and about how much for each year, by comparison it may be discovered if it is the sorting factor or experience affecting his success.

### C. Organization of Data

After all the data had been collected and studied, the next step in establishing relationships was the organization of the data into tabular form so that these relationships could be seen at a glance and proved statistically. Following is an explanation of how and why this organization was done.

#### 1. Coding

As mentioned previously, the results obtained from the standardized tests were converted into small mathematical values so that they could be used easily in statistical analyses. On the Bernreuter inventory, those persons making under five percent

received a value of one, those making between five percent and 19 percent received a value of two, and so on. On the vocational interest blank, the new values ran from one to 12 since it had 12 divisions of grading instead of five as the inventory had. All the new values were transferred to coding paper with numbered columns on it. Each column represented a personal trait, an occupational interest, number of years teaching, or an average score. On the paper, opposite the name of the individual case were his scores in terms of the new values on each of the above factors.

## 2. Punching Cards

After checking and rechecking the data on the coding paper, the numbers were then punched on cards of 80 columns corresponding to the coding paper. Each case was represented by a card on which the numbers punched stood for his scores on personality traits, vocational interests, average score for teaching, and number of years experience teaching Vocational Agriculture. After all the cards were punched, they were checked for all errors and then corrected.

## 3. Sorting Cards

The problem undertaken in this thesis is to show the relationships between certain personal features, interests in certain occupations, and success in teaching Vocational Agriculture, success being based upon the average scores of the teachers in this field. It is assumed in the statement of the problem



that certain personality traits and vocational interests do have some bearing upon success in teaching Vocational Agriculture; that is, they help produce the result, called in this study average score. So the cards were sorted from cause to effect.

The cards were run through the sorting machine for a numbered column on the card which represented a certain factor or bit of information. The machine divided the cards into sorts. All the cases making one on column five fell into pocket one of the machine; all those making two on the same factor fell into pocket two, and so on. This was done for each of the factors before tabulating.

The sorting factor shown on all the tables is really the average score made on the factor sorted. It is found by dividing the number of cases of the group into the total score made by the group. For example, in the sort on the columns 21 and 22 or farmer, 53 cases made a total score of 82 on farming. By dividing 53 into 82, the sorting factor is found. It is 1.6. This means that the average score on farming for all those in this group is 1.6 which is an "A" score.

#### 4. Tabulating Cards

After the cards were sorted into groups for a certain factor, they were tabulated. By this process, the total scores of each group of the factor sorted on all the other factors were found. For illustration, let us take a specific case. In the sort on column five which was neurotic tendency, ten cases made

one on this factor, the total being ten; the same ten cases made a total of 31 on column seven which was self-sufficiency; the same ten cases made a total of 17 on column nine which was introversion-extroversion; the same made a total of 20 on column 13 which was confidence; and they made a total of 775.4 on columns 28, 29, and 30 which was their rating in Vocational Agriculture. Their totals on the occupations were given also. At the same time, the total scores for the cases making two on neurotic tendency, the sorting factor, were obtained, and for those making three, four, five, and six. In brief, the tabulations were the total scores of the groups of the sorting factor on all the other factors including the average score. Before the tabulations were found each time, the cards were sorted into groups.

##### 5. Averaging the Tabulations

After the tabulations were found, it was necessary to find the average ratings for the groups. For example, ten cases made a total of 775.4 on ratings in Vocational Agriculture. The average score for this group is 775.4 divided by ten which is 77.5. Also the same group made a total of 31 on self-sufficiency. Their average rating on this factor is 31 divided by ten which is 3.1. The averages of all the tabulations were found next. Averages of the tabulations are recorded in the tables.

## 6. Arranging the Data in Tables

After the information was punched on cards and the cards were sorted, tabulated, and averaged, the results were arranged on tables in the following sequence: (1) sort on values of factor being correlated, (2) the average of sorting factor, (3) the number of cases, (4) the personality traits, (5) the occupations, (6) the number of years experience teaching Vocational Agriculture, and (7) the average scores or criteria.

#### D. Information on Tables

Because of the factors used in this study and the significance of their scores, it is impossible to make a set of rules for reading the tables. Each table must be interpreted separately. However, there are a few general questions about the tables which should be answered. These are given below.

1. In general, what does each table show?

Each table shows principally two facts. They are (1) the relationship between the sort factor and the criteria or average scores and (2) the relationship between the sort factor and each of the remaining factors.

2. Why are there so few cases in the upper and lower groups?

There are so few cases in the upper and lower groups because in these groups are found those individuals rating above and below normal. Naturally the largest number of cases falls into the groups rating normal.

The fact that there are few cases in the upper and lower groups is very significant. It indicates that on the whole the teachers in this study are a normal group of people from the standpoint of certain personality features and vocational interests.

3. Why are some of the values combined and others not?

It may be seen by looking at the tables on personality features that the values representing normality are never combined with those rating above or below this. However, a value indicating a state above normality may be combined with one also indicating the same state, except perhaps a degree higher. The values below normality sometimes are likewise combined. Both are done only in situations where the few number of cases warrants it and where the combination of values does not destroy their meaning.

The combination of values on the interest tables is simple and uniform. One, two, and three are combined because they represent A; four, five, and six are joined because they stand for B; seven, eight, and nine fall together because they equal C; ten, eleven, and twelve are grouped because they equal D. If any one of these combinations is missing from the tables, it means there were no cases falling into this group. The same is true of the personality values; if any values are omitted from the tables, it means no cases scored the missing values.

#### 4. Why does the sorting factor always increase?

The sorting factor always increases because of the way in which the cards were sorted, from lower to higher. The other factors react according to the influence exerted upon them by the sort factor. They may increase, remain constant, or decrease.

Form I

Letter

VIRGINIA POLYTECHNIC INSTITUTE  
Department of Vocational Education  
Blacksburg, Virginia

January 24, 1940

To: Teachers of Agriculture,  
Ex-Students, Agricultural Education, V.P.I.

Dear Men:

I have at the present time a graduate student doing research work on the "Vocational Interest Blank for Men" and the Bernreuter "Personality Inventory", trying to establish correlations between these tests and success in the teaching field. We need your cooperation in this work, so we are enclosing one or both of these tests for you to fill out and return. It takes only a short time and is easily done. Just follow directions. Remember there is no right or wrong answer. It is just how one feels.

As you know, basic interests and personality are important factors in determining success in any field of work. I am very eager for the students who are doing this work to establish a statistically sound scale for future teachers of Agriculture. You see we need the results from these tests for use with the freshmen and prospective students to find out how really interested they are in the agricultural field and just how suited they are for the job.

Won't you please take the test or tests enclosed and return promptly? In so doing, you will be helping not only the students doing this work, but also the department itself.

Very truly yours,

Henry C Groseclose, Professor  
Agricultural Education

HCG:F

## FORM II

## SCORE CARD

## RATING OF VIRGINIA DEPARTMENTS OF VOCATIONAL AGRICULTURE

Session 1931-32

Departments	En- roll- ment Score	% Enter- prise & Imp. Pract. Comp.	% Boys Comp. Sup. Pract.	% Proj. Meet- ing Hours	Aver. Labor Income	Qual. Prelim. Reports	Supp. Jobs Comp.	Use Proj. Rec. Book	Adv. Coun- cil	Obj. Annu. Plan Reach- ed	Pub- lic- ity	Facil- ities & Org. of Dept.	Class Room Rat- ing	Prof. Im- prove- ment	F.F.A. Activi- ties	State and A.V.A. Assoc.	Total
Possible Score	(22)	(12)	(5)	(10)	(4)	(7)	(2)	(9)	(3)	(5)	(7)	(2)	(5)	(2)	(5)	(2)	(102)

## FORM III

## SCORE CARD

## RATING OF DEPARTMENT OF VOCATIONAL AGRICULTURE

June 1938

Departments	En- roll- ment Score	% Ent. Comp.	Av.No. Imp. Pr. Comp.	Qu. Ann. Pro. & AC	Ev.Cl Att. Av. a Mem.	F. F. A. Ac.	Ut. of Rec. Bk.	INFORMING THE PUBLIC					OUT OF SCHOOL YOUTH				FARM MECHANICS			Total	
								20 News Art.	5 Chap. Cht.	1 Ra- dio	Fa- irs Show	Sta. S&G Mts.	3 Adv. Coun.	%Boys Farm or Al. Occ.	%For. Stu. Rchd.	Sur. to Date	Org. Inst. Pt.Tm.	Fm. Shp. Sv.	Org. Shp. Mat.		Qu. Fa. Shp.
Possible Score	(16)	(5)	(3)	(6)	(3)	(10)	(15)	(4)	(2)	(1)	(5)	(1)	(3)	(4)	(4)	(3)	(3)	(2)	(5)	(5)	(100)



# THE PERSONALITY INVENTORY

By ROBERT G. BERNREUTER

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STANFORD UNIVERSITY, CALIFORNIA

Date.....

NAME..... Age..... Sex.....

Address.....

Name of school or business firm..... School grade or occupation.....

	B1-N	B2-S	B3-I	B4-D	F1-C	F2-S
Plus						
Minus						
Difference						
Percentile	%	%	%	%	%	%

H.S.—COLL.—ADULT

Based on norms

MALE—FEMALE

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Leiland Stanford Junior University

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The questions on this blank are intended to indicate your interests and attitudes. It is not an intelligence test, nor are there any right or wrong answers.

In front of each question you will find: "Yes No ?"

If your answer is "Yes," draw a circle around the "Yes." If your answer is "No," draw a circle around the "No." If you are entirely unable to answer either "Yes" or "No" to the question, then draw a circle around the question mark.

- 
1. Yes No ? Does it make you uncomfortable to be "different" or unconventional?
  2. Yes No ? Do you day-dream frequently?
  3. Yes No ? Do you usually work things out for yourself rather than get someone to show you?
  4. Yes No ? Have you ever crossed the street to avoid meeting some person?
  5. Yes No ? Can you stand criticism without feeling hurt?
  6. Yes No ? Do you ever give money to beggars?
  7. Yes No ? Do you prefer to associate with people who are younger than yourself?
  8. Yes No ? Do you often feel just miserable?
  9. Yes No ? Do you dislike finding your way about in strange places?
  10. Yes No ? Are you easily discouraged when the opinions of others differ from your own?
  11. Yes No ? Do you try to get your own way even if you have to fight for it?
  12. Yes No ? Do you blush very often?
  13. Yes No ? Do athletics interest you more than intellectual affairs?
  14. Yes No ? Do you consider yourself a rather nervous person?
  15. Yes No ? Do you usually object when a person steps in front of you in a line of people?
  16. Yes No ? Have you ever tried to argue or bluff your way past a guard or doorman?
  17. Yes No ? Are you much affected by the praise or blame of many people?
  18. Yes No ? Are you touchy on various subjects?
  19. Yes No ? Do you frequently argue over prices with tradesmen or junkmen?
  20. Yes No ? Do you feel self-conscious in the presence of superiors in the academic or business world?
  21. Yes No ? Do ideas often run through your head so that you cannot sleep?
  22. Yes No ? Are you slow in making decisions?
  23. Yes No ? Do you think you could become so absorbed in creative work that you would not notice a lack of intimate friends?
  24. Yes No ? Are you troubled with shyness?
  25. Yes No ? Are you inclined to study the motives of other people carefully?
  26. Yes No ? Do you frequently feel grouchy?
  27. Yes No ? Do your interests change rapidly?
  28. Yes No ? Are you very talkative at social gatherings?
  29. Yes No ? Do you ever heckle or question a public speaker?
  30. Yes No ? Do you very much mind taking back articles you have purchased at stores?
  31. Yes No ? Do you see more fun or humor in things when you are in a group than when alone?
  32. Yes No ? Do you prefer travelling with someone who will make all the necessary arrangements to the adventure of travelling alone?
  33. Yes No ? Would you rather work for yourself than carry out the program of a superior whom you respect?
  34. Yes No ? Can you usually express yourself better in speech than in writing?
  35. Yes No ? Would you dislike any work which might take you into isolation for a few years, such as forest ranging, etc.?
  36. Yes No ? Have you ever solicited funds for a cause in which you were interested?
  37. Yes No ? Do you usually try to avoid dictatorial or "bossy" people?
  38. Yes No ? Do you find conversation more helpful in formulating your ideas than reading?

