AN INVESTIGATION OF THE RELATIONSHIPS BETWEEN CERTAIN PERSONALITY TRAITS AND SELECTED PROFESSIONAL AND SOCIO-ECONOMIC VARIABLES OF OKLAHOMA STUDENT TEACHING PERSONNEL IN VOCATIONAL AGRICULTURE

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July, 1970

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ACKNOWLEDGMENTS

The researcher wishes to express his deep appreciation to Dr. Robert R. Price, major adviser, Professor and Head, Department of Agricultural Education, for his ingenious help, encouragement and guidance to initiate and complete this study.

Appreciation is extended to Dr. James P. Key, Dr. William Stevenson, Dr. L. A. Parcher and to Dr. Lloyd Wiggins, the members of the graduate committee for their valuable advice and guidance. The researcher is particularly indebted to Dr. Key for his ungrudging constant assistance to undertake and complete this study, and to Dr. Don Fraiser of the Research Division of the State Department of Vocational-Technical Education for special advisement regarding certain research phases of the study.

A special appreciation is extended to all the Oklahoma student teaching personnel who very kindly cooperated with the researcher to provide data for this study.

Appreciation is also extended to Dr. Jack D. Gray, Director, International Programs, Texas A & M University, College Station, Texas for his general encouragement and assistance.

The researcher acknowledges the fine service that was extended to him by the computer center, Oklahoma State University, and by Mrs. Leona Heffington, typist, toward completion of the study.

The researcher is deeply indebted to his wife, Begum Anwara Islam (Hashi) and to his children, Muna-Luna, Shiblee-Saad, and Ena-Deena for

the hardships and sacrifices they had to undergo due to a heavy and long absence of the researcher from the family.

To my wife, Hashi, the work is dedicated.

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CHAPTER I

INTRODUCTION

The Status of the Problem

American agriculture has been revolutionized during the last fifty years. This has been possible due to extensive mechanization of farming and large scale use of agricultural technologies discovered as a result of agricultural research, teaching, and extension by various public and private agencies in the United States. The results thus achieved have made American farmers competent to produce more food, feed, fiber, and oil per acre and per farm worker.

These changes in agriculture were a partial result of an early change in the national educational policy in the country. For gainful employment of the high school graduates, a course in vocational education in agriculture was introduced in high school curriculum by the Smith-Hughes Act in 1917. The resulting federally aided program of vocational agricultural education is one of the public programs having responsibility for providing the knowledge and skill needed for success in both on-farm and off-farm agricultural vocations. The basic aim of the program is to train the present and the prospective agricultural workers for proficiency in agricultural occupations including business and commercial aspects of modern agriculture such as service and supply for farmers and marketing and processing of farm commodities.

Besides on-farm and off-farm training in agriculture, special abil-

ities are also needed by secondary school students in vocational agriculture who expect to continue their vocational education after graduating from high school. In such cases, it is necessary to develop among the students an interest in and an awareness of the occupational opportunities in technical and related fields of agriculture, some knowledge of the scientific principles of agriculture, and some experience in agricultural business as a background for further study of technical agriculture.

The Vocational Education Act of 1963 (71) recognized the need for instruction in vocational education including instruction in agriculture for various groups of individuals. These groups include (1) persons attending high school, (2) persons who have completed or left high schools and are available for full time study in preparation for entering the labor market, (3) persons who have entered the labor market and need training to achieve stability or advancement in employment, and (4) persons who have academic, socio-economic, or other handicaps that prevent them from succeeding in the regular vocational education program.

Responsibilities of instructional programs of vocational agriculture teachers in areas other than classroom teaching are listed by Roberts (69) as follows: supervising the farming and other experience programs of students; engaging in community service; developing satisfactory public relations; maintaining adequate teaching facilities, materials and equipment; organizing and conducting FFA programs of work; and making records and reports.

The traditional instructional programs in vocational agriculture are being changed rapidly due to expansion of non-farm agricultural job opportunities. Scarborough (73) reports that the 1963 and 1968 Vocation-

al Acts give emphases to people - to individual needs for occupational education. This phase of educational programs in Vocational Agriculture demands superior leadership and additional professional competencies on the part of the Vocational Agriculture teachers in discharging their duties.

In discussing the scope of educational programs in vocational agriculture, Atherton (12) writes:

> Acceptance or rejection of the program by the lay public will be predicted more upon what the program is and what it does than by what it expounds. It is a must that education in agriculture evidence interest in contemporary life by its environment in the vital issues of employment.

This calls for the need to reorder certain priorities concerned with the professional competencies of the vocational agriculture teachers in order to adjust to changes in occupational education and vocational development. The emerging pattern of off-farm agricultural occupational education is emphasizing an inevitable change in instructional programs. The teachers of vocational agriculture are required to obtain a fair amount of experience in human relations and business management that qualifies them to teach and supervise trainees in off-farm agricultural occupations.

Besides these responsibilities, some of the vocational agriculture teachers have an additional responsibility to train prospective vocational agriculture teachers. These trainer-teachers are known as vocational agriculture cooperating teachers, who work in the student teaching program to guide and supervise the activities, participation, and teaching by the college students as they gain competencies in performing the roles of vocational agriculture teachers. The day to day supervision and evaluation by the cooperating teachers are a most indis-

pensible part of an effective program of teacher development.

The future of the vocational agriculture teaching profession depends to a great extent upon the quality of the professional character of both the cooperating and the student teachers. In this complex and changing society the role of the student teachers is no less important than the cooperating teachers'. In fact, both the groups are equally important to mold the character of the young people of the nation and also to contribute to and strengthen the world of work with an efficient skilled labor force. Success of these activities, of course, is conditioned by a number of factors such as professional qualifications, aptitudes, socio-economic backgrounds of the teachers, teaching techniques, materials available, buildings and equipment. The cooperating teachers are vitally important because they are to initiate, execute, and evaluate programs and manipulate other factors when necessary to make the program a success. The task of vocational agriculture teachers is not only to transform young promising human beings into a creative work force, but also to develop such qualities as commitment, stability, self-understanding, self-acceptance, tolerance, and sensitivity. The new dimensions of vocational education in agriculture demand high quality teachers with pleasing personalities.

In describing the character and personality of the vocational agriculture teachers, Phipps (67) states:

> Unquestionable character is essential for every successful teacher. This is especially true of teachers of agriculture. In all probability, many students try to be like their agriculture instructors; consequently, what teachers do must be of the highest standard. A teacher must have a distinctive and individual character indicative of a forceful personality. He must know how to meet people and carry on a conversation. Often agriculture instructors fail simply because of

> the inability to meet people and to adapt themselves to their environments. A teacher with a pleasing personality can do a great deal in developing a good community attitude toward the program in agriculture.

It appears imperative that a teacher in vocational agriculture and occupational education must possess the required abilities, characteristics and personality traits to perform quality jobs. If he does not have all of them, he should himself check whether he has the ability and will power to attain them. They are vital to survival as a successful teacher in the emerging pattern of vocational education in agriculture.

A teacher of vocational agriculture needs to be cooperative with the school officials, community people and his students. He must have the proper attitude not only toward his work but also toward others both in the school system and in the community. One of the most important qualifications of a vocational agriculture teacher is leadership. He is not only a classroom teacher but also a field organizer of youth and adults.

In describing the attributes of the agricultural leaders, Phipps (67) quoted Dean Alfred Vivian of the Ohio State University as saying that they should possess the following attributes:

1. Abounding faith in the importance of the work.
2. Infinite tact in meeting trying situations.
3. Unlimited patience in overcoming community inertia.
4. Endless good nature in face of all trials.
5. A saving sense of humor when nothing else will meet the situation.
6. A large vision of the work to be done.
7. Ability to lose gracefully and to rebound after each defeat.
8. Indomitable courage in standing for the right.
9. A grim determination to see the work put through to its completion.
10. A contagious enthusiasm that inspires local leadership.
11. Unquenchable optimism in spite of all discouragement.

12. Unreserved belief in the importance of the farm family to the common wealth.

In fact, the success of the vocational educational programs in agriculture depends upon the desirable qualities and characteristics of the teachers. Combs (23) states that a good teacher should:

1. Know his subject.
2. Know much about related subjects.
3. Be adaptable to new knowledge.
4. Understand the process of becoming.
5. Recognize individual differences.
6. Be a good communicator.
7. Develop an inquiring mind.
8. Be available.
9. Be committed.
10. Be enthusiastic.
11. Have a sense of humor.
12. Have humility.
13. Cherish his own individuality.
14. Have convictions.
15. Be sincere and honest.
16. Act with integrity.
17. Show tolerance and understanding.
18. Be caring.
19. Have compassion.
20. Have courage.
21. Have personal security.
22. Be creative.
23. Be versatile.
24. Be willing to try.
25. Be adaptable.
26. Believe in God.

Practically speaking there is no end of qualities and characteristics that a person may possess. The sum total of all his qualities, characteristics, behaviors, intelligence, knowledge, attitudes, interests, responses and interactions with his environment constitute his personality. The investigator is vitally concerned with teaching of vocational education in agriculture and career development. He is therefore, interested to study and determine to what extent the vocational agriculture student teaching personnel of Oklahoma do possess personality factors such as poise, spontaneity, leadership ability, self-confidence,

self-acceptance, particiative temperament, maturity, responsibility, permissiveness, intellectual efficiency and flexibility as measured by the California Psychological Inventory.

Purpose of the Study

The primary purpose of this study is to examine the variability of personality traits of the Oklahoma Vocational Agriculture student teaching personnel and to determine the relationships between their personality traits and some selected professional and socio-economic variables. Considering that the outcome of this study is to be used as a basis of reference and guidance in vocational education administration and teacher education in agriculture, the investigator thought it relevant to examine the associations between the teachers' personality traits and their independent variables in the area of professional, sociological and economic conditions. In order to accomplish this purpose, the following specific objectives were considered in the study.

Specific Objectives

1. To identify, compare and discuss the personality traits of the Oklahoma student teaching personnel in vocational agriculture as measured by the California Psychological Inventory (CPI) scales. These traits were:

i. Dominance (Do)
ii. Capacity for status (Cs)
iii. Sociability (Sy)
iv. Social presence (Sp)
v. Self-acceptance (Sa)
vi. Sense of well-being (Wb)
vii. Responsibility (Re)
viii. Socialization (So)
ix. Self-control (Sc)
x. Tolerance (To)

xi. Good impression (Gi)
xii. Communality (Cm)
xiii. Achievement via conformance (Ac)
xiv. Achievement via independence (Ai)
xv. Intellectual efficiency (Ie)
xvi. Psychological-mindedness (Py)
xvii. Flexibility (Fx)
xviii. Femininity (Fe)

2. To determine the relationships between the personality traits of the student teaching personnel and their professional and socio-economic variables. These variables were:

i. Present title of the teaching personnel.
ii. Participation in high school FFA.
iii. Participation in high school extra-curricular activities.
iv. Participation in Collegiate FFA.
v. Participation in Collegiate extra-curricular activities.
vi. Academic achievement.
vii. Membership in professional organization.
viii. Tenure in teaching vocational agriculture.
ix. Age.
x. Marital status.
xi. Size of family.
xii. Birth order.
xiii. Sibling.
xiv. Place where mostly lived.
xv. Personal income.
xvi. Father's occupation.
xvii. Father's education.

3. To determine the differences between the personality trait scores of the cooperating teachers and those of the student teachers in vocational agriculture.

4. To determine the validity coefficients of the test scores to the criterion scores, (grade point averages) of the student teaching personnel.

5. To determine the inter-trait associations among the personality traits of the student teaching personnel.

6. To suggest implications for improving the program used by teaching personnel engaged in teacher education in agriculture at the profes-

sional level.

Significance of the Study

Vocational education in agriculture serves the society and individuals through various types of educational programs. It prepares the youth for farm and for non-farm agricultural occupations. The rapid changes in both production agriculture and agribusiness have created a demand for different types of agricultural education in the public schools. The Vocational Education Act of 1963 was a landmark in American history for boosting vocational agriculture programs at the high school level. This in turn, created an increasing awareness among teacher educators of the need to prepare vocational agriculture teachers with additional emphasis on career development and social competence. It is a conscientious opinion that the effectiveness of the vocational agriculture program depends not only on the technical skills of the vocational agriculture teachers but also on their social skills to manipulate programs with the clientele. Teachers in vocational education constitute a group of social engineers because they prepare young people to be socially effective in their lives. Further, they are not only change agents but also present ideal characters for millions of young people. Therefore, a continued effort to appraise their personal qualities and social skills is one of the objectives of the teacher education administration. Dr. Robert R. Price, Head of the Department of Agricultural Education, Oklahoma State University, encouraged the investigator to undertake this study to make available an appraisal report on personal qualities and social skills of the student teaching personnel in vocational agriculture for academic as well as administrative

considerations. It was expected that the findings of the study would help the teacher educators to administer programs for the student teaching personnel more effectively.

The psychology of personality is a branch of behavioral science. As science as a whole is changing and progressing, new knowledge is expanding in all the branches of science. This area of behavioral science needs further studies to build new frames of reference and theories, especially, in the areas which are still unexplored for the benefit of human beings. Combs (24) stated that a frame of reference, or a theory is nothing more than an organization of data or a way of looking at data to make them meaningful. Facts by themselves have little meaning or value. It is only when facts are combined into some sort of framework, they become meaningful and can deal with problems. Therefore, the study was designed to collect data on personal qualities and social skills of the vocational agriculture student teaching personnel, to prepare some frames of reference to be used in teacher education.

Definition of Terms

The Student Teaching Personnel. This term is meant to include the vocational agriculture teachers of public high schools who work as training teachers with student teachers of vocational agriculture. These teachers are referred to as cooperating or supervising teachers. University students working under their direction are known as student teachers. In this study the student teaching personnel include both groups.

The Cooperating Teachers. These teachers are selected from their peer group on the basis of their professional competencies and merit of their teaching experience programs. One of the important criteria to be

selected as a cooperating teacher, is to possess competencies necessary for guiding the growth of the prospective teachers.

The Student Teachers. This title is for those who are the college seniors in agricultural education and need to practice teaching vocational agriculture in high schools to fulfill part of their college requirements.

Personality. To define personality is a difficult task for anybody. Allport (2) states:

> There is no single correct definition of personality; usage has sanctioned too many. Some of the meanings are psychological, some are not. The first task is to distinguish between them. The second is to select from among available psychological definitions one that best fits the phenomenon dealt with.

Therefore, the investigator accepted the definition of the term personality for the purpose of his study as stated by Schoen (76).

> Personality is the organized system, the functioning whole or unity of habits, dispositions and sentiments that mark off any one member of a group as being different from any other member of the same group.

Personality Trait. The term "personality trait" indicates the enduring characteristics of the individual which are manifested by his behaving in a consistent way, and this in a wide variety of situations.

Score. A synonym for raw scores obtained by the vocational agriculture student teaching personnel as measured by the California Psychological Inventory.

Variables. Scientists somewhat loosely define the properties they study "variables" which in the field of educational psychology, stand for motivation, discipline, introversion, conformity, intelligence, achievement and many other items. Kerlinger (48) states:

> A variable is a symbol to which numerals or values are

assigned. For instance, X is a variable: it is a symbol to which we assign numberical values.

Scope of the Study

In the Fall of 1969 the investigator became fully aware of the evident need to investigate relationships between personality traits of the Oklahoma Vocational Agriculture student teaching personnel and their professional and socio-economic variables. In the State of Oklahoma there are 349 public high schools which offer courses in vocational agriculture. Out of 349 public high schools, 38 were selected by the Department of Agricultural Education, Oklahoma State University, as student teaching centers. Three of those centers were functioning as multi-teacher departments. In total 43 vocational agriculture teachers were selected to work as the cooperating teachers in the student teaching program which also included 80 student teachers with assignments during Fall, 1969 and Spring, 1970. The population of the study was made up of the two groups of teachers: the cooperating teachers and the student teachers, and the total number of the subjects was 123.

There are several techniques available for determining personality traits of an individual. They are: interviews, rating scales, questionnaires, inventories, projective techniques, and direct observations. The investigator used the inventory technique in his study to determine the personality traits of the student teaching personnel. The inventory was chosen because of its advantage in obtaining quantitative data free from bias. The inventory measures milti-dimensional aspects of personality traits. This method of personality study can be administered under varying conditions: formal testing sessions, take-home plans, and mail-out mail-back. The inventory test is generally standardized,

based on empirical findings.

As science is changing and progressing every day, new knowledge is expanding in all branches of science. The psychology of personality needs further research study in the light of available information to collect further data in order to build new frames of reference and theories in the area which are still unexplored for the benefit of human beings.

Underlying Assumptions of the Study

The major assumptions that were made by the investigator are listed below: (1) that the subjects of the study came from an ongoing and changing population engaged in teaching vocational agriculture at high school level, and (2) that though human behavior is ever changing, it has quite an amount of constancy for making identifiable observations and scientific study.

Limitations of the Study

Personality is one of the most complex areas of behavioral science. It is such a complex field, that even a professional authority sometimes runs into problems. On the other hand, it is also claimed that personality is known even to a layman though he does not understand what it is and how it functions!

The investigator was fully aware that the science of human behavior has not yet attained the same level of accuracy as that of the physical science. Nevertheless, he thought the study of personality traits would be quite challenging to him because of the importance of the problem in human societies. It was also thought by the investigator that

the problem of personality study will continue to be the focus of many researchers in behavioral science. Because of such limitations, the investigator felt that one needs to be careful in making generalizations from the findings of the study. In drawing conclusions and making statements of generalization, Gordon (31) states:

> Before one can draw a conclusion from a relationship between an event and the conditions that control, or which were necessary for the event to occur, one must demonstrate that the relationship is reliable, that it occurs consistently in the same way. A scientific law that can be applied to other cases cannot be discovered from a single case.

CHAPTER II

REVIEW OF LITERATURE

The teaching of vocational agriculture is an integral part of the public school education system in the U.S.A. Besides teaching day students in vocational agriculture, the department of vocational agriculture has a responsibility to conduct and supervise courses for young and adult farmers. In order to explain the need for such courses for the young and adult farmers, Hamlin (37) writes:

> Farmers need to realize the part they may individually and collectively play in securing our survival, since farmers hold the balance of power in the Congress of the most powerful nation on earth and because of the system of presentation in the Senate, farmers are powerful out of proportion to their numbers in determining the foreign policies of the United States.

In supporting farmers' education, Phipps (68) writes that

> . . . local school administrators should encourage adult farmer classes by allowing teachers of vocational agriculture time to conduct and supervise such courses . . . and these classes should be considered as an integral part of the program in vocational agriculture.

The student teaching program in vocational agriculture was first introduced by Dr. Wheeler in the University of Georgia in 1929. The program soon became universally adopted all over the country with varying modifications. In this connection, Stone (82) reported:

> In the 1960-61 school year, the Agricultural Education Department of Oklahoma State University selected and recommended to the University Director of Teacher Education the approval of 27 vocational agriculture departments in Oklahoma as student teaching centers.

Although the student teaching program has been in action since 1929, it was considerably reinforced in the school year of 1960-61. During that period the Department of Agricultural Education of Oklahoma State University had a series of training programs for these trainer-teachers to improve their professional efficiency.

The success of both school and student teaching programs of vocational agriculture is in a large measure dependent upon the technical, professional, and general education of the cooperating teachers. Besides these, Roberts (71) writes:

> . . . possession of a number of personal traits and characteristics, frequently acquired in formal education courses and through experiences, contributes to the success of the teacher of vocational agriculture. Among these are leadership qualities, resourcefulness, and dependability. The vocational agriculture teacher is required to express himself in public and to participate intelligently in community affairs. A vocational teacher should possess an unquestionable character and should conduct himself at all times in a manner approved by the citizens of the community in which he is employed.

The cooperating teachers under this study were selected by the Department of Agricultural Education, Oklahoma State University, for the initiation and management of the student teaching centers. The selection of criteria were based on professional competencies, personal living and academic achievements. The Association for Student Teaching (87) reports:

> A supervising teacher having responsibility for student teachers should constantly demonstrate high quality teaching performance and professional growth . . . participates in the program willingly and looks upon supervising the growth of student teachers as a contribution to his profession.

The investigator, therefore, is interested in this chapter to review some related studies in connection with (1) the theories of

personality, (2) development of personality, (3) assessment of personality, (4) selected variables included in the study, and (5) the California Psychological Inventory.

Origins of the Term "Personality"

The word "personality" has an interesting origin and development. It originated from the classical Latin word, persona, meaning "mask." Among the ancient Greek actors there was a practice to wear masks to conceal their identity in the dramatic performance and to depict the character, and play the roles of the masks. This dramatic technique was later on adopted by the Romans, and from them the modern term "personality" was transmitted to other nationals. Almost at the end of the nineteenth century, Muller (58) wrote:

> This word persona has rolled along with wonderful bounds, striking right and left, suggesting new thoughts, stirring up clouds of controversy, and occupying to the present day a prominent place in all discussions on theology and philosophy, though only few of those who use it know how it came to be there.

In medieval Europe the word "persona" meant "as one appears to others;" not as one actually is. The popular concept of personality was perhaps derived from that connotation as the effect one has on others. Therefore, the impression that one makes on others and their responses to him are important factors in the development of one's personality. From this view point when someone says "Mr. X has lots of personality," it means that Mr. X is interesting in conversation, competent in business, intelligent in academic work, good in sports, cooperative in team work and is both sincere and adaptable. Personality, then is not a single and specific attribute; rather, it is the quality of the

individual's total behavior. Thus, some of the psychologists who took a social view of personality, defined it as the sum total of the effect made by an individual upon society. Some other psychologists defined personality as the sum total of all the biological innate dispositions, impulses, tendencies, appetites, and instincts of the individual. Thus, different psychologists defined personality differently from different points of view at different times.

Definitions of Personality

Present Day Conceptions of Personality

Current views regarding the concept of personality might be classified first of all as popular and unacademic on the one hand, and psychological and perhaps more objective on the other. Schwesinger (78) once wrote that a layman is usually concerned with the externality of the person: dress, voice, gestures, manners, motor-coordination, charm, versatility, or any other reactions which, in fact, are socially important. The social side of the individual was not only emphasized but also regarded as being the essence of personality itself. Gilliland (29), Allport (1), May (55), and Morrison (57) subscribed to this view that the individual's personality is his stimulus values.

Many psychologists however, do not deny the importance of this social aspect of personality definition, but they generally advance a more precise and less superficial meaning for the term. They argue that the charm of the physical qualities of an individual wear off for the friend of long standing, and the inner self begins to stand out to be identified as personality. This view is shared by Symonds (86), Brooks (20), Roback (70), Woodworth (96), and many of the present day psycholo-

gists who belong to the family of gestalt psychology.

In terms of self-respect and adjustment of an individual to his environment, Hilgard (43) states:

> The term personality is used to mean the configuration of individual characteristics and ways of behaving, which determines an individual's unique adjustment to his environment. We stress particularly those personal traits that affect the individual's getting along with other people and with himself. Hence, personality includes any characteristics that are important in the individual's personal adjustment, in his maintenance of self-respect.

In defining personality Havighurst (40) emphasized that personality is not dependent on the individual's intellect.

> Personality is the valuing aspect of human behavior, while intellect is the knowing aspect. Personality includes such traits or abilities as altruism, social loyalty, social sensibility, esthetic sensibility, self-acceptance; and a subgroup of characteristics which combine value with will, such as self-control, responsibility, honesty, and personal independence.

Allport (3), however, defined personality as "the dynamic organization within the individual of those psychological systems that determine his unique adjustment to his environment." Allport recognized the changing nature of personality and focused on the inner adjustment rather than the superficial ones. He had a strong conviction that personality is a trait which mediates between the individual and his physical and psychological environment, sometimes submitting to it, and sometimes mastering it.

In defining personality, Dalton (26) writes:

> . . . personality is a construction of the dynamic organization within the individual which specifies his potentialities for action.

Here the term 'dynamic organization' refers to the fact that personality is fluid, never static, although there are stable elements in it. Dal-

ton continues writing,

> . . . new learning modifies the structure of the organism, sometimes in minor details, sometimes in a significant manner; and with each modification the personality changes.

Thorpe (89) differentiated character from personality and wrote that character is a part of the total personality of an individual. He further said that character is that part of personality which relates to laws, social conventions, and moral considerations. Allport (2) and many other psychologists supported his ideas. Allport stated that what the American psychologists mean by the term "personality," the European psychologists mean the same thing by the term "character." In defining character, Allport wrote:

> When we say a man is of good character, we are referring to his moral excellence.

The word "personality" has a variety of definitions. Some authors have reported that there are at least fifty different meanings of the term. Mostly personality is defined from four broad bases: firstly, a personality is regarded as an assemblance of personal qualities that is, what a person is really like; secondly, the way a person appears to others, not as he really is; thirdly, the role a person plays in life; and finally, the qualities that a person acquired in life.

Guilford (35) reports that though these concepts connect with the ancient writing of Cicero, still have a wide acceptance in modern psychology. Guilford (35) further reports:

> The subject of personality comes within the spheres of interest of at least four of the basic sciences - - biology, anthropology, psychology, and sociology.

Therefore, it is quite natural that different approaches will be made by different scientists of different disciplines to define personality with

different emphases. Thus, the definitions of the term personality made by different authors were grouped by Guilford into a few core ideas: (1) personality as a stimulus; (2) omnibus definitions of personality; (3) integrative definitions of personality; (4) totality definitions of personality; and (5) personality as adjustment. In summarizing the above definitions of personality, Guilford concluded, "there is no one correct definition, all others being wrong." He emphasized that every individual is different from every other and thus each and every personality is unique. He wrote, "an individual personality, then, it is his unique pattern of traits."

Personality as a Stimulus

A very few who study personality scientifically adopt this idea that personality is one's social-stimulus value as reported by Guilford. However, this definition of personality is based on the bio-social view which is in contrast to the bio-physical conception of personality. The bio-physical concept holds that personality, psychologically considered, is what an individual is regardless of the matter in which other people perceive his qualities.

Omnibus Definitions of Personality

This type of definition was more popular some time back and it starts with the words "personality is the sum total of the innate dispositions, impulses, appetites, instincts, tendencies and habits."

Integrative Definitions of Personality

Unlike the omnibus definitions this class stresses the organization

of personal attributes. The integrative definitions are also known as configurational definitions. This emphasizes that personality is more than the sum of its parts. An example of this definition is stated below:

> The integrated organization of all the cognitive, affective, conative and physical characteristics of an individual as it manifests itself in focal distinctness from others.

Totality Definitions of Personality

These types of definitions of personality carry the emphasis upon integration a large step further, almost forgetting the parts entirely. These definitions include the general pattern of an individual's total behavior and the field property of the individual's total behavior-pattern.

Personality as Adjustment

Biologists and behaviorists are incluned to view personality as an evolutionary phenomenon, as a mode of survival. According to them personality is the "whole organism in action." They view personality, in essence, is:

> The integration of those systems of habits that represent an individual characteristic adjustments to his environment.