39. Yes No ? Do you worry too long over humiliating experiences?
40. Yes No ? Have you ever organized any clubs, teams, or other groups on your own initiative?
41. Yes No ? If you see an accident do you quickly take an active part in giving aid?
42. Yes No ? Do you get stage fright?
43. Yes No ? Do you like to bear responsibilities alone?
44. Yes No ? Have books been more entertaining to you than companions?
45. Yes No ? Have you ever had spells of dizziness?
46. Yes No ? Do jeers humiliate you even when you know you are right?
47. Yes No ? Do you want someone to be with you when you receive bad news?
48. Yes No ? Does it bother you to have people watch you at work even when you do it well?
49. Yes No ? Do you often experience periods of loneliness?
50. Yes No ? Do you usually try to avoid arguments?
51. Yes No ? Are your feelings easily hurt?
52. Yes No ? Do you usually prefer to do your own planning alone rather than with others?
53. Yes No ? Do you find that telling others of your own personal good news is the greatest part of the enjoyment of it?
54. Yes No ? Do you often feel lonesome when you are with other people?
55. Yes No ? Are you thrifty and careful about making loans?
56. Yes No ? Are you careful not to say things to hurt other people's feelings?
57. Yes No ? Are you easily moved to tears?
58. Yes No ? Do you ever complain to the waiter when you are served inferior or poorly prepared food?
59. Yes No ? Do you find it difficult to speak in public?
60. Yes No ? Do you ever rewrite your letters before mailing them?
61. Yes No ? Do you usually enjoy spending an evening alone?
62. Yes No ? Do you make new friends easily?
63. Yes No ? If you are dining out do you prefer to have someone else order dinner for you?
64. Yes No ? Do you usually feel a great deal of hesitancy over borrowing an article from an acquaintance?
65. Yes No ? Are you greatly embarrassed if you have greeted a stranger whom you have mistaken for an acquaintance?
66. Yes No ? Do you find it difficult to get rid of a salesman?
67. Yes No ? Do people ever come to you for advice?
68. Yes No ? Do you usually ignore the feelings of others when accomplishing some end which is important to you?
69. Yes No ? Do you often find that you cannot make up your mind until the time for action has passed?
70. Yes No ? Do you especially like to have attention from acquaintances when you are ill?
71. Yes No ? Do you experience many pleasant or unpleasant moods?
72. Yes No ? Are you troubled with feelings of inferiority?
73. Yes No ? Does some particularly useless thought keep coming into your mind to bother you?
74. Yes No ? Do you ever upbraid a workman who fails to have your work done on time?
75. Yes No ? Are you able to play your best in a game or contest against an opponent who is greatly superior to you?
76. Yes No ? Have you frequently appeared as a lecturer or entertainer before groups of people?
77. Yes No ? Are people sometimes successful in taking advantage of you?
78. Yes No ? When you are in low spirits do you try to find someone to cheer you up?
79. Yes No ? Can you usually understand a problem better by studying it out alone than by discussing it with others?
80. Yes No ? Do you lack self-confidence?
81. Yes No ? Does admiration gratify you more than achievement?
82. Yes No ? Are you willing to take a chance alone in a situation of doubtful outcome?
83. Yes No ? Does your ambition need occasional stimulation through contact with successful people?

84. Yes No ? Do you usually avoid asking advice?
85. Yes No ? Do you consider the observance of social customs and manners an essential aspect of life?
86. Yes No ? If you are spending an evening in the company of other people do you usually let someone else decide upon the entertainment?
87. Yes No ? Do you take the responsibility for introducing people at a party?
88. Yes No ? If you came late to a meeting would you rather stand than take a front seat?
89. Yes No ? Do you like to get many views from others before making an important decision?
90. Yes No ? Do you try to treat a domineering person the same as he treats you?
91. Yes No ? Does your mind often wander so badly that you lose track of what you are doing?
92. Yes No ? Do you ever argue a point with an older person whom you respect?
93. Yes No ? Do you have difficulty in making up your mind for yourself?
94. Yes No ? Do you ever take the lead to enliven a dull party?
95. Yes No ? Would you "have it out" with a person who spread untrue rumors about you?
96. Yes No ? At a reception or tea do you feel reluctant to meet the most important person present?
97. Yes No ? Do you find that people are more stimulating to you than anything else?
98. Yes No ? Do you prefer a play to a dance?
99. Yes No ? Do you tend to be radical in your political, religious, or social beliefs?
100. Yes No ? Do you prefer to be alone at times of emotional stress?
101. Yes No ? Do you usually prefer to work with others?
102. Yes No ? Do you usually work better when you are praised?
103. Yes No ? Do you have difficulty in starting a conversation with a stranger?
104. Yes No ? Do your feelings alternate between happiness and sadness without apparent reason?
105. Yes No ? Are you systematic in caring for your personal property?
106. Yes No ? Do you worry over possible misfortunes?
107. Yes No ? Do you usually prefer to keep your feelings to yourself?
108. Yes No ? Can you stick to a tiresome task for a long time without someone prodding or encouraging you?
109. Yes No ? Do you get as many ideas at the time of reading a book as you do from a discussion of it afterward?
110. Yes No ? Do you usually face your troubles alone without seeking help?
111. Yes No ? Have you been the recognized leader (president, captain, chairman) of a group within the last five years?
112. Yes No ? Do you prefer making hurried decisions alone?
113. Yes No ? If you were hiking with a group of people, where none of you knew the way, would you probably let someone else take the full responsibility for guiding the party?
114. Yes No ? Are you troubled with the idea that people on the street are watching you?
115. Yes No ? Are you often in a state of excitement?
116. Yes No ? Are you considered to be critical of other people?
117. Yes No ? Do you usually try to take added responsibilities on yourself?
118. Yes No ? Do you keep in the background at social functions?
119. Yes No ? Do you greatly dislike being told how you should do things?
120. Yes No ? Do you feel that marriage is essential to your present or future happiness?
121. Yes No ? Do you like to be with people a great deal?
122. Yes No ? Can you be optimistic when others about you are greatly depressed?
123. Yes No ? Does discipline make you discontented?
124. Yes No ? Are you usually considered to be indifferent to the opposite sex?
125. Yes No ? Would you feel very self-conscious if you had to volunteer an idea to start a discussion among a group of people?

# VOCATIONAL INTEREST BLANK FOR MEN (Revised)

By EDWARD K. STRONG, JR.  
Professor of Psychology, Stanford University

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It is possible with a fair degree of accuracy to determine by this test whether one would like certain occupations or not. The test is not one of intelligence or school work. It measures the extent to which one's interests agree or disagree with those of successful men in a given occupation.

Your responses will, of course, be held strictly confidential.

Date.....

1. Name..... 2. Age..... 3. Sex.....

4. Address to which correspondence should be sent.....

*If you are still attending school or expect to return to school, answer items 5-12; if you have left school, answer items 13-20.*

Any additional remarks may be entered at 21.

5. Grade I am now in: Grammar School 1 2 3 4 5 6 7 8 High School 1 2 3 4 College 1 2 3 4 5 6 7  
(PUT A CIRCLE AROUND APPROPRIATE GRADE)

6. School grade I expect to complete.....

7. School subjects I am now most interested in.....

8. School subjects I expect to specialize in later on.....

9. Occupation I am planning to enter..... 10. Sure of this..... Not sure.....

11. Jobs I have been employed at (e.g., clerical, retail selling, farming, giving number of months employed at each).....

12. Occupations I have formerly considered entering.....

### *To be Answered by Those Who Have Left School*

13. Last grade you finished in school (e.g., Grammar 6th, High School 2nd, College 4th).....

14. What technical or business courses have you taken? (Underline those you finished).....

15. Occupation (e.g., Carpenter)..... 16. Years of experience in it.....

17. Just what do you do?.....

18. Why did you select the above occupation?.....

19. What occupations, other than your present one, have you at one time or another engaged in?.....

20. What occupations, if any, have you in mind entering? Why? .....

21. Remarks .....

**Part I. Occupations.** Indicate after each occupation listed below whether you would like that kind of work or not. Disregard considerations of salary, social standing, future advancement, etc. Consider only whether or not you would like to do what is involved in the occupation. You are not asked if you would take up the occupation permanently, but merely whether or not you would enjoy that kind of work, regardless of any necessary skills, abilities, or training which you may or may not possess.

Draw a circle around L if you like that kind of work

Draw a circle around I if you are indifferent to that kind of work

Draw a circle around D if you dislike that kind of work

Work rapidly. Your first impressions are desired here. Answer all the items. Many of the seemingly trivial and irrelevant items are very useful in diagnosing your real attitude.

- |                                     |   |   |   |                                       |   |   |   |
|-------------------------------------|---|---|---|---------------------------------------|---|---|---|
| 1 Actor (not movie) .....           | L | I | D | 46 Jeweler .....                      | L | I | D |
| 2 Advertiser .....                  | L | I | D | 47 Judge .....                        | L | I | D |
| 3 Architect .....                   | L | I | D | 48 Labor Arbitrator .....             | L | I | D |
| 4 Army Officer .....                | L | I | D | 49 Laboratory Technician .....        | L | I | D |
| 5 Artist .....                      | L | I | D | 50 Landscape Gardener .....           | L | I | D |
| 6 Astronomer .....                  | L | I | D | 51 Lawyer, Criminal .....             | L | I | D |
| 7 Athletic Director .....           | L | I | D | 52 Lawyer, Corporation .....          | L | I | D |
| 8 Auctioneer .....                  | L | I | D | 53 Librarian .....                    | L | I | D |
| 9 Author of novel.....              | L | I | D | 54 Life Insurance Salesman.....       | L | I | D |
| 10 Author of technical book.....    | L | I | D | 55 Locomotive Engineer .....          | L | I | D |
| 11 Auto Salesman .....              | L | I | D | 56 Machinist .....                    | L | I | D |
| 12 Auto Racer .....                 | L | I | D | 57 Magazine Writer .....              | L | I | D |
| 13 Auto Repairman .....             | L | I | D | 58 Manufacturer .....                 | L | I | D |
| 14 Aviator .....                    | L | I | D | 59 Marine Engineer .....              | L | I | D |
| 15 Bank Teller .....                | L | I | D | 60 Mechanical Engineer .....          | L | I | D |
| 16 Bookkeeper .....                 | L | I | D | 61 Mining Superintendent .....        | L | I | D |
| 17 Building Contractor .....        | L | I | D | 62 Musician .....                     | L | I | D |
| 18 Buyer of merchandise.....        | L | I | D | 63 Music Teacher .....                | L | I | D |
| 19 Carpenter .....                  | L | I | D | 64 Office Clerk .....                 | L | I | D |
| 20 Cartoonist .....                 | L | I | D | 65 Office Manager .....               | L | I | D |
| 21 Cashier in bank.....             | L | I | D | 66 Orchestra Conductor .....          | L | I | D |
| 22 Certified Public Accountant..... | L | I | D | 67 Pharmacist .....                   | L | I | D |
| 23 Chemist .....                    | L | I | D | 68 Photo Engraver .....               | L | I | D |
| 24 Civil Engineer .....             | L | I | D | 69 Physician .....                    | L | I | D |
| 25 Civil Service Employee.....      | L | I | D | 70 Playground Director .....          | L | I | D |
| 26 Clergyman .....                  | L | I | D | 71 Poet .....                         | L | I | D |
| 27 College Professor .....          | L | I | D | 72 Politician .....                   | L | I | D |
| 28 Consul .....                     | L | I | D | 73 Printer .....                      | L | I | D |
| 29 Dentist .....                    | L | I | D | 74 Private Secretary .....            | L | I | D |
| 30 Draftsman .....                  | L | I | D | 75 Railway Conductor .....            | L | I | D |
| 31 Editor .....                     | L | I | D | 76 Rancher .....                      | L | I | D |
| 32 Electrical Engineer .....        | L | I | D | 77 Real Estate Salesman.....          | L | I | D |
| 33 Employment Manager .....         | L | I | D | 78 Reporter, general .....            | L | I | D |
| 34 Explorer .....                   | L | I | D | 79 Reporter, sporting page.....       | L | I | D |
| 35 Factory Manager .....            | L | I | D | 80 Retailer .....                     | L | I | D |
| 36 Factory Worker .....             | L | I | D | 81 Sales Manager .....                | L | I | D |
| 37 Farmer .....                     | L | I | D | 82 School Teacher .....               | L | I | D |
| 38 Floorwalker .....                | L | I | D | 83 Scientific Research Worker.....    | L | I | D |
| 39 Florist .....                    | L | I | D | 84 Sculptor .....                     | L | I | D |
| 40 Foreign Correspondent .....      | L | I | D | 85 Secretary, Chamber of Commerce.... | L | I | D |
| 41 Governor of a State.....         | L | I | D | 86 Secret Service Man.....            | L | I | D |
| 42 Hotel Keeper or Manager.....     | L | I | D | 87 Ship Officer .....                 | L | I | D |
| 43 Interior Decorator .....         | L | I | D | 88 Shop Foreman .....                 | L | I | D |
| 44 Interpreter .....                | L | I | D | 89 Social Worker .....                | L | I | D |
| 45 Inventor .....                   | L | I | D | 90 Specialty Salesman .....           | L | I | D |



**Part I. Occupations, continued.**

91	Statistician .....	L	I	D
92	Stock Broker .....	L	I	D
93	Surgeon .....	L	I	D
94	Toolmaker .....	L	I	D
95	Traveling Salesman .....	L	I	D
96	Typist .....	L	I	D
97	Undertaker .....	L	I	D
98	Watchmaker .....	L	I	D
99	Wholesaler .....	L	I	D
100	Worker in Y.M.C.A., K. of C., etc...	L	I	D

**Part II. School Subjects.** Indicate as in Part I your interest when in school.

101	Algebra .....	L	I	D
102	Agriculture .....	L	I	D
103	Arithmetic .....	L	I	D
104	Art .....	L	I	D
105	Bookkeeping .....	L	I	D
106	Botany .....	L	I	D
107	Calculus .....	L	I	D
108	Chemistry .....	L	I	D
109	Civics .....	L	I	D
110	Dramatics .....	L	I	D
111	Economics .....	L	I	D
112	English Composition .....	L	I	D
113	Geography .....	L	I	D
114	Geology .....	L	I	D
115	Geometry .....	L	I	D
116	History .....	L	I	D
117	Languages, ancient .....	L	I	D
118	Languages, modern .....	L	I	D
119	Literature .....	L	I	D
120	Mathematics .....	L	I	D
121	Manual Training .....	L	I	D
122	Mechanical Drawing .....	L	I	D
123	Military Drill .....	L	I	D
124	Music .....	L	I	D
125	Nature Study .....	L	I	D
126	Philosophy .....	L	I	D
127	Physical Training .....	L	I	D
128	Physics .....	L	I	D
129	Psychology .....	L	I	D
130	Physiology .....	L	I	D
131	Public Speaking .....	L	I	D
132	Shop work .....	L	I	D
133	Sociology .....	L	I	D
134	Spelling .....	L	I	D
135	Typewriting .....	L	I	D
136	Zoölogy .....	L	I	D

**Part III. Amusements.** Indicate in the same manner as in Part I whether you like the following or not. If in doubt, consider your most frequent attitude. *Work rapidly.* Do not think over various possibilities. Record your first impression.

137	Golf .....	L	I	D
138	Fishing .....	L	I	D
139	Hunting .....	L	I	D
140	Tennis .....	L	I	D
141	Driving an automobile.....	L	I	D
142	Taking long walks.....	L	I	D
143	Boxing .....	L	I	D
144	Chess .....	L	I	D
145	Poker .....	L	I	D
146	Bridge .....	L	I	D
147	Observing birds (nature study)....	L	I	D
148	Solving mechanical puzzles.....	L	I	D
149	Performing sleight-of-hand tricks...	L	I	D
150	Collecting postage stamps.....	L	I	D
151	Drilling in a company.....	L	I	D
152	Chopping wood .....	L	I	D
153	Amusement parks .....	L	I	D
154	Picnics .....	L	I	D
155	Excursions .....	L	I	D
156	Smokers .....	L	I	D
157	"Rough house" initiations .....	L	I	D
158	Conventions .....	L	I	D
159	Full-dress affairs .....	L	I	D
160	Auctions .....	L	I	D
161	Fortune tellers .....	L	I	D
162	Animal zoos .....	L	I	D
163	Art galleries .....	L	I	D
164	Museums .....	L	I	D
165	Vaudeville .....	L	I	D
166	Musical comedy .....	L	I	D
167	Symphony concerts .....	L	I	D
168	Pet canaries .....	L	I	D
169	Pet monkeys .....	L	I	D
170	Snakes .....	L	I	D
171	Sporting pages .....	L	I	D
172	Poetry .....	L	I	D
173	Detective stories .....	L	I	D
174	"Time" .....	L	I	D
175	"Judge" .....	L	I	D
176	"New Republic" .....	L	I	D
177	"System" .....	L	I	D
178	"National Geographic Magazine"....	L	I	D
179	"American Magazine" .....	L	I	D
180	"Popular Mechanics" .....	L	I	D
181	"Atlantic Monthly" .....	L	I	D
182	Educational movies .....	L	I	D
183	Travel movies .....	L	I	D
184	Social problem movies.....	L	I	D
185	Making a radio set.....	L	I	D

**Part IV. Activities.** Indicate your interests as in Part I.

186	Repairing a clock.....	L	I	D
187	Adjusting a carburetor.....	L	I	D
188	Repairing electrical wiring.....	L	I	D
189	Cabinetmaking .....	L	I	D
190	Operating machinery .....	L	I	D
191	Handling horses .....	L	I	D
192	Giving "first aid" assistance.....	L	I	D
193	Raising flowers and vegetables.....	L	I	D
194	Decorating a room with flowers.....	L	I	D
195	Arguments .....	L	I	D
196	Interviewing men for a job.....	L	I	D
197	Interviewing prospects in selling...	L	I	D
198	Interviewing clients .....	L	I	D
199	Making a speech.....	L	I	D
200	Organizing a play .....	L	I	D
201	Opening conversation with a stranger	L	I	D
202	Teaching children .....	L	I	D
203	Teaching adults .....	L	I	D
204	Calling friends by nicknames.....	L	I	D
205	Being called by a nickname.....	L	I	D
206	Meeting and directing people.....	L	I	D
207	Taking responsibility .....	L	I	D
208	Meeting new situations.....	L	I	D
209	Adjusting difficulties of others.....	L	I	D
210	Drilling soldiers .....	L	I	D
211	Pursuing bandits in sheriff's posse..	L	I	D
212	Doing research work.....	L	I	D
213	Acting as yell-leader.....	L	I	D
214	Writing personal letters.....	L	I	D
215	Writing reports .....	L	I	D
216	Entertaining others .....	L	I	D
217	Bargaining ("swapping") .....	L	I	D
218	Looking at shop windows.....	L	I	D
219	Buying merchandise for a store.....	L	I	D
220	Displaying merchandise in a store..	L	I	D
221	Expressing judgments publicly regardless of criticism.....	L	I	D
222	Being pitted against another as in a political or athletic race.....	L	I	D
223	Methodical work .....	L	I	D
224	Regular hours for work.....	L	I	D
225	Continually changing activities.....	L	I	D
226	Developing business systems.....	L	I	D
227	Saving money .....	L	I	D
228	Contributing to charities.....	L	I	D
229	Raising money for a charity.....	L	I	D
230	Living in the city.....	L	I	D
231	Climbing along edge of precipice...	L	I	D
232	Looking at a collection of rare laces.	L	I	D
233	Looking at a collection of antique furniture .....	L	I	D

**Part V. Peculiarities of People.** Record your first impression. Do not think of various possibilities or of exceptional cases. "Let yourself go" and record the feeling that comes to mind as you read the item.

234	Progressive people .....	L	I	D
235	Conservative people .....	L	I	D
236	Energetic people .....	L	I	D
237	Absent-minded people .....	L	I	D
238	People who borrow things.....	L	I	D
239	Quick-tempered people .....	L	I	D
240	Optimists .....	L	I	D
241	Pessimists .....	L	I	D
242	People who are natural leaders.....	L	I	D
243	People who assume leadership.....	L	I	D
244	People easily led.....	L	I	D
245	People who have made fortunes in business .....	L	I	D
246	Emotional people .....	L	I	D
247	Thrifty people .....	L	I	D
248	Spendthrifts .....	L	I	D
249	Talkative people .....	L	I	D
250	Religious people .....	L	I	D
251	Irreligious people .....	L	I	D
252	People who have done you favors...	L	I	D
253	People who get rattled easily.....	L	I	D
254	Gruff men .....	L	I	D
255	Foreigners .....	L	I	D
256	Sick people .....	L	I	D
257	Nervous people .....	L	I	D
258	Very old people.....	L	I	D
259	Cripples .....	L	I	D
260	Side-show freaks .....	L	I	D
261	People with gold teeth.....	L	I	D
262	People with protruding jaws.....	L	I	D
263	People with hooked noses.....	L	I	D
264	Blind people .....	L	I	D
265	Deaf mutes .....	L	I	D
266	Self-conscious people .....	L	I	D
267	People who always agree with you..	L	I	D
268	People who talk very loudly.....	L	I	D
269	People who talk very slowly.....	L	I	D
270	People who talk about themselves...	L	I	D
271	Fashionably dressed people.....	L	I	D
272	Carelessly dressed people.....	L	I	D
273	People who don't believe in evolution	L	I	D
274	Socialists .....	L	I	D
275	Bolshevists .....	L	I	D
276	Independents in politics.....	L	I	D
277	Men who chew tobacco.....	L	I	D
278	Men who use perfume.....	L	I	D
279	People who chew gum.....	L	I	D
280	Athletic men .....	L	I	D



**Part VI. Order of Preference of Activities.** Indicate which three of the following ten activities you would enjoy most by checking (✓) opposite them in column 1; also indicate which three you would enjoy least by checking opposite them in column 3. Check the remaining four activities in column 2.

- |     | 1   | 2   | 3   |  |
|-----|-----|-----|-----|--|
| 281 | ( ) | ( ) | ( ) | Develop the theory of operation of a new machine, e.g., auto       |
| 282 | ( ) | ( ) | ( ) | Operate (manipulate) the new machine                               |
| 283 | ( ) | ( ) | ( ) | Discover an improvement in the design of the machine               |
| 284 | ( ) | ( ) | ( ) | Determine the cost of operation of the machine                     |
| 285 | ( ) | ( ) | ( ) | Supervise the manufacture of the machine                           |
| 286 | ( ) | ( ) | ( ) | Create a new artistic effect, i.e., improve the beauty of the auto |
| 287 | ( ) | ( ) | ( ) | Sell the machine   |
| 288 | ( ) | ( ) | ( ) | Prepare the advertising for the machine                            |
| 289 | ( ) | ( ) | ( ) | Teach others the use of the machine                                |
| 290 | ( ) | ( ) | ( ) | Interest the public in the machine through public addresses        |

Indicate in the same way what you consider are the three most important factors affecting your work; also the three least important factors. Check the remaining four items in column 2. Be sure you have marked three items under 1, three items under 3, and four items under 2.

- |     | 1   | 2   | 3   |   |
|-----|-----|-----|-----|---|
| 291 | ( ) | ( ) | ( ) | Salary received for work  |
| 292 | ( ) | ( ) | ( ) | Steadiness and permanence of work   |
| 293 | ( ) | ( ) | ( ) | Opportunity for promotion   |
| 294 | ( ) | ( ) | ( ) | Courteous treatment from superiors  |
| 295 | ( ) | ( ) | ( ) | Opportunity to make use of all one's knowledge and experience             |
| 296 | ( ) | ( ) | ( ) | Opportunity to ask questions and to consult about difficulties            |
| 297 | ( ) | ( ) | ( ) | Opportunity to understand just how one's superior expects work to be done |
| 298 | ( ) | ( ) | ( ) | Certainty one's work will be judged by fair standards                     |
| 299 | ( ) | ( ) | ( ) | Freedom in working out one's own methods of doing the work                |
| 300 | ( ) | ( ) | ( ) | Co-workers—congenial, competent, and adequate in number                   |

Indicate in the same way the three men you would most like to have been; also the three you would least like to have been. Check the remaining four men in column 2.

- |     | 1   | 2   | 3   |                                |
|-----|-----|-----|-----|--------------------------------|
| 301 | ( ) | ( ) | ( ) | Luther Burbank, "plant wizard" |
| 302 | ( ) | ( ) | ( ) | Enrico Caruso, singer          |
| 303 | ( ) | ( ) | ( ) | Thomas A. Edison, inventor     |
| 304 | ( ) | ( ) | ( ) | Henry Ford, manufacturer       |
| 305 | ( ) | ( ) | ( ) | Charles Dana Gibson, artist    |
| 306 | ( ) | ( ) | ( ) | J. P. Morgan, financier        |
| 307 | ( ) | ( ) | ( ) | J. J. Pershing, soldier        |
| 308 | ( ) | ( ) | ( ) | William H. Taft, jurist        |
| 309 | ( ) | ( ) | ( ) | Booth Tarkington, author       |
| 310 | ( ) | ( ) | ( ) | John Wanamaker, merchant       |

Indicate in the same way the three positions you would most prefer to hold in club or society; also the three you least prefer to hold. Check the remaining four in column 2.

- |     | 1   | 2   | 3   |                                   |
|-----|-----|-----|-----|-----------------------------------|
| 311 | ( ) | ( ) | ( ) | President of a Society or Club    |
| 312 | ( ) | ( ) | ( ) | Secretary of a Society or Club    |
| 313 | ( ) | ( ) | ( ) | Treasurer of a Society or Club    |
| 314 | ( ) | ( ) | ( ) | Member of a Society or Club       |
| 315 | ( ) | ( ) | ( ) | Chairman, Arrangement Committee   |
| 316 | ( ) | ( ) | ( ) | Chairman, Educational Committee   |
| 317 | ( ) | ( ) | ( ) | Chairman, Entertainment Committee |
| 318 | ( ) | ( ) | ( ) | Chairman, Membership Committee    |
| 319 | ( ) | ( ) | ( ) | Chairman, Program Committee       |
| 320 | ( ) | ( ) | ( ) | Chairman, Publicity Committee     |

**Part VII. Comparison of Interest between Two Items.** Indicate your choice of the following pairs by checking (✓) in the first space if you prefer the item to the left, in the second space if you like both equally well, and in the third space if you prefer the item to the right. Assume other things are equal except the two items to be compared.