Theories of Personality

The psychology of personality depends on a set of principles to explain how an individual is different from all other individuals. It also seeks to explain how an individual is similar to some other individuals. Individuality is a prime characteristic of human nature. The

science of personality deals with individual differences. Though every one has a unique characteristic yet he is like all other men. Therefore, every individual has three sets of norms: universal, group and idiosyncratic. Whenever we attempt to deal with human behavioral phenomenon of demonstrated significance with a principle, a theory is established. In defining the nature of a theory, Sax (72) writes:

> A theory is a unified system of principles, definitions, postulations, and observations organized in such a way as to most simply explain the inter-relationships between variables.

Every day all of us make hundreds of observations but unless these are organized into meaningful relationships, they have little value in the development of science. Isolated facts or observations cannot be considered as science. In order to understand the individual and his behavior we need theories and laws of learning, of perception, of cognition and we also need a fair amount of knowledge of culture and society in which he lives.

Personality theory enables the worker to formulate hypotheses and to collect facts to test hypotheses. When facts are collected they are to be seen in relationships to formulate new theories. It also enables the worker in the field of behavioral science to make predictions adequate enough to deal with a wide range of human behavior. A theory helps in building new theories and new knowledge.

During the last few decades, personality theories have multipled to the extent that it is now almost impossible to even mention them all. Hall and Lindzey (36) have contributed significantly describing the major contemporary theories of personality. Lazarus (51) mentioned about the diversified views in this field and attempted to present the theories of personality in a more simplified way with three "frames of

reference:" trait and type; stimulus-response; and phenomenology. Heidenreich (41) has presented a pen picture of the theories of personalities under a few major divisions: (1) type theories; (2) trait theories; (3) developmental theories; (4) learning theories; and (5) dynamic theories.

The investigator planned to discuss briefly a few important theories relevant to his study in this chapter.

Type Theories

Type theories trace back to the days of Hippocrates, an ancient Greek physician who postulated four properties of the human body and the temperament of a person was reflected by the dominance of one of the four properties: (1) blood, cheerful; (2) black bile, depressed; (3) yellow bile, irritable; and (4) phlegm, lethargic. Kretschmer (50) and Sheldon (79) advanced theories on personality behavior upon body build and body tissues. The type theories have not been verified by scientific investigation. Another short coming of these theories is that they heavily depend upon biological inheritance without any consideration of cultural and sociological influences.

Trait Theories

Popular use of this theory tends to underestimate the scientific values attached to this theory. Sometimes traits of an individual are compared with his habits and attitudes. Allport (3) clears the idea as follows:

> A trait is, then, a neuropsychic structure having the capacity to render many stimuli functionally equivalent, and to initiate and guide equivalent (meaningfully consistent) forms of adaptive and expressive behavior.

that every trait must satisfy three criteria: (1) the frequency with which a person adopts a certain type of adjustment; (2) the range of situations in which he adopts the same mode of acting; and (3) the intensity of his reactions in keeping with his preferred pattern of behavior. The scientific evidence for the existence of a trait of a person's behavior and the reliabilitymeasures. When the scientific evidence toward a trait is derived from a whole population of people, the trait is known as one of "common traits." One usual property of common traits is their normal distribution. The investigator used this concept of the trait in his study.

Developmental Theories

Developmental and dynamic theories of personality are similar to the extent that both stress environmental aspect of learning and roles. However, they differ mostly in regard to the emphasis placed upon past experience and potentialities (developmental) as opposed to present dispositions and conflicts (dynamic) within the individual.

Freud's psychoanalytic theory for personality development consists of a basic maturational plan of development with sexual impulses. Freud strongly emphasized that the personality of an individual develops during the early parts of his life, remain relatively stable at the middle age, and deteriorates at the old age. Therefore, his psychoanalytic theory of personality is both developmental and dynamic.

Most of the developmental theorists lean toward genetic and learning theories to explain human behaviors and personality growth. Hilgard (43) stated that maturation is a keen competitor to learning. The contemporary learning theories fall under two families: the S-R Associa-

tionism and the Gestalt Field Psychology. The first group of psychologists explain human behavior and learning through stimulus-response connection, conditioning and reinforcement while the second group stress on the psychological field where the psychological person lives, strives and aspires.

Freud's Psychoanalytic Theory

The total personality as conceived by Freud consists of three major systems: the id, the ego, and the superego. These three systems work harmoniously within a mentally normal person. By working together cooperatively they enable the individual to carry on effectively with his environment. The purpose of these transactions is the fulfillment of man's basic needs and desires, conversely, if these three systems of personality do not work harmoniously the person is said to be in trouble and this system is exhibited by both covert and overt behaviors. Consequently, he is identified by the clinical psychologists as pathological.

Freud tried to explore man's mind by the method of psychoanalysis. He used to believe that the greatest changes in personality take place during the early parts of one's life. During this part of life one learns to overcome or adjust to external and internal frustrations, and personal inadequacies. By the end of this period, one's personality achieves some degree of constancy or equilibrium which persists until the deteriorative processes of old age sets in. His theory of psychoanalysis was designed to treat neurotic patients. Among those who followed Freud in psychoanalytic approaches, Carl Jung and Alfred Adler were most prominent. However, both of them later on withdrew their support of psychoanalysis and developed rival schools.

Jung's Analytic Theory

Freud used to believe that there is a characteristic sequence of psychosexual stages in man's life such as, oral stage, anal stage, phallic stage, latency period and genital stage. Every child passes through these stages; and the individual differences in personality, according to Freud, may be traceable to the specific manners to which one is identifiable solving the conflicts arising of these stages. Jung rejected Freud's such pansexualism. He used to believe that everybody tries to accomplish something and to represent himself more accomplished and competent to others. Thus, everybody tries to develop further his personal qualities. He established his own method of psychotherapy which is known as analytical psychology. The most important aspect of Jung's theory of personality is based upon the forward-going nature of personality development. He was concerned for the future of man. He said that one needs to look into the past to determine his present behavior. He maintained that the present is not only determined by the past but also by the future. He emphasized the need to collect facts about man's past and future and then to combine them to have a complete picture of man.

Adler's Socio-Psychological Theory

Adler stressed social factors in determining human behavior. He also stressed the concept of the creative self. He considered each person to be a unique configuration of motives, traits, interests, attitudes, drives, and values. He, unlike Freud, made consciousness the center of personality. He fashioned a humanistic theory of personality which was an antithesis of Freud's conception of man. Freud's intimate

knowledge of human nature made him both pessimistic and critical. He did not have a very high opinion of the bulk of mankind. In contrast, Adler restored to man a sense of dignity and worth. Adler's conception of the nature of personality is rooted in bio-social nature of human beings.

Allport's Theory of Personality

The most important part of Allport's theory of personality is based on the conception that a person has an internal structure and range of characteristics which are represented by traits and these traits motivate the person to behave.

Another important point of his theory is the recognition of the influence of heredity and environment in the formation and development of personality of an individual. Allport (4) said, "if either were zero there could be no personality." He presented an equation to explain personality:

$$P = F\ (H \times E)$$

Where, P = Personality,
F = Function,
H = Heredity, and
E = Environment.

He stated that though there is a biological subtratum of personality, it seems better at this stage of scientific progress to study personality from a psychological point of view. Because psychological study entails the functioning of both mind and body in some inextricable unity. Further, when the psychological systems of an individual are called into action, they either motivate the individual or direct him for specific action or thought.

Allport's (4) theory of personality stresses that personality is a

system within a matrix of socio-cultural systems. It is an inside structure embedded within and interacting with outside structures. He further indicated that some theories of personality neglect the outer systems. Perhaps psychoanalysis, existentialism, and personalism could be so accused. He also mentioned that it is common to find neglect of internal systems by role theorists, culturalists, Marxists, and by some sociologists.

Cattell's Theory of Personality

Cattell was interested in the quantitative and experimental phase of personality study. He found much of psychology was loaded with literary insights. He said that there are of course scientific truths about personality in the literary truths from such pasteboard shams. He further said that clinical psychology made some progress in the scientific study of personality but the same was centered around the study of abnormal personality. The second major short coming of the clinical phase, as he indicated that it did not used quantitative methods in the study of personality. By contrast, he said that the scientific study of personality started at the turn of this century based on the theories of actual behavior measurement. The multi-variate and uni-variate methods of personality study brought the psychology of personality to the level of pure scientific status.

Cattell (22) defined personality:

> . . . as that which tells what a man will do when placed in a given situation.

This statement he formulated into an equation:

$$R = F\ (S \cdot P)$$

Where, R = The nature and magnitude of a person's

behavioral response,

F = Function,
S = The stimulus situation, and
P = The nature of the individual's personality.

He further stated that by holding the situation constant, one can make inferences from personality (traits) to behavior and vice versa. To get a fair figure for the trait, one should divide the response magnitude by the stimulus magnitude, thus:

$$\frac{R}{S} = F\ (p)$$

In determining the trait from a typical response, Cattell advises us to consider the psychological state in which the person lives. He says that a particular response made in a particular mood may not be considered as a trait. He further says that though instability of mood is a trait, but having a particular mood at a particular time is not a trait, yet it determines behavior. Thus, he refined the formula to say:

> Personality is what determines behavior in a defined situation and a defined mood.

According to Cattell traits are divided into three modalities: (1) abilities, (2) temperament traits, and (3) dynamic traits. An ability trait is shown in the manner of response to the complexity of a situation, whereas, a temperament trait is always stylistic, in the sense, it deals with temper, form, and persistence, etc. to cover a large variety of specific responses. Again, a dynamic trait has to do with motivation and interest. He further advised to recognize the common traits, such, as intelligence, introversion which have much the same form for everyone, but of which one person may have more than another, and secondly, the unique traits which are so specific to an individual that no one else could be scored on the same.

In describing the controversial issue of heredity versus environmental influence on personality organization and development, Cattell (22) writes:

> . . . obviously, the practical uses of knowledge about the nature-nurture ratios are numerous. Heredity is not 'fate' any more than the element copper should have the properties of copper is 'fate.' It is a knowledge of properties useful in making the best use of the individual.

Guilford's Theory of Personality

Guilford (35) expressed his concern about the determination of uniqueness of an individual's personality including identical twins. He said that things, including persons, are known by their properties. An object is round, or hard, or sharp of all of these things. Similarly, a person is observed to react cooperatively, or promptly or accurately or in all of these ways. Properties are abstractions that come by way of analysis from totalities. Further, one person differs from another person in several properties or aspects which are known as traits. Therefore, a trait is any distinguishable, relatively enduring way in which one individual differs from others. Thus, Guilford gave a broad definition of a trait which may be identified either as a behavioral trait or as a somatic trait. Behavioral traits are inferred rather than observed. General cues to traits are in what the person does, how he does it, and how well he does it. The cues in behavior that lead to inferences concerning traits are called trait indicators. Traits are measureable and each trait may be represented by a straight line. A person may have a characteristic trait position on a trait scale. Some traits are unipolar while others are bipolar.

Guilford further stated that the trait position of a person is not

a fixed value; it does fluctuate from time to time. This phenomenon is called functional fluctuation. There is probably more instability in some traits than in others and in one person than in another, but a very general trait of instability is unlikely. Some traits tend to be more widely generalized than others, in the sense that they have a greater range of trait indicators. Traits are conveniently grouped into classes of traits or modalities to account for a personality. Therefore, Guilford concluded that the modalities such as temperament, attitudes, interests, needs, aptitudes, morphology, and physiology are the constituent parts of personality. These modalities like traits are the properties of personality which is always an integrated whole. To him, personality is not fixed for life, but it changes and develops with experience and with maturation. Some aspects of personality interms of trait modalities according to Guilford, are shown in Figure I.

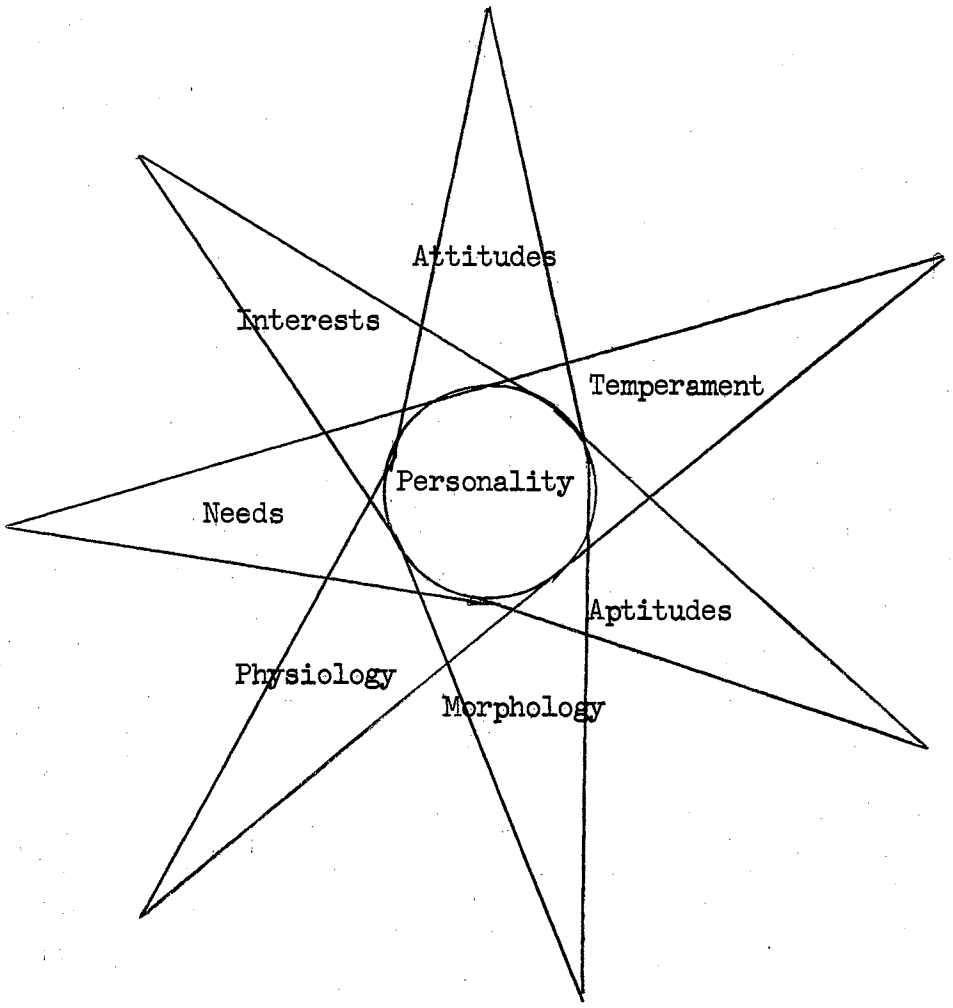


Figure I. Aspects of Personality in Terms of Trait Modalities

Murray's Personalogy

The focus of Murray's theory of personality is upon the individual in all his complexity and this point of view has been highlighted by the term "personalogy" which was introduced by him. Though Murray's theory of personality is heavily influenced by psychoanalytic theory and yet in many respects his theory is differentiated from an orthodox Freudian pan sexualism. Murray (59) stated:

> Personality is the governing organ of the body, an institution, which, from birth to death, is ceaselessly engaged in transformative functional operations.

This very definition of Murray stresses the dynamic nature of personality. He, of course, defined personality from a variety of views and possibly stressed more on motivational psychology. Hall and Lindzey (36) reported that Murray insisted on an adequate understanding of human motivation and his theory of motivation was based on the concepts of press, tension reduction, thema, need integration and regnancy.

In understanding the press and needs of an individual, Murray stressed the study of the influence of the society in which the individual lives. The following statement by Murray and Kluckhohn (60) bears strong testimony of Murray's conviction in this area.

> A person is an emergent entity of and in a certain physical, social, and cultural milieu. He cannot be properly represented in isolation from his locale, or from the culture of the group of which he is a member, or from his status (role) in the structure of that group. Basically, every person is a social person, an independent part of a system of human interactions.

Stimulus-Response Theory

In explaining human behaviors, the S-R theorists are primarily concerned with the process whereby the individual mediates between his array of responses and the various kinds of stimuli, both internal and external, to which he is exposed. Although there is a wide divergence in interpretation of the S-R process by different associationists, almost all of them agree to a point that a person's psychological and physical environments are identical; his environment consists of all his physical and social surroundings. Because environment is defined

in contrast to Gestalt Field-psychologists, in objective and physicalistic terms. It would be perhaps inappropriate to discuss S-R theory without mentioning at least three pioneers such as Ivan Pavlov, John B. Watson, and Edward L. Thorndike, who were responsible for the growth and development of classical conditioning, behaviorism and connectionism, respectively. Another four psychologists, namely, Guthrie, Hull, Spence, and Skinner need mentioning because of their invaluable contributions to the growth of behavioral science. Hull's reinforcement and Skinner's operant conditioning theories are so convincing and effective that these theories have increasingly revolutionized our ideas of behavior modification and change.

According to S-R associationists, behavior change, or learning, involves: (1) stimulus substitution and response control; (2) response substitution and stimulus control; (3) reinforcement such as (a) fixed ratio reinforcement; (b) fixed interval reinforcement; and (c) variable interval reinforcement.

Biggie (16) states:

> Among S-R theorists, much use is made of the concepts reflexes, reactions, objective measurement, quantitative data, sequence of behavior and reinforcement schedules.

This indicated that S-R theorists tried to make the science of human behavior free from value-judgment and subjective interpretation. Biggie further indicated that the S-R associationists differ from the Gestalt Field-psychologists in their definitions of environment, perception, interaction and experience.

Lewins' Field Theory

Kurt Lewin (1890-1947) was one of the prominent exponents of the

Gestalt psychology which was designed and developed with very much similar concepts of physical science by three German psychologists, namely, Max Wertheimer, Wolfgang Kohler, and Kurt Koffka. The chief tenet of Gestalt psychology is that the way in which an object is perceived is determined by the total context or configuration in which the object is embedded.

Lewin was interested in the study of various problems concerning socio-political organizations, minority groups, international and cultural relations, personality and education development. He believed that the various S-R associationisms represented an inadequate approach to the study of psychology. Thus, he developed his "field psychology" in such a way that it is fundamentally different from S-R associationism. The very term "field" of field psychology implies that, psychologically interpreted, everything happens at once. Biggie (16) states:

> Lewin's field psychology more precisely is called topological and vector psychology. In developing his psychology he borrowed ideas and concepts from other disciplines, namely, geometry and physics. Key concepts which he borrowed were topology from geometry and vector from physics.

In using these terms Lewin did not adhere rigidly to the definitions of their mother science, rather he used them conveniently to suit his system of psychology.

In defining the one's self or person, Lewin placed the person in his psychological field and announced that a person is that body or configuration of matters with which an individual becomes identified, of which he takes care, and to which he gives his allegiance. Thus, the self is not a fixed quantity or static thing, and at the same time it is not identical with an organism. Thus, according to Lewin a person is not limited to a mind or body; neither is it body nor mind. Rather, a

person is a consciously behaving self and he lives in life space which constitutes the psychological person and the psychological environment. Lewin's basic formula of behavior is stated below:

$$B = F (P , E)$$

Where, B = Behavior of the person,
F = Function,
P = Psychological person, and
E = Psychological environment.

Horney's Theory of Personality

Horney's theory of personality development is centered around the home condition. She stated that if a child is raised in a home where there is security, trust, love, respect, tolerance and warmth, he will surely come up with adequate personality. She gave emphasis to childhood experience in shaping one's personality. Horney (46) stated:

> The person who is likely to become neurotic is one who has experienced culturally determined difficulties in an accentuated form, mostly through the medium of childhood experience.

Sullivan's Theory of Interpersonal Psychiatry

Sullivan's (85) theory of personality is based on interpersonal situations. He maintained that personality is the relatively enduring pattern of recurrent interpersonal situations which characterize a human life. He further stated that an interpersonal behavior is all that can be observed as personality.

Sullivan viewed personality from the perspective of definite stages of development. He described six stages in the development of personality prior to the final stages of maturity: (1) infancy, (2) childhood, (3) juvenile era, (4) pre-adolescence, (5) early adolescence, and

(6) late adolescence. He further indicated that personality of an individual is likely to be changed at any time with new interpersonal situations, since the human organism is extremely plastic and malleable.

Selected Variables in the Study

In the study of the personality, it must be recognized that the personality includes patterns of reflexes, motivations, interests, needs, attitudes, aptitudes, values, ideals, goals, beliefs and many other factors related to biological, sociological and psychological aspects of the individual.

According to Heidenreich (41) the biological, sociological and psychological factors that affect personality and cause delinquency and criminality are listed below.

Biological Factors

Heredity - inherent weakness in physical, mental or emotional naturation (epilepsy, insanity, or temperament). Mentality - subnormal, defective, retarded, and feeble-mindedness. Learning - inability or unwillingness to profit from training or personal experiences; lack of perception and insight for the consequences of deviant behavior. Immaturity - slow, or retarded, maturation of the physical, intellectual, emotional, and volitional and inhibitory powers (self-control).

Sociological Factors

Home - poverty; squalor; overcrowding; parental discord; broken home (death, separation, divorce, desertion); institutionalization. Family - lack of proper training (right versus wrong); punitive or

erratic discipline; lack of values (respect for others' rights, courtesy, honesty, and responsibility); lack of positive attitudes, interests and ideals; lack of security (rejection, overprotection, and domination); delinquent parents. Community - a neighborhood of economic poverty (slums); overcrowded schools; inadequately trained teachers; inadequate law enforcement; lack of leisure-time activities and recreational facilities; antisocial models (identification figures).

Psychological Factors

Affect - emotional frustration, conflict and failure. Anxiety - emotional immaturity and an inability or unwillingness or lack of power to adjust to volitional and inhibitory social needs which motivates hostility toward parents, school and society.

Some of the variables which have been selected for investigation in this study, are discussed with reference to the studies already made in personality and its related areas.

Family

Due to rapid expansion of technologies and job opportunities there is a significant change in the way of family life in the American society. Nevertheless, the family life of an individual plays an important role in the growth and development of his personality. The home is the child's first environment and therefore, it plays the primary role of socializing the child. Further, the child identifies in the family with those members whom he loves and imitates their patterns of behavior for his adjustment. The strongest factor in molding a child's personality is his relationship with his parents.

Phillips (66) stated:

> While the pattern established in the home will be changed and modified as the child grows older, it will never be completely eradicated.

Another important factor is the cultural differences within the American families. Because some of the parents still try to maintain old world cultures from where their ancestors migrated to the United States, this kind of situation or environment encourages individuals in the growth and development of their personality. The personality of an individual that is first developed in the home, will influence him in later life to work under a variety of situations. Therefore, basic home training is a crucial factor in adequate personality development.

Brown (21) and others found in their research study that character development was most closely related to sharing family decisions, interpersonal relations, and parental attitudes toward the child's peers. They also found that personality patterns of adolescents were significantly related to the emotional relationships and the disciplinary patterns that they experienced in living with their parents. Peck (65) supported the above findings through his research conducted in 1958.

Size of Family

The family is one of the complex social systems made up of different members with different roles. Larger the family in size, bigger the complexity of interpersonal relations and interactional systems. The child learns interacting with the members of the family as he grows. While the child is performing his own role, he is also learning the roles of his father, mother and siblings. Thus, the family acts as a primary socializing agent for the child. To determine the number of

interactional systems in the family, Henry and Warson (42) suggested a formula:

$$N = 2^n - n - 1$$

Where, N = The number of interactional systems, and
n = The number of family members.

Each interactional system has its own unique emotional quality which affects the personality and behavior of all the members of the family. Vogel and Laughterback (91) found in their study that the incidence of neuroses and character disorders was higher among the "only" children than their peer groups who were not characterized as "only" children in their families.

In an effort to determine the relationship between size of family of offspring, Maller (53) found that family size correlates negatively with intelligence, moral knowledge, cultural background, and honest behavior, whereas the highest intelligence scores were made by subjects from homes of two children. This study also indicated that family size exhibited a definite curvilinear relationship with both cooperativeness and helpfulness, those of very small and large families scored lower than those of average size families. Children of large families were found to score highest in persistence. Significantly, there was a marked negative relationship between social status of parents and the number of children in the family.

In connection with the only child in the family quite a large number of research work has already been done but most of the findings were found contradictory. Some of the studies indicated that the only child situation is unfavorable to personality development, while the majority found the opposite to be true. Goodenough (30) found only children to be more aggressive, confident, gregarious and distractible than other

children. On the other hand, Witty (95) found the only children to be superior in health, intelligence, and character to other children at the five year level.

Birth Order in the Family

Several studies have already been made to determine whether an ordinal position is a factor of personality differences. Results obtained from empirical studies are often contradictory. Steckel's (81) study indicated that on the average later-born children have higher IQ's than the early-born children. In contrast, Wile (93) reported that order of birth is not demonstrated to have any important relation to the development of maladjsted or neurotic personality. They further reported that "ordinal position is not an especially significant factor in fixing a personality type or in establishing definite forms of difficulty in adjustment or in determining dominant attitudes and responses in human relations."

Bossard and Boll (19) identified and classified eight different roles of the children. Three of them showed a relationship to the birth order. These three were (1) the responsible child who was usually the first-born one; (2) the sociable child who was often the second-born; and (3) the spoiled child who was many times the last-born.

Age

It is an important fact that much of the human behaviors and experiences have their origin in their maturation process. Emotions and drives are intimately bound up with physical structures and functions of human bodies. As one advances in life, he experiences physical changes

in the body. Usually in normal pattern of one's life physical maturity correlates with his intellectual, emotional, economic and social maturities. Schaie (74) conducted a study which included 500 subjects both male and female by 50:50; of age from 20 to 70 years. He divided the subjects into ten five-year age intervals and rank-ordered them in terms of a composite score on rigidity. The most flexible and most rigid individuals in each group were examined with respect to their personal characteristics. Significant differences were observed in favor of the flexible group on the measures of educationa, income, and occupational levels. Significant differences were also found between rigidity-flexibility and age on a measure of mobility (change of residence).

Anderson (7) administered personality and adjustment measures to 3200 children from nine to eighteen years of age. At each age level a group of well-adjusted, average-adjusted, and poorly-adjusted children was selected on the basis of combined scores on thirteen measures. Results showed sharp distinctions among the three groups on the affective index in relation to age and adjustment.

Parental Occupation

The parent-child relationship is a crucial factor in determining or shaping the personality of the child. Binger (17) stated:

> One of the important, fateful, and determining influences of childhood the relationship of a child with his parents comes first. This is his very life line, through which he establishes his relationships, for better or for worse, with the rest of the world.

Father's occupation is important because it identifies the whole family into a social class which is an important socio-economic factor that determines one's personality. There is another way to look into the

influences of socio-economic factors that these class factors put the individuals into selective cultural groupings, each with its identifying mode of earning and living.

Ogburn and Nimkoff (64) stated:

> The fundamental attribute of a social class is its social position of relative superiority or inferiority to other social classes.