*Work rapidly.*

- |  |     |     |     |   |
|--|-----|-----|-----|---|
| 321 Street-car motorman .....  | ( ) | ( ) | ( ) | Street-car conductor  |
| 322 Policeman .....  | ( ) | ( ) | ( ) | Fireman (fights fire)   |
| 323 Chauffeur .....  | ( ) | ( ) | ( ) | Chef  |
| 324 Head waiter .....  | ( ) | ( ) | ( ) | Lighthouse tender   |
| 325 House to house canvassing.....   | ( ) | ( ) | ( ) | Retail selling  |
| 326 House to house canvassing.....   | ( ) | ( ) | ( ) | Gardening   |
| 327 Repair auto .....  | ( ) | ( ) | ( ) | Drive auto  |
| 328 Develop plans .....  | ( ) | ( ) | ( ) | Execute plans   |
| 329 Do a job yourself.....   | ( ) | ( ) | ( ) | Delegate job to another   |
| 330 Persuade others .....  | ( ) | ( ) | ( ) | Order others  |
| 331 Deal with things.....  | ( ) | ( ) | ( ) | Deal with people  |
| 332 Plan for immediate future.....   | ( ) | ( ) | ( ) | Plan for five years ahead   |
| 333 Activity which produces tangible returns.....  | ( ) | ( ) | ( ) | Activity which is enjoyed for its own sake  |
| 334 Taking a chance.....   | ( ) | ( ) | ( ) | Playing safe  |
| 335 Definite salary .....  | ( ) | ( ) | ( ) | Commission on what is done  |
| 336 Work for yourself.....   | ( ) | ( ) | ( ) | Carry out program of superior who is respected  |
| 337 Work which interests you with modest income  | ( ) | ( ) | ( ) | Work which does not interest you with large income  |
| 338 Work in a large corporation with little chance<br>of becoming president until age of 55.....                 | ( ) | ( ) | ( ) | Work for self in small business   |
| 339 Selling article, quoted 10% below competitor..   | ( ) | ( ) | ( ) | Selling article, quoted 10% above competitor  |
| 340 Small pay, large opportunities to learn during<br>next 5 years.....  | ( ) | ( ) | ( ) | Good pay, little opportunity to learn during next<br>5 years  |
| 341 Work involving few details.....  | ( ) | ( ) | ( ) | Work involving many details   |
| 342 Outside work .....   | ( ) | ( ) | ( ) | Inside work   |
| 343 Change from place to place.....  | ( ) | ( ) | ( ) | Working in one location   |
| 344 Great variety of work.....   | ( ) | ( ) | ( ) | Similarity in work  |
| 345 Physical activity .....  | ( ) | ( ) | ( ) | Mental activity   |
| 346 Emphasis upon quality of work.....   | ( ) | ( ) | ( ) | Emphasis upon quantity of work  |
| 347 Technical responsibility (head of a department<br>of 25 people engaged in technical, research<br>work) ..... | ( ) | ( ) | ( ) | Supervisory responsibility (head of a department<br>of 300 people engaged in typical business<br>operation) |
| 348 Present a report in writing.....   | ( ) | ( ) | ( ) | Present a report verbally   |
| 349 Listening to a story.....  | ( ) | ( ) | ( ) | Telling a story   |
| 350 Playing baseball .....   | ( ) | ( ) | ( ) | Watching baseball   |
| 351 Amusement where there is a crowd.....  | ( ) | ( ) | ( ) | Amusement alone or with one or two others   |
| 352 Nights spent at home.....  | ( ) | ( ) | ( ) | Nights away from home   |
| 353 Reading a book.....  | ( ) | ( ) | ( ) | Going to movies   |
| 354 Belonging to many societies.....   | ( ) | ( ) | ( ) | Belonging to few societies  |
| 355 Few intimate friends.....  | ( ) | ( ) | ( ) | Many acquaintances  |
| 356 Many women friends.....  | ( ) | ( ) | ( ) | Few women friends   |
| 357 Fat men .....  | ( ) | ( ) | ( ) | Thin men  |
| 358 Tall men .....   | ( ) | ( ) | ( ) | Short men   |
| 359 Jealous people .....   | ( ) | ( ) | ( ) | Conceited people  |
| 360 Jealous people .....   | ( ) | ( ) | ( ) | Spendthrifts  |

**Part VIII. Rating of Present Abilities and Characteristics.** Indicate below what kind of a person you are right now and what you have done. Check in the *first* column ("Yes") if the item really describes you, in the *third* column ("No") if the item does not describe you, and in the *second* column (?) if you are not sure. (Be frank in pointing out your weak points, for selection of a vocation must be made in terms of them as well as your strong points.)

	YES	?	NO
361 Usually start activities of my group.....	( )	( )	( )
362 Usually drive myself steadily (do not work by fits and starts) .....	( )	( )	( )
363 Win friends easily.....	( )	( )	( )
364 Usually get other people to do what I want done.....	( )	( )	( )
365 Usually liven up the group on a dull day.....	( )	( )	( )
366 Am quite sure of myself.....	( )	( )	( )
367 Accept just criticism without getting sore.....	( )	( )	( )
368 Have mechanical ingenuity (inventiveness) .....	( )	( )	( )
369 Have more than my share of novel ideas.....	( )	( )	( )
370 Can carry out plans assigned by other people.....	( )	( )	( )
371 Can discriminate between more or less important matters.....	( )	( )	( )
372 Am inclined to keep silent (reticent) in confidential and semi-confidential affairs.....	( )	( )	( )
373 Am always on time with my work.....	( )	( )	( )
374 Remember faces, names, and incidents better than the average person .....	( )	( )	( )
375 Can correct others without giving offense.....	( )	( )	( )
376 Able to meet emergencies quickly and effectively.....	( )	( )	( )
377 Get "rattled" easily.....	( )	( )	( )
378 Can write a concise, well-organized report.....	( )	( )	( )
379 Have good judgment in appraising values.....	( )	( )	( )
380 Plan my work in detail.....	( )	( )	( )
381 Follow up subordinates effectively.....	( )	( )	( )
382 Put drive into the organization.....	( )	( )	( )
383 Stimulate the ambition of my associates.....	( )	( )	( )
384 Show firmness without being easy.....	( )	( )	( )
385 Win confidence and loyalty.....	( )	( )	( )
386 Smooth out tangles and disagreements between people.....	( )	( )	( )
387 Am approachable .....	( )	( )	( )
388 Discuss my ideals with others.....	( )	( )	( )

Check (✓) in the first, second, or third column at the right according as the first, second, or third statement in each item below applies to you.

	(1st)	(2nd)	(3rd)
389 (1) Feelings easily hurt                      (2) Feelings hurt sometimes                      (3) Feelings rarely hurt.....	( )	( )	( )
390 (1) Usually ignore the feelings of others                      (2) Consider them sometimes                      (3) Carefully consider them..	( )	( )	( )
391 (1) Loan money to acquaintances                      (2) Loan only to certain people                      (3) Rarely loan money.....	( )	( )	( )
392 (1) Rebel inwardly at orders from another, obey when necessary                      (2) Carry out instructions with little or no feeling                      (3) Enter into situation and enthusiastically carry out program .....	( )	( )	( )
393 (1) When caught in a mistake usually make excuses                      (2) Seldom make excuses                      (3) Practically never make excuses .....	( )	( )	( )
394 (1) Best-liked friends are superior to me in ability                      (2) Equal in ability                      (3) Inferior in ability.....	( )	( )	( )
395 (1) Handle complaints without getting irritated                      (2) Become annoyed at times                      (3) Lose my temper at times..	( )	( )	( )
396 (1) Borrow frequently (for personal use)                      (2) Borrow occasionally                      (3) Practically never borrow..	( )	( )	( )
397 (1) Tell jokes well                      (2) Seldom tell jokes                      (3) Practically never tell jokes                      ( )                      ( )                      ( )	( )	( )	( )
398 (1) My advice sought by many                      (2) Sought by few                      (3) Practically never asked...                      ( )                      ( )                      ( )	( )	( )	( )
399 (1) Frequently make wagers                      (2) Occasionally make wagers                      (3) Never make wagers.....                      ( )                      ( )                      ( )	( )	( )	( )
400 (1) Worry considerably about mistakes                      (2) Worry very little                      (3) Do not worry.....                      ( )                      ( )                      ( )	( )	( )	( )

**Be Sure You Have Not Omitted Any Part: Note Particularly the Second Columns on Pages 2, 3, and 4.**

Occupation	Artist	Psychologist	Architect	Physician	Dentist	Mathematician	Engineer	Chemist	Production Manager	Farmer
Raw Score										
Standard Score										
Rating										
Occupation	Carpenter	Printer	Mathematics-Science Teacher	Policeman	Forest Service	Y.M.C.A. Physical Director	Personnel	Y.M.C.A. General Secretary	Social Science Teacher	City School Superintendent
Raw Score										
Standard Score										
Rating										
Occupation	Minister	Musician	Certified Public Accountant	Accountant	Office Worker	Purchasing Agent	Banker	Sales Manager	Real Estate Salesman	Life Insurance Salesman
Raw Score										
Standard Score										
Rating										
Occupation	Advertising Man	Lawyer	Author-Journalist	President, M'g Concern	Occupational Level	Masculinity-Femininity	Interest Maturity			
Raw Score										
Standard Score										
Rating										
Occupation										
Raw Score										
Standard Score										
Rating										

### III. EXPLANATION OF FINDINGS

#### A. Introduction

In the preceding section are presented, in an orderly arrangement, the steps of the experimental procedure, which are necessary before making the correlations of the personality traits and of the vocational interests with success in teaching agriculture. While seemingly unimportant, they represent the work making possible the realization of the aim, found in the following pages.

At the beginning of this section are given a personality score sheet, a vocational interest score plan, and a table of average scores on the first ten years teaching experience of the individuals on whom this study is based. The first two are essential for translating the values into every-day language, and the last one is used for the comparison of the average scores sorted out on the basis of a certain factor with the average scores sorted out merely on the basis of a definite number of years teaching agriculture. They are included here for the reader's convenience in analyzing the tables.

The remainder of the section is devoted to the tables on personality traits and occupational interests with their explanations, which are offered in form of definition, findings, and conclusions. The conclusions are based strictly upon the data

on the tables and not upon the author's opinions.

It may be seen that the correlation of each of the personality factors with vocational interests is mentioned in all the discussions on the personality tables. However, in discussing the relationship of vocational interests, this has been omitted, because as shown in the personality discussions practically no relationship exists between the two sets of factors. The same fact may be seen by looking at the vocational interests tables. It is easy to see why there is little relation between the two. They are so different in what they measure; one indicates interests in vocations whereas the other measures certain general personality traits.

In this section, an attempt is made merely to present the author's findings in their true form, to point out the outstanding ones, and to explain them in terms of this study, simply and accurately as possible.

## FORM IV

## PERSONALITY SCORE SHEET

<u>PERSONALITY FEATURE</u>	<u>SIGNIFICANCE OF SCORES</u>	<u>NEW VALUES</u>
(1) B1 - N	Above 98% - would probably benefit from psychiatric advice	6
Neurotic	95%-98% - maladjusted	5
Tendency	80%-94% - somewhat maladjusted	4
	20%-79% - normal	3
	5%-19% - stable	2
	Below 5% - exceptionally stable	1
(2) B2 - S	95% and above - markedly self-sufficient	5
Self-	80%-94% - self-sufficient	4
Sufficiency	20%-79% - normal	3
	5%-19% - lacking in self-sufficiency	2
	Below 5% - markedly lacking in self-sufficiency	1
(3) B3 - I	Above 98% - would probably benefit from psychiatric advice	6
Introversion-	95%-98% - markedly introverted	5
Extroversion	80%-94% - introverted	4
	20%-79% - normal	3
	5%-19% - extroverted	2
	Below 5% - markedly extroverted	1
(4) B4 - D	Above 98% - would probably benefit from psychiatric advice	6
Dominance-	95% and above - markedly dominant	5
Submission	80%-94% - dominant	4
	20%-79% - normal	3
	5%-19% - submissive	2
	Below 5% - markedly submissive	1
(5) F1 - C	95% and above - markedly self-conscious	5
Confidence in	80%-94% - self-conscious	4
Oneself	20%-79% - normal	3
	5%-19% - self-confident	2
	Below 5% - markedly self-confident	1

## PERSONALITY SCORE SHEET (Continued)

<u>PERSONALITY FEATURE</u>	<u>SIGNIFICANCE OF SCORES</u>	<u>NEW VALUES</u>
(6) F2 - S	95% and above - markedly non-sociable	5
Sociability	80%-94% - non-sociable	4
	20%-79% - normal	3
	5%-19% - sociable	2
	Below 5% - markedly sociable	1

## FORM V

## VOCATIONAL INTEREST SCORE PLAN

(1) 1 ..... A+	(2) 4 ..... B+	(3) 7 ..... C+
2 ..... A = A's	5 ..... B = B's	8 ..... C = C's
3 ..... A-	6 ..... B-	9 ..... C-
	(4) 10 ..... D+	
	11 ..... D = D's	
	12 ..... D-	



TABLE I

THE RELATION OF NUMBER OF YEARS TEACHING VOCATIONAL AGRICULTURE  
TO AVERAGE SCORE

<u>Number of Years Experience</u>	<u>Average Score</u>
One .....	73.0
Two .....	75.0
Three .....	76.3
Four .....	77.6
Five .....	78.6
Six .....	79.3
Seven .....	79.6
Eight .....	79.8
Nine .....	79.9
Ten .....	80.1

B. NUMBER OF YEARS TEACHING

DEFINITION - The number of years teaching means the actual number of years the men had taught Vocational Agriculture prior to 1938. It was necessary to use the first ten years experience regardless of when it occurred, if the effect of experience upon the average score were to be found. How the average scores on table 1 were derived is explained carefully on page 12 .

FINDINGS - (1) The average score increases as the number of years experience increases.

(2) The greatest increase in average score is found after the first year's experience, the next greatest after the second year, and the third greatest after the third year.

(3) Even though the average score increases after the fifth year, it is very small. This fact is significant.

(4) The percentage of difference between the average score of the first year's experience and that of the tenth year's experience is less than ten percent.

CONCLUSIONS - (1) Experience does affect teaching success in Vocational Agriculture, because the average score increases as the number of years experience increases.

(2) The first year's experience contributes

the most to success in teaching agriculture, because after the first year's experience there is the greatest increase in average score. The second year's experience has the next greatest effect upon teaching success, because it causes the next greatest increase in the average score. The third year's experience produces the next greatest increase in the average score.