Therefore, it is evident that father's occupation has a cultural significance as it affects the child's social prestige.

Hollingshed (45) found behavior varied considerably with the social class to which the adolescent belonged, and that each of five different classes affected behavior differently.

Place of Living

When a child develops socially in a family, he also develops within the larger social framework, the community. The large the size of the community where a child lives, the larger the number of interactional systems that the child comes in contact with. Thus, the child is a larger community gets exposed to a variety of responses for his adjustment, compared to his peer group members living in an isolated farm community. Further, different communities furnish different social fields which influence differently for the growth and development of personality of the people.

Mangus (54) states:

> Compared with children from urban areas, rural children have been reported to be superior in both self-adjustment and social adjustment. In general, rural children are more self-reliant, have a greater sense of personal worth and of belonging, and have greater freedom from nervous symptoms and withdrawing tendencies.

The behavioral patterns that are found in large cities and industrialized urban communities, are not commonly found in small towns and villages. Schneiders (75) reported that communities differ to a considerable extent, also, in the matter of vocational and avocational interest. People of smaller communities often hold picnics, church festivals, outside amusements and many other traditional things which influence the individuals to the development of personal qualities.

The psychological and cultural characteristics of the community are transmitted to the growing children through their participations in various social activities. If a person lives in a poor or in an isolated community, he is expected to be both psychologically and culturally less developed. This statement is supported by Sullenger's (84) remarks:

> They make him what he is, socially, and in order to understand him we must study him in his setting.

Participation in Organizations

The psychological needs of acceptance, belonging, status and achievement are often met through individual's participation in social activities and professional organizations. Schneiders (75) stated:

> Participation can be a powerful socializing influence, and an important factor in social adjustment. Concepts and experiences, skills and view points that are socially as well as personally valuable, can be achieved by participating in the activities of experiences of others. Some form of group action is, therefore, a prerequisite for social development.

If the individual is to learn how to live effectively in society, he needs to acquire experiences of the social matrices through participation. In schools and colleges there are clubs, various programs and activities which provide many opportunities for personality and character development. Schneiders (75) stated that it is the responsibility of the

parents and the teacher to encourage the children for active participation in such organizations for adequate personality development.

Formal Education

The effect of formal education on personality development has been demonstrated by various types of research studies. Trent and Medsker (90) stated that the subjects who entered college were distinguished from those who did not by a higher degree of personal development in terms of academic attitudes, tolerance, flexibility, and objectivity. They further stated that the young people who did not attend college after high school graduation showed little and sometimes no discernible personality development.

To determine change in attitudes of the high school seniors toward world problems, Klee (49) conducted a seven-week study course and found that out of 218 changes recorded, 192 changes were the direct result of the planned study course.

Influence of Socio-Economic Status

The relationship between environmental background and the development of intelligence and personality has largely been demonstrated by various research studies. Davis (27) in a study of social class influences upon learning, pointed out that the children from middle-class home environment performed best. He also concluded that children from high socio-economic levels were consistently superior to those who came from homes lower in the socio-economic scale. Asher (9) and Wheeler (93) studies were concluded earlier with similar findings.

In this connection Powell (69) commented:

> There are, of course, rather unusual cases; the majority of children from socio-economically low homes are generally average or below in intelligence.

Academic Achievement

The relationship between personal characteristics and academic achievements has also been demonstrated by numerous studies. Angelino and Hall (8) used the Rorschach test to study temperament attributes of high and low achieving bright students of high school level. The results indicated that low-achievers were associated with lack of tact and flexibility which were not found in high-achievers.

Astington (11) conducted a study in England on the basis of a hypothesis that prediction of academic performance of grammar school candidates would be improved if personality qualities were considered along with achievement scores. Personality was measured by teachers' ratings for six qualities, classmate's ratings on sociability and by a self-reporting questionnaire on introversion-extroversion. The results indicated the academically successful boys received higher ratings on their personality scales than the unsuccessful boys. Grammer school teachers' ratings or persistence, independence, and interest showed an average correlation of .60 with achievement scores.

Title or Position in the Job

An individual is identified not only with the norms of the occupational group to which he is a member but also with the position that he holds in the group. This is what Harsh and Schrickel (38) told the readers. Further, Powell (69) stated that the relationships between personality and/or temperament traits and specific occupations are not

as well established as those between intelligence and occupations, but such relationships apparently do exist.

The California Psychological Inventory

For measurement of personality there are several inventories found in use besides the California Psychological Inventory (CPI), namely, AVL (5), MMPI (39), SVIB (83), MBTI (61), ACL (33), FIRO-B (77), and many others. In this connection, Anastasi (6) stated:

> The number of available personality tests runs into several hundred. Especially numerous are the personality inventories and the projective techniques.

The CPI was developed to make comprehensive and multidimensional assessment of normal persons in a variety of settings. The inventory consists of 480 statements which identify 18 personality traits. The inventory yields raw scores for 18 traits. Once the trait-scores are identified, they are ready to be to the profile forms to make psychographs. The inventory is a self-administering one for literate subjects who are required to respond on a separate answer sheet "true" or "false" according to agreement or disagreement with the statements.

The CPI Scales

Gough (32) constructed the scales of the CPI empirically. In this method of criterion dimension which one seeks to measure is first defined, for example personal dominance. Secondly, inventory statements which seem to bear psychological relevance to the criterion dimension are assembled in a preliminary scale. These questions are then administered to persons who can be shown by some procedure entirely independent of the test to be strongly characterized by this trait or dimension.

Eleven of the CPI scales were constructed in this way. These scales are Do, Cs, Sy, Re, So, To, Ac, Ai, Ie, Py, and Fe. Four additional scales, Sp, Sa, Sc, and Fx were created by the technique of internal consistency analysis. The three scales which were developed to detect faking are Wb, Gi, and Cm.

It has also been mentioned by Gough that in interpreting scores on the inventory, it is imperative to keep in mind the basic purpose of each scale which is to identify individuals who will (1) behave in a certain way and (2) be described in a characteristic manner. The scales are not intended to define traits or to specify psychometric factors; validation, therefore, should address itself to the degree to which the inventory can forecast behavior and identify individuals who are perceived in characteristic ways.

Reliability of the CPI

Gough (32) mentioned about two reliability studies using test-retest method. In both the studies he found high enough consistency of measurement to permit the use of the scales in both group and individual testing. However, two scales, Cm and Py were found low on the reliability check.

Validity of the CPI

Gough (32) stated that the articles and reports listed in the bibliography of the CPI Manual provide the fullest and most accurate picture of the validity of each scale. Gough documented the validity, reliability and usefulness of the CPI in more than 200 studies. He further indicated that in every instance the evidence presented was

drawn from cross-validational studies of the inventory.

Review of the CPI

Kelly (47) did not find the reason why Gough classed Wb (Sense of Well-Being) into cluster one and Ac (Achievement via Conformance into cluster three, though, his own data showed that these two scales were intercorrelated to the extent of +.58 for men and +.66 for women. Again, both were highly correlated with cluster two. Kelly commented:

> All in all, however, the CPI in the reviewer's opinion is one of the best, if not the best, available instruments of its kind. It was developed on the basis of a series of empirical studies and the evidence for the validity of its several scales is extensive.

Bajaj (14) used the CPI in the personality study of the Oklahoma County Extension personnel and found that the percentage of the subjects having scores average or above the CPI norms stood as follows:

> Psychological-mindedness, 87 percent; Communality, 84 percent; Achievement via conformance, 84 percent; Responsibility, 83.5 percent; Socialization, 82 percent; Self-control, 81.25 percent; Tolerance, 81 percent; Sense of well-being, 80 percent; Dominance, 78 percent; Achievement via independence, 75 percent; Self-acceptance, 71 percent; Good impression, 76.5 percent; Capacity for status, 64 percent; Sociability, 62.5 percent; Intellectual efficiency, 59 percent; Femininity, 55 percent; Social presence, 51 percent; and Flexibility, 50 percent.

He further concluded that the county extension personnel with attributes such as, advanced formal education, knowledge in social science, high status of father's occupation and preference for living in middle-sized communities tended to show adequate personality.

Mordock and Patterson (56) used the CPI in measuring the personality characteristics of counseling students at various levels of their training and they observed an increase of scores of the counseling students

on the CPI personality scales with the increase of course levels and training.

CHAPTER III

METHODOLOGY

Introduction

This chapter consists of the plan, structure, and strategy of the research project that was undertaken by the investigator to: (1) identify, discuss and compare the personality traits of Oklahoma Vocational Agriculture student teaching personnel as measured by the California Psychological Inventory (CPI) scales, (2) determine the degree of relationships between the personality traits of Oklahoma Vocational Agriculture student teaching personnel and their professional and socio-economic variables, (3) determine the differences between the scores of the cooperating teachers and those of the student teachers of vocational agriculture on their personality traits, (4) determine the validity coefficients of the test scores to the criterion scores (grade point averages) of the student teaching personnel, (5) determine the intercorrelations among the personality trait scores of the Oklahoma Vocational Agriculture student teaching personnel, and (6) suggest training program implications for the Oklahoma Vocational Agriculture student teaching personnel for teaching vocational education in agriculture on the professional level.

Kerlinger (48) states that the plan is the overall scheme of the research. It includes an outline of everything the investigator will do from writing hypotheses and their operational implications to the final

scores and the criterion scores (grade point average) of the student teaching personnel.

5. There is no significant inter-trait relationship among the personality traits of the student teaching personnel as measured by the CPI scales.

The Population

The universe of this study was composed of 123 Vocational Agriculture student teaching personnel. To speak more specifically, the population consisted of 80 student teachers and 43 cooperating teachers of Vocational Agriculture. All the student teachers who were selected for the study, were the graduating seniors in Spring, 1970. The cooperating teachers who are also known as the teacher-trainers, were selected according to the student teaching centers of Oklahoma. Each of the student teaching centers offers instructional programs in Vocational Agriculture under the supervision and guidance of the cooperating teacher. Each graduating senior in Agricultural Education is required to undergo for eight weeks practice teaching under the supervision and guidance of a cooperating teacher. Therefore, our population consisted of two groups of teachers: 43 cooperating teachers and 80 student teachers.

Instrumentation

To measure the personality traits of the Vocational Agriculture student teaching personnel, the California Psychological Inventory was used. Two questionnaires shown in Appendices A and B were developed by the investigator and used to collect information related to professional

and socio-economic variables of the said teaching personnel. The questionnaire shown in Appendix A was used with the cooperating teachers while the questionnaire in Appendix B was used with the student teachers. The questionnaires provided specific information related to independent variables in order to examine the degree of association between these variables and the personality traits as measured by the CPI scales.

In describing the characteristics of a good measuring instrument, Noll (63) writes that all good measuring instruments have certain primary qualities in common. These are the universals - the qualities which differentiate good tests from inferior ones - whether they are for the use of the educator, the psychologist, the medical technician, the physicist, or people in other fields. A test which lacks a known and substantial degree of these primary qualities is not a measuring instrument in any true sense, and little or no dependence can be placed upon results obtained by its use. The two universals generally agreed upon are validity and reliability.

Reliability of the CPI

Two reliability studies using the test-retest method are mentioned by Gough (32) in the California Psychological Inventory Manual. Two high school junior classes took the CPI test in the Fall, 1952, and a year later as seniors. Two hundred male prisoners took the other test twice with a lapse of 7 to 21 days between testings. In both the tests, Gough concluded that the consistency of measurement was high enough to permit the use of the scales in both group and individual testing. He further concluded that two scales, the Cm (Communality) and Py (Psychological-mindedness) were found low on the reliability check.

Validity of the CPI

It has been mentioned by Gough (32) in the CPI Manual that the articles and reports listed in the bibliography provide the fullest and most accurate picture of the validity of each scale. Gough documented evidences regarding the reliability and validity of the CPI scales in the Manual. He indicated that in every instance the evidence presented was drawn from cross-validational studies of the CPI.

Use of the CPI

Gough (32) states that the California Psychological Inventory was created in the hope of attaining two goals of personality assessment. The first goal, largely theoretical in nature, was to use and to develop descriptive concepts which possess broad personal social relevance.

The second goal for the CPI, he stated, was the practical one of devising dependable subscales for the identification and measurement of the variables chosen for inclusion in the inventory. This test was designed by Gough for the study of personality characteristics of normal people rather than pathological ones. In this connection, Liddle (52) commented:

> The CPI is a relatively new self-report instrument intended to determine favorable and positive aspects of personality rather than the morbid or pathological.

In support of the use of the CPI, Siegel (80) writes:

> It makes a unique contribution to personality assessment because of its focus upon traits related to effective social interaction. It should prove to be extremely valuable whenever the goal of testing is to ascertain the adequacy with which an individual is relating to his social environment.

In describing the use of the CPI test in mental hospitals, Cuadra and Reed (25) state:

> The possibility that the CPI is not an appropriate instrument with which to assess the particular personality variables which may be involved here. While it includes measures of a wide variety of psychological dimensions it may not allow sufficient room for behavior pathology to express itself. One of the seeming virtues - namely, its relative freedom from the frankly pathological content of its chief predecessor, the Minnesota Multiphasic Personality Inventory.

Thus, they concluded that the CPI has a limited scope for the study of pathological personality.

The CPI booklets along with the CPI answer sheets and templates were received from Dr. Harrison G. Gough, Professor of Psychology, and Associate Director, Institute of Personality Assessment and Research, University of California, Berkeley through mail with the help and courtesy of the Department of Agricultural Education, Oklahoma State University. The CPI test was administered to the student teachers locally in the Department of Agricultural Education, Oklahoma State University, along with the instrument related to professional and socio-economic variables. The CPI test forms along with the questionnaire shown in Appendix A were mailed out to the cooperating teachers. A letter of request from the Head of the Department of Agricultural Education, Oklahoma State University, accompanied the questionnaire and the CPI test forms for quick return of the same by the cooperating teacher.

Scoring.

The scores obtained by each Vocational Agriculture student teaching personnel for each trait were hand tabulated by placing the respective template on the CPI answer sheet. The X's (check marks) seen through

the templates were counted for each trait and the total was entered in the proper cell at the bottom of the CPI answer sheet for each individual. The individual profile sheet for the CPI was prepared with the individual's raw scores on eighteen personality traits. The raw scores thus obtained were transferred to IBM sheets for machine computation. The scores of each individual were carefully examined regarding the faking of data. Gough (32) writes that three scales have been developed to assist in detecting those subjects who deliberately exaggerate or otherwise distort their responses to the inventory: Gi (Good impression), Wb (Sense of well-being), and Cm (Communality). He further stated that a very high score on Gi, or a very low score on either Wb or Cm raise the possibility of the test being faked.

The scores obtained by the subjects on the professional and socio-economic variables related to the study were directly transferred on the IBM sheets. All data were analyzed by the University Computer Service of Oklahoma State University.

The raw scores obtained by the subjects are placed in Appendix G. The 38 cooperating teachers and the 80 student teachers were represented in the study by code numbers, A01 to A38 and B01 to B80, respectively.

Statistical Treatment

In order to reduce the data to manageable proportions to test hypotheses and draw conclusions, the investigator felt the necessity of computing measures such as, percentages, means, standard deviations, standard errors, t-ratios, rank orders, ranges, Chi-squares, corrected coefficient contingencies, correlation coefficients and intercorrelation coefficients. Statistical treatments of data helped the investigator

to organize, analyze and present the data in an understandable way to the readers. It also helped to establish relationships between variables considered in the study.

In statistical treatment of data, the fundamental work starts with classification of data. In classification we attempt to sort elements with respect to certain characteristics, making decisions about the similarity and dissimilarity of the elements. In such cases, we use nominal scales but when we place them in order without mentioning the exact differences in them, we use ordinal scales. In this study, the investigator used both the nominal and ordinal scales to categorize and identify data. In using nominal scales, Blalock (18) states:

> Formally, nominal scales possess the properties of symmetry and transivity. By symmetry we mean that a relation holding between A and B also holds between B and A. By transivity we mean that if A = B and B = C, then A = C.

He further stated that in contrast, the ordinal scales are asymmetrical in the sense that certain special relationships may hold between A and B which do not hold good for B and A. If $A > B$ it cannot be true that $B > A$. However, transivity still holds good, that is, if $A > B > C$, then $A > C$.

In summary, Blalock (18) writes:

> An ordinal scale possesses all the properties of a nominal scale plus ordinality. An interval scale has all the qualities of both nominal and ordinal scales plus a unit of measurement, and a ratio scale represents the highest level since it has not only a unit of measurement but an absolute zero as well.

Standard Deviation and Range

As a measure of variability of each of the personality trait scores of the CPI, standard deviations were used to see the extent and nature

of variability of trait scores among the two groups of teaching personnel as well as in total population. Standard deviations gave some clues about the representiveness of the means of the personality traits included in the study. The large standard deviations of the traits reflected wider and scattered distribution of scores around the mean and told us not to be confident that the means are the typical scores of many teachers in the group. On the other hand, the small standard deviations told us that the individual scores tend to cluster more closely around the means. And, thus, it made the investigator more confident to state that such means were quite representative of the group under study.

The investigator used the range also as a measure of variability. The range measurements indicated the total spread of each of the personality traits of the teaching personnel.

The Chi-Square Test

The Chi-square distribution deals with non-parametric statistical tests. It is another kind of distribution, just as the normal or student's t-distribution. The Chi-square test was used in the study to determine the significance of association between two variables, that is, personality traits and professional variables of the Oklahoma Vocational Agriculture student teaching personnel. It was also designed to study significance of association between personality traits and socio-economic variables of the said teaching personnel.

The results at .05 level of significance were accepted as the basis for rejecting the null hypotheses. Thus, greater discrepencies between observed and hypothesized value, were tolerated before a hypothesis was rejected. This measure also helped in accepting a null hypothesis with more strictness in similarities between observed and hypothesized values

in order to avoid type one and type two errors as far as possible.

Whenever the results were found statistically significant, the correlated coefficient of contingency for qualitative variables and the coefficient of correlation for quantitative variables were calculated.

The Correlated Coefficient of Contingency

A non-significant Chi-square value indicates that there is no basis to reject the hypothesis of independence of the two variables. If the Chi-square test is significant we conclude that the variables are associated. In all such cases the investigator calculated the contingency coefficient to determine the strength of association of qualitative variables. McCormick (62) stated that the coefficient of contingency has one defect. It underestimates the amount of correlation actually present in inverse proportion to the number of cells in the table. For a 3x3 table having perfect correlation, the contingency coefficient (C) would not be 1.00 as it shouls be, but .816. He further suggested that it was possible to correct C to some extent for the fault of underestimating the amount of correlation actually present between two variables. And as such, he recommended the following formula for the correction of the fault (See Appendix C).

$$\overline{C} = \frac{C}{t_r \cdot t_c}$$

Where, $\overline{C}$ is the corrected coefficient of contingency,
C is the coefficient of contingency,
t_r is the value given in the table of factors for correcting C for broad grouping, for number of rows, and
t_c is the value given in the table of factors for correcting C for broad grouping, for number of columns.

Student's T-Test

To determine the difference between the two groups of teaching personnel's performance on each of the CPI personality traits, the student's t-test was designed. Whenever a t-value was found significant at a given probability level (.05), the means of the two groups of the teaching personnel were considered to be significantly different. Further, in order to apply t-test, the standard error of the difference between means was calculated first.

Correlation Coefficient

In order to measure the inter-trait associationships among the traits such as, Do (Dominance), Cs (Capacity for status), Sy (Sociability), etc., the investigator examined the scores of all the subjects on these traits as pairs of scores and calculated correlation coefficient (r). The r's for all the personality traits as measured by the CPI were calculated and tabulated to examine the relationships and cluster-habit among them. Thus, a scale of intercorrelation matrix was prepared with eighteen personality traits of the Vocational Agriculture student teaching personnel.

To determine the significance of r's so computated from the interaction of personality traits a hypothesis of zero correlation was assumed, that is, $r = 0$. To find out whether the observed values of r's are sufficiently large to reject the null hypothesis, the observed values were compared with the table values of r's given in Appendix E. The table values of r's are recorded with degrees of freedom equal to N-2, where N is the number of pairs. Whenever the observed values at a given degree of freedom were found to be less than tabulated values, the in-

vestigator concluded that the correlation between the related personality traits was insignificant or in other words, the related personality trait variables were independent.

Validation of Measurement

The investigator felt the responsibility of providing evidence that the CPI tests measured what he intended to measure by the tests. In order to validate the test measures of the CPI, the investigator used the grade point averages of the subjects as concurrent criterion. The grade point averages of all the subjects were collected from the Office of the Registrar, Oklahoma State University, for their entire undergraduate course work. The CPI scores on each personality trait were correlated with the grade point averages to determine the validity coefficients of the tests.

In matters of criterion-selection, Thorndike and Hagen (88) identified four desirable qualities: (1) relevance, (2) freedom from bias, (3) reliability, and (4) availability. In selecting the grade point averages as criterion, the investigator considered the above qualities for the criterion-selection.

To determine the significance of the validity coefficients a null hypothesis was advanced that there was a zero correlation between the test scores and the grade point averages of the Vocational Agriculture student teaching personnel.

CPI Scales as Predictors

In summarizing a study involving 1384 male and female high school students, Gough (34) reported that Ac, Ai, and Ie scales correlated with

GPA by Product Moment correlation coefficients, +0.36, +0.34, and +0.40, respectively. Holland (44) found the relationship between Ac and GPA to be much less intense (r = 0.07 to 0.28) for exceptionally talented college freshmen. Thus, his investigation failed to confirm potencies of Ai and Ie scales as predictors of GPA. Bending (15), however, obtained correlations of magnitude 0.35 to 0.58 for men and 0.42 to 0.46 for women between the scale Ai and GPA in psychology courses. Astin and Holland (10) found Ai not significantly related to GPA in exceptional male undergraduates. However, he found a slight correlation in case of female exceptional undergraduates.

Watson's (92) study indicates that the CPI scales were found to be more sensitive as predictors of GPA in the maladjusted groups than the normal ones. In contrast, both Gough (34) and Kelly (47) stated and demonstrated that the CPI scales were developed to make multi-dimensional assessment of normal persons in a variety of settings.

Evans (28) conducted a study with six groups of college freshmen to determine the relationships between the scales Ac, Ai, and Ie on the one side and the three criteria, namely, GPA, verbal ability, and quantitative ability on the other. He found no significant relationship between Ac and GPA and between Ie and GPA for any of the groups. However, Ai was found to be significantly related to GPA for all of the groups.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The findings of this study are reported under five major divisions: (1) Personality Trait Scores; (2) CPI Classes; (3) Personality Traits and Professional and Socio-economic Variables; (4) Personality Traits and Intercorrelations; and (5) Personality Traits and Academic (Scholastic) Achievements.

As stated earlier, this study involved the vocational agriculture student teaching personnel of Oklahoma for the academic year 1969-70. Data presented in Table I indicate that all of the 123 student teaching personnel in Vocational Agriculture were included in the study. Out of 123 subjects under study, 118 returned the questionnaires and the CPI answer sheets as instructed. Two of the subjects returned the questionnaires and the CPI answer sheets incomplete while the other three failed to return the same in time.

TABLE I

VOCATIONAL AGRICULTURE STUDENT TEACHING PERSONNEL'S RESPONSE BY TITLE

Title	Number Requested	Number Responded	Percent of Response
Vo. Ag. Student Teachers	80	80	100.00
Vo. Ag. Cooperating Teachers	43	38	88.37
	123	118	95.93

Personality Trait Scores

The CPI instrument used in the study measured eighteen personality traits of the vocational agriculture student teaching personnel. The mean scores for the student teachers and the cooperating teachers were shown in Table II by personality traits.

Data in Table II indicate that the cooperating teachers scored higher than the student teachers in traits Do, Cs, Sy, Wb, Re, So, Sc, To, Gi, Cm, Ac, Ai, Ie, Py, and Fe. In contrast, the student teachers scored higher than the cooperating teachers in Sp, Sa, and Fx.

Gough(32) has demonstrated that raw scores of each trait can directly be converted to standard scores. He has also established the mean standard score for each of the traits at fifty. Any score on or above the standard score of fifty is considered as average or above the average (See Appendix F).

Standard scores shown in Table II reveal that the cooperating teachers scored above the established CPI norms for traits Do, Cs, Sy, Sa, Wb, Re, So, Se, To, Gi, Cm, Ac, Ai, Ie, Py, and Fe compared to the student teachers who scored above the established CPI norms only in Do, Sp, Sa, So, and Cm.

The mean scores of all the student teaching personnel shown in Tabel II indicate that the combined group scored above the established CPI norms in traits Do, Sy, Sp, Sa, Wb, So, Se, Cm, Ac, and Py. The combined group scored below the norms in traits Cs, Re, Gi, Ie, Fx, and Fe, and approximated the CPI norms in traits To and Ai.