(3) After the fifth year, the rating given an agriculture teacher is fairly constant, fluctuating slightly up and down, because the table shows that after that time the increase in the average score is very small. In finding the average score for each year's experience and not for the entire time, this fact was proved.

(4) From the above conclusions, several general ones may be drawn. One is that a man entering the agricultural field and hoping for success must work. Another is that a man is capable of improving his efficiency the most after the first year's experience and that he may continue improving it for some time but not to the same degree. Another conclusion, but one likely to be contested, is that a man's rating in agriculture rises each year through the fifth or sixth where it reaches its maximum. From that time on, it maintains a fairly even score with small fluctuations. Also, according to the data found, this score runs slightly below the maximum of the sixth year.

TABLE II

## RELATION OF NEUROTIC TENDENCY RATING OF TEACHERS AND CERTAIN OTHER FACTORS

Neurotic tendency	Number teachers	AVERAGE SCORE OF PERSONALITY FACTORS					Average no. yrs. teaching	Average rating of teachers
		Self sufficiency	Introversion Extroversion	Dominance Submission	Confidence	Sociability		
1	10	3.1	1.7	4.5	2.0	2.5	6.0	77.5
2	31	2.8	2.2	3.5	2.6	2.1	6.4	74.1
3	62	2.8	3.0	2.9	3.1	2.5	6.6	77.2
4	6	3.2	4.0	2.5	4.2	3.8	9.5	78.2

TABLE II ----- Continued

Neurotic tendency	Number teachers	AVERAGE SCORE OF VOCATIONAL INTEREST FACTORS							Average no. yrs. teaching	Average rating of teachers
		Physician	Engineer	Farmer	Lawyer	Salesman	Teacher			
1	10	6.9	6.8	5.7	6.4	6.0	3.9	6.0	77.5	
2	31	6.5	6.5	2.9	6.8	6.0	2.8	6.4	74.1	
3	62	5.8	7.0	3.6	6.6	5.8	3.7	6.6	77.2	
4	6	6.5	8.0	5.0	7.5	6.8	3.7	9.5	78.2	

C. NEUROTIC TENDENCY

DEFINITION - Neurotic tendency is the inclination of an individual toward nervousness or emotional instability.

FINDINGS - 1. Personality Traits

Table II indicates outstanding relationships between neurotic tendency and (1) introversion-extroversion, (2) dominance-submission, (3) confidence in oneself, and (4) sociability.

2. Vocational Interests

The cases studied, on this sort, show a relatively steady "B" and "C" interest in the listed occupations with the exceptions of teaching and farming which show also a constant interest but one rating higher, A and B+ respectively.

3. Average Number of Years Teaching

The table reveals a positive relationship between neurotic tendency and the number of years teaching; that is, the agriculture teachers rating exceptionally stable and stable show an average of 6.2 years teaching, whereas those rating somewhat maladjusted show an average of 9.5 years teaching.

4. Average Score

The percentage of difference between the average score is 5.5. While apparently small, it is a significant difference in view of the fact that there is less than a ten percent difference in the average scores for the first ten years

teaching.

The individuals rating somewhat maladjusted show the highest average score, 78.2; the group rating exceptionally stable shows the next highest average score, 77.5; the group whose personalities measure normal on this tendency has an average score of 77.2. It may readily be seen that the difference among these three scores is negligible. The group whose personalities measure stable shows the lowest average score, 74.1. Herein lies the significant difference.

#### CONCLUSIONS - 1. Personality Traits

From the correlations, it may be concluded that from the cases of the agriculture teachers studied the personalities measuring emotionally stable are also extroverted, dominant, confident of themselves, and sociable. On the other hand, those measuring somewhat maladjusted are introverted, submissive, self-conscious, and non-sociable. The group rating normal on neurotic tendency follows a more or less normal path between these extremes.

#### 2. Vocational Interests

Table II does not indicate that neurotic tendency in the individuals studied has any direct bearing on interests in the occupations being listed as closely allied with teaching. The reason for this assumption is that the scores on the vocations remain relatively constant regardless of rating on neuroticism.

It does indicate, however, that the individuals from whom these data were secured show the highest interest in teaching and the next highest in farming which fact is easily understandable and will be discussed further in connection with the tables based on these two vocations.

### 3. Average Number of Years Teaching

Table II shows that those teachers of agriculture who have been teaching a longer number of years measure somewhat maladjusted, whereas those who have taught a shorter period of time show more emotional stability. From this it may be concluded, but perhaps not very soundly, that teaching has a tendency to undermine the stability of the emotions.

### 4. Average Score

Since table II was made to show principally the influence, if any, of neurotic tendency on the average scores of teachers of Vocational Agriculture, the conclusion on this is by far the most important of all the conclusions drawn from table II. Before giving the conclusion on the effect of neuroticism on the average scores, it is advisable to point out specifically the data on which this conclusion is based.

(1) By referring to the table, it may be found that those personalities measuring exceptionally stable have an average of six years teaching experience; those measuring stable have an average of 6.4 years teaching experience; those measuring normal have an average of 6.5 years teaching

experience; and finally those measuring somewhat maladjusted have an average of 9.5 years teaching experience.

(2) By referring to the table on page 29 , it may be seen that the average score of this group of teachers regardless of personality traits for six years is 79.3, for 6.4 years is 79.4, for 6.5 years is 79.5, and 9.5 years is 80.0.

(3) By looking at table II it may be found that when sorted on the varying degrees of neototicism the average score for the six years is 77.5, for the 6.4 years is 74.1, for the 6.5 years is 77.2, and for 9.5 years is 78.2.

(4) It is not to be expected that the two sets of average scores would be identical, but it is to be expected that they would show the same general tendency unless the factor on which the scores were sorted had some definite influence on them.

(5) On page 29, it may be found that the percent of difference between the average score for first year teaching and that for the tenth year teaching is slightly less than ten percent. On table II it may be seen that the difference between the lowest and the highest average scores is 5.5 percent. In view of the percentage of difference of average scores over a ten-year period, it is safe to conclude that 5.5 percent is a significant difference, if only from the standpoint of comparison.

Based on the data in tables I and II, the



conclusion may be drawn that neurotic tendency does have some bearing on the average rating of teachers of Vocational Agriculture, but how this tendency influences these ratings it is impossible to say.

TABLE III RELATION OF SELF-SUFFICIENCY TO AVERAGE RATING OF TEACHERS AND CERTAIN OTHER FACTORS

Self-sufficiency	Av. of sorting factor	Number teachers	AVERAGE SCORE OF PERSONALITY FACTORS							Average no. yrs. teaching	Average rating of teachers
			Neuroticism	Introversion Extroversion	Dominance Submission	Confidence	Sociability				
1 and 2	1.8	24	2.7	2.8	2.8	3.0	2.1	7.2	79.3		
3	3.0	76	2.6	2.7	3.3	2.9	2.5	6.2	75.9		
4 and 5	4.2	9	2.3	2.8	3.8	2.7	3.3	8.3	72.9		

TABLE III ----- Continued

Self-sufficiency	Av. of sorting factor	Number teachers	AVERAGE SCORE OF VOCATIONAL INTEREST FACTORS							Average no. yrs. teaching	Average rating of teachers
			Physician	Engineer	Farmer	Lawyer	Salesman	Teacher			
1 and 2	1.8	24	5.6	6.9	3.2	6.8	6.6	2.7	7.2	79.3	
3	3.0	76	6.5	7.0	3.8	6.6	5.8	3.6	6.2	75.9	
4. and 5	4.2	9	5.2	5.4	3.9	6.9	5.3	3.9	8.3	72.9	

#### D. SELF-SUFFICIENCY

DEFINITION - According to the "Winston Simplified Dictionary", self-sufficiency is "the ability of accomplishing one's own ends or aims, or fulfilling one's own desires without the help or cooperation of others". Those who score four and five on this trait rely upon themselves for companionship, do not often ask for encouragement or advice, and tend to ignore the advice given them. Those who score one and two, the other extreme, are lacking in self-sufficiency; that is, they dislike solitude, seek advice and help, and often ask for encouragement and sympathy. Those who score three possess enough but not too much self-sufficiency, so they pursue a course between the two extremes.

##### FINDINGS - 1. Personality Traits

Table III indicates correlations between self-sufficiency and (1) neuroticism, (2) confidence in oneself, and (3) sociability, and (4) dominance-submission, the strongest correlations being with the last two factors.

##### 2. Vocational Interests

There are weak correlations between self-sufficiency and interest in (1) farmer, (2) salesman, and (3) teacher. Although small, there is a steady increase or decrease in the ratings of each of these vocational interests. The values on the remaining vocations signify a "B" interest and are fairly constant.

### 3. Average Number of Years Teaching

There does not appear to be any correlation between self-sufficiency and average number of years teaching. Those who prefer to be alone and tend to ignore the advice of others have the highest average of years teaching, whereas those who dislike being alone and seek advice and encouragement have the next highest average number of years teaching and those who are neither self-sufficient nor lacking in self-sufficiency but are normal on this trait have the lowest average number of years teaching. It might be well to mention that there is not a great deal of difference in the average number of years teaching for all three groups.

### 4. Average Score

There is a very definite correlation between self-sufficiency and the average score. As self-sufficiency increases, the average score decreases and in about the same proportion each time. The percentage of difference is 8.8, which is very significant.

### CONCLUSIONS - 1. Personality Traits

From the data in the table, it may be concluded that the agriculture teachers who are self-sufficient are more dominant, less sociable, have slightly more confidence in themselves, and tend to be more stable emotionally than those lacking in self-sufficiency. Those whose personalities rank

normal on this trait pursue a course between these two extremes.

## 2. Vocational Interests

Because of the constant ratings on vocational interests, it may be concluded that self-sufficiency does not have any outstanding influence upon interests in certain occupations. It appears to have a slight influence upon teaching, salesmanship, and farming, because as self-sufficiency increases the interest in farming and teaching decreases and the interest in salesmanship increases. The increase or decrease that the varying degrees of the sort factor produce is so very small. that it may be considered relatively unimportant.

## 3. Average Number of Years Teaching

Self-sufficiency does not appear to have any direct bearing upon the average number of years teaching.

## 4. Average Score

According to table I, page 29, the average score increases as the number of years teaching increases. In the sort on self-sufficiency, those having the highest average number of years teaching have the lowest score, those who have next highest average number of years teaching have the highest scores, and those who have the lowest number of years teaching have an average score between the highest and lowest. Because of these facts, it may be seen that the decreasing average score is not due to the average number of years teaching but to the

sorting factor.

It may be stated, then that self-sufficiency does have some direct bearing upon success in teaching agriculture and perhaps in the same way the data show that it influenced the success of those on whom this study is based. The individuals who were self-sufficient received the lowest average score, those who were normal in this trait received the middle average score, and those who were lacking in self-sufficiency received the highest average score.

TABLE IV RELATION of INTROVERSION-EXTROVERSION TO AVERAGE RATING of TEACHERS and CERTAIN OTHER FACTORS

Introversion Extroversion	Number Teachers	AVERAGE SCORE OF PERSONALITY FACTORS						
		Neuroticism	Self-Sufficiency	Dominance Submission	Confidence	Sociability	Average No. Yrs. Teaching	Average Rating of Teachers
1	6	1.5	2.7	4.0	2.2	2.2	3.8	72.8
2	30	1.9	3.0	3.7	2.5	2.2	6.1	74.2
3	64	2.9	2.8	3.0	3.0	2.5	6.7	77.6
4	9	3.7	3.0	2.7	3.9	3.6	9.7	77.4

TABLE IV ----- Continued

Introversion Extroversion	Number teachers	AVERAGE SCORE OF VOCATIONAL INTEREST FACTORS							
		Physician	Engineer	Farmer	Lawyer	Salesman	Teacher	Average no. yrs. teaching	Average rating of teachers
1	6	6.2	6.2	2.5	5.5	6.2	3.5	3.8	72.8
2	30	6.6	7.0	3.8	7.0	5.7	3.1	6.1	74.2
3	64	6.0	6.8	3.5	6.6	5.8	3.5	6.7	77.6
4	9	6.2	7.3	5.0	7.0	7.6	4.2	9.7	77.4

E. INTROVERSION - EXTROVERSION

DEFINITIONS - An introvert is a person living within himself and highly imaginative. The values four, five, and six measure personalities introverted, markedly introverted, and introverted to the extent of needing psychiatric advice. Since five and six are missing from the table, it means there were no teachers scoring these. Introversion itself is simply the act of living within oneself.

According to the Winston Simplified Dictionary, "An extrovert is a person whose acts, emotions, and processes of thought are influenced by external conditions rather than by introspection". The values one and two measure extroverted and markedly extroverted personalities. The value three quite naturally measures those personalities which are not decidedly introverted or extroverted but possess a moderate amount of the characteristics of both.

FINDINGS - 1. Personality Traits

Table IV indicates correlations between introversion - extroversion and (1) neuroticism, (2) dominance - submission, (3) confidence in oneself, and (4) sociability.

## 2. Vocational Interests

There do not appear to be any correlations between introversion-extroversion and vocational interests with the exception of a weak correlation with farmer, which shows



interest in farming decreasing as the degree of introversion increases. The values sorted on the occupational interests remain relatively constant and mostly on a "B" level.