Figure 2 shows the relationship of the means of the different groups of the teachers to the standard score mean line. The mean

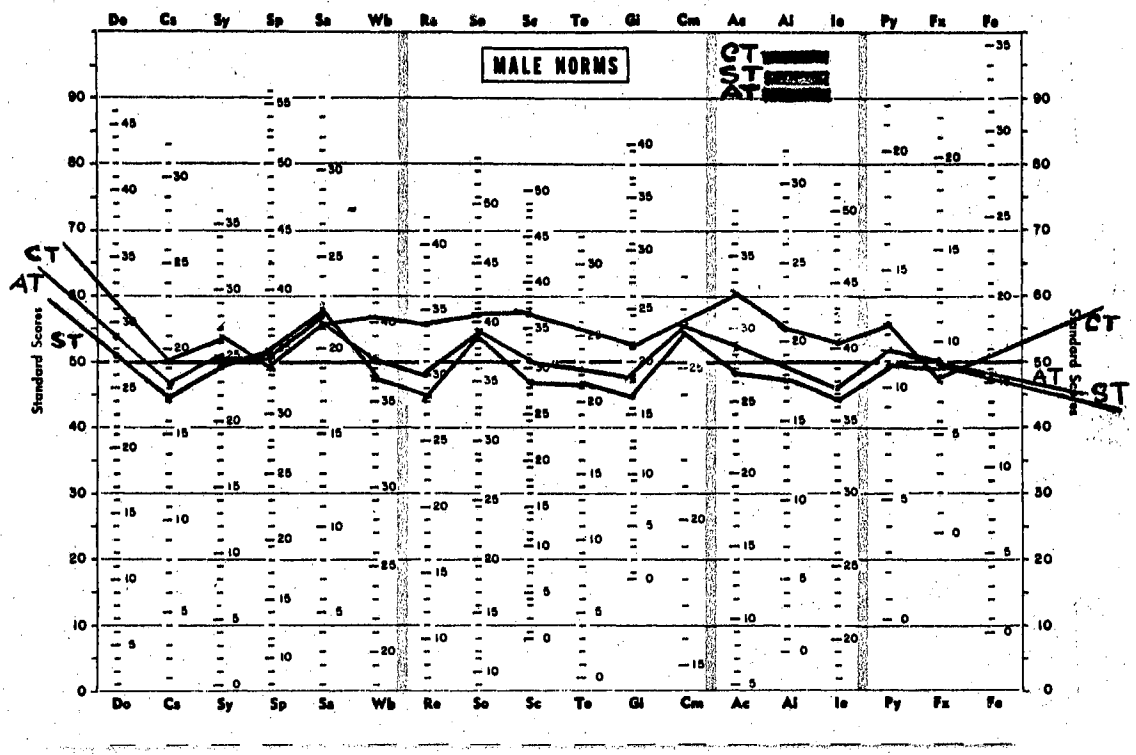
TABLE II

MEAN PERSONALITY SCORES OF OKLAHOMA VOCATIONAL AGRICULTURE STUDENT TEACHING PERSONNEL AS MEASURED BY THE CPI SCALES

Traits of CPI	Student Teachers N=80		Coop. Teachers N=38		All Teachers N=118	
	Raw	Standard	Raw	Standard	Raw	Standard
Dominance	27.76	51.68	31.26	58.53	28.89	53.88
Capacity for Status	17.34	44.69	19.55	50.53	18.05	46.57
Sociability	24.26	49.53	26.13	53.26	24.86	50.73
Social Presence	34.83	51.33	33.68	49.16	34.46	50.63
Self-Acceptance	21.98	57.51	21.18	55.24	21.72	56.78
Sense of Well-Being	36.48	47.44	40.03	56.29	37.62	50.29
Responsibility	28.20	44.36	33.97	55.95	30.06	48.09
Socialization	38.79	53.60	40.45	56.68	39.32	54.59
Self-Control	28.80	46.98	36.16	56.97	31.17	50.19
Tolerance	21.26	46.49	25.11	54.61	22.50	49.10
Good Impression	16.90	44.81	21.26	52.13	18.31	47.17
Communality	26.08	54.10	26.61	56.47	26.25	54.86
Achievement via Conformance	26.66	48.03	32.08	59.89	28.41	51.84
Achievement via Independence	17.60	47.45	20.63	54.71	18.58	49.79
Intellectual Efficiency	36.36	43.75	40.37	52.32	37.65	46.51
Psychological Mindedness	10.79	49.23	12.68	56.00	11.40	51.41
Flexibility	8.73	49.18	8.18	47.63	8.55	48.68
Femininity	15.01	46.68	16.82	51.55	15.59	48.25

FIGURE 2

MEAN PROFILE BY TYPE OF VOCATIONAL AGRICULTURE STUDENT TEACHING PERSONNEL AS PLOTTED ON THE CPI MEAN STANDARD SCORE LINE



CT -- Cooperating Teachers

ST -- Student Teachers

AT -- All Teachers

score line of the cooperating teachers (CT) is quite above the mean score lines of the student teachers (ST) and also that of the all teachers combined (AT). The cooperating teachers as a group tended to exhibit superior functioning than the student teachers in all the traits except Sp, Sa, and Fx. As a group the cooperating teachers appeared to be effective both socially and academically, even though a bit less flexible. Though the student teachers as a group scored lower than the cooperating teachers in almost all traits except Sp, Sa, and Fx, their mean score line was found to be close to the established CPI norms. In fact, they scored above the CPI norms in traits Do, Sp, Sa, So, and Cm. The total nature of the profile of the cooperating teachers compared to the student teachers indicates superior leadership ability, social maturity, better interpersonal relationships, and higher intellectual efficiency. Conversely, the student teachers scored below the mean standard score line in a majority of the traits. Therefore, it may be seen that the student teachers as a group experienced some slight difficulty in interpersonal adjustment, independent work programs, and intellectual efficiency.

The total nature of the profile for both the groups of teachers indicates that both the groups fit themselves within plus or minus one standard deviation of the established CPI mean. This further indicates that the subjects of both the groups were found to be ambitious, aggressive, verbally fluent, efficient, and effective in their teaching profession. The comparison between the performance of the subjects and the established CPI norms was not adequately appropriate in the sense that the CPI norms were established for College Students where as the subjects under study were represented by two types of teachers:

practice teachers from graduating seniors and professional vocational teachers in agriculture. Consequently, the investigator expected their performance to be significantly above the CPI norms. In this respect, the student teachers in general failed to secure scores above the established CPI norms, especially in the areas of ascendency, responsibility, intrapersonal structuring of values, and intellectual efficiency and interest modes.

The mean score line of the student teachers presented a wavey curve with spikes on the scales Sa, So, and Cm. They were relatively more serious about attaining self-interest, self-adequacy, and realistic views about the teaching profession.

The mean profiles for both the groups of teachers exhibit a tendency of similarity on the scales Do, Cs, Sy, Sa, Gi, Cm, Ai, Ie, and Py while disimilarity on the scales Wb, Re, Ac, Fx, and Fe. The tendency of securing low scores on the scales Wb, Re, Ac, and Fe by the student teachers compared to the performance of the cooperating teachers indicates that the student teachers as a group were found to be concerned about their personal worries and complaints mostly due to uncertainity of the occupational future. One of the important features noticed in the profile is that the student teachers were found to be more flexible, outgoing, ambitious, and masculine in character than that of the cooperating teachers. Considering the mean score line of student teachers in relation to CPI norms, the investigator concluded that they had, perhaps, developed moderate social skills but were weak in intellectual and academic drives. Conversely, the cooperating teachers were found to be effective both socially and intellectually. Further, the cooperating teachers as a group were found to be more planful, persua-

sive, independent with better leadership potential than that of the student teachers.

College Students Norms

In the CPI Manual, Gough(32) has provided the mean scores of 1133 college students for eighteen personality traits. These mean scores along with the mean scores of the student teaching personnel are shown in Figure 3.

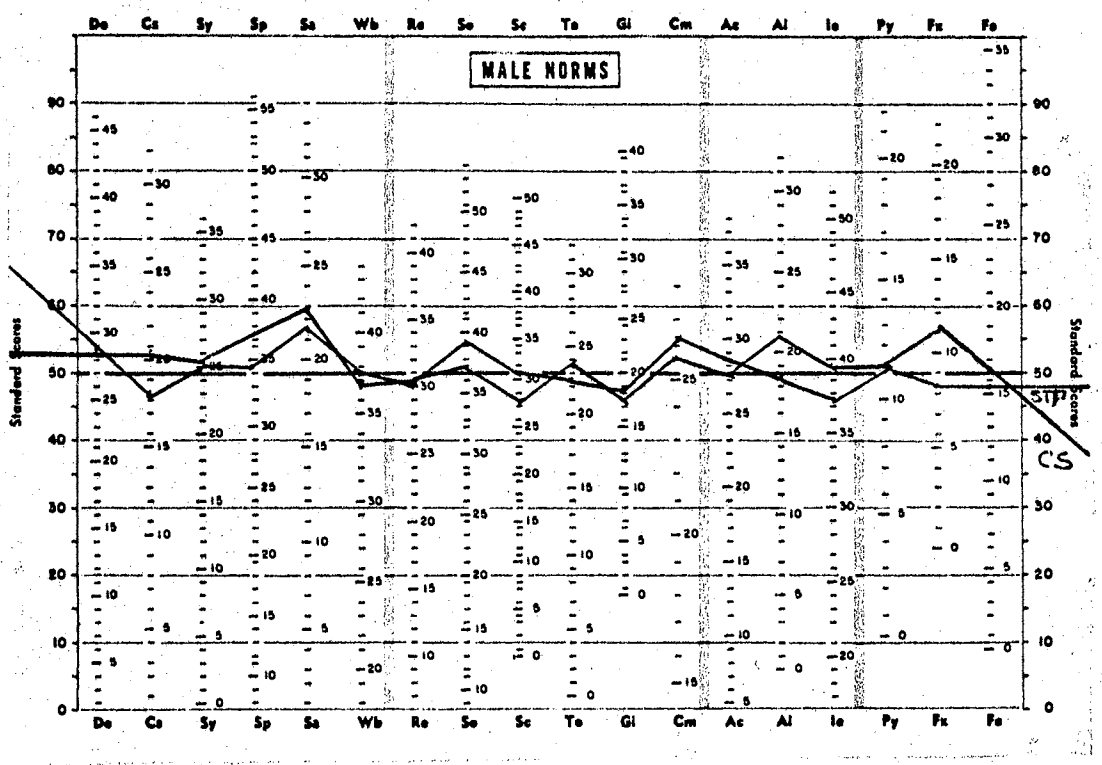
The mean profiles of both the groups are very close to the CPI mean standard line. In other words, both the profiles fall under plus or minus one standard deviation of the CPI mean standard line. Perhaps, then, both groups were found to be functioning effectively in matters of social and intellectual affairs.

On further examination of the profiles shown in Figure 3, it appears that the college students were found to be functioning better than the student teaching personnel in matters of poise, ascendency, self-acceptance, social interaction, non-judgemental social beliefs, and adaptability to social innovations. The student teaching personnel were found to be functioning better in matters of social maturity, self-control, and realistic thinking and good judgement than the college students. They were also found doing slightly better in matters of leadership ability, sense of well-being, good impression, and cooperation than the college students.

In matters of social norms, values, and interests, the student teaching personnel were found to be functioning a lot better than the college students except for non-judgemental social beliefs and permissiveness. In other words, the student teaching personnel were found to

FIGURE 3

MEAN PROFILE OF THE STUDENT TEACHING PERSONNEL
AND THE COLLEGE STUDENTS AS PLOTTED ON THE
CPI MEAN STANDARD SCORE LINE



C.S. -- College Students

S.T.P. -- Student Teaching Personnel

be relatively more judgemental than the college students in matters of social beliefs and attitudes.

In matters of academic and intellectual endeavor, the college students were found to be functioning better than the student teaching personnel except for the achievement in set pattern of behavior. Student teaching personnel were found to be more efficient, organized, responsible, and sincere in planned intellectual activities.

Both college students and student teaching personnel were found to be almost equally effective in understanding people's needs and interests. Members of both the groups were found to be almost equally psychologically-minded in interpersonal relationships. Student teaching personnel were found to be less flexible and more masculine in character than were the college students. This means that the student teaching personnel were more methodical and rigid in social behavior than the college students.

The greatest deviations between the two groups were noticed in traits, flexibility, capacity for status, achievement via independence. This indicates that the college students were found to be more concerned with personal pleasure and diversion than the student teaching personnel. They were also to be found as more ambitious and forceful than the student teaching personnel. The most interesting thing that was observed on the profile sheet was an almost parallel rise and fall of the trait scores of the two groups of people.

Student Teaching Personnel Above CPI Norms

The mean scores for the two groups of vocational agriculture teachers on CPI traits have been presented in Table II. It was the

investigator's intention to determine the number and percentage of teachers of both the groups scoring average or above in each of the traits.

The data in Table III indicates that the cooperating teachers, based on percentage distribution, scored higher than the student teachers in traits Do, Cs, Sy, Wb, Re, So, Se, To, Gi, Cm, Ac, Ai, Ie, Py, and Fe at average or above the CPI norms. Conversely, the student teachers, percentage wise, scored higher than the cooperating teachers in traits Sp, Sa, and Fx at the same level.

About 84 percent of the cooperating teachers scored average or above the CPI norms in trait dominance, compared to 60 percent of the student teachers. Similarly, about 47, 68, 39, 74, 82 percent of the cooperating teachers scored average or above the CPI norms in traits Cs, Sy, Sp, Sa, and Wb, compared to about 33, 48, 54, 78, and 54 percent of the student teachers, respectively.

The percent distribution of both the teachers combined having scores average or above the CPI norms, was found to be highest in trait communality and lowest in femininity. This indicates that the teachers in general were found to be sensitive, realistic, conscientious and opportunistic in character.

Rank Order of the CPI Traits

The investigator considered it important to rank the traits according to the number of scores average or above the CPI norms. The number and percent of the subjects of both the groups combined having scores average or above the CPI norms are placed in Table IV in rank order.

TABLE III

NUMBER AND PERCENT DISTRIBUTION OF VO. AG. STUDENT TEACHING PERSONNEL HAVING SCORES AVERAGE OR ABOVE THE CPI NORMS

Traits of CPI	Student Teachers N=80		Coop. Teachers N=38		All Teachers N=118	
	n	%	n	%	n	%
Dominance	48	60.00	32	84.21	80	67.80
Capacity for Status	26	32.50	18	47.37	44	37.29
Sociability	38	47.50	26	68.42	64	54.24
Social Presence	43	53.75	15	39.47	58	49.15
Self-Acceptance	62	77.50	28	73.68	90	76.27
Sense of Well-Being	43	53.75	31	81.58	74	62.71
Responsibility	25	31.25	33	86.84	58	49.15
Socialization	53	66.25	34	89.47	87	73.73
Self-Control	35	43.75	32	84.21	67	56.78
Tolerance	34	42.50	29	76.32	63	53.39
Good Impression	24	30.00	22	57.89	46	38.98
Communality	62	77.50	31	81.58	93	78.81
Achievement via Conformance	38	47.25	35	92.11	73	61.86
Achievement via Independence	33	41.25	28	73.68	61	51.69
Intellectual Efficiency	23	28.75	22	57.89	45	38.13
Psychological Mindedness	49	61.25	32	84.21	81	68.64
Flexibility	42	52.50	17	44.74	59	50.00
Femininity	23	28.75	20	52.63	43	36.44

(See Appendix F)

TABLE IV

RANK ORDER OF TRAITS ACCORDING TO THE NUMBER OF SCORES AVERAGE OR ABOVE THE CPI NORMS OBTAINED BY VO. AG. STUDENT TEACHING PERSONNEL

CPI Traits	Rank Order	No. of Teaching Personnel Scored Average or Above CPI Norms	Percentage N=118
Communality	1	93	78.81
Self-Acceptance	2	90	76.27
Socialization	3	87	73.73
Psychological Mindedness	4	81	68.64
Dominance	5	80	67.79
Sense of Well-Being	6	74	62.71
Achievement via Conformance	7	73	61.68
Self-Control	8	67	56.78
Sociability	9	64	54.23
Tolerance	10	63	53.39
Achievement via Independence	11	61	51.69
Flexibility	12	59	50.00
Responsibility	12.5	58	49.07
Social Presence	12.5	58	49.07
Good Impression	15	46	38.97
Intellectual Efficiency	16	45	38.13
Capacity for Status	17	44	37.28
Femininity	18	43	36.44

(See Appendix F)

The data in Table IV indicate that a majority of the student teaching personnel scored above the CPI norms in traits Cm, Sa, So, Py, and Do. The proportion of the student teaching personnel obtaining scores above the CPI norms was moderate in traits Wb, Ac, Sc, Sy, To, Ai, Fx, and Re. In the remaining traits, namely, Gi, Ie, Cs, and Fe, the proportion of the student teaching personnel scoring above the CPI norms was considerably low.

These results suggest that it would be further meaningful to reflect the traits and their corresponding percentages of the student teaching personnel who scored below the CPI norms. Accordingly, the relevant data are placed in Table V. This table represents a vital picture of personality traits of the vocational agriculture student teaching personnel in respect to the CPI norms.

In Class I which measures the poise, ascendancy, self-assurance, and interpersonal adequacy, the cooperating teachers failed to score up to the level of the CPI norms in traits Do, Cs, Sy, Sp, Sa, and Wb by almost 16, 53, 34, 61, 23, and 46 percent compared to the student teachers by almost 40, 68, 53, 46, 23, and 46 percent, respectively. Similarly, in Class II of the CPI scales which measure of socialization, maturity, responsibility, and intrapersonal structuring of values, the cooperating teachers failed to score up to the CPI norms in traits Re, So, Sc, To, Gi, and Cm by almost 13, 11, 16, 24, 42, and 18 percent, compared to the student teachers by almost 69, 34, 56, 58, 70, and 23 percent, respectively.

In Class III which measures of achievement potential and intellectual efficiency, the cooperating teachers failed to score up to the level of the CPI norms in traits Ac, Ai, and Ie by almost 8, 26, and

TABLE V

NUMBER AND PERCENT DISTRIBUTION OF VO. AG. STUDENT TEACHING PERSONNEL HAVING SCORES BELOW THE CPI NORMS

CPI Traits	Student Teachers N=80		Coop. Teachers N=38		All Teachers N=118	
	n	%	n	%	n	%
Dominance	32	40.00	6	15.79	38	32.20
Capacity for Status	54	67.50	20	52.63	74	62.71
Sociability	42	52.50	12	31.58	54	45.76
Social Presence	37	46.25	23	60.53	60	50.85
Self-Acceptance	18	22.50	10	26.32	28	23.73
Sense of Well-Being	37	46.25	7	18.42	44	37.29
Responsibility	55	68.75	5	13.16	60	50.85
Socialization	27	33.75	4	10.53	31	26.27
Self-Control	45	56.25	6	15.79	51	43.22
Tolerance	46	57.50	9	23.68	55	46.61
Good Impression	56	70.00	16	42.11	72	61.02
Communality	18	22.50	7	18.42	25	21.19
Achievement via Conformance	42	52.50	3	7.89	45	38.13
Achievement via Independence	47	58.75	10	26.32	57	48.30
Intellectual Efficiency	57	71.25	16	42.11	73	61.86
Psychological Mindedness	31	38.75	6	15.79	37	31.35
Flexibility	38	47.50	21	55.26	59	50.00
Femininity	57	71.25	18	47.37	75	63.50

(See Appendix F)

42 percent, compared to the student teachers by almost 53, 59, and 71 percent, respectively.

Similarly, in Class IV of the CPI scales which measure of intellectual and interest modes, the cooperating teachers failed to score up to the level of the CPI norms in traits Py, Fx, and Fe by almost 16, 55, and 47 percent, compared to the student teachers by almost 39, 48, and 71 percent, respectively.

The large percentage of the student teachers' failure to score up to the level of CPI norms projects a concern to the teacher educators. A larger number of the cooperating teachers in percent failed to score up to the CPI norms in traits Sp, Sa, and Fx compared to the student teachers' performance.

Range of Personality Scores

The mean personality scores of the student teaching personnel previously presented in Table II did not reflect the distribution of scores in correspondence with the CPI traits. The investigator considered it essential to measure the variability of data to make the study more meaningful and also to provide additional insight in the nature of dispersion of scores. In order to determine this objective two statistical indices, namely, range and standard deviation, were employed.

Data in Table VI show the range for each group of the vocational agriculture student teaching personnel. In Table II, the mean scores in Sa (Self-Acceptance) were found to be 21.18 and 21.98 for the cooperative and the student teachers, respectively. The means revealed little difference between the performance of the two groups. But the Table VI indicates that the scores in Sa range from 26 to 16 and from

TABLE VI

RANGE OF PERSONALITY SCORES OF VO. AG. STUDENT TEACHING PERSONNEL ON THE CPI TRAITS

CPI Traits		Student Teachers N=80	Coop. Teachers N=38	All Teachers N=118
Dominance	Raw Scores	40.00 - 13.00 = 27.00	41.00 - 25.00 = 16.00	41.00 - 13.00 = 28.00
	Standard Scores	76.00 - 23.00 = 53.00	78.00 - 46.00 = 32.00	78.00 - 23.00 = 55.00
Capacity for Status	Raw Scores	26.00 - 9.00 = 17.00	27.00 - 13.00 = 14.00	27.00 - 9.00 = 18.00
	Standard Scores	67.00 - 23.00 = 44.00	70.00 - 33.00 = 37.00	70.00 - 23.00 = 47.00
Sociability	Raw Scores	33.00 - 11.00 = 22.00	33.00 - 18.00 = 15.00	33.00 - 11.00 = 22.00
	Standard Scores	67.00 - 23.00 = 44.00	67.00 - 37.00 = 30.00	67.00 - 23.00 = 44.00
Social Presence	Raw Scores	46.00 - 19.00 = 27.00	51.00 - 24.00 = 27.00	51.00 - 19.00 = 32.00
	Standard Scores	72.00 - 22.00 = 50.00	82.00 - 31.00 = 51.00	82.00 - 22.00 = 60.00
Self- Acceptance	Raw Scores	30.00 - 14.00 = 16.00	26.00 - 16.00 = 10.00	30.00 - 14.00 = 16.00
	Standard Scores	79.00 - 36.00 = 43.00	68.00 - 41.00 = 27.00	79.00 = 36.00 = 43.00
Sense of Well-Being	Raw Scores	44.00 - 21.00 = 23.00	44.00 - 32.00 = 12.00	44.00 - 21.00 = 23.00
	Standard Scores	66.00 - 9.00 = 57.00	66.00 - 36.00 = 30.00	66.00 - 9.00 = 57.00
Responsibility	Raw Scores	37.00 - 16.00 = 21.00	41.00 - 25.00 = 16.00	41.00 - 16.00 = 25.00
	Standard Scores	62.00 - 20.00 = 42.00	70.00 - 38.00 = 32.00	70.00 - 20.00 = 50.00
Socialization	Raw Scores	50.00 - 24.00 = 26.00	50.00 - 32.00 = 18.00	50.00 - 24.00 = 26.00
	Standard Scores	74.00 - 28.00 = 46.00	74.00 - 42.00 = 32.00	74.00 - 28.00 = 46.00
Self-Control	Raw Scores	43.00 - 11.00 = 32.00	47.00 - 22.00 = 25.00	47.00 - 11.00 = 36.00
	Standard Scores	66.00 - 23.00 = 43.00	72.00 - 38.00 = 34.00	72.00 - 23.00 = 49.00
Tolerance	Raw Scores	31.00 - 12.00 = 19.00	31.00 - 14.00 = 17.00	31.00 - 12.00 = 19.00
	Standard Scores	67.00 - 27.00 = 40.00	67.00 - 31.00 = 36.00	67.00 - 27.00 = 40.00
Good Impression	Raw Scores	33.00 - 5.00 = 28.00	36.00 - 10.00 = 26.00	36.00 - 5.00 = 28.00
	Standard Scores	72.00 - 25.00 = 47.00	77.00 - 33.00 = 44.00	77.00 - 25.00 = 52.00
Communality	Raw Scores	28.00 - 19.00 = 9.00	28.00 - 20.00 = 8.00	28.00 - 19.00 = 9.00
	Standard Scores	63.00 - 22.00 = 41.00	63.00 - 26.00 = 37.00	63.00 - 22.00 = 41.00

TABLE VI Continued

CPI Traits		Student Teachers N=80	Coop. Teachers N=38	All Teachers N=118
Achievement via Conformance	Raw Scores	35.00 - 10.00 = 25.00	38.00 - 25.00 = 13.00	38.00 - 10.00 = 28.00
	Standard Scores	66.00 - 11.00 = 55.00	73.00 - 44.00 = 29.00	73.00 - 11.00 = 62.00
Achievement via Independence	Raw Scores	25.00 - 7.00 = 18.00	26.00 - 15.00 = 11.00	26.00 - 7.00 = 19.00
	Standard Scores	65.00 - 22.00 = 43.00	68.00 - 41.00 = 27.00	68.00 - 22.00 = 46.00
Intellectual Efficiency	Raw Scores	47.00 - 23.00 = 24.00	47.00 - 30.00 = 17.00	47.00 - 23.00 = 24.00
	Standard Scores	67.00 - 15.00 = 52.00	67.00 - 30.00 = 37.00	67.00 - 15.00 = 52.00
Psychological Mindedness	Raw Scores	15.00 - 4.00 = 11.00	18.00 - 8.00 = 10.00	18.00 - 4.00 = 14.00
	Standard Scores	64.00 - 25.00 = 39.00	75.00 - 39.00 = 36.00	75.00 - 25.00 = 50.00
Flexibility	Raw Scores	17.00 - 2.00 = 15.00	15.00 - 0.00 = 15.00	17.00 - 0.00 = 17.00
	Standard Scores	73.00 - 30.00 = 43.00	67.00 - 24.00 = 43.00	73.00 - 24.00 = 49.00
Femininity	Raw Scores	23.00 - 8.00 = 15.00	22.00 - 11.00 = 11.00	23.00 - 8,00 = 15.00
	Standard Scores	60.00 - 29.00 = 31.00	65.00 - 37.00 = 28.00	65.00 - 29.00 = 36.00

30 to 14 for the cooperating and student teachers, respectively. That is, the scores earned by the student teachers in Sa were found to be more variable than that of the cooperating teachers. This indicates that the cooperating teachers were found to be more homogenous than the student teachers in attributes like personal worth, self-acceptance and capacity for independent thinking and action.

Similarly, variability of the cooperating teachers' scores were found to be smaller than that of the student teachers in personality traits Do, Cs, Sy, Wb, Re, So, Se, Gi, Cm, Ac, Ai, Py, and Fe. This indicates that the student teachers were found to be more heterogenous in all these personality traits compared to the cooperating teachers. However, both the groups of teachers were found to be equally variable in traits Sp and Fx.

In order to compare the personality traits of the student teaching personnel according to variability, the raw scores were converted to standard scores and presented in Table VI. On examination it was found that the maximum variability had occurred in Ac with the minimum in Fe for the combined group.

Standard Deviation

To measure variability of personality trait scores from the means, standard deviation as a measure of variability was employed. An examination of the data presented in Table VII reveals that the variability of the student teachers' scores was wider than the cooperating teachers in all the traits except Fx. This indicates that the cooperating teachers as a group were found to be persons with more common attributes than that of the student teachers. However, in trait Fx the scores of

TABLE VII

STANDARD DEVIATIONS OF PERSONALITY SCORES OBTAINED BY VO. AG. STUDENT TEACHING PERSONNEL ON THE CPI TRAITS

CPI Traits	Student Teachers N=80		Coop. Teachers N=38		All Teachers N=118		
	Raw Scores	Standard Scores	Raw Scores	Standard Scores	Raw Scores	Standard Scores	CV
Dominance	5.65	11.07	4.35	8.71	5.50	10.82	21.42
Capacity for Status	3.71	9.64	3.29	8.57	3.71	9.67	21.58
Sociability	4.51	9.01	3.73	7.46	4.34	8.69	18.19
Social Presence	5.73	10.79	5.62	10.64	5.70	10.74	21.01
Self-Acceptance	3.67	9.89	2.85	7.71	3.43	9.27	17.19
Sense of Well-Being	4.86	12.16	3.02	7.59	4.65	11.63	25.62
Responsibility	4.67	9.35	3.24	6.48	5.04	10.09	21.07
Socialization	5.37	9.54	3.47	6.09	4.88	8.67	17.79
Self-Control	6.99	9.53	6.21	8.38	7.56	10.27	20.28
Tolerance	4.45	9.39	4.25	8.96	4.73	9.97	20.20
Good Impression	6.17	10.32	5.85	9.78	6.38	10.68	23.03
Communality	2.06	9.40	1.72	7.94	1.97	8.99	17.34
Achievement via Conformance	4.77	10.50	2.99	6.47	4.97	10.89	21.86
Achievement via Independence	3.42	8.11	2.96	7.10	3.56	8.48	17.09
Intellectual Efficiency	4.64	10.07	3.55	7.63	4.70	10.15	23.04
Psychological Mindedness	2.23	8.02	2.21	7.93	2.39	8.57	16.29
Flexibility	2.99	8.53	3.83	11.03	3.28	9.39	17.34
Femininity	2.97	7.25	2.77	7.10	3.02	7.53	15.53

the cooperating teachers were found to be widely dispersed than that of the student teachers. In the combined group, the largest amount of variation was noticed in Wb compared to the smallest amount of variation in Fe.