### 3. Average Number of Years Teaching

There is a definite correlation between introversion-extroversion and the average number of years teaching. As the degree of introversion increases, so does the average number of years teaching.

### 4. Average Score

The table shows that the average score tends to increase as the degree of introversion increases. There is a 0.2 decrease in the fourth group which is so small that it is probably of little significance.

## CONCLUSIONS - 1. Personality Traits

From the correlations shown, it may be concluded that agriculture teachers who are extroverted are also emotionally stable, have a tendency to be dominant, are self-confident, and are sociable. On the other hand, those who are introverted appear to be somewhat maladjusted, have a tendency to be submissive, are self-conscious, and are not sociable. Those whose personalities measure normal follow a path running between the two extremes.

## 2. Vocational Interests

It may be concluded from the data in the table that the varying degrees of the sorting factor do not exert

any marked influence upon agriculture teachers' interests in certain occupations allied with their profession.

### 3. Average Number of Years Teaching

As the degree of introversion increases, the average number of years teaching increases very definitely. From this it may be concluded that teaching tends to make individuals introverted rather than extroverted. Much evidence supporting this fact may be found in various psychological books.

### 4. Average Score

Even though the average score shows a tendency to increase with an increasing degree of introversion, it is not safe to conclude that the difference in the average score is due strictly to the influence of the sorting factor. By referring to table I on page 29, it may be found that the average score increases as the number of years experience increases.

Then the facts on which the conclusion must be based are (1) an increasing degree of introversion or sorting factor, (2) an increasing average number of years of teaching, and (3) an increasing average score. From this we may conclude, strictly on the basis of the data, that either experience or the sorting factor or both do have a marked influence upon success in teaching agriculture. However, from the fact that the introverted personalities have the highest scores and the extroverted the lowest, it may be concluded that the factor influencing the average score here is experience rather than the sorting factor.

TABLE V RELATION OF DOMINANT-SUBMISSION TO AVERAGE RATING OF TEACHERS AND CERTAIN OTHER FACTORS

Dominance Submission	Av. of Sorting Factor	Number teachers	AVERAGE SCORE OF PERSONALITY FACTORS					Average no. yrs. teaching.	Average rating of teachers
			Neuroticism	Self-sufficiency	Introversion Extroversion	Confidence	Sociability		
1 and 2	1.4	9	3.1	2.2	3.3	3.3	2.7	7.4	74.9
3	3.0	70	2.8	2.8	2.8	3.0	2.4	6.7	77.2
4	4.0	20	2.2	3.0	2.5	2.7	2.6	7.4	75.3
5 and 6	5.1	10	1.5	3.2	2.0	2.0	2.8	4.2	74.3

TABLE V ----- Continued

Dominance Submission	Av. of Sorting Factor	Number Teachers	AVERAGE SCORE OF VOCATIONAL INTEREST FACTORS						Average no. yrs. teaching	Average rating of teachers
			Physician	Engineer	Farmer	Lawyer	Salesman	Teacher		
1 and 2	1.4	9	6.0	7.3	3.6	7.3	7.6	3.2	7.4	74.9
3	3.0	70	6.0	6.6	3.3	7.0	6.0	3.4	6.7	77.2
4	4.0	20	6.6	7.2	4.7	5.6	5.0	3.5	7.4	75.3
5 and 6	5.1	10	7.0	7.7	4.1	6.3	5.5	4.0	4.2	74.3

F. DOMINANCE - SUBMISSION

DEFINITIONS - Dominance is a characteristic of people who attempt to force their will upon others in face-to-face situations. In the table, they are those individuals scoring four, five, and six. The personalities measuring four are dominant; those measuring five are markedly dominant; and those measuring six, of which there was only one, are dominant to the extent of probably benefiting from psychiatric advice.

Submission is the act of giving in to the will of others. Those scoring one are markedly submissive; those scoring two are submissive; and those scoring three are normal on this trait, tending toward neither dominance nor submission.

FINDINGS - 1. Personality Traits

The data reveal several very definite correlations between the sorting factor and (1) neurotic tendency, (2) self-sufficiency, (3) introversion-extroversion, and (4) confidence in oneself.

## 2. Vocational Interests

There do not appear to be any outstanding correlations between the sorting factor and the interests in the listed occupations, and the interests remain almost constant regardless of the degree of dominance or submission. However, there are some slight variations which do not seem to be of great

significance. As the degree of dominance increases, so does the interest in salesmanship, which gradually rises from a "C" interest to a "B" one. Though the correlation indicated here is a minor one, it seems as if there might be something more significant than meets the eye since most salesmen do try to force their will upon others in door-to-door situations.

### 3. Average Number of Years Teaching

The table shows no definite correlation between the sorting factor and the average number of years teaching, because two groups have an average of 7.4 years teaching, one measuring dominant and the other submissive. Another group measuring normal has an average of 6.7 number of years experience, which is only 0.7 lower than the other two groups. The difference in the average number of years teaching for all three groups is negligible. The individuals measuring markedly dominant have for their average number of years teaching, 4.2. From these facts it may be seen that there is no relationship between dominance or submission and the average number of years teaching.

The table does not indicate a steadily rising or decreasing correlation between the sorting factor and the average score, but it does reveal a very definite relationship between the two when the meanings of the values of the varying degrees of the sorting factor are taken into consideration.

The markedly submissive individuals and the markedly dominant ones have the lowest average ratings between which there is very small difference. The group of teachers tending toward dominance shows a higher average rating than the other two groups, but very little higher. Finally, the group rating normal on dominance and submission shows the highest average rating.

### CONCLUSIONS - 1. Personality Traits

From the correlations shown, it may be concluded that the agriculture teachers who are submissive tend toward neuroticism and introversion and do not have confidence in themselves, whereas those measuring markedly dominant and dominant are emotionally stable, extroverted, and have self-confidence. The group measuring normal on the sorting factor shows normal tendencies also in the correlations.

### 2. Vocational Interests

Because the varying degrees of the sorting factor do not appear to have any effect upon the individuals' interests in the vocations given here, it may be concluded that dominance or submission does not affect agriculture teachers' interests in certain occupations.

### 3. Average Number of Years Teaching

From the data, it may be concluded that neither dominance nor submission has any effect upon the average number of years that agriculture teachers stay in their profession.

#### 4. Average Score

Because the table shows that individuals who are markedly dominant and submissive receive the lowest average scores, that those who are merely dominant receive the next lowest, but that those who are normal on this scale receive the highest average score, it may be concluded that the sorting factor does influence success in teaching agriculture and that the men being neither dominant nor submissive but possessing enough of each to keep them from tending in either direction too far are those who are the most successful in teaching agriculture, from the standpoint of dominant or submissive personalities.

TABLE VI RELATION OF CONFIDENCE IN ONESELF TO AVERAGE RATING OF TEACHERS AND CERTAIN OTHER FACTORS

Confidence	Av. of Sorting Factors	Number teachers	AVERAGE SCORE OF PERSONALITY FACTORS						Average no. yrs. teaching	Average rating of teachers
			Neuroticism	Self-sufficiency	Introversion Extroversion	Dominance Submission	Sociability			
1 and 2	1.8	23	1.7	2.9	2.0	3.9	2.6	5.1	74.8	
3	3.0	72	2.8	2.9	2.8	3.1	2.4	6.7	77.1	
4 and 5	4.2	14	3.1	2.6	3.4	2.7	2.5	9.0	75.4	

TABLE VI ----- Continued

Confidence	Av. of Sorting Factors	Number teachers	AVERAGE SCORE OF VOCATIONAL INTEREST FACTORS						Average no. yrs. teaching	Average rating of teachers
			Physician	Engineer	Farmer	Lawyer	Salesman	Teacher		
1 and 2	1.8	23	6.3	6.7	3.8	6.6	5.6	3.1	5.1	74.8
3	3.0	72	6.2	7.0	3.5	6.7	5.8	3.5	6.7	77.1
4 and 5	4.1	14	5.9	6.4	4.4	6.6	7.1	3.8	9.0	75.4



### G. CONFIDENCE IN ONESELF

DEFINITION - Confidence in oneself is the belief that one has in his own powers. On this scale, those who are self-confident and wholesomely adjusted to their surroundings measure one and two; those who are self-conscious and have feelings of inferiority measure four and five; and those measuring three are the individuals who have enough but not too much confidence in themselves. They are neither self-conscious nor over self-confident.

#### FINDINGS - 1. Personality Traits

Table VI indicates correlations between confidence in oneself and (1) neurotic tendency, (2) introversion-extroversion, and (3) dominance-submission.

#### 2. Vocational Interests

There does not appear to be any direct influence of self-confidence upon occupational interests, because the ratings on the interests remain comparatively constant, with the interests in teaching and farming still rating higher than the interests in the other vocations.

#### 3. Average Number of Years Teaching

The table shows a correlation between confidence in oneself and the average number of years teaching. As self-confidence decreases, the average number of years teaching increases.

#### 4. Average Score

The self-confident individuals have the lowest average score, the normal ones have the highest score, and the self-conscious ones have the next lowest average score. While there is not a steadily increasing or decreasing correlation between the sorting factor and the average score, there appears to be some relationship here, not due to experience.

#### CONCLUSIONS - 1. Personality Traits

From the correlations, it may be concluded that those teachers who are self-confident are also emotionally stable, extroverted, and dominant, whereas those who are self-conscious are normal on both introversion-extroversion and dominance-submission traits but have a tendency to be submissive. The group rating normal on self-confidence shows itself to have normal tendencies on the other personality traits.

#### 2. Vocational Interests

Because the interests in the vocations remain almost constant regardless of the degree of self-confidence, it is safe to conclude that this factor does not have any direct bearing upon vocational interests.

#### 3. Average Number Years of Teaching

As the degrees of self-confidence tend toward self-consciousness, the average number of years teaching increases. From this, it may be concluded that self-confidence

in teachers grows toward self-consciousness as the number of years they teach increases. Proof other than what is revealed here may be easily found to support this fact.

#### 4. Average Score

It has already been found and verified that the average score increases as the average number of years teaching increases. Since the average score is influenced but not in the same way that experience influences it, it is safe to assert that confidence in oneself does have some direct bearing upon success in teaching agriculture. The teachers who were over self-confident and those who were lacking in self-confidence rated the lowest average scores with very little difference between them, whereas those who tended in neither direction too far made the highest average score. From this, it is logical to conclude that teachers who are neither over self-confident nor self-conscious are likely to meet with the greatest success in teaching agriculture.

TABLE VII

RELATION OF SOCIABILITY TO AVERAGE RATING OF TEACHERS AND CERTAIN OTHER FACTORS

Sociability	Av. of sorting factor	Number teachers	AVERAGE SCORE OF PERSONALITY FACTORS						
			Neuroticism	Self-sufficiency	Introversion Extroversion	Dominance Submission	Confidence	Average no. yrs. teaching	Average rating of teachers
1	1.0	21	2.4	2.6	2.5	3.2	3.0	9.2	78.0
2	2.0	27	2.6	2.7	2.6	2.9	3.0	6.1	76.1
3	3.0	54	2.6	2.9	2.7	3.4	2.7	5.5	75.8
4	4.0	7	3.4	3.6	3.6	3.0	3.4	10.0	77.8

TABLE VII -----Continued

Sociability	Av. of sorting factor	Number teachers	AVERAGE SCORE OF VOCATIONAL INTEREST FACTORS							
			Physician	Engineer	Farmer	Lawyer	Salesman	Teacher	Average no. yrs. teaching	Average rating of teachers
1	1.0	21	6.4	6.5	3.8	7.1	6.2	2.4	9.2	78.0
2	2.0	27	6.1	6.5	3.0	6.8	6.1	3.8	6.1	76.1
3	3.0	54	6.2	7.4	3.8	6.5	5.8	3.7	5.5	75.8
4	4.0	7	5.7	6.7	4.7	6.1	5.3	3.1	10.0	77.8

## H. SOCIABILITY

DEFINITION - Sociability is an individual's power for mingling freely with people and deriving satisfaction from it. On this scale, the markedly sociable teachers score one, the sociable ones score two, the ones normal on this trait score three, the non-sociable ones score four.

### FINDINGS - 1. Personality Traits

The correlations of personality features with sociability are not so marked as with certain other factors. There appear to be correlations of sociability with (1) neurotic tendency, (2) introversion-extroversion, and (3) self-sufficiency.

### 2. Vocational Interests

The table does not indicate any very definite correlations of the sorting factor with vocational interests. There are minor indications of correlations with lawyer and salesman, which show that interests in both professions increase as the degree of sociability decreases.

### 3. Average Number of Years Teaching

Sociability does not seem to have any direct influence upon the average number of years that teachers remain in their profession. The reason for this assumption is that the data show those teachers who are markedly sociable and those who are non-sociable have almost the same average number of years

teaching, and furthermore, that the groups measuring normal and merely sociable have about the same average number of years teaching. These facts bear out the statement that the teacher's sociability or lack of sociability does not influence the average number of years he teaches.

#### 4. Average Score

Table VII does not indicate any correlation between sociability and the average score, because the most sociable and the least sociable individuals have the two lowest scores with very little difference between them, and the next two groups, measuring different degrees of this factor, have almost the same average score.

### CONCLUSIONS - 1. Personality Traits

The correlations show that the markedly sociable teachers are more stable emotionally, more extroverted, less self-sufficient, more dominant, and more self-confident than the non-sociable ones. By looking at the table, one may notice that none of the groups sorted on sociability seems to vary very much from normality on the various factors. From this, it is logical to assume that sociability exerts the least influence of all the personality traits.