In order to test the first hypothesis that there is no significant difference in variability of the personality traits of the two groups of student teaching personnel, the investigator first used the range shown in Table VI as a general measure of spread or scatter of data and found differences between the two groups in the CPI trait scores.

Similar differences were observed when standard deviations were employed as measures of variability for the two groups of teachers in the CPI trait scores from the mean. Therefore, the investigation failed to retain the null hypothesis.

The investigator further desired to determine the relative variability of the personality trait scores for the whole group of student teaching personnel. Accordingly, the investigator converted all the raw scores into the standard scores and computed coefficient of variation for each of the CPI traits. Is the variability of teachers' scores in "dominance" in ratio to their mean as great as the variability of teachers' scores in "Capacity for Status" in ratio to their mean? To answer such questions, the coefficients of variation are placed in Table VII which indicates that variability in "Capacity for Status" was found to be slightly wider than that of "dominance". The variability in traits Do, Cs, Sy, Sp, Sa, and Wb was found to be 21.42, 21.58, 18.19, 21.01, 17.19, and 25.62 compared to 21.07, 17.79, 20.28, 20.20, 23.03, and 17.34 in Re, So, Sc, To, Gi, and Cm, respectively. Similarly, the variability in traits Ac, Ai, and Ie was found

to be 21.86, 17.09, and 23.04 compared to 16.29, 17.34, and 15.53 in Py, Fx, and Fe. The maximum variability was noticed in trait Wb compared to the minimum in trait Fe.

CPI Classes

Each of the eighteen personality traits included in the CPI instrument is intended to encompass one important facet of interpersonal psychology. The total set of eighteen traits is meant to provide a comprehensive survey of an individual from his social interaction point of view. In the CPI Manual the eighteen traits have been grouped into four broad classes, seeking to emphasize some of the psychological and psychometric clusterings which exist among them. The four classes are stated below:

Class I. Measures of Poise, Ascendancy, and Self-Assurance. It has six traits, Do, Cs, Sy, Sp, Sa, and Wb.

Class II. Measures of Socialization, Maturity, and Responsibility. The traits included in this Class are Re, So, Sc, To, Gi, and Cm.

Class III. Measures of Achievement Potential and Intellectual Efficiency. Three traits are included in this Class, namely, Ac, Ai, and Ie.

Class IV. Measures of Intellectual and Interest Modes. In this Class three traits are included, namely, Py, Fx, and Fe.

Table VIII provides data grouped in four classes based on those student teaching personnel who scored average or above the CPI norms. In Class I, 50 percent of the student teachers scored average or above the CPI norms compared to 71 percent of the cooperating teachers. Similarly, in Class II about 38 percent of the student teachers scored average or above the CPI norms compared to about 82 percent of the

TABLE VIII

NUMBER AND PERCENT DISTRIBUTION OF VO. AG. STUDENT TEACHING PERSONNEL HAVING SCORES AVERAGE OR ABOVE THE CPI NORMS CLASS-WISE

Classes of CPI	Student Teachers N=80		Coop. Teachers N=38		All Teachers N=118	
	n	%	n	%	n	%
Class I	40	50.00	27	71.05	67	56.78
Class II	30	37.50	31	81.58	61	51.69
Class III	21	26.25	30	78.95	51	43.22
Class IV	29	36.25	22	57.89	51	43.22

(See Appendix F)

cooperating teachers. In Class III and Class IV, 26 and 36 percent of the student teachers scored average or above the CPI norms compared to 79 and 58 percent of the cooperating teachers, respectively. In all the classes the performance of the cooperating teachers was found to be much higher than that of the student teachers. The cooperating teachers, in general, were found to be of superior quality and ability than that of the group of the student teachers. This indicates a quality selection of the cooperating teachers by the teacher education administration. However, the performance of the two groups of teachers combined was not found to be very encouraging, particularly in the areas of achievement potential and intellectual efficiency, and intellectual and interest modes.

Personality Traits and Professional and Socio-economic Variables

Gough (32) has presented a detailed description of the purpose of each of the CPI traits. He has provided meaningful associative adjectives and behavioral descriptions for each of the CPI traits in the Manual.

In contrast, selected variables identified by the investigator for use in the study, were divided into two categories in order to facilitate the understanding of the relationship between the CPI personality traits and the selected variables. The first grouping, considered professional, included those variables related to job, work experience, and education of the student teaching personnel. The second grouping contained variables related to age, family size, income, social environment, and father's occupation and education. The variables included in the second grouping were called socio-economic variables.

In investigating the relationship between the personality traits of the CPI and the various selected variables, it was considered important to examine each trait of the CPI separately.

To determine the difference of significance between the CPI personality traits and the selected variables, chi-square tests were applied to data carefully considering the magnitude of the expected frequencies. In order to meet this requirement, the adjacent classifications were collapsed wherever necessary and thereby the number of the cells was reduced.

Results at the .05 level of significance were accepted as the basis for rejection of the null hypothesis. However, results at the .01 level also were recorded to show the trend of significance.

The scores in the personality traits were classified into three groups: low; medium; and high. The medium group was identified by $\pm$ 1 (plus or minus one standard deviation) from the mean while the high and low scores were classified one standard deviation above and one standard deviation below the mean, respectively.

Dominance*. The scale Do (dominance) assesses factors of leadership ability, dominance, persistence, and social initiative.

Dominance and Professional Related Variables

The data in Table IX show the relationship between the personality trait dominance and the professional related variables of the student

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*High Scores Tend to be Seen as: Aggressive, confident, persistent and planful; as being persuasive and verbally fluent; as self-reliant and independent; and as having potential and initiative.

Low Scores Tend to be Seen as: Retiring, inhibited, common place, indifferent, silent and unassuming; as being slow in thought and action. as avoiding of situation of tension and decision; and as lacking in self-confidence.

TABLE IX

RELATIONSHIP OF PERSONALITY TRAIT DOMINANCE TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Present Title						
Student Teacher	80	18	53	9	10.838**	+0.4235
Coop. Teachers	38	0	30	8		
N=	118	18	83	17		
Participated in High School FFA						
President or officer	82	13	58	11		
Member	21	5	13	3	4.110 NS	
Not participated	15	0	12	3		
N=	118	18	83	17		
Participation in High School Extra Curricular Programs						
President or officer	43	6	28	9		
Member	28	4	22	2	2.981 NS	
Not participated	22	4	16	2		
N=	118	18	83	17		
Participation in Collegiate FFA						
President or officer	16	0	14	2		
Member	80	14	52	14	5.886 NS	
Not participated	22	4	16	2		
N=	118	18	83	17		
Participation in Collegiate Extra Curricular Programs						
President or officer	29	1	20	8		
Member	35	11	21	3	14.955**	0.4545
Not participated	54	6	42	6		
N=	118	18	83	17		
Formal Education						
College Senior	80	18	53	9		
Bachelor degree	1	0	1	0		
Bachelor with addl. work	12	0	10	2	13.266 c	0.4076
Master degree	8	0	7	1		
Master with addl. work	15	0	10	5		
N=	116	18	81	17		
Membership in Professional Organization						
One organization	35	0	28	7		
More than one organization	0	0	0	0	0.0 c NS	
No organization	0	0	0	0		
N=	35	0	28	7		

TABLE IX Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$	or r
		Low	Medium	High			
Tenure in Teaching Vo. Ag.							
Less than 1 year	0	0	0	0			
1 to 9 years	10	0	9	1			
10 to 19 years	16	0	12	4	1.285_c	NS	
20 to 29 years	10	0	7	3			
30 years or above	0	0	0	0			
N=	36	0	28	8			

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

teaching personnel. An examination of the data in Table IX reveals that there was a significant difference between the trait dominance and the title of the student teaching personnel at the .01 level. The cooperating teachers scored higher than the student teachers. This indicates that the job title has a relationship with the personality trait dominance. The corrected coefficient of contingency was found to be +0.4235.

Significant differences were noticed between the trait dominance and the professional related variables namely, formal education, and extra-curricular activities. Teachers with higher degrees and graduate work scored higher than t he teachers who had only the bachelor's degree. Similarly, the teachers who actively particpated in the collegiate extra-curricular activities scored higher than non-participators. Data in Table IX also show non-significant values of chi-squares for the high school FFA participants, collegiate FFA participants, members of professional organizations and tenure-holders of teaching vocational agriculture.

Dominance and Socio-economic Related Variables

The relationship between the variables related to age, family, economic and social environment to the trait dominance is provided in Table X.

An examination of the data in Table X reveals that a positive relationship exists between the trait dominance and age, and between dominance and marital status of the subjects. For those reporting ages below thirty or sixty and above sixty scored higher in trait dominance than the teachers of middle age, thirty to fifty. Percentage wise the

TABLE X

RELATIONSHIP OF PERSONALITY TRAIT DOMINANCE TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$	or r
Age							
Less than 20 years	0	0	0	0			
20 to 29 years	72	17	45	10			
30 to 39 years	11	0	10	1			
40 to 49 years	8	0	7	1	17.638^{**}_{c}		$+0.3230^{**}$
50 to 59 years	6	0	6	0			
60 years or above	21	0	15	6			
	N=118	17	83	18			
Marital Status							
Single	30	12	13	5			
Married	88	6	70	12	20.462^{**}_{c}	0.5608	
Other	0	0	0	0			
	N=118	18	83	17			
Size of Family							
No child	32	4	23	5			
1 child	21	1	19	1			
2 children	16	1	13	2	6.601NS		
3 children or more	20	0	15	5			
	N= 89	6	70	13			
Birth Order							
First-born	45	7	32	6			
Second-born	29	4	20	5			
Third-born	19	4	15	0	8.492NS		
Fourth-born	7	1	3	3			
Fifth-born or later	17	2	18	2			
	N=117	18	82	17			
Sibling							
No sibling	4	1	3	0			
One sibling	27	4	19	4			
Two to four siblings	65	11	43	11	2.023^{NS}_{c}		
Five siblings or more	22	2	18	2			
	N=118	18	83	17			
Place Where Mostly Lived							
Rural farm or ranch	92	13	66	13			
Rural non-farm	8	2	6	0			
Town	9	3	4	2			
Small city	2	0	2	0	6.768^{NS}_{c}		
Medium-sized city	2	0	1	1			
Large city	4	0	3	1			
Metropolis	0	0	0	0			
	N=117	18	82	17			

TABLE X Continued

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	0	2	0	1.196_c	NS
$8000 to $8999	8	0	7	1		
$9000 or above	26	0	19	7		
	N= 36	0	28	8		
Father's Occupation						
Professional	7	1	6	0		
Managerial, technical, official or farmer	74	11	52	11		
Clerical or salesman	1	0	1	0	3.133_c	NS
Skilled worker	17	3	12	2		
Semi-skilled worker	11	2	6	3		
Unskilled worker	2	0	2	0		
Other	5	1	3	1		
	N=117	18	82	17		
Father's Education						
College graduate	2	0	2	0		
Attd. college for 1 yr. or more	15	1	13	1		
High School graduate	32	4	24	4		
Attd. high school for 1 year or more	28	4	20	4	9.754_c	NS
Elementary school graduate	23	7	13	3		
Attd. elementary school for 1 year or more	18	2	11	5		
	N=118	18	83	17		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant
$_c$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

student teaching personnel of unmarried status scored lower in dominance than did married ones. In both the cases, the contingency tables were collapsed and chi-square values proved significance at the .01 level. The amount of association between trait dominance and teacher age was high with a correlation coefficient of +.3230. Similarly, the amount of associationship between the trait dominance and teachers' marital status was found to be adequately correlated as seen from the corrected coefficient of contingency ($\bar{C}$ = .5608).

The data in Table X reveal that no significant difference was detected between the trait dominance and the attributed data, namely, family size, birth order, number of siblings, father's education and occupation, personal income, and living place.

Based on the data presented in Table IX and X, the null hypothesis of no significant difference between the trait dominance and professional and socio-economic related variables was not rejected except for the variables of the teachers' title, collegiate extra-curricular activities, formal education, age, and marital status.

Capacity for Status*. This trait serves as an index of an individual's capacity for status (not his achieved status). The scale attempts to measure the personal qualities and attributes which underlie and lead to status.

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*High Scores Tend to be Seen as: Ambitious, active, forceful, insightful, resourceful, and versatile; as being ascendant and self-seeking; effective in communication; and as having personal scope and breadth of interest.

Low Scores Tend to be Seen as: Apathetic, shy, conventional, dull, mild, simple, and slow; as being sterotyped in thinking; restricted in outlook and interests; and as being uneasy and awkward in new or unfamilar social situation.

Capacity for Status and Professional Related Variables

The relationship of capacity for status and variables related to job, previous experience, and education of the student teaching personnel is shown in Table XI.

Data presented in Table XI reveal several significant values of chi-square that is, the differences between the observed and the expected frequencies were found to be significant at the .01 level in case of professional variables namely, teachers' job title, participation in collegiate extra-curricular programs and tenure in teaching vocational agriculture. Similarly, the difference between the observed and the expected frequencies was found to be significant at the .05 level in case of professional variable, formal education. No statistical significant difference was observed between the observed and the expected frequencies in case of professional variables, namely, participation in high school FFA, participation in high school extra-curricular programs, participation in collegiate FFA and membership in professional organizations. This means that the observed frequencies approximated to the expected ones resulting smaller chi-square values. This indicated that there was a closer relationship between the observed results and the hypothesis under testing. In other words, the investigator did not find any reason to reject the null hypothesis in case of attributes, namely, participation in high school FFA, participation in collegiate FFA, participation in high school extra-curricular programs, and membership in professional organizations.

Capacity for Status and Socio-economic Related Variables

The data in connection with the relationship between the trait,

TABLE XI

RELATIONSHIP OF PERSONALITY TRAIT CAPACITY FOR STATUS TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Present Title						
Student Teacher	80	17	55	8	11.589**	0.4365
Coop. Teacher	38	1	26	11		
	N=118	18	81	19		
Participation in High School FFA						
President or officer	82	13	58	11		
Member	21	4	13	4	2.662 NS	
Not participated	15	1	10	4		
	N=118	18	81	19		
Participation in High School Extra Curricular Programs						
President or officer	43	4	30	9		
Member	28	3	21	4	4.759 NS	
Not participated	47	11	30	6		
	N=118	18	81	19		
Participation in Collegiate FFA						
President or officer	16	2	13	1		
Member	80	9	58	13	8.336 NS	
Not participated	21	7	10	4		
	N=117	18	81	18		
Participation in Collegiate Extra Curricular Programs						
President or officer	29	2	17	10		
Member	35	9	22	4	13.405**	0.4329
Not participated	54	7	42	5		
	N=118	18	81	19		
Formal Education						
College Senior	80	17	55	8		
Bachelor degree	1	0	1	0		
Bachelor with addl. work	12	0	9	3	13.199^{*}_{c}	0.4066
Master degree	8	0	5	3		
Master with addl. work	15	1	9	5		
	N=116	18	79	19		
Membership in Professional Organization						
One organization	35	1	24	10		
More than one organization	0	0	0	0	0.0_{c} NS	
No organization	0	0	0	0		
	N= 35	1	24	10		

TABLE XI Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$	or r
		Low	Medium	High			
Tenure in Teaching Vo. Ag.							
Less than 1 year	0	0	0	0			
1 to 9 years	10	1	8	1			
10 to 19 years	16	0	13	3	10.374_c**	.6900	
20 to 29 years	10	0	3	7			
30 years or above	0	0	0	0			
	N= 36	1	24	11			

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

capacity for status, and the socio-economic related variables are shown in Table XII.

It appears from the Table that there was a strong association between the trait, capacity for status, and the variables, age, and marital status of the subjects under study. The difference between the observed and the expected frequencies in case of socio-economic related variable, the size of the family of the subjects was found to be significant at the .05 level. This means, if the experiment would be repeated, only once in 20 trials chi-square would come out with a value of 12.748. Further, the chi-square value of 12.748 was considered to be significant considering an error of 1 in 20 due to sampling fluctuations.

The study indicates that the vocational agriculture student teaching personnel who had two or more children scored higher on personality test than the teaching personnel who had none or only one child. Similarly, the married teachers scored higher than the unmarried ones. The teachers of age 30 or above scored higher than the teachers of age less than 30. The teachers of age 60 or above scored the highest points on the trait, capacity for status. No statistically significant difference was noticed between the observed and the expected frequencies in case of variables, birth order, sibling, place of living, income, father's occupation and education.

The data shown in Table XII indicate that the null hypothesis of no significant difference between the personality trait, capacity for status, and the selected socio-economic attributes was not rejected except for the variables, age, marital status, and size of the family of the student teaching personnel.

TABLE XII

RELATIONSHIP OF PERSONALITY TRAIT CAPACITY FOR STATUS TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$	or r
		Low	Medium	High			
Age							
Less than 20 years	0	0	0	0			
20 to 29 years	72	17	50	5			
30 to 39 years	11	0	8	3			
40 to 49 years	8	1	7	0	23.387_c**		+0.3730**
50 to 59 years	6	0	4	2			
60 years or above	21	0	12	9			
	N=118	18	81	19			
Marital Status							
Single	30	11	18	1			
Married	88	7	63	18	16.601_c**	.5123	
Other	0	0	0	0			
	N=118	18	81	19			
Size of Family							
No child	32	5	24	3			
1 child	21	2	14	5			
2 children	16	0	14	2	12.748_c**	.4504	
3 or more children	20	0	12	8			
	N= 89	7	64	18			
Birth Order							
First-born	45	7	33	5			
Second-born	29	5	19	5			
Third-born	19	4	13	2	4.202NS		
Fourth-born	7	1	4	2			
Fifth-born or later	17	1	12	4			
	N=117	18	81	18			
Sibling							
No sibling	4	0	4	0			
One sibling	27	4	19	4			
Two to four siblings	65	13	40	12	4.404_cNS		
Five siblings or more	22	1	18	3			
	N=118	18	81	19			
Place Where Mostly Lived							
Rural farm or ranch	92	14	62	16			
Rural non-farm	8	1	7	0			
Town	9	3	5	1			
Small city	2	0	1	1	5.767_cNS		
Medium-sized city	2	0	2	0			
Large city	4	0	3	1			
Metropolis	0	0	0	0			
	N=117	18	80	19			

TABLE XII Continued

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	0	1	1	2.757 $_c$	NS
$8000 to $8999	8	1	7	0		
$9000 or above	26	0	16	10		
	N= 36	1	24	11		
Father's Occupation						
Professional	7	2	4	1		
Managerial, technical, official or farmer	74	11	49	14		
Clerical or salesman	1	0	1	0		
Skilled worker	17	3	12	2	2.628 $_c$	NS
Semi-skilled worker	11	1	9	1		
Unskilled worker	2	0	1	1		
Other	5	1	4	0		
	N=117	18	80	19		
Father's Education						
College Graduate	2	0	1	1		
Attd. college for 1year or more	15	2	11	2		
High school graduate	32	6	20	6		
Attd. high school for 1 year or more	28	4	19	5	5.103 $_c$	NS
Elementary school grad.	23	5	14	4		
Attd. elementary school for 1 year or more	18	1	16	1		
	N=118	18	81	19		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant
$_c$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

Sociability*. The purpose of this trait is to identify persons of outgoing, sociable, and particiative temperament.

Sociability and Professional Related Variables

The relationship of sociability and professional related variables is shown in Table XIII.

The data presented in Table XIII show that the difference between the observed and the expected frequencies was not found statistically significant to any of the professional related attributes of the student teaching personnel. This means that the observed results approximated to the expected results in all cases of the professional related variables. Further, the differences noticed in Table XIII did not account for any significant relationship between the personality trait, sociability, and the professional related attributes of the student teaching personnel.

Sociability and Socio-economic Related Variables

The data in connection with the study of relationship between the trait, sociability, and the socio-economic related variables are placed in Table XIV.

The data presented in Table XIV indicate that no statistically significant difference was found between the observed and the expected

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*High Scores Tend to be Seen as: Outgoing, enterprising, and ingenious; as being competitive and forward; and as original and fluent in thought.

Low Scores Tend to be Seen as: Awkward, conventional, quiet, submissive, and unassuming; as being detached and passive in attitude; and as being suggestible and overly influenced by others reactions and opinions.

TABLE XIII

RELATIONSHIP OF PERSONALITY TRAIT SOCIABILITY TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Present Title						
Student Teacher	80	16	51	13	2.796	NS
Coop. Teacher	38	3	28	7		
	N=118	19	79	20		
Participation in High School FFA						
President or officer	82	14	53	15		
Member	21	4	14	3	1.729	NS
Not participated	15	1	12	2		
	N=118	19	79	20		
Participation in High School Extra Curricular Programs						
President or officer	43	5	30	8		
Member	28	3	18	7	4.928	NS
Not participated	47	11	31	5		
	N=118	19	79	20		
Participation in Collegiate FFA						
President or officer	16	2	11	3		
Member	80	12	55	13	1.408	NS
Not participated	21	5	12	4		
	N=117	19	78	20		
Participation in Collegiate Extra Curricular Programs						
President or officer	29	2	20	7		
Member	35	10	22	3	7.773	NS
Not participated	54	7	37	10		
	N=118	19	79	20		
Formal Education						
College senior	80	16	51	13		
Bachelor degree	1	0	1	0		
Bachelor with addl. work	12	1	10	1	9.647	NS
Master degree	8	0	4	4		
Master with addl. work	15	2	11	2		
	N=116	19	77	20		
Membership in Professional Organization						
One organization	35	3	25	7		
More than one organization	0	0	0	0	0.0	NS
No organization	0	0	0	0		
	N= 35	3	25	7		

TABLE XIII Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching Vo. Ag.						
Less than 1 year	0	0	0	0		
1 to 9 years	10	2	7	1		
10 to 19 years	16	0	13	3	1.285_c	NS
20 to 29 years	10	1	6	3		
30 years or above	0	0	0	0		
	N= 36	3	26	7		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

TABLE XIV

RELATIONSHIP OF PERSONALITY TRAIT SOCIABILITY TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Age						
Less than 20 years	0	0	0	0		
20 to 29 years	72	15	47	10		
30 to 39 years	11	0	8	3		
40 to 49 years	8	3	3	2	6.590 $_c$NS	
50 to 59 years	6	0	6	0		
60 years or above	21	1	15	5		
	N=118	19	79	20		
Marital Status						
Single	30	9	17	4		
Married	88	10	62	16	5.771 $_c$NS	
Other	0	0	0	0		
	N=118	19	79	20		
Size of Family						
No child	32	6	22	4		
1 child	21	2	15	4		
2 children	16	1	13	2	4.779NS	
3 children or more	20	2	12	6		
	N=89	11	62	16		
Birth Order						
First-born	45	9	29	7		
Second-born	29	3	19	7		
Third-born	19	3	15	1	8.742NS	
Fourth-born	7	0	4	3		
Fifth-born or later	17	4	11	2		
	N=117	19	78	20		
Sibling						
No sibling	4	0	3	1		
One sibling	27	4	17	6		
Two to four siblings	65	11	42	12	3.378 $_c$NS	
Five siblings or more	22	4	17	1		
	N=118	19	79	20		
Place Where Mostly Lived						
Rural farm or ranch	92	15	61	16		
Rural non-farm	8	1	6	1		
Town	9	3	6	0		
Small city	2	0	2	0	6.684 $_c$NS	
Medium-sized city	2	0	1	1		
Large city	4	0	2	2		
Metropolis	0	0	0	0		
	N=117	19	78	20		

TABLE XIV Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	0	2	0	0.788_c	NS
$8000 to $8999	8	2	5	1		
$9000 or above	26	1	19	6		
	N= 36	3	26	7		
Father's Occupation						
Professional	7	2	5	0		
Managerial, official, technical or farmer	74	11	51	12		
Clerical or salesman	1	0	1	0		
Skilled worker	17	4	8	5	6.188_c	NS
Semi-skilled worker	11	1	9	1		
Unskilled worker	2	0	2	0		
Other	5	1	2	2		
	N=117	19	78	20		
Father's Education						
College graduate	2	0	1	1		
Att. college 1 yr. or more	15	2	9	4		
High School graduate	32	4	21	7	7.958_c	NS
Att. high school for 1 year or more	28	4	21	3		
Elementary school grad.	23	7	14	2		
Att. elementary school 1 year or more	18	2	13	3		
	N=118	19	79	20		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
$_c$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

frequencies of the socio-economic attributes of the student teaching personnel in relation to their scores on the trait, sociability. Therefore, the investigator failed to reject the null hypothesis for any of the attributes related to the student teaching personnel's professional and socio-economic variables as indicated in Table XIII and Table XIV.

Social Presence*. The trait, social presence, assesses factors such as poise, spontaneity, and self-confidence in personal and social interaction.

Social Presence and Professional Related Variables

The data in connection with the study of relationship between the trait, social presence, and the professional related attributes of the vocational agriculture student teaching personnel are shown in Table XV.

No value of chi-square was found to be statistically significant at the .05 level. This indicates that there was an agreement between the observed and the expected frequencies of the professional related variables of the student teaching personnel in relation to their scores on the trait, social presence.

Social Presence and Socio-economic Related Variables

The data in connection with the study of relationship between

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*High Scores Tend to be Seen as: Clever, enthusiastic, imaginative, quick, informal, spontaneous, and talkative; as being active and vigorous; and as having an expressive, ebullient nature.

Low Scores Tend to be Seen as: Deliberate, moderate, patient, self-restrained, and simple; as vacillating and uncertain in decision; and as being literal and unoriginal in thinking and judging.

TABLE XV

RELATIONSHIP OF PERSONALITY TRAIT SOCIAL PRESENCE TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Present Title						
Student Teacher	80	10	55	15	1.376	NS
Coop. Teacher	38	6	28	4		
	N=118	16	83	19		
Participation in High School FFA						
President or officer	82	8	58	16		
Member	21	3	17	1	8.504	NS
Not participated	15	5	8	2		
	N=118	16	83	19		
Participation in High School Extra-Curricular Programs						
President or officer	43	7	31	5		
Member	28	5	19	4	2.916	NS
Not participated	47	4	33	10		
	N=118	16	83	19		
Participation in Collegiate FFA						
President or officer	16	1	14	1		
Member	80	14	52	14	4.983	NS
Not participated	21	1	16	4		
	N=117	16	82	19		
Participation in Collegiate Extra-Curricular Programs						
President or officer	29	2	23	4		
Member	35	7	25	3	5.191	NS
Not participated	54	7	35	12		
	N=118	16	83	19		
Formal Education						
College senior	80	10	55	15		
Bachelor degree	1	0	1	0		
Bachelor with addl. work	12	1	10	1	4.592	NS
Master degree	8	2	4	2		
Master with addl. work	15	3	11	1		
	N=116	16	81	19		
Membership in Professional Organization						
One organization	35	6	25	4		
More than one organization	0	0	0	0	0.0	NS
No organization	0	0	0	0		
	N= 35	6	25	4		

TABLE XV Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching Vo. Ag.						
Less than one year	0	0	0	0		
1 to 9 years	10	1	9	0		
10 to 19 years	16	4	11	1	6.533_c NS	
20 to 29 years	10	1	6	3		
30 years or above	0	0	0	0		
	N= 36	6	26	4		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
$_c$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

social presence and socio-economic attributes of the student teaching personnel are placed in Table XVI.