### 2. Vocational Interests

It may be concluded that sociability does not have any direct bearing upon interests in the given vocations,

because the interests remain almost the same regardless of the varying degrees of sociability. With salesman and lawyer, the interests do increase slightly as the individuals become less sociable.

### 3. Average Number of Years Teaching

Because the most sociable and the least sociable teachers have almost the same average number of years teaching and the sociable and normal groups have almost the same, it is safe to conclude that the sorting factor does not exert any pronounced influence upon the length of time agriculture teachers remain in the profession.

### 4. Average Score

Referring to the table, you may find that the teachers rating the most sociable and those rating non-sociable have the same average score, and that those who are sociable and normal have almost the same average score. Because of this it may be asserted that sociability does not bear any direct relationship to the average score.

In looking at the average score, you may discover that it is influenced by some factor. The groups have almost the same number of years teaching, and they have almost the same average score. The two middle groups have almost the same average number of years teaching, and they have almost the same average score. It has been pointed out previously that the

average number of years teaching influences the average score by causing it to increase as the number of years teaching increases. Since it has been shown that the influence exerted on the average score is not due to the sorting factor and in view of above facts, it is safe to say that experience, and not sociability, is the factor influencing the average score. As a final conclusion, it may be said, then, that sociability has little, if any bearing, on success in teaching agriculture.



TABLE VIII

RELATION OF INTEREST IN THE WORK OF A PHYSICIAN TO AVERAGE RATING OF TEACHERS AND CERTAIN OTHER FACTORS

Physician	Av. of sorting factor	Number teachers	AVERAGE SCORE OF PERSONALITY FACTORS							Average no. yrs. teaching	Average rating of teachers
			Neuroticism	Self-sufficiency	Introversion extroversion	Dominance Submission	Confidence	Sociability			
1,2 and 3	1.8	12	2.8	2.8	2.9	3.0	3.0	2.6	7.2	76.0	
4,5 and 6	5.0	42	2.6	2.9	2.6	3.3	2.9	2.5	6.4	75.4	
7,8 and 9	7.6	47	2.6	2.8	2.8	3.2	2.9	2.3	6.8	77.4	
10,11 and 12	10.4	8	2.0	2.9	2.4	3.6	2.8	3.0	3.9	76.3	

TABLE VIII ----- Continued

Physician	Av. of sorting factor	Number teachers	AVERAGE SCORE OF VOCATIONAL INTEREST FACTORS					Average no. yrs. teaching	Average rating of teachers
			Engineer	Farmer	Lawyer	Salesman	Teacher		
1,2 and 3	1.8	12	5.3	1.8	4.8	5.8	3.8	7.2	76.0
4,5 and 6	5.0	42	6.6	3.6	6.1	5.2	3.5	6.4	75.4
7,8 and 9	7.6	47	7.2	3.8	7.6	6.7	3.3	6.8	77.4
10,11 and 12	10.4	8	9.1	6.2	7.0	5.4	2.9	3.9	76.3

I. INTEREST IN THE WORK OF A PHYSICIAN

DEFINITION - A physician is one who treats the mental or physical ills of other people. This table shows the comparison of the interests of agriculture teachers in the career of physicians with that of physicians successfully engaged in their work. It must be noticed and kept in mind that the data do not indicate ability at all but interest. Those scoring one, two, three, rate a very high interest in the work of a physician, or an "A" interest; those scoring four, five, and six show a "B" interest; those scoring seven, eight, and nine indicate "C" interest; and finally those scoring ten, eleven, and twelve have a "D" interest.

FINDINGS - 1. Vocational Interests

The table indicates some correlation between the interest of agriculture teachers in the work of a physician and that which they have in engineering, farming, and teaching.

## 2. Average Number of Years Teaching

The table does not show a steadily increasing or decreasing correlation between interest in physician and the average number of years teaching, but it does indicate some relationship. It reveals, on the cases studied, that those who have the greatest interest in the medical profession have also the highest average number years teaching and those who have the

smallest amount of interest in it have the lowest number of years teaching.

### 3. Average Score

There does not appear to be any connection between agriculture teachers' interest in physician and the average scores, because regardless of the degree of interest, the average scores remain relatively the same. There are only slight variations in them for the four different grades of interest.

### CONCLUSIONS - 1. Vocational Interests

Because the interests in farming and engineering decrease along with the decreasing interest in physician, it may be concluded that there is a relationship between these interests. However, as the teachers' interest in the medical profession decreases, their interest in teaching increases, which shows definitely that the interest in physician does not exert a positive influence upon interest in teaching. It seems logical to assert from this that teachers who are highly interested in the career of physician are the ones least interested in the teaching profession. By noticing the data on some of the other tables, this same fact may be seen several times.

### 2. Average Number of Years Teaching

Because the table shows that those most interested in physician have the greatest average number of years

teaching and those who are least interested have the lowest average number of years teaching, it may be assumed that teaching tends to develop interest in the career of a physician.

### 3. Average Score

Because the average scores vary but slightly regardless of the degree of interest, it appears safe to conclude that interest in the career of a physician has little relationship with the success in teaching Vocational Agriculture.

TABLE IX RELATION OF INTEREST IN THE WORK OF AN ENGINEER TO AVERAGE RATING OF TEACHERS AND CERTAIN OTHER FACTORS

Engineer	Av. of sorting factor	Number teachers	AVERAGE SCORE OF PERSONALITY FACTORS						Average no. yrs. teaching	Average rating of teachers
			Neuroticism	Self-sufficiency	Introversion Extroversion	Dominance Submission	Confidence	Sociability		
1,2,3,	2.0	10	2.4	2.9	2.8	2.9	3.1	2.3	5.5	70.00
4,5,6,	5.5	24	2.6	2.9	2.6	3.3	2.8	2.4	7.0	74.80
7,8,9,	7.7	67	2.6	2.8	2.7	3.3	2.9	2.4	6.9	77.60
10,11,12	10.6	8	2.9	2.9	3.0	3.4	3.0	3.1	4.8	78.90

TABLE IX ----- Continued

Engineer	Av. of sorting factor	Number teachers	AVERAGE SCORE OF VOCATIONAL INTEREST FACTORS					Average no. yrs. teaching	Average rating of teachers
			Physician	Farmer	Lawyer	Sale sman	Teacher		
1,2,3,	2.0	10	4.0	1.9	6.8	6.5	3.4	5.5	70.00
4,5,6,	5.5	24	5.5	3.6	6.7	5.0	3.8	7.0	74.80
7,8,9,	7.7	67	6.6	3.7	6.6	6.1	3.4	6.9	77.60
10,11,12	10.6	8	7.5	5.6	6.8	5.9	2.5	4.8	78.90

## J. INTEREST IN THE WORK OF AN ENGINEER

DEFINITION - An engineer is one who is skilled in the principles and practices of any branch of mechanical science. The interest in engineering is measured on the same plan as that of the other vocations.

### FINDINGS - 1. Vocational Interests

As the interest in the work of an engineer decreases so does the interest in farming and medicine. The interest in the other vocations remains fairly constant with the exception of teaching which shows a decided increase of interest by the group manifesting the smallest amount of interest in engineering.

### 2. Average Number of Years Teaching

No relationship seems to exist between the interest of agriculture teachers in engineer and the average number of years they teach. The data show that those having an "A" interest in engineering have almost the same average number of years teaching as those who have a "D" interest. Those who show a "B" and "C" interest have almost the same average number of years experience, too.

### 3. Average Score

There is a very definite correlation between the interest of agriculture teachers in engineering and their

average score, because as their interest in engineering decreases their average score shows a decided increase.

CONCLUSIONS - 1. Vocational Interests

Because of the correlations between the interest in the engineering profession and those of physician and farmer, it may be assumed that interest in engineering bears a relationship to the interest in the other two vocations.

2. Average Number of Years Teaching

The data reveal no relationship at all between the interest agriculture teachers have in engineering and the average number of years they remain in their profession. The reasons for this conclusion is that the group showing the least interest in engineering and the group showing the greatest interest have almost the same average number of years teaching. The same is true of the "B" and "C" interest groups; their average number of years is almost the same, too.

3. Average Score

The table shows a 12.7 percent increase in the average score. This increase was produced as the interest in engineering decreased. By referring to table I, one may see that the average scores do not coincide with those sorted on the basis of the average number of years teaching. As the average number of years teaching increases, the average score does also. Here the average number of years does not steadily increase along with the average score, but instead increases, falls

slightly, and then falls again to a greater degree. Therefore the increase in the average score is not due to the average number of years teaching but must be due to the sorting factor.

Finally, it may be concluded that the interest which agriculture teachers have in engineering has some bearing upon success in teaching agriculture. Those individuals possessing the greatest interest in engineering achieve less success in teaching agriculture than those possessing the least interest in engineering. This conclusion seems logical when considering the fact that men usually do better work in the occupations in which they have more interests.



TABLE X RELATION OF INTEREST IN THE WORK OF A FARMER TO AVERAGE RATING OF TEACHERS AND CERTAIN OTHER FACTORS

Farmer	Av. of sorting factor	Number teachers	AVERAGE SCORE OF PERSONALITY FACTORS						Average no. yrs. teaching	Average rating of teachers
			Neuroticism	Self-sufficiency	Introversion Extroversion	Dominance Submission	Confidence	Sociability		
1-3	1.6	53	2.6	2.8	2.6	3.2	2.8	2.5	5.9	75.7
4-6	4.8	42	2.7	2.8	2.9	3.2	3.0	2.3	6.9	75.7
7	8.2	14	2.4	2.9	2.6	3.5	2.9	2.7	8.6	81.0

TABLE X ----- Continued

Farmer	Av. of sorting factor	Number teachers	AVERAGE SCORE OF VOCATIONAL INTEREST FACTORS					Average no. yrs. teaching	Average rating of teachers
			Physician	Engineer	Lawyer	Sale sman	Teacher		
1-3	1.6	53	5.6	6.3	6.8	5.8	2.9	5.9	75.7
4-6	4.8	42	6.4	7.1	6.9	5.9	3.9	6.9	75.7
7	8.2	14	7.6	8.4	5.8	6.4	4.3	8.6	81.0

K. INTEREST IN THE WORK OF A FARMER

DEFINITION - A farmer is one who cultivates or manages a portion of land. Unlike the results shown on the other tables, none of the individuals scored less than "C" on their interest in this occupation, which fact is understandable because of the nature of farming and because so many of the agriculture teachers had had both training and experience in it. Quite naturally a group of individuals rates higher on their interest in the vocations they are well acquainted with than those they know little about, especially those requiring technical knowledge.

FINDINGS - 1. Vocational Interests

Interest in farmer seems to correlate with interests in (1) physician, (2) engineer, (3) salesman, and (4) teacher. The interest in teacher rates much higher than interest in any other vocation. This is noticable in all the tables.

2. Average Number of Years Teaching

As interest in farming decreases, the average number of years teaching increases, which shows relationship between the two.

3. Average Score

The data indicate that the sorting factor does have some influence upon the average score, because it increases as the interest in farmer decreases.

### CONCLUSIONS - 1. Vocational Interests

It may be concluded that the interest in farming is closely associated with interest in the professions of a physician, engineer, salesman, and teacher, because as the interest in farming decreases so does the interest in these other professions.

### 2. Average Number of Years Teaching

The sorting factor has some direct relationship with the average number of years teaching, because as the interest in farming decreases the average number of years teaching increases. The data for the study were secured from a group of agriculture teachers. In sorting out their interests in farming, it seems reasonable that the group have the least interest in this occupation would likely be the group remaining the longest average number of years in teaching and the group having the most interest in farming would likely be the group having the fewest average number of years teaching experience. It may be concluded that the sorting factor is directly responsible for the increasing average number of years teaching, because in the sorting out the interest in farming of the agriculture teachers on the basis of "A", "B", "C", and "D" the average number of years teaching increased for each group as its interest in farming approached "D".

### 3. Average Score

The table shows some relationship between

the sorting factor and the average score. The group of teachers most interested in farming made an average of 75.7 whereas the group the least interested in farming made an average score of 81.0. Teachers so very highly interested in farming are not likely to be so successful in teaching as those not so highly interested in it but more interested in the occupation in which they are engaged. The data in table X prove this fact. It is also proved in many occupational studies as well. Finally, it seems sound to conclude that the sorting factor and not the number of years teaching affects the average score since it has already been shown that the sorting factor itself is directly responsible for the increasing average number of years teaching.