It appears from the data that no chi-square value of the test was found to be significant except for the attribute, marital status of the subjects under study. This indicates that the student teaching personnel who were married scored higher on the trait, social presence, than the teaching personnel who were single.

Therefore, the null hypothesis of no significant difference between the trait, social presence, and the professional, and socio-economic variables of the student teaching personnel was rejected except for the variable, marital status, as the data indicated in Table XV and Table XVI.

Social-Acceptance*. The trait self-acceptance assesses factors such as sense personal worth for independent thinking and action.

Self-acceptance and Professional Related Variables

The data in connection with the study of relationship between self-acceptance and the professional variables such as job title, work experience, formal education, and tenure of the student teaching personnel are shown in Table XVII.

The difference between the observed and the expected frequencies was not found to be significant at the .05 level except for the chi-

*High Scores Tend to be Seen as: Intelligent, outspoken, sharp-witted, demanding, aggressive, and self-centered; as being persuasive and verbally fluent; and as possessing self-confidence and self-assurance.

Low Scores Tend to be Seen as: Methodical, conservative, dependable, conventional, easy going, and quiet; as self-abasing and given to feelings of guilt and self-blame; and as being passive in action and narrow in interests.

TABLE XVI

RELATIONSHIP OF PERSONALITY TRAIT SOCIAL PRESENCE TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Age						
Less than 20 years	0	0	0	0		
20 to 29 years	72	10	48	14		
30 to 39 years	11	1	9	1		
40 to 49 years	8	0	8	0	4.827_cNS	-0.0396
50 to 59 years	6	1	5	0		
60 years or above	21	4	13	4		
	N=118	16	83	19		
Marital Status						
Single	30	8	17	5		
Married	88	8	66	14	6.174_c*	.3253
Other	0	0	0	0		
	N=118	16	83	19		
Size of Family						
No child	32	3	25	4		
One child	21	1	15	5	7.019NS	
Two children	16	4	11	1		
Three children or more	20	1	15	4		
	N= 89	9	66	14		
Birth Order						
First-born	45	7	32	6		
Second-born	29	5	19	5		
Third-born	19	3	12	4	3.066_cNS	
Fourth-born	7	1	6	0		
Fifth-born or later	17	0	13	4		
	N=117	16	82	19		
Sibling						
No sibling	4	1	2	1		
One sibling	27	3	19	5		
Two to four siblings	65	11	44	10	2.684_cNS	
Five siblings or more	22	1	18	3		
	N=118	16	83	19		
Place Where Mostly Lived						
Rural farm or ranch	92	15	64	13		
Rural non-farm	8	0	4	4		
Town	9	0	9	0		
Small city	2	0	2	0	12.183_cNS	
Medium-sized city	2	0	1	1		
Large city	4	1	2	1		
Metropolis	0	0	0	0		
	N=117	16	82	19		

TABLE XVI Continued

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	0	2	0	2.513_cNS	
$8000 to $8999	8	1	7	0		
$9000 or above	26	5	17	4		
	N= 36	6	26	4		
Father's Occupation						
Professional	7	1	6	0		
Managerial, official, technical, or farmer	74	10	54	10		
Clerical or salesman	1	0	1	0		
Skilled worker	17	2	12	3	3.224_cNS	
Semi-skilled worker	11	1	8	2		
Unskilled worker	2	1	1	0		
Other	5	1	1	3		
	N=117	16	83	18		
Father's Education						
College graduate	2	0	2	0		
Attd. college 1 yr.or more	15	5	7	3		
High School graduate	32	1	25	6		
Attd. high school for 1 year or more	38	3	19	6	12.669_cNS	
Elementary school grad.	23	6	15	2		
Attd. elementary school for 1 year or more	18	1	15	2		
	N=118	16	83	19		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

TABLE XVII

TABLE XVII

RELATIONSHIP OF PERSONALITY TRAIT SELF-ACCEPTANCE TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Present Title						
Student Teacher	80	13	53	14	1.032NS	
Coop. Teacher	38	6	28	4		
	N=118	19	81	18		
Participation in High School FFA						
President or officer	82	10	56	16		
Member	21	6	14	1	6.223NS	
Not participated	15	3	11	1		
	N=118	19	81	18		
Participation in High School Extra-Curricular Programs						
President or officer	43	5	30	8		
Member	28	4	20	4	1.986NS	
Not participated	47	10	31	6		
	N=118	19	81	18		
Participation in Collegiate FFA						
President or officer	16	2	12	2		
Member	80	13	53	14	1.212NS	
Not participated	21	4	15	2		
	N=117	19	80	18		
Participation in Collegiate Extra-Curricular Programs						
President or officer	29	2	20	7		
Member	35	12	19	4	14.013**	.4415
Not participated	54	5	42	7		
	N=118	19	81	18		
Formal Education						
College Senior	80	13	53	14		
Bachelor degree	1	0	1	0		
Bachelor with addl. work	12	3	8	1	5.834NS	
Master degree	8	0	6	2	C	
Master with addl. work	15	3	12	0		
	N=116	19	80	17		
Membership in Professional Organization						
One organization	35	6	26	3		
More than one organization	0	0	0	0	0.0NS	
No organization	0	0	0	0	C	
	N= 35	6	26	3		

TABLE XVII Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching Vo. Ag.						
Less than one year	0	0	0	0		
1 to 9 years	10	3	6	1		
10 to 19 years	16	1	13	2	2.610_c	NS
20 to 29 years	10	2	8	0		
30 years or above	0	0	0	0		
	N= 36	6	27	3		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

square value related to the atribute, participation in collegiate extra-curricular programs. The large chi-square value indicated a strong relationship between the personality trait, self-acceptance, and the professional variable, participation in collegiate extra-curricular programs. This indicates that the student teaching personnel who participated in collegiate extra-curricular programs scored higher on the trait scale, self-acceptance, than the teaching personnel who did not participate.

Self-acceptance and Socio-economic Related Variables

The trend of relationship of self-acceptance to socio-economic related variables are shown in Table XVIII.

The data in Table XVIII show that the observed results closely approximated the expected results and as a result, the chi-square values were found to be not significant even at the .05 level. Further, smaller the chi-squares, greater the agreement between the observed results and the null hypothesis was established.

In Table XVIII most of the chi-square values were computed after collapsing the contingency tables in order to avoid very low frequencies. Though in some attributes such as, size of family, father's education, and birth order of the subjects, the chi-square values were found to be quite adequate; nevertheless, they were found to be not significant statistically.

Based on the data in Tables XVII and XVIII, the null hypothesis of no significant difference between the trait, self-acceptance, and the professional and socio-economic variables was not rejected except for the variable, participation in collegiate extra-curricular programs.

TABLE XVIII

RELATIONSHIP OF PERSONALITY TRAIT SELF-ACCEPTANCE TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Age						
Less than 20 years	0	0	0	0		
20 to 29 years	72	11	50	11		
30 to 39 years	11	2	5	4		
40 to 49 years	8	3	4	1	5.677 NS	-0.0980
50 to 59 years	6	9	6	0	$_c$	
60 years or above	21	3	16	2		
	N=118	19	81	18		
Marital Status						
Single	30	8	17	5		
Married	88	11	64	13	3.681 NS	
Other	0	0	0	0	$_c$	
	N=118	19	81	18		
Size of Family						
No child	32	3	22	32		
1 child	21	2	18	21		
2 children	16	4	11	16	6.847 NS	
3 children or more	20	2	14	20		
	N= 89	11	65	13		
Birth Order						
First-born	45	10	28	7		
Second-born	29	4	19	6		
Third-born	19	2	15	2	6.016 NS	
Fourth-born	7	0	5	2		
Fifth-born or later	17	3	13	1		
	N=117	19	80	18		
Sibling						
No sibling	4	1	2	1		
One sibling	27	5	18	4		
Two to four siblings	65	8	45	12	3.626 NS	
Five siblings or more	22	5	16	1	$_c$	
	N=118	19	81	18		
Place Where Mostly Lived						
Rural farm or ranch	92	14	64	14		
Rural non-farm	8	1	6	1		
Town	9	2	5	2		
Small city	2	1	1	0	1.393 NS	
Medium-sized city	2	0	2	0	$_c$	
Large city	4	1	2	1		
Metropolis	0	0	0	0		
	N=117	19	80	18		

TABLE XVIII Continued

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	0	1	1	0.110_c NS	
$8000 to $8999	8	2	6	0		
$9000 or above	26	4	20	2		
	N= 36	6	27	2		
Father's Occupation						
Professional	7	1	5	1		
Managerial, technical, official or farmer	74	13	52	9		
Clerical or salesman	1	0	1	0	4.042_c NS	
Skilled worker	17	2	11	4		
Semi-skilled worker	11	1	8	2		
Unskilled worker	2	0	1	1		
Other	5	2	2	1		
	N=117	19	80	18		
Father's Education						
College graduate	2	0	2	0		
Attd. college for 1 year or more	15	2	9	4		
High School graduate	32	4	24	4		
Attd. high school for 1 year or more	28	3	20	5	7.758_c NS	
Elementary school grad.	23	7	15	1		
Attd. elementary school for 1 year or more	18	3	11	4		
	N=118	19	81	18		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
$_c$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

Sense of Well-Being*. The trait, sense of well-being, identifies persons who minimize their worries and complaints, and who are relatively free from self-doubt and disillusionment.

Sense of Well-Being and Professional Related Variables

The data in connection with the study of the relationship of the trait, sense of well-being, to the professional related variables of the student teaching personnel are shown in Table XIX.

The chi-square values as the measures of the differences between observed and expected frequencies, were found to be significant for the attributes, present title, and formal education of the student teaching personnel at the .01 level. The large values of chi-squares indicated positive association between the personality trait, sense of well-being, and the teachers' attributes, namely, present job title, and formal education. The corrected coefficients of contingency also indicated high degrees of association between the above mentioned personality trait and the professional variables, present job title, and formal education.

Empirically obtained data shown in Table XIX indicate that the cooperating teachers scored higher on the trait, sense of well-being, than the student teachers. This means that the student teachers showed relatively higher degree of worriness about themselves than those of

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*High Scores Tend to be Seen as: Energetic, enterprising, alert, ambitious, and versatile; as being productive and active; and as valuing work and effort for its own sake.

Low Scores Tend to be Seen as: Unambitious, leisurely, awkward, cautious, apathetic, and conventional; as being self-defensive and apologetic; and as constricted in thought and action.

TABLE XIX

TABLE XIX

RELATIONSHIP OF PERSONALITY TRAIT SENSE OF WELL-BEING TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Present Title						
Student Teacher	80	17	58	5	9.750**	.4031
Coop. Teacher	38	1	30	7		
	N=118	18	88	12		
Participation in High School FFA						
President or officer	82	11	63	8		
Member	21	4	13	4	4.335NS	
Not participated	15	3	12	0		
	N=118	18	88	12		
Participation in High School Extra-Curricular Programs						
President or officer	43	8	30	5		
Member	28	4	21	3	0.992NS	
Not participated	47	6	37	4		
	N=118	18	88	12		
Participation in Collegiate FFA						
President or officer	16	2	12	2		
Member	80	11	61	8	1.495NS	
Not participated	21	5	14	2		
	N=117	18	87	12		
Participation in Collegiate Extra-Curricular Programs						
President or officer	29	6	21	2		
Member	35	6	25	4	1.797NS	
Not participated	54	6	42	6		
	N=118	18	88	12		
Formal Education						
College senior	80	17	58	5		
Bachelor degree	1	0	1	0		
Bachelor with addl. work	12	0	11	1	13.518**	.4379
Master degree	8	0	6	2		
Master with addl. work	15	0	11	4		
	N=116	17	87	12		
Membership in Professional Organizations						
One organization	35	0	29	6		
More than one organization	0	0	0	0	0.0NS	
No organization	0	0	0	0		
	N= 35	0	29	6		

TABLE XIX Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching Vo. Ag.						
Less than 1 year	0	0	0	0		
1 to 9 years	10	0	10	0		
10 to 19 years	16	0	11	5	3.839$_c$NS	
20 to 29 years	10	0	8	2		
30 years or above	0	0	0	0		
	N= 36	0	29	7		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

the cooperating teachers. In other words, the cooperating teachers were found to be relatively better adjusted than those of the student teachers.

The data shown in Table XIX also indicate that the teachers with graduate work scored significantly higher on the personality scale, Wb, than the teachers who had no graduate work experience. This means that higher education has a definite role in the formation and development of personality.

The chi-square values in connection with the remaining professional related attributes were found to be supporting the null hypothesis.

Sense of Well-Being and Socio-economic Related Variables

The data in connection with the study of the relationship of the trait, sense of well-being, to the socio-economic variables are shown in Table XX.

The data presented in Table XX indicate that the difference between the observed and the expected frequencies in connection with the attribute, age, was found to be significant at the .05 level. To determine the degree of association between the trait, sense of well-being, and the attribute, age, Pearson Product Mament correlation coefficient was worked out. The correlation coefficient was found to be significant at the .01 level. This indicated a high degree of relationship between the two variables. The teachers of age 30 or above, percentage wise, scored higher on the trait scale, Wb, than the teachers of age less than 30.

Similarly, the difference between the observed and the expected frequencies in connection with the attribute, size of family, was

TABLE XX

RELATIONSHIP OF PERSONALITY TRAIT SENSE OF WELL-BEING TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Age						
Less than 20 years	0	0	0	0		
20 to 29 years	72	17	51	4		
30 to 39 years	11	0	10	1		
40 to 49 years	8	0	6	2	14.084^{*}_{c}	+0.3643**
50 to 59 years	6	0	5	1		
60 years or above	21	1	16	4		
	N=118	18	88	12		
Marital Status						
Single	30	7	23	0		
Married	88	11	65	12	5.835^{NS}_{c}	
Other	0	0	0	0		
	N=118	18	88	12		
Size of Family						
No child	32	9	21	2		
1 child	21	1	17	3	14.376*	.4744
2 children	16	0	14	2		
3 children or more	20	1	14	5		
	N= 89	11	66	12		
Birth Order						
First-born	45	5	37	3		
Second-born	29	5	21	3		
Third-born	19	3	14	2	2.283^{NS}_{c}	
Fourth-born	7	2	3	2		
Fifth-born or later	17	3	13	1		
	N=117	18	88	11		
Siblings						
No sibling	4	0	3	1		
One sibling	27	3	22	2		
Two to four siblings	65	10	48	7	1.772^{NS}_{c}	
Five siblings or more	22	5	15	2		
	N=118	18	88	12		
Place Where Mostly Lived						
Rural farm or ranch	92	10	73	9		
Rural non-farm	8	1	7	0		
Town	9	5	3	1		
Small city	2	0	0	2	7.240^{*}_{c}	.3522
Medium-sized city	2	0	2	0		
Large city	4	2	2	0		
Metropolis	0	0	0	0		
	N=117	18	87	12		

TABLE XX Continued

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	0	2	0	0.788_c^{NS}	
$8000 to $8999	8	0	7	1		
$9000 or above	26	0	20	6		
	N= 36	0	29	7		
Father's Occupation						
Professional	7	3	3	1		
Managerial, technical official or farmer	74	9	57	8		
Clerical or salesman	1	0	0	1		
Skilled worker	17	2	13	2		
Semi-skilled worker	11	2	9	0	3.443_c^{NS}	
Unskilled worker	2	1	1	0		
Other	5	1	4	0		
	N=117	18	87	12		
Father's Education						
College graduate	2	1	0	1		
Attd. college for 1 year or more	15	2	12	1		
High school graduate	32	6	21	5		
Attd. high school for 1 year or more	28	6	20	2	5.867_c^{NS}	
Elementary school grad.	23	2	20	1		
Attd. elementary school for 1 year or more	18	1	15	2		
	N=118	18	88	12		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

found to be significant at the .05 level. The degree of association between the two variables namely, sense of well-being and family size was indicated by the corrected coefficient of contingency which was fairly adequate. This means that the teachers who had one or more children were found to be better adjusted and productive than those of the teachers who had none.

The data in Table XX also indicate that the chi-square value in connection with the attribute, place of living, was found to be significant at the .05 level. This means that the place of living had influence in the formation and development of personality of the student teaching personnel. The teachers who had mostly lived in the small cities scored highest on the personality scale, Wb.

Based on the data presented in Table XIX and XX, the investigator failed to reject the null hypothesis except for the variables, present title, formal education, age, size of family, and place where mostly lived.

Responsibility*. The trait, responsibility, identifies persons of conscientious, responsible, and dependable disposition and temperament.

Responsibility and Professional Related Variables

The data in connection with the study of relationship between

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*High Scores Tend to be Seen as: Planful, responsible, thorough, progressive, capable, dignified, and independent; as being conscientious and dependable; resourceful and efficient; and as being alert to ethical and moral issues.

Low Scores Tend to be Seen as: Immature, moody, lazy, awkward, changeable, and disbelieving; as being influenced by personal bias, spite, and dogmatism; and as undercontrolled and impulsive in behavior.

responsibility and professional related variables of the student teaching personnel are shown in Table XXI.

The data in Table XXI indicate that the differences between the observed and the expected frequencies in connection with the attributes, namely, present title, participation in high school FFA, participation in high school extra-curricular programs, participation in collegiate extra-curricular programs and formal education, were found to be significant at the .01, .01, .05 and .01 levels, respectively.

The cooperating teachers scored higher on the personality scale, Re, compared to the student teachers. This means that the cooperating teachers were found to be more planful, responsible, efficient and resourceful than the student teaching personnel. The large chi-square value indicated a very strong relationship between the trait, responsibility, and the teachers' present title.

Similarly, a strong relationship was exhibited between the trait, responsibility, and the attributes, participation in high school FFA, participation in high school extra-curricular program, participation in collegiate extra-curricular programs, and formal education. This study indicates that the teachers who had leadership role in their high school and college careers scored significantly higher on the personality scale, Re, than the teachers who did not display similar roles in school and college careers.

This study also indicates that the teachers with graduate work scored significantly higher than the teachers who had no graduate work experience.

TABLE XXI

RELATIONSHIP OF PERSONALITY TRAIT RESPONSIBILITY TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Present Title						
Student Teacher	80	16	63	1	27.234**	.6317
Coop. Teacher	38	0	27	11		
	N=118	16	90	12		
Participation in High School FFA						
President or officer	82	13	67	2		
Member	21	2	14	5	18.763**	.5020
Not participated	15	1	9	5		
	N=118	16	90	12		
Participation in High School Extra-Curricular Programs						
President of officer	43	1	37	5		
Member	28	3	21	4	11.314*	.4009
Not participated	47	12	32	3		
	N=118	16	90	12		
Participation in Collegiate FFA						
President of officer	16	3	12	1		
Member	80	9	62	9	2.041NS	
Not participated	21	4	16	1		
	N=117	16	90	11		
Participation in Collegiate Extra-Curricular Programs						
President or officer	29	1	24	4		
Member	35	9	20	6	12.908*	
Not participated	54	6	46	2		
	N=118	16	90	12		
Formal Education						
College senior	80	16	63	1		
Bachelor degree	1	0	1	0		
Bachelor with addl. work	12	0	7	5	26.703**	.5863
Master degree	8	0	8	0		
Master with addl. work	15	0	10	5		
	N=116	16	89	11		
Membership in Professional Organization						
One organization	35	0	25	10		
More than one organization	0	0	0	0	0.0NS	
No organization	0	0	0	0		
	N= 35	0	25	10		

TABLE XXI Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching Vo. Ag.						
Less than 1 year	0	0	0	0		
1 to 9 years	10	0	9	1		
10 to 19 years	16	0	11	5	2.416_c NS	
20 to 29 years	10	0	6	4		
30 years or more	0	0	0	0		
	N= 36	0	26	10		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

Responsibility and Socio-economic Related Variables

The data in connection with the study of relationship between the trait, responsibility, and the socio-economic variables of the student teaching personnel are shown in Table XXII.

The data presented in Table XXII indicate that the chi-square values in connection with the attributes, age, marital status, size of family, and place of living were found to be significant. The significant difference between the observed and the expected frequencies in connection with the attribute, age, was manifested by a large chi-square. A high degree of association between the triat, responsibility, and the variable, age, was indicated by a large correlation coefficient ($r = +.5341$; P .01). The data further indicate that the teachers of age 40 or more scored significantly higher on the trait scale, Re, compared to the teachers of age below 40. The married teachers scored higher than the unmarried ones on the trait, responsibility. It was also found that the teachers who had two or more children scored significantly higher on the trait, responsibility, than the teachers who had none, or just one child.

The data presented in Table XXII also indicate that the attributes namely, birth order, sibling, income, father's occupation and education contributed to support the null hypothesis. In other words, the observed results in connection with these attributes approximated to the expected ones to produce smaller chi-square values which were found to be statistically non-significant.

Based on the data presented in Table XXI and XXII, the investigator failed to reject the null hypothesis of no significant difference

TABLE XXII

RELATIONSHIP OF PERSONALITY TRAIT RESPONSIBILITY SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$	or r
Age							
Less than 20 years	0	0	0	0			
20 to 29 years	72	15	56	1			
30 to 39 years	11	1	10	0			
40 to 49 years	8	0	6	2	33.052_c**		+0.5341**
50 to 59 years	6	0	5	1			
60 years or above	21	0	13	8			
	N=118	16	90	12			
Marital Status							
Single	30	7	23	0			
Married	88	9	67	12	6.925_c*	.3436	
Other	0	0	0	0			
	N=118	16	90	12			
Size of Family							
No child	32	5	26	1			
1 child	21	3	16	2			
2 children	16	0	9	7	18.442**	.5271	
3 children or more	20	1	17	2			
	N= 89	9	68	12			
Birth Order							
First-born	45	6	37	2			
Second-born	29	4	20	5			
Third-born	19	2	15	2	3.803_cNS		
Fourth-born	7	1	6	0			
Fifth-born or later	17	3	11	3			
	N=117	16	89	12			
Siblings							
No sibling	4	0	4	0			
One sibling	27	5	20	2			
Two to four siblings	65	8	51	6	2.327NS		
Five siblings or more	22	3	15	4			
	N=118	16	90	12			
Place Where Mostly Lived							
Rural farm or ranch	92	9	75	8			
Rural non-farm	8	4	4	0			
Town	9	3	6	0			
Small city	2	0	0	2	6.162_c*	.5792	
Medium-sized city	2	0	2	0			
Large city	4	0	3	1			
Metropolis	0	0	0	0			
	N=117	16	90	11			

TABLE XXII Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	0	2	0	2.181_c NS	
$8000 to $8999	8	0	7	1		
$9000 or above	26	0	17	9		
	N= 36	0	26	10		
Father's Occupation						
Professional	7	0	7	0		
Managerial, technical, official or farmer	74	8	57	9		
Clerical or salesman	1	0	0	1		
Skilled worker	17	3	14	0	4.677_c NS	
Semi-skilled worker	11	3	7	1		
Unskilled worker	2	0	2	0		
Other	5	2	2	1		
	N=117	16	89	12		
Father's Education						
College graduate	2	0	2	0		
Attd. college for 1 year or more	15	1	14	0		
High school graduate	32	5	24	3		
Attd. high school for 1 year or more	28	4	20	4	5.698_c NS	
Elementary school grad	23	3	16	4		
Attd. elementary school for 1 year or more	18	3	14	1		
	N=118	16	90	12		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

between responsibility and professional, and socio-economic related variables of the student teaching personnel except for the variables present title, participation in high school FFA, participation in high school extra-curricular programs, participation in collegiate extra-curricular programs, formal education, age, marital status, size of family, and place where mostly lived.

Socialization*. The trait, socialization, indicates the degree of social maturity, integrity, and rectitude which the individual has attained.

Socialization and Professional Related Variables

The data presented in Table XXIII show the relationship between the personality trait, socialization, and the professional related variables of the student teaching personnel.

An examination of the data reveals that there was a significant difference between the trait dominance and the title of the student teaching personnel at the .05 level. The cooperating teachers scored relatively higher than the student teachers. This indicates that the cooperating teachers were found to be more conscientious, obliging, and conforming than the student teachers.

A further study of the data in Table XXIII reveal that the differences between the observed and the expected frequencies of the

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*High Scores Tend to be Seen as: Serious, honest, industrious, modest, obliging, sincere, and steady; as being conscientious and responsible; and as being self-denying and conforming.

Low Scores Tend to be Seen as: Defensive, demanding, opinionated, resentful and deceitful in dealing with others; and as given to excess, exhibition, and ostentation in their behavior.

TABLE XXIII

RELATIONSHIP OF PERSONALITY TRAIT SOCIALIZATION TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Present Title						
Student Teacher	80	19	51	10	8.793*	.3841
Coop. Teacher	38	1	33	4		
	N=118	20	84	14		
Participation in High School FFA						
President or officer	82	16	54	12		
Member	21	4	16	1	6.114NS	
Not participated	15	0	14	1		
	N=118	20	84	14		
Participation in High School Extra-Curricular Programs						
President or officer	43	4	32	7		
Member	28	7	18	3		
Not participated	47	9	34	4		
	N=118	20	84	14		
Participation in Collegiate FFA						
President or officer	16	1	12	3		
Member	80	13	57	10	4.389NS	
Not participated	21	6	14	1		
	N=117	20	83	14		
Participation in Collegiate Extra-Curricular Programs						
President or officer	29	2	22	5		
Member	35	9	23	3		
Not participated	54	9	39	6		
	N=118	20	84	14		
Formal Education						
College senior	80	19	51	10		
Bachelor degree	1	0	0	1		
Bachelor with addl. work	12	0	12	0	8.596NS	
Master degree	8	0	7	1		
Master with addl. work	15	1	12	2		
	N=116	20	82	14		
Membership in Professional Organization						
One organization	35	1	30	4		
More than one organization	0	0	0	0	0.0NS	
No organization	0	0	0	0		
	N= 35	1	30	4		

TABLE XXIII Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching Vo. Ag.						
Less than 1 year	0	0	0	0		
1 to 9 years	10	0	7	3		
10 to 19 years	16	0	15	1	5.245_c	NS
20 to 29 years	10	1	9	0		
30 years or above	0	0	0	0		
	N= 36	1	31	4		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient;

professional related variables were found to be not significant at the .05 level except for the variable, present title, of the student teaching personnel.