TABLE XI RELATION OF INTEREST IN WORK OF A LAWYER TO AVERAGE RATING OF TEACHERS AND CERTAIN OTHER FACTORS

Lawyer	Av. of sorting factor	Number teachers	AVERAGE SCORE OF PERSONALITY FACTORS							Average no. yrs. teaching	Average rating of teachers
			Neuroticism	Self-sufficiency	Introversion Extroversion	Dominance Submission	Confidence	Sociability			
1,2,3,	1.8	9	2.4	2.7	2.6	3.4	2.9	2.6	8.1	79.8	
4,5,6,	5.2	35	2.5	2.9	2.7	3.5	2.8	2.7	6.5	77.5	
7,8,9,	7.7	55	2.7	2.8	2.7	3.6	3.0	2.2	7.0	75.4	
10,11,12	10.8	10	2.5	3.0	2.6	3.1	2.7	2.7 <sub>m</sub>	3.8	75.2	

TABLE XI ----- Continued

Lawyer	Av. of sorting factor	Number teachers	AVERAGE SCORE OF VOCATIONAL INTEREST FACTORS					Average no yrs. teaching	Average rating of teachers
			Physician	Engineer	Farmer	Salesman	Teacher		
1,2,3,	1.8	9	4.8	6.7	3.9	3.4	3.7	8.1	79.8
4,5,6,	5.2	35	5.6	6.9	4.0	5.5	4.1	6.5	77.5
7,8,9,	7.7	55	6.5	6.9	3.6	6.4	3.2	7.0	75.4
10,11,12	10.8	10	7.3	6.7	2.4	6.6	2.3	3.8	75.2

## I. INTEREST IN THE WORK OF A LAWYER

DEFINITION - A lawyer is a member of a legal profession or one who knows the law well.

### FINDINGS - 1. Vocational Interests

The table indicates correlations between interest in the work of a lawyer and interests in those of physician and salesman. It shows also the group having the least interest in the law has the greatest interest in teaching.

#### 2. Average Number of Years Teaching

While there does not appear to be any outstanding correlations between interest in lawyer and the average number of years teaching, there may be some relationship. Those who rate the highest interest in lawyer have the highest average number of years teaching while those who rate the lowest interest in lawyer have the lowest average number of years teaching.

#### 3. Average Score

The table shows a definite correlation between interest in lawyer and the average score. Quite different from the other correlations of interest, this one shows that as the interest in lawyer decreases so does the average score. The percentage of difference in the average score is a little over six.

### CONCLUSIONS - 1. Vocational Interests

Because the interests in physician and salesman decrease with a decreasing interest in lawyer, it may

be concluded that these vocational interests are related.

## 2. Average Number of Years Teaching

The table shows that there is no outstanding relationship between interest in lawyer and the average number of years teaching. However, it may be assumed, but not strictly in the evidence presented by the data, that teaching tends to develop interest in the vocation of a lawyer. The reasons for this assumption are: (1) the fact that those who show the most interest in lawyer also have the highest average number of years teaching and those who show the least interest have the lowest average number years teaching and (2) the fact that there are many practices and interests common to both professions.

## 3. Average Score

Table XI indicates a correlation between interest in lawyer and the average score, because as interest decreases so does the average score. Since the average score results from sorting the interests agriculture teachers have in lawyer, this means the interests determine the average score. Experience may have helped produce the change. But in view of the fact that the sorting factor sorts out the average number of years experience and at the same time the average scores, it seems as if the sorting factor is wholly responsible for the decrease in average score. In conclusion, though, it may be seen that interest in lawyer and success in teaching vocational

agriculture are closely associated, because the greater the interest of agriculture teachers in lawyer the higher their average score but on the other hand the lower their interest the lower their average score.



TABLE XII RELATION OF INTEREST IN THE WORK OF A SALESMAN TO AVERAGE RATING OF TEACHERS AND CERTAIN OTHER FACTORS

Salesman	Av. of sorting factor	Number teachers	AVERAGE SCORE OF PERSONALITY FACTORS							Average no. yrs. teaching	Average rating of teachers
			Neuroticism	Self-sufficiency	Introversion Extroversion	Dominance Submission	Confidence	Sociability			
1,2,3,	1.9	21	2.5	3.0	2.7	3.6	2.7	2.7	6.3	78.2	
4,5,6,	5.2	38	2.7	2.8	2.7	3.1	2.8	2.4	7.6	76.1	
7,8,9,	7.7	44	2.6	2.8	2.7	3.2	3.0	2.4	6.3	76.9	
10,11,12	11.2	6	2.3	2.5	3.0	3.0	2.8	2.5	4.0	68.0	

TABLE XII ----- Continued

Salesman	Av. of sorting factor	Number teachers	AVERAGE SCORE OF VOCATIONAL INTEREST FACTORS					Average no. yrs. teaching	Average rating of teachers
			Physician	Engineer	Farmer	Lawyer	Teacher		
1,2,3,	1.9	21	5.5	6.9	3.6	4.8	3.2	6.3	78.2
4,5,6,	5.2	38	6.1	6.4	3.3	7.4	7.9	7.6	76.1
7,8,9,	7.7	44	6.7	7.4	4.2	6.8	3.9	6.3	76.9
10,11,12	11.2	6	5.2	5.7	2.0	7.7	3.2	4.0	68.0

M. INTEREST IN THE WORK OF A SALESMAN

DEFINITION - 1. A salesman is one whose business is to sell goods or one who visits prospective customers as representative of a firm.

FINDINGS - 1. Vocational Interests

The table does not indicate any definite correlations between interest in the work of a salesman and interests in the other vocations.

2. Average Number of Years Teaching

There does not appear to be any outstanding relationship between agricultural teachers' interest in the vocation of a salesman and the average length of time they teach. The reason for this statement is that those who have an "A" interest and those who have a "C" interest have the same average number of years teaching; those who have a "B" interest in salesmanship have the highest average number of years experience and those who have the least interest have as an average, fewer years of experience.

3. Average Score

While there is not a constantly decreasing average score, there is a 15 percent difference resulting from the interest sorting.

CONCLUSIONS - 1. Vocational Interests

Because the data show no outstanding

correlations between interest in the work of a salesman and interests in the other vocations, it may be concluded that the interest of agriculture teachers have in salesmanship bears no relationship to their other vocational interests.

### 2. Average Number of Years Teaching

Because the group of individuals having an "A" interest and the one having a "C" interest have the same average number of years experience and because the group having only a "B" interest has for its average the greatest number of years experience, it is safe to say that the interest agriculture teachers have in salesmanship does not influence the length of time they remain in their profession.

### 3. Average Score

Because the average number of years does not show a steady increase but varies up and down and because the average score increases, it may be seen that experience is not responsible for the change in the average score. It must be due to the sorting factor, since it resulted as the different grades of interest were sorted out. As interest decreases, the average score shows a tendency to decrease also. In conclusion, it may be said that interest in salesmanship seems to have some direct bearing upon success in teaching agriculture, for those teachers who have the greatest interest in it receive a 15 per cent higher average score than those who have the least interest in it.

TABLE XIII RELATION OF INTEREST ON THE WORK OF A TEACHER TO AVERAGE RATING OF TEACHERS AND CERTAIN OTHER FACTORS

Teacher	Av. on sorting factor	Number teachers	AVERAGE SCORE OF PERSONALITY FACTORS							Average no. yrs. teaching	Average rating of teachers
			Neuroticism	Self-sufficiency	Introversion Extroversion	Dominance Submission	Confidence	Sociability			
1,2,3,	1.8	58	2.5	2.8	2.6	3.4	2.8	2.3	6.1	75.2	
4,5,6,	4.7	38	2.7	2.9	2.8	3.1	3.1	2.5	6.9	76.3	
7,8,9, and 10,11,12	7.0	13	2.6	3.2	2.8	3.5	2.8	2.9	8.3	81.8	

TABLE XIII ----- Continued

Teacher	Av. on sorting factor	Number teachers	AVERAGE SCORE OF VOCATIONAL INTEREST FACTORS					Average no. yrs. teaching	Average rating of teachers
			Physician	Engineer	Farmer	Lawyer	Sale sman		
1,2,3,	1.8	58	6.3	6.9	3.2	6.9	5.7	6.1	75.2
4,5,6,	4.7	38	6.1	6.7	4.0	7.0	6.4	6.9	76.3
7,8,9, and 10,11,12	7.0	13	5.7	7.4	4.8	4.6	6.0	8.3	81.8

N. INTEREST IN THE WORK OF A TEACHER

DEFINITION - A teacher is one who shows or instructs how to perform some act.

FINDINGS -. 1. Vocational Interests

The data reveal that interest in teaching decreases as does the interest in farming, but that interest in the work of a physician increases. The interests in the other vocations fluctuate.

On all the tables, the group of teachers on whom this study is based rates higher interest in teaching than in any other vocation, with interest in farming running a close second. The interests in the other vocations are mostly "C" and "B" ones. In nearly all the sorts, interest in teaching rates "A", and in farming just a little lower. Considering the fact that the entire group is composed of teachers who have had training and experience in both teaching and farming, it is understandable why their interests do run higher on these vocations. Interests in the more technical vocations rate lower grades.

## 2. Average Number of Years Teaching

There is a very definite correlation between interest in teaching and the average length of time teachers remain in their profession, but it is not as one might think. As the interest in teaching decreases, the average number of years teaching increases.

### 3. Average Score

The table indicates a correlation between the sorting factor and the average score. As interest in teaching decreases, the average score increases.

#### CONCLUSIONS - 1. Vocational Interests

Because of the parallel increases between interests in teaching and in farming, it may be seen that these two interests are closely associated. Since interest in medicine increases as the interest in farming decreases, it appears that these two interests are not related.

#### 2. Average Number of Years Teaching

Since the data show conclusively that as interest in teaching decreases the average number of years teaching increases, it may be concluded that the longer teachers remain in their profession the less they are interested.

#### 3. Average Score

It may be seen that as interest in teaching decreases, the average score increases with a corresponding increase in the average number of years teaching. Instead of a decreasing interest being responsible for the increase in the average score and especially since it has been shown that experience produces increasing results in it, it seems logical to conclude that experience rather than lack of interest is responsible for the change. For a final conclusion, it may be said that experience tends to overcome the influence of interest in

helping teachers to achieve success, since the data show that those with the least interest but with the most experience achieve an 8.7 percent higher rating in teaching vocational agriculture than those with the most interest but with the least experience.

IV. CONCLUSIONS

It is impossible to measure accurately such subjective elements as personality, interest, and success. The means of measuring them may be objective as in the case of this study, but even then the securing of the information on them is subjective and requires the honest cooperation of those on whom the information is based. By using the same means of measurement and the same basis for success, even though error enters, it affects all the results alike. Because of the consistency throughout, a measure of personality traits, vocational interests, and success may be obtained.

Today, more than ever before, personality traits are affecting success. That is why the schools are placing so much emphasis upon individual growth rather than upon subject matter. Should it have been possible to measure the absolute success of the agriculture teachers, it would have been found that their personality traits and vocational interests would have borne far more relationship to their success than really shown in this study. Even here in spite of the intangibility of the factors and of the creeping in of human error, it can be seen that personality traits and vocational interests influence in some way the success of teachers of agriculture.

At the end of the discussion of each table, conclusions were given on the effect of the sorting factor on success in teaching



agriculture. Following are the most outstanding ones presented in a brief form:

### 1. Average Number of Years Teaching

It was found in this study that experience bears the greatest relationship to success in teaching agriculture of all the factors correlated, because the average score over a ten-year period showed an increase of ten percent, regardless of the other factors. In some cases, it was found that experience overcame the influence of some detrimental factor on success.

### 2. Personality Traits

It was seen that certain personality traits run parallel with each other. For example, individuals who are self-sufficient are also introverted. But most important, the data prove that personality traits do bear some direct relationship to success in teaching agriculture. In the order of the extent to which they appear to influence the success of teachers studied and the way in which they influence it are given as follows:

(1) Of all the personality traits, self-sufficiency affects the average score the most with 8.7 percent change. The table shows that those lacking in self-sufficiency achieve the greatest success and those markedly self-sufficient achieve the least success.

(2) The measure of introversion-extroversion produce the next greatest change in the average score, 6.6 percent difference. Throughout the study, this factor runs parallel with the one above.

The data show that those teachers who are extroverted achieve greater success than those introverted.

(3) Neurotic tendency affects the average score by 5.5 difference. The table shows that those emotionally stable achieve greater success than those emotionally unstable, except where the factor of experience may overcome the influence of neurotic tendency.

(4) The data on dominance-submission show that those individuals who are dominant or submissive receive less success than those who are normal on this scale, tending to neither one extreme nor the other.

(5) The data on confidence in oneself show that those teachers over self-confident or self-conscious receive less success than those who are normal, tending in neither direction too far.

(6) The data showed that sociability has practically no effect upon success.

### 3. Vocational Interests

Throughout the study, the data indicate that there is little relationship between vocational interests given and personality traits but that there is some relationship between the interests and success in teaching agriculture. In general, as the interest in a vocation decreases, the average score in teaching increases. This is logical when considering the fact that individuals do not produce as effective work in vocations they are not interested in as in vocations they are interested in. Also, the

tables show that the individuals studied, for the most part, have an average amount of interest in the vocations suggested as being allied with the one in which they are engaged, and rate higher in it than in any other of the vocations given.

The following is a summary of the relationship that vocational interests bear to success in teaching agriculture.

(1) Interest in the medical profession seems to bear little relationship, if any, to success in teaching.

(2) Interest in the professions of law and salesmanship bears a direct relationship to success in teaching, because as interests in them decrease so does the average score. This is quite contrary to the correlations of the other vocations with the average score.

(3) Interests in farming and engineering decrease as the average score increases which shows that those being the most successful in teaching have more interest in the work engaged in than in these two occupations and that those the most interested in engineering and farming are being less effective in teaching than those showing more interest.

(4) The data indicated all along that interest in teaching rates much higher than interest in any other occupation. In the sorting on teaching, the data showed that the teachers having the least interest but the most experience are the most successful. Because of these facts, it is impossible to indicate the true relationship that interest in teaching has upon success in it.

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