Socialization and Socio-economic Related Variables

The data presented in Table XXIV show the relationship between the personality trait, socialization, and the socio-economic related variables of the student teaching personnel.

An examination of the data reveals that the variable, marital status, was found to be significant at the .05 level. This indicates that the difference between the observed and the expected frequencies in connection with the attribute, marital status, was significant at the .05 level.

Similarly, the variable, place where mostly lived, was also found to be significant at the .05 level.

Based on the data presented in Table XXIII and Table XXIV, the investigator failed to reject the null hypothesis of no significant difference between socialization and professional and socio-economic related variables of the student teaching personnel except for the variables, present title, marital status, and place where mostly lived.

Self-control*. The trait, self-control, assesses the degree and adequacy of self-regulation and self-control and freedom from impuls-

*High Scores Tend to be Seen as: Calm, patient, practical, slow, self-denying, inhibited, thoughtful, and deliberate; as being strict and thorough in their work and in their expectations for others; and as being honest and conscientious.

Low Scores Tend to be Seen as: Impulsive, shrewd, excitable, irritable, self-centered and uninhibited; as being aggressive and assertive; and as over-emphasizing personal please and self-gain.

TABLE XXIV

RELATIONSHIP OF PERSONALITY TRAIT SOCIALIZATION TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Age						
Less than 20 years	0	0	0	0		
20 to 29 years	72	17	45	10		
30 to 39 years	11	1	9	1		
40 to 49 years	8	0	7	1	8.345_cNS	+0.0721
50 to 59 years	6	1	4	1		
60 years or above	21	1	19	1		
	N=118	20	84	14		
Marital Status						
Single	30	10	17	3		
Married	88	10	67	11	7.680_c*	.3606
Other	0	0	0	0		
	N=118	20	84	14		
Size of Family						
No child	32	6	21	5		
1 child	21	3	14	4		
2 children	16	0	15	1	7.163NS	
3 children or more	20	2	17	1		
	N= 89	11	67	11		
Birth Order						
First-born	45	6	29	10		
Second-born	29	5	23	1		
Third-born	19	3	15	1	8.749_cNS	
Fourth-born	7	1	5	1		
Fifth-born or later	17	5	11	1		
	N=117	20	83	14		
Sibling						
No sibling	4	0	3	1		
One sibling	27	4	21	2		
Two to four siblings	65	9	45	11	7.907_cNS	
Five siblings or more	22	7	15	0		
	N=118	20	84	14		
Place Where Mostly Lived						
Rural farm or ranch	92	12	66	14		
Rural non-farm	8	3	5	0		
Town	9	3	6	0		
Small city	2	0	2	0	7.975_c*	.3685
Medium-sized city	2	0	2	0		
Large city	4	2	2	0		
Metropolis	0	0	0	0		
	N=117	20	83	14		

TABLE XXIV Continued

Variables	Scores Obtained				X^2	$\bar{C}$ or r
		Low	Medium	High		
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	0	2	6	1.107_c^{NS}	
$8000 to $8999	8	0	6	2		
$9000 or above	26	1	23	2		
	N=36	1	31	4		
Father's Occupation						
Professional	7	2	5	0		
Managerial, technical, official or farmer	74	9	56	9		
Clerical or salesman	1	0	1	0		
Skilled worker	17	2	11	4	9.078_c^{NS}	
Semi-skilled worker	11	4	6	1		
Unskilled worker	2	0	2	0		
Other	5	3	2	0		
	N=117	20	83	14		
Father's Education						
College graduate	2	0	2	0		
Attd. college for 1 year or more	15	2	11	2		
High school graduate	32	7	19	6		
Att. high school for 1 year or more	28	3	22	3	4.711_c^{NS}	
Elementary school grad.	23	4	17	2		
Attd. elementary school for 1 year or more	18	4	13	1		
	N=118	20	84	14		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

ivity and self-centeredness.

Self-Control and Professional Related Variables

The data presented in Table XXV show the relationship between the personaltiy trait, self-control and the professional related variables of the student teaching personnel.

An examination of the data reveals that there was a significant difference between the observed and the expected frequencies in connection with the attribute, the present job title of the student teaching personnel ($X^2 = 15.30$; $P < .01$). Similar significant difference was noticed in connection with the attribute, formal education of the student teaching personnel ($X^2 = 21.14$; $P < .01$). In the remaining of the professional related variables, the observed data approximated the expected ones under the null hypothesis. Therefore, no significant difference was noticed.

Self-Control and Socio-economic Related Variables

The data presented in Table XXVI show the relationship between the personality trait, self-control, and the socio-economic related variables of the student teaching personnel.

It was observed from the data shown in Table XXVI that there was a significant difference between the observed and the expected frequencies in connection with the socio-economic variable, age of the student teaching personnel ($X^2 = 20.63$; $P < .01$). In order to ascertain the degree of association between the two variables, namely, self-control and age, a product moment correlation coefficient was worked out ($r = +.4437$; $P < .01$). This indicates that there was a high degree

TABLE XXV

RELATIONSHIP OF PERSONALITY TRAIT SELF-CONTROL TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Present Title						
Student teacher	80	19	53	8	15.302**	.4943
Coop. teacher	38	1	24	13		
	N=118	20	77	21		
Participation in High School FFA						
President or officer	82	17	55	10		
Member	21	2	13	6	7.302NS	
Not participated	15	1	9	5		
	N=118	20	77	21		
Participation in High School Extra-Curricular Programs						
President or officer	43	8	29	6		
Member	28	3	18	7	2.085NS	
Not participated	47	9	30	8		
	N=118	20	77	21		
Participation in Collegiate FFA						
President of officer	16	0	12	4		
Member	80	16	49	15	5.032NS	
Not participated	21	4	15	2		
	N=117	20	76	21		
Participation in Collegiate Extra-Curricular Programs						
President or officer	29	4	21	4		
Member	35	7	20	8	1.765NS	
Not participated	54	9	36	9		
	N=118	20	77	21		
Formal Education						
College senior	80	19	53	8		
Bachelor degree	1	0	1	0		
Bachelor with addl. work	12	1	8	3	21.148**	.4996
Master degree	8	0	6	2	$_c$	
Master with addl. work	15	0	7	8		
	N=116	20	75	21		
Membership in Professional Organization						
One organization	35	1	21	13		
More than one organization	0	0	0	0	0.0NS	
No organization	0	0	0	0	$_c$	
	N= 35	1	21	13		

TABLE XXV Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching Vo. Ag.						
Less than 1 year	0	0	0	0		
1 to 9 years	10	0	6	4		
10 to 19 years	16	1	8	7	1.595_c^{NS}	
20 to 29 years	10	0	8	2		
30 years or above	0	0	0	0		
	N= 36	1	22	13		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

TABLE XXVI

RELATIONSHIP OF PERSONALITY TRAIT SELF-CONTROL TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Age						
Less than 20 years	0	0	0	0		
20 to 29 years	72	18	48	6		
30 to 39 years	11	1	8	2	20.639_c**	+0.4437**
40 to 49 years	8	0	4	4		
50 to 59 years	6	1	3	2		
60 years or above	21	0	14	7		
	N=118	20	77	21		
Marital Status						
Single	30	11	17	2		
Married	88	9	60	19	12.482_c**	.4512
Other	0	0	0	0		
	N=118	20	77	21		
Size of Family						
No child	32	5	22	5		
1 child	21	2	16	3	11.202NS	
2 children	16	0	8	8		
3 children or more	20	2	15	3		
	N= 89	9	61	19		
Birth Order						
First-born	45	7	34	4		
Second-born	29	3	19	7		
Third-born	19	4	11	4	6.531_cNS	
Fourth-born	7	2	4	1		
Fifth-born or later	17	4	9	4		
	N=117	20	77	20		
Sibling						
No sibling	4	0	3	1		
One sibling	27	3	19	5	6.695_cNS	
Two to four siblings	65	12	45	8		
Five siblings or more	22	5	10	7		
	N=118	20	77	21		
Place Where Mostly Lived						
Rural farm or ranch	92	14	60	18		
Rural non-farm	8	2	5	1		
Town	9	4	5	0		
Small city	2	0	0	2	8.146_cNS	
Medium-sized city	2	0	2	0		
Large city	4	0	4	0		
Metropolis	0	0	0	0		
	N=117	20	76	21		

TABLE XXVI Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	1	1	0	0.224_cNS	
$8000 to $8999	8	0	5	3		
$9000 or above	26	0	16	10		
	N=136	1	22	13		
Father's Occupation						
Professional	7	3	3	1		
Managerial, technical official, or farmer	74	8	52	14		
Clerical or salesman	1	0	0	1	11.340_cNS	
Skilled worker	17	5	9	3		
Semi-skilled worker	11	2	9	0		
Unskilled worker	2	0	1	1		
Other	5	2	2	1		
	N=117	20	76	21		
Father's Education						
College graduate	2	1	0	1		
Attd. college for 1 or more years	15	2	11	2		
High school graduate	32	6	22	4		
Attd. high school for 1 or more years	28	4	21	3	6.839_cNS	
Elementary school grad.	23	3	12	8		
Attd. elementary school for 1 year or more	18	4	11	3		
	N=118	20	77	21		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
$_c$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

of associationship between the variables, self-control and age of the student teaching personnel.

Similar signigicant difference between the observed and the expected frequencies was noticed in connection with the variable, marital status of the student teaching personnel (X^2 = 12.48; P .01). The degree of relationship between the variables, self-control and marital status was determined by the corrected coefficient of contingency ($\bar{C}$ = .4512).

Based on the data presented in Table XXV and XXVI, the investigator failed to reject the null hypothesis of no significant difference between the personality trait, self-control, and professional, and socio-economic variables of the student teaching personnel except for the variables, present title, formal education, age, and marital status.

Tolerance*. The trait, tolerance, identifies persons with permissive accepting, and non-judgemental social beliefs and attitudes.

Tolerance and Professional Related Variables

The data presented in Table XXVII show the relationship between the personality trait, tolerance, and the professional related variables of the student teaching personnel.

An examination of the data in Table XXVII reveals that there was a significant difference between the observed and the expected frequenc-

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*High Scores Tend to be Seen as: Enterprising, informal, quick, tolerant, clear-thinking, and resourceful; as being intellectually able and verbally fluent; and as having broad and varied interests.

Low Scores Tend to be Seen as: Suspicious, narrow, aloof, wary, and retiring; as being passive and overly judgemental in attitude; and as disbelieving and distrustful in personal and social outlook.

TABLE XXVII

RELATIONSHIP OF PERSONALITY TRAIT TOLERANCE TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained				X^2	$\bar{C}$ or r
		Low	Medium	High			
Present Title							
Student Teacher	80	18	53	9		10.536**	.4177
Coop. Teacher	38	2	24	12			
	N=118	20	77	21			
Participation in High School FFA							
President or officer	82	16	55	11			
Member	21	1	15	5		6.544NS	
Not participated	15	3	7	5			
	N=118	20	77	21			
Participation in High School Extra-Curricular Programs							
President or officer	43	8	29	6			
Member	28	4	17	7		1.499NS	
Not participated	47	8	31	8			
	N=118	20	77	21			
Participation in Collegiate FFA							
President or officer	16	3	11	2			
Member	80	12	52	16		1.459NS	
Not participated	21	5	13	3			
	N=118	20	76	21			
Participation in Collegiate Extra-Curricular Programs							
President or officer	29	2	21	6			
Member	35	9	18	8		6.136NS	
Not participated	54	9	38	7			
	N=118	20	77	21			
Formal Education							
College senior	80	18	53	9			
Bachelor degree	1	0	1	0			
Bachelor with addl. work	12	1	8	3		11.514NS	
Master degree	8	0	6	2		$_c$	
Master with addl. work	15	1	8	6			
	N=116	20	76	20			
Membership in Professional Organization							
One organization	35	2	23	10			
More than one organization	0	0	0	0		0.0NS	
No organization	0	0	0	0		$_c$	
	N= 35	2	23	10			

TABLE XXVII Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching Vo. Ag.						
Less than 1 year	0	0	0	0		
1 to 9 years	10	0	10	0	8.489^{*}_{c}	.6372
10 to 19 years	16	2	9	5		
20 to 29 years	10	0	4	6		
30 years or more	0	0	0	0		
	N= 36	2	23	11		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
$\underline{c}$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

TABLE XXVIII

RELATIONSHIP OF PERSONALITY TRAIT TOLERANCE TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained Low	Medium	High	X^2_c	$\bar{C}$ or r
Age:						
Less than 20	0	0	0	0		
20 to 29 years	72	17	47	8		
30 to 39 years	11	1	9	1	26.859**	+0.4378**
40 to 49 years	8	0	8	0		
50 to 59 years	6	1	4	1		
60 years or above	21	1	9	11		
	N=118	20	77	21		
Marital Status						
Single	30	9	16	5		
Married	88	11	61	16	4.947NS	
Other	0	0	0	0		
	N=118	20	77	21		
Size of Family						
No child	32	5	26	1		
1 child	21	3	13	5	8.351NS	
2 children	16	1	11	4		
3 children or more	20	2	12	6		
	N= 89	11	62	16		
Birth Order						
First-born	45	8	31	6		
Second-born	29	3	19	7		
Third-born	19	6	10	3	5.579NS	
Fourth-born	7	1	5	1		
Fifth-born or later	17	2	11	4		
	N=117	20	76	21		
Siblings:						
No sibling	4	0	2	2		
One sibling	27	4	18	5	1.447NS	
Two or four siblings	65	13	42	10		
Five siblings or more	22	3	15	4		
	N=118	20	77	21		
Place Where Mostly Lived						
Rural farm or ranch	92	13	62	17		
Rural non-farm	8	3	5	0		
Town	9	4	5	0		
Small city	2	0	1	1	12.890*	.4008
Medium-sized city	2	0	1	1		
Large city	4	0	3	1		
Metropolis	0	0	0	0		
	N=117	20	77	20		

TABLE XXVIII Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	1	1	0	6.092_c*	.5974
$8000 to $8999	8	0	8	0		
$9000 or abov3	26	1	14	11		
	N= 36	2	23	11		
Father's Occupation						
Professional	7	1	6	0		
Managerial, technical, official or farmer	74	10	49	15		
Clerical or salesman	1	0	1	0	12.427_cNS	
Skilled worker	17	4	12	1		
Semi-skilled worker	11	2	7	2		
Unskilled worker	2	1	1	0		
Other	5	2	0	3		
	N=117	20	76	21		
Father's Education						
College graduate	2	0	1	1		
Attd. college for 1 more years	15	3	10	2		
High school graduate	32	5	23	4		
Attd. high school for 1 or more years	28	4	17	7	3.933_cNS	
Elementary school grad.	23	3	15	5		
Attd. elementary school 1 year or more	18	5	11	2		
	N=118	20	77	21		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
$_c$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

ies between the variables, tolerance and place of living (X^2 =12.89; P .05); and tolerance and income (X^2 = 6.09; P .05). From this study it appears that the student teaching personnel who lived mostly in rural farm or ranch scored relatively high on the trait, tolerance than the teachers who mostly lived in rural non-farm or cities. Similarly, the teachers who had annual income of $9000 or above scored relatively high on the trait, tolerance, than the teachers who had income less than $9000. This means that the teachers with mostly rural farm or ranch living and high income were found to be enterprising, tolerant, and resourceful.

Based on the data presented in Table XXVII and XXVIII, the investigator failed to reject the null hypothesis of no significant difference between the trait, tolerance and the professional and socio-economic variables of the student teaching personnel except for the variables, present title, tenure in teaching vocational agriculture, age, place where mostly lived and income.

Good Impression*. The trait, good impression, identifies persons capable of creating a favorable impression and who are concerned about how others react to them.

Good Impression and Professional Related Variables

The data in connection with the relationship between the trait,

*High Scores Tend to be Seen as: Cooperative, enterprising, outgoing, sociable, warm, and helpful; as being concerned with making a good impression; and as being diligent and persistent.

Low Scores Tend to be Seen as: Inhibited, cautious, shrewd, wary, aloof and resentful; as being cool and distant in their relationships with others; and as being self-centered and too little concerned with the needs and wants of others.

good impression and the professional related variables of the student teaching personnel are shown in Table XXIX.

The data in Table XXIX do not support most of the variables as being statistically significant. A significant difference between the observed and the expected frequencies was noticed in the variable, present title of the student teaching personnel ($X^2 = 7.20$; $P < .05$). A significant difference was also noticed in case of formal education ($X^2 = 17.62$; $P < .05$). This indicates that the cooperating teachers performed better than the student teachers on the CPI scale, Gi. In other words, the cooperating teachers were found to be more cooperative, sociable, and concerned with others reaction to them than those of the student teachers. It was also observed that the teachers who had master degree or master degree with additional graduate work scored relatively higher on the trait scale, Gi, than the teachers who had no master degree.

The chi-square values in connection with attributes, present title and formal education of the student teaching personnel established relationships with the personality trait, good impression but not to the degree of significant relationship. The corrected coefficients of contingency were worked out and moderately strong relationships were found to exist between the variables.

Good Impression and Socio-economic Related Variables

The data presented in Table XXX show the relationship between the trait, good impression and the socio-economic variables of the student teaching personnel.

The data in Table XXX indicate that there was a significant

TABLE XXIX

RELATIONSHIP OF PERSONALITY TRAIT GOOD IMPRESSION TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Present Title						
Student teacher	80	15	55	10	7.202*	.3498
Coop. teacher	38	2	25	11		
	N=118	17	80	21		
Participation in High School FFA						
President or officer	82	13	58	11		
Member	21	2	12	7	4.711NS	
Not participated	15	2	10	3		
	N=118	17	80	21		
Participation in High School Extra-Curricular Programs						
President of officer	43	4	33	6		
Member	28	4	18	6	2.940NS	
Not participated	47	9	29	9		
	N=118	17	80	21		
Participation in Collegiate FFA						
President or officer	16	0	13	3		
Member	80	13	51	16	4.469NS	
Not participated	21	4	15	2		
	N=117	17	79	21		
Participation in Collegiate Extra-Curricular Programs						
President or officer	29	3	23	3		
Member	35	8	17	10	8.720NS	
Not participated	54	6	40	8		
	N=118	17	80	21		
Formal Education						
College senior	80	15	55	10		
Bachelor degree	1	0	1	0		
Bachelor with addl. work	12	2	8	2	17.621_c*	.4620
Master degree	8	0	7	1		
Master with addl. work	15	0	7	8		
	N=116	17	78	21		
Membership in Professional Organization						
One organization	35	2	22	11		
More than one organization	0	0	0	0	0.0_cNS	
No organization	0	0	0	0		
	N= 35	2	22	11		

TABLE XXIX Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching						
Less than 1 year	0	0	0	0		
1 to 9 years	10	1	6	3	0.890_cNS	
10 to 19 years	16	1	9	6		
20 to 29 years	10	0	8	2		
30 years or above	0	0	0	0		
	N= 36	2	23	11		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
$_c$ = chi-square value of the collapsed contingency table,
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

TABLE XXX

RELATIONSHIP OF PERSONALITY TRAIT GOOD IMPRESSION TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$	or r
		Low	Medium	High			
Age							
Less than 20 years	0	0	0	0			
20 to 29 years	72	15	50	7			
30 to 39 years	11	1	8	2	14.137$_c$*		+0.3817**
40 to 49 years	8	0	5	3			
50 to 59 years	6	1	3	2			
60 years or above	21	0	14	7			
	N=118	17	80	21			
Marital Status							
Single	30	11	15	4	16.165$_c$**	.5064	
Married	88	6	65	17			
Other	0	0	0	0			
	N=118	17	80	21			
Size of Family							
No child	32	3	26	3			
1 child	21	2	15	4	9.611NS		
2 children	16	0	9	7			
3 children or more	20	1	16	3			
	N= 89	6	66	17			
Birth Order							
First-born	45	6	33	6			
Second-born	29	4	17	8			
Third-born	19	3	13	3	3.350$_c$NS		
Fourth-born	7	1	5	1			
Fifth-born or more	17	3	12	2			
	N=117	17	80	20			
Sibling							
No sibling	4	0	3	1			
One sibling	27	1	22	4			
Two to four siblings	65	12	43	10	6.370$_c$NS		
Five siblings or more	22	4	12	6			
	N=118	17	80	21			
Place Where Mostly Lived							
Rural farm or ranch	92	13	61	18			
Rural non-farm	8	0	7	1			
Town	9	4	5	0			
Small city	2	0	0	2	10.731$_c$NS		
Medium-sized city	2	0	2	0			
Large city	4	0	4	0			
Metropolis	0	0	0	0			
	N= 117		17	79	21		

TABLE XXX Continued

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	2	0	0	0.727_c NS	
$8000 to $8999	8	0	6	2		
$9000 or above	26	0	17	9		
	N= 36	2	23	11		
Father's Occupation						
Professional	7	3	3	1		
Managerial, technical official, or farmer	74	6	53	15		
Clerical or salesman	1	0	0	1	12.708_c NS	
Skilled worker	17	5	9	3		
Semi-skilled worker	11	2	9	3		
Unskilled worker	2	0	2	0		
Other	5	1	3	1		
	N=117	17	79	21		
Father's Education						
College graduate	2	1	0	1		
Attd. college for 1 or more years	15	2	12	1		
High School graduate	32	6	19	7		
Attd. high school for 1 or more years	28	2	22	4	4.891_c NS	
Elementary school grad.	23	3	14	6		
Attd. elementary school for 1 year or more	18	3	13	2		
	N=118	17	80	21		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

difference between the observed and the expected frequencies in connection with the attribute, age of the student teaching personnel ($X^2 = 14.13$; $P < .05$). Similar significant difference was noticed in connection with the attribute, marital status of the student teaching personnel ($X^2 = 16.16$; $P < .05$).

In order to determine the degree of relationship between good impression and age; and good impression and marital status of the student teaching personnel, Pearson Product Moment coefficient of correlation and the corrected coefficient of contingency were calculated, respectively. In both cases, strong relationships were found to exist between the variables.

Based on the data presented in Table XXIX and XXX, the investigator failed to reject the null hypothesis of no significant difference between the personality trait, good impression and the professional and socio-economic variables of the student teaching personnel except for the variables, present title, formal education, age, and marital status.

Communality*. The trait, communality, indicates the degree to which an individual's reactions and responses correspond to the modal (common) pattern established for the inventory.

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*High Scores Tend to be Seen as: Dependable, moderate, tactful, reliable, sincere, patient, steady, and realistic; as being honest and conscientious; and as having common sense and good judgement.

Low Scores Tend to be Seen as: Impatient, changeable, complicated, imaginative, disorderly, nervous, restless, and confused; as being guileful and deceitful; inattentive and forgetful; and as having internal conflicts and problems.

Communality and Professional Related Variables

The data presented in Table XXXI show the relationship between the personality trait, communality and the professional related variables of the student teaching personnel.

It appears from an examination of the data that no significant relationship was established between the personality trait communality and the professional related variables of the student teaching personnel. In all the tests of the professional related variables, the chi-square values were found to be conforming the null hypothesis. Therefore, no variable was found to be statistically significant.

Communality and Socio-economic Related Variables

The data presented in Table XXXII show the relationship between the trait, communality, and the socio-economic related variables of the student teaching personnel.

It appears from the data shown in Table XXXII that no variable was found to be statistically significant. On the basis of the study of the data shown in Table XXXI and XXXII, the investigator failed to reject the null hypothesis of no significant difference between the trait, communality, and the professional and socio-economic variables of the student teaching personnel.

Achievement via Conformance*.. The trait, achievement via conform-

*High Scores Tend to be Seen as: Capable, cooperative, efficient, organized, responsible, stable, and sincere; as being persistent and industrious; and as valuing intellectual activity and intellectual achievement.

Low Scores Tend to be Seen as: Coarse, stubborn, aloof, awkward, insecure, and opinionated; as easily disorganized under stress of pressure to conform; and as pessimistic about their occupational future.

TABLE XXXI

RELATIONSHIP OF PERSONALITY TRAIT COMMUNALITY TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Present Title						
Student teacher	80	11	69	0	1.892NS	
Coop. teacher	38	2	36	0	$_c$	
	N=118	13	105	0		
Participation in High School FFA						
President or officer	82	9	73	0		
Member	21	3	18	0	0.518NS	
Not participated	15	1	14	0		
	N=118	13	105	0		
Participation in High School Extra-Curricular Programs						
President or officer	43	6	37	0		
Member	28	5	23	0	3.906NS	
Not participated	47	2	45	0	$_c$	
	N=118	13	105	0		
Participation in Collegiate FFA						
President or officer	16	0	16	0		
Member	80	11	69	0	2.617NS	
Not participated	21	2	19	0	$_c$	
	N=117	13	104	0		
Participation in Collegiate Extra-Curricular Programs						
President or officer	29	1	28	0		
Member	35	5	30	0	2.284NS	
Not participated	54	7	47	0	$_c$	
	N=118	13	105	0		
Formal Education						
College senior	80	11	69	0		
Bachelor degree	1	0	1	0		
Bachelor with addl. work	12	1	11	0	1.707NS	
Master degree	8	0	8	0	$_c$	
Master with addl. work	15	1	14	0		
	N=116	13	103	0		
Membership in Professional Organization						
One organization	35	2	33	0		
More than one organization	0	0	0	0	0.0NS	
No organization	0	0	0	0	$_c$	
	N= 35	2	22	0		

TABLE XXXI Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenur in Teaching Vo. Ag.						
Less than 1 year	0	0	0	0		
1 to 9 years	10	1	9	0	0.0_c	NS
10 to 19 years	16	0	16	0		
20 to 29 years	10	1	9	0		
30 years or more	0	0	0	0		
	N= 36	2	34	0		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
$\underline{c}$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

TABLE XXXII

RELATIONSHIP OF PERSONALITY TRAIT COMMUNALITY TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$	or r
		Low	Medium	High			
Age							
Less than 20 years	0	0	0	0			
20 to 29 years	72	11	61	0			
30 to 39 years	11	1	10	0	3.946_cNS		+0.0757
40 to 49 years	8	0	8	0			
50 to 59 years	6	0	6	0			
60 years or above	21	1	20	0			
	N=118	13	105	0			
Marital Status							
Single	30	6	24	0			
Married	88	7	81	0	3.311_cNS		
Other	0	0	0	0			
	N=118	13	105	0			
Size of Family							
No child	32	4	28	0			
1 child	21	2	19	0			
2 children	16	0	16	0	2.629_cNS		
3 children or more	20	1	19	0			
	N= 89	7	82	0			
Birth Order							
First-born	45	3	42	0			
Second-born	29	4	25	0			
Third-born	19	2	17	0	1.156_cNS		
Fourth-born	7	1	6	0			
Fifth-born or later	17	2	15	0			
	N=117	12	105	0			
Sibling							
No sibling	4	1	3	0			
One sibling	27	4	23	0			
Two to four siblings	65	6	59	0	1.121_cNS		
Five siblings or more	22	2	20	0			
	N=118	13	105	0			
Place Where Mostly Lived							
Rural farm or ranch	92	9	83	0			
Rural non-farm	8	0	8	0			
Town	9	0	9	0			
Small city	2	1	1	0	0.769_cNS		
Medium-sized city	2	1	1	0			
Large city	4	2	2	0			
Metropolis	0	0	0	0			
	N=117	13	104	0			

TABLE XXXII Continued

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	1	1	0	0.0_cNS	
$8000 to $8999	8	0	8	0		
$9000 or above	26	1	25	0		
	N= 36	2	34	0		
Father's Occupation						
Professional	7	2	5	0		
Managerial, technical, official, or farmer	74	7	67	0		
Clerical or salesman	1	0	1	0		
Skilled worker	17	2	15	0	0.0_cNS	
Semi-skilled worker	11	1	10	0		
Unskilled worker	2	0	2	0		
Other	5	1	4	0		
	N=117	13	104	0		
Father's Education						
College graduate	2	0	2	0		
Attd. college for 1 or more years	15	2	13	0		
High school graduate	32	4	28	0		
Attd. high school for 1 year or more	28	5	23	0	3.00_cNS	
Elementary school grad.	23	1	22	0		
Attd. elementary school for 1 year or more	18	1	17	0		
	N=118	13	105	0		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
$_c$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

ance, identifies those factors of interest and motivation which facilitate achievement in any setting where conformance is a positive behavior.

Achievement Via Conformance and Professional Related Variables

The data presented in Table XXXIII show the relationship between the trait, achievement via conformance and the professional related variables of the student teaching personnel. It appears from the data that there was a significant difference between the observed and the expected frequencies in connection with the variable, present title of the student teaching personnel ($X^2 = 30.39$; $P < .01$). Therefore, the relationship between the personality trait, achievement via conformance and the variable, present title of the student teaching personnel was established. In order to ascertain the strength of the relationship between the two variables, a corrected coefficient of contingency was calculated. This indicated a strong relationship between the trait, achievement via conformance and the variable, present title of the student teaching personnel.

Further, high scoring of the cooperating teachers on the trait, achievement via conformance indicated that they were more interested and motivated for achievement in planned programs than the student teachers.

On further examination of the data, it was found that the difference between the observed and the expected frequencies in connection with the attribute, formal education, was significant ($X^2 = 38.70$; $P < .01$). Further, the corrected coefficient of contingency also indicated a very strong relationship between the personality trait, achievement via

TABLE XXXIII

RELATIONSHIP OF PERSONALITY TRAIT ACHIEVEMENT VIA CONFORMANCE TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Present Title						
Student teacher	80	17	60	3	30.395**	.6603
Coop. teacher	38	0	23	15		
	N=118	17	83	18		
Participation in High School FFA						
President or officer	82	14	58	10		
Member	21	2	15	4	3.391NS	
Not participated	15	1	10	4		
	N=118	17	83	18		
Participation in High School Extra-Curricular Programs						
President or officer	43	8	27	8		
Member	28	2	21	5	3.205NS	
Not participated	47	7	35	5		
	N=118	17	83	18		
Participation in Collegiate FFA						
President or officer	16	1	9	6		
Member	80	12	58	10	7.559NS	
Not participated	21	4	15	2		
	N=117	17	82	18		
Participation in Collegiate Extra-Curricular Programs						
President or officer	29	2	22	5		
Member	35	8	20	7	5.379NS	
Not participated	54	7	41	6		
	N=118	17	83	18		
Formal Education						
College senior	80	17	60	3		
Bachelor degree	1	0	1	0		
Bachelor with addl. work	12	0	9	3	38.701_c**	.6364
Master degree	8	0	6	2		
Master with addl. work	15	0	6	9		
	N=116	17	82	17		
Membership in Professional Organization						
One organization	35	0	22	13		
More than one organization	0	0	0	0	0.0_cNS	
No organization	0	0	0	0		
	N= 35	0	22	13		

TABLE XXXIII Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching Vo. Ag.						
Less than 1 year	0	0	0	0		
1 to 9 years	10	0	7	3		
10 to 19 years	16	0	9	7	0.496^{NS}_{c}	
20 to 29 years	10	0	6	4		
30 years or above	0	0	0	0		
	N=36	0	22	14		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
$\underline{c}$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

conformance and the variable, formal education of the student teaching personnel. Higher the level of education of the student teaching personnel, better the performance on the personality trait, achievement via conformance.

Achievement Via Conformance and Socio-economic Related Variables

The data presented in Table XXXIV show the relationship between the trait, achievement via conformance and the socio-economic related variables of the student teaching personnel.

On examination of the data, it appears that there was a significant difference between the observed and the expected frequencies in connection with the variable, age of the student teaching personnel (X^2 =35.86; $P < .01$). Thus, the relationship between the variables, achievement via conformance and age of the student teaching personnel was established. In order to examine the strength of the relationship, Pearson Product Moment coefficient of correlation was calculated and found to be significant ($r = +.5019$; $P < .01$). Therefore, a high degree of positive relationship was identified between the variables achievement via conformance and age of the student teaching personnel. The teachers of age 40 or above scored significantly higher on the personality trait, achievement via conformance than the teachers of age below 40.

Similarly, significant differences between the observed and the expected frequencies were observed in connection with the variables, marital status, ($X^2 = 6.02$; $P < .05$); and size of family, (X^2=13.20; $P < .05$) of the student teaching personnel.

It was further observed that the married teachers scored higher than the unmarried ones. The teachers who had two children scored

TABLE XXXIV

RELATIONSHIP OF PERSONALITY TRAIT ACHIEVEMENT VIA CONFORMANCE TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$	or r
Age							
Less than 20 years	0	0	0	0			
20 to 29 years	72	16	53	3			
30 to 39 years	11	1	10	0	35.860_c**		+0.5019**
40 to 49 years	9	0	4	4			
50 to 59 years	6	0	3	3			
60 years or above	21	0	13	8			
	N=118	17	83	18			
Marital Status							
Single	30	7	22	1			
Married	88	10	61	17	6.023_c*	.3215	
Other	0	0	0	0			
	N=118	17	83	18			
Size of Family							
No child	32	7	23	2			
1 child	21	2	16	3			
2 children	16	0	10	6	13.200*	.4573	
3 children or more	20	1	13	6			
	N= 89	10	62	17			
Birth Order							
First-born	45	6	33	6			
Second-born	29	4	18	7			
Third-born	19	3	14	2	2.570NS		
Fourth-born	7	1	5	1			
Fifth-born or later	17	3	12	2			
	N=117	17	82	18			
Sibling							
No sibling	4	1	2	1			
One sibling	27	2	23	2			
Two to four siblings	65	11	42	12	2.672_cNS		
Five siblings or more	22	3	16	3			
	N=118	17	83	18			
Place Where Mostly Lived							
Rural farm or ranch	92	11	66	15			
Rural non-farm	8	2	6	0			
Town	9	3	6	0			
Small city	2	0	0	2	6.639_cNS		
Medium-sized city	2	0	2	0			
Large city	4	1	3	0			
Metropolis	0	0	0	0			
	N=117	17	83	17			

TABLE XXXIV Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	0	2	0	2.078^{NS}_{c}	
$8000 to $8999	8	0	6	2		
$9000 or above	26	0	14	12		
	N= 36	0	22	14		
Father's Occupation						
Professional	7	1	6	0		
Managerial, technical official, farmer	74	9	51	14		
Clerical or salesman	1	0	0	1	4.021^{NS}_{c}	
Skilled worker	17	3	13	1		
Semi-skilled worker	11	2	8	1		
Unskilled worker	2	0	2	0		
Other	5	2	2	1		
	N=117	17	82	18		
Father's Education						
College graduate	2	0	2	0		
Attd. college for 1 or more years	15	1	13	1		
High school graduate	32	5	22	5		
Attd. high school for 1 or more years	28	5	19	4	3.802^{NS}_{c}	
Elementary school grad.	23	3	15	5		
Attd. elementary school for 1 year or more	18	3	12	3		
	N=118	17	83	18		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
$\underline{c}$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

higher than the teachers who had only one child or none.

On the basis of the data presented in Table XXXIII and XXXIV, the investigator failed to reject the null hypothesis of no significant difference between the personality trait, achievement via conformance and the professional and socio-economic variables of the student teaching personnel except for the variables, present title, formal education, age, marital status, and size of family.

Achievement via Independence*. The trait, achievement via independence, seeks to identify those factors of interest and motivation which facilitate achievement in any setting where autonomy and independence are positive behavior.

Achievement Via Independence and Professional Related Variables

The data presented in Table XXXV show the relationship between the trait, achievement via independence, and the professional related variables of the student teaching personnel.

On examination of the data, it appears that there was a significant difference between the observed and the expected frequencies in connection with the variable, present title of the student teaching personnel ($X^2 = 14.93$; $P < .01$). Thus, the variables, achievement via independence and present title of the student teaching personnel were found to be interrelated. In order to locate the strength of the

*High Scores Tend to be Seen as: Mature, forceful, strong, dominant, demanding, and foresighted; as being independent and self-reliant; and as having superior intellectual ability and judgement.

Low Scores Tend to be Seen as: Inhibited, anxious, cautious, dissatisfied, dull, and wary; as being submissive and compliant before authority; and as lacking in self-insight and self-understanding.

TABLE XXXV

RELATIONSHIP OF PERSONALITY TRAIT ACHIEVEMENT VIA INDEPENDENCE TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Present Title						
Student teacher	80	14	60	6	14.930**	.4889
Coop. teacher	38	0	27	11		
	N=118	14	87	17		
Participation in High School FFA						
President or officer	82	12	62	8		
Member	21	2	15	4	7.837NS	
Not participated	15	0	10	5		
	N=118	14	87	17		
Participation in High School Extra-Curricular Programs						
President or officer	43	7	28	8		
Member	28	0	26	2	7.852NS	
Not participated	47	7	33	7		
	N=118	14	87	17		
Participation in Collegiate FFA						
President or officer	16	2	13	1		
Member	80	9	58	13	1.578NS	
Not participated	21	3	16	2		
	N=117	14	87	16		
Participation in Collegiate Extra-Curricular Programs						
President or officer	29	2	19	8		
Member	35	4	28	3	6.188NS	
Not participated	54	8	40	6		
	N=118	14	87	17		
Formal Education						
College senior	80	14	60	6		
Bachelor degree	1	0	1	0		
Bachelor with addl. work	12	0	8	4	14.409^{**}_{c}	.4505
Master degree	8	0	7	1		
Master with addl. work	15	0	10	5		
	N=116	14	86	16		
Membership in Professional Organization						
One organization	35	0	25	10		
More than one organization	0	0	0	0	0.0_{c}NS	
No organization	0	0	0	0		
	N= 35	0	25	10		

TABLE XXXV Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching Vo. Ag.						
Less than 1 year	0	0	0	0		
1 to 9 years	10	0	9	1		
10 to 19 years	16	0	11	5	2.416^{NS}_{c}	
20 to 29 years	10	0	6	4		
30 years or above	0	0	0	0		
	N= 36	0	26	10		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

the relationship, a corrected coefficient of contingency was calculated. This indicated a moderately strong relationship between the variables mentioned above. The cooperating teachers scored significantly higher than the student teachers on the trait, achievement via independence. Thus, they were found to be more independent, self-reliant, and mentally matured than the student teachers.

On further examination of the data a significant difference between the observed and the expected frequencies in relation to the variables, achievement via independence and formal education of the student teaching personnel was found to be existed (X^2 = 14.40; $P < .01$). Further, the corrected coefficient of contingency indicated a moderately strong relationship between these two variables.

Achievement Via Independence and Socio-economic Related Variables

The data presented in Table XXXVI show the relationship between the trait, achievement via independence, and the socio-economic related variables of the student teaching personnel.

The data in Table XXXVI indicate that there were significant differences between the observed and the expected frequencies only in two socio-economic variables, namely, age (X^2 =21.48; $P < .01$) and marital status (X^2 =9.37; $P < .01$) of the student teaching personnel.

Similarly, to determine the strength of relationship between acheivement via independence and marital status of the student teaching personnel, a corrected coefficient of contingency was worked out and a strong positive relationship was established.

Based on the data in Table XXXV and XXXVI, the investigator failed to reject the null hypothesis of no significant difference between the

TABLE XXXVI

RELATIONSHIP OF PERSONALITY TRAIT ACHIEVEMENT VIA INDEPENDENCE TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Age						
Less than 20 years	0	0	0	0		
20 to 29 years	72	14	53	5		
30 to 39 years	11	0	10	1		
40 to 49 years	8	0	7	1	21.485_c**	+0.4572**
50 to 59 years	6	0	4	2		
60 years or above	21	0	13	8		
	N=118	14	87	17		
Marital Status						
Single	30	8	20	2		
Married	88	6	67	15	9.379_c**	.3958
Other	0	0	0	0		
	N=118	14	87	17		
Size of Family						
No child	32	4	25	3		
1 child	21	2	14	5	7.410NS	
2 children	16	0	14	2		
3 children or more	20	0	15	5		
	N= 89	6	68	15		
Birth Order						
First-born	45	7	31	7		
Second-born	29	3	22	4		
Third-born	19	1	16	2	2.067_cNS	
Fourth-born	7	1	5	1		
Fifth-born or later	17	2	12	3		
	N=117	14	86	17		
Sibling						
No sibling	4	1	2	1		
One sibling	27	3	21	3	0.257_cNS	
Two to four siblings	65	7	48	10		
Five siblings or more	22	3	16	3		
	N=118	14	87	17		
Place Where Mostly Lived						
Rural farm or ranch	92	9	70	13		
Rural non-farm	8	1	7	0		
Town	9	4	4	1		
Small city	2	0	1	1	1.953_cNS	
Medium-sized city	2	0	1	1		
Large city	4	0	4	0		
Metropolis	0	0	0	0		
	N=117	14	87	16		

TABLE XXXVI Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	0	2	0	2.181_c NS	
$8000 to $8999	8	0	7	1		
$9000 or above	26	0	17	9		
	N= 36	0	26	10		
Father's Occupation						
Professional	7	1	6	0		
Managerial, technical, official, farmer	74	7	52	15		
Clerical or salesman	1	0	1	0	3.971_c NS	
Skilled worker	17	3	13	1		
Semi-skilled worker	11	2	8	1		
Unskilled worker	2	0	2	0		
Other	5	1	4	0		
	N=117	14	86	17		
Father's Education						
College graduate	2	0	1	1		
Attd. college for 1 or more years	15	2	12	1		
High school graduate	32	4	27	1		
Attd. high school for 1 or more years	28	2	17	9	13.661_c NS	
Elementary school grad.	23	2	17	4		
Attd. elementary school for 1 or more years	18	4	13	1		
	N=118	14	87	17		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

trait, achievement via independence, and the professional and socio-economic variables of the student teaching personnel except for the variables, namely, present title, formal education, age, and marital status.

Intellectual Efficiency*. The trait, intellectual efficiency, indicates the degree of personal and intellectual efficiency which the individual has attained.

Intellectual Efficiency and Professional Related Variables

The data presented in Table XXXVII show the relationship between the trait, intellectual efficiency, and the professional related variables of the student teaching personnel.

A study of the data in Table XXXVII reveals that there was significant differences between the observed and the expected results of the variables, namely, present title ($X^2 = 23.92$; $P < .01$); participation in high school FFA ($X^2 = 10.05$; $P < .05$); and participation in collegiate extra-curricular programs ($X^2 = 14.66$; $P < .01$). This indicates that the personality trait, intellectual efficiency, was found to be significantly related with the professional variables namely, present title, participation in high school FFA, and participation in collegiate extra-curricular programs.

On further examination of the data, the variable, formal education,

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*High Scores Tend to be Seen as: Efficient, clear-thinking, capable, intelligent, progressive, planful, thorough and resourceful; as being alert and well-informed; and as placing a high value on cognitive and intellectual matters.

Low Scores Tend to be Seen as: Cautious, confused, easy-going, defensive, shallow, and unambitious; as being conventional and stereotyped in thinking; and as lacking in self-direction and self-discipline.

TABLE XXXVII

RELATIONSHIP OF PERSONALITY TRAIT INTELLECTUAL EFFICIENCY TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Present Title						
Student teacher	80	15	62	3	23.292**	.5923
Coop. teacher	38	1	24	13		
	N=118	16	86	16		
Participation in High School FFA						
President or officer	82	9	66	7		
Member	21	4	13	4	10.059*	
Not participated	15	3	7	5		
	N=118	16	86	16		
Participation in High School Extra-Curricular Programs						
President or officer	43	7	28	8		
Member	28	2	25	1	5.511NS	
Not participated	47	7	33	7		
	N=118	16	86	16		
Participation in Collegiate FFA						
President or officer	16	0	15	1		
Member	80	12	54	14	8.774NS	
Not participated	21	4	17	0		
	N=117	16	86	15		
Participation in Collegiate Extra-Curricular Programs						
President or officer	29	4	16	9		
Member	35	8	25	2	14.663**	.4506
Not participated	54	4	45	5		
	N=118	16	86	16		
Formal Education						
College senior	80	15	62	3		
Bachelor degree	1	0	1	0		
Bachelor with addl. work	12	0	9	3	31.773**	.5900
Master degree	8	0	6	2		
Master with addl. work	15	1	6	8		
	N=116	16	84	16		
Membership in Professional Organization						
One organization	35	1	22	12		
More than one organization	0	0	0	0	0.0NS	
No organization	0	0	0	0		
	N=35	1	22	12		

TABLE XXXVII Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching Vo. Ag.						
Less than 1 year	0	0	0	0		
1 to 9 years	10	0	9	1		
10 to 19 years	16	1	8	7	4.196_c NS	
20 to 29 years	10	0	5	5		
30 years or above	0	0	0	0		
	N= 36	1	22	13		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
$_c$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

also was found to be significantly related with the personality trait, intellectual efficiency of the student teaching personnel (X^2 =31.77; $P < .01$). In order to determine the degree of relationship between the personality trait, intellectual efficiency, and the significant professional variables, corrected coefficients of contingency were calculated. A further study of the corrected coefficients of contingency indicated a high degree of relationship between intellectual efficiency and the four professional variables namely, present title, participation in high school FFA, participation in collegiate extra-curricular programs and formal education of the student teaching personnel.

The cooperating teachers made significantly higher scores on the personality trait, intellectual efficiency, than the student teachers. Thus, the cooperating teachers were found to be more planful, capable, and resourceful than the student teachers.

Intellectual Efficiency and Socio-economic Related Variables

The data presented in Table XXXVIII show the relationship between the trait, intellectual efficienty, and the socio-economic related variables of the student teaching personnel.

The data shown in the Table XXXVIII indicate that the socio-economic variables, age and family size, of the subjects were found to be significantly related with their personality trait, intellectual efficiency. Both of these variables were found to be significant at the .01 level. In case of the variable, age, a correlation-coefficient test was made to determine the strength of the relationship between the personality trait, intellectual efficiency of the student teaching

TABLE XXXVIII

RELATIONSHIP OF PERSONALITY TRAIT INTELLECTUAL EFFICIENCY TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Age						
Less than 20 years	0	0	0	0		
20 to 29 years	72	15	56	1		
30 to 39 years	11	0	9	2		
40 to 49 years	8	0	7	1	42.054_c**	+0.4190**
50 to 59 years	6	0	5	1		
60 years or above	21	1	9	11		
	N=118	16	86	16		
Marital Status						
Single	30	7	22	1		
Married	88	9	64	15	5.937_cNS	
Other	0	0	0	0		
	N=118	16	86	16		
Size of Family						
No child	32	5	27	0		
1 child	21	3	13	5	17.648**	.5176
2 children	16	1	13	2		
3 children or more	20	0	12	8		
	N= 89	9	65	15		
Birth Order						
First-born	45	8	32	5		
Second-born	29	4	20	5		
Third-born	19	3	15	1	4.762_cNS	
Fourth-born	7	0	5	2		
Fifth-born or later	17	1	13	3		
	N=117	16	85	16		
Sibling						
No sibling	4	0	3	1		
One sibling	27	4	22	1		
Two to four siblings	65	10	44	11	2.745_cNS	
Five siblings or more	22	2	17	3		
	N=118	16	86	16		
Place Where Mostly Lived						
Rural farm or ranch	92	13	65	14		
Rural non-farm	8	0	8	0		
Town	9	2	6	1		
Small city	2	0	2	0	3.826_cNS	
Medium-sized city	2	0	2	0		
Large city	4	1	3	0		
Metropolis	0	0	0	0		
	N=117	16	85	16		

TABLE XXXVIII Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	0	2	0	4.091_c*	.5017
$8000 to $8999	8	0	7	1		
$9000 or above	26	1	13	12		
	N= 36	1	22	13		
Father's Occupation						
Professional	7	3	4	0		
Managerial, technical, official, farmer	74	9	50	15		
Clerical or salesman	1	0	1	0	6.304_cNS	
Skilled worker	17	2	14	1		
Semi-skilled worker	11	1	10	0		
Unskilled worker	2	0	2	0		
Other	5	1	4	0		
	N=117	16	85	16		
Father's Education						
College graduate	2	0	1	1		
Attd. college for 1 or more years	15	2	12	1	13.661_cNS	
High School graduate	32	4	27	1		
Attd. high school for 1 or more years	28	2	17	9		
Elementary school grad.	23	2	17	4		
Attd. elementary school for 1 year or more	18	4	13	1		
	N=118	14	87	17		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

personnel and their age ($r = +.4190$; $P < .01$). The correlation-coefficient indicated a high degree of relationship between the variables, intellectual efficiency and age of the subjects.

To determine the strength of the relationship between intellectual efficiency and size of family of the subjects, a test of corrected coefficient of contingency was made. The test indicated moderately strong relationship between the variables. The remaining of the socio-economic variables of the student teaching personnel were found to be non-significant at the .05 level. However, large chi-square value was observed in connection with the variable, father's education. On further examination of the data, it was found that the teachers whose fathers had college education scored higher on the personality trait, intellectual efficiency, than the teachers whose fathers did not attend college.

On the basis of the data shown in Table XXXVII and XXXVIII, the investigator failed to reject the null hypothesis of no significant difference between the personality trait, intellectual efficiency, and the professional and socio-economic related variables of the student teaching personnel except for the variables, namely, present title, participation in high school FFA, participation in collegiate extra-curricular programs, formal education, age, and size of family.

Psychological-Mindedness*. The trait, psychological-mindedness,

*High Scores Tend to be Seen as: Observant, spontaneous, quick, perceptive, talkative, resourceful, and changeable; as being verbally fluent and socially ascendant; and as being rebellious toward rules, restrictions, and constraints.

Low Scores Tend to be Seen as: Apathetic, peaceable, serious, cautious, and unassuming; as being slow and deliberate in tempo; and as being overly conforming and conventional.

measures the degree to which the individual is interested in,as well as responsive to, the inner needs, motive, and experiences of others.

Psychological-Mindedness and Professional Related Variables

The data presented in Table XXXIX show the relationship between the trait, psychological-mindedness and the professional related variables of the student teaching personnel.

On examination of the data, it reveals that there were significant differences between the observed and the expected frequencies for the variables, present title ($X^2 = 7.79$; $P < .05$); participation in collegiate extra-curricular programs ($X^2 = 13.43$; $P < .01$); and formal education ($X^2 = 12.70$; $P < .05$) of the student teaching personnel. This indicated interrelationships between the personality trait, psychological-mindedness and the three professional related variables namely, present title, participation in collegiate extra-curricular programs, and formal education of the student teaching personnel. In order to determine the strength of these relationships, corrected coefficients of contingency were calculated in each of the three cases. The corrected coefficients of contingency indicated high degree of relationships between the variables, psychological-mindedness and present title ($\bar{C} = .3631$), psychological-mindedness and participation in collegeiate extra-curricular programs ($\bar{C} = .4333$), and psychological-mindedness and formal education ($\bar{C} = .4258$) of the student teaching personnel.

On further examination of the data, it appeared that the cooperating teachers, percentage-wise, scored higher than the student teachers on the trait, psychological-mindedness. This indicates that the cooperating teachers were found to be more interested and responsive

TABLE XXXIX

RELATIONSHIP OF PERSONALITY TRAIT PSYCHOLOGICAL-MINDEDNESS TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Present Title						
Student teacher	80	12	61	7	7.790*	.3631
Coop. teacher	38	2	26	10		
	N=118	14	87	17		
Participation in High School FFA						
President or officer	82	12	58	12		
Member	21	2	17	2	3.411NS	
Not participated	15	0	12	3		
	N=118	14	87	17		
Participation in High School Extra-Curricular Programs						
President or officer	43	7	26	10		
Member	28	2	22	4	7.390NS	
Not participated	47	5	39	3		
	N=118	14	87	17		
Participation in Collegiate FFA						
President or officer	16	3	10	3		
Member	80	9	61	10	1.830NS	
Not participated	21	2	15	4		
	N=117	14	86	17		
Participation in Collegiate Extra-Curricular Programs						
President or officer	29	2	17	10		
Member	35	5	26	4	13.435**	.4333
Not participated	54	7	44	3		
	N=118	14	87	17		
Formal Education						
College senior	80	12	61	7		
Bachelor degree	1	0	0	1		
Bachelor with addl. work	12	0	10	2	12.705*$_c$	.4258
Master degree	8	1	6	1		
Master with addl. work	15	0	9	6		
	N=116	13	86	17		
Membership in Professional Organization						
One organization	35	1	25	9		
More than one organization	0	0	0	0	0.0$_c$NS	
No organization	0	0	0	0		
	N=35	1	25	9		

TABLE XXXIX Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching Vo. Ag.						
Less than 1 year	0	0	0	0		
1 to 9 years	10	0	8	3		
10 to 19 years	16	1	11	4	0.110_cNS	
20 to 29 years	10	0	7	3		
30 years or above	0	0	0	0		
	N= 36	1	25	10		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

to the needs of others than the student teachers.

Psychological-Mindedness and Socio-economic Related Variables

The data presented in Table XL show the relationship between the trait, psychological-mindedness and the socio-economic related variables of the student teaching personnel.

On examination of the data, it was noticed that there was no significant relationship between the variable, age and the personality trait, psychological-mindedness of the student teaching personnel. Similar result was observed in all the socio-economic related variables of the student teaching personnel except for the variable, marital status ($X^2 = 8.56$; $P < .05$). The corrected coefficient of contingency ($\bar{C} = .3794$) indicated moderately strong relationship between psychological-mindedness and marital status of the subjects.

On further examination of the data, it was found that the married teachers scored higher than the unmarried ones on the personality trait, psychological-mindedness. Thus, the married teachers were found to be more socially ascendant and accepted than the unmarried ones.

On the basis of the data shown in Table XXXIX and XL, the investigator failed to reject the null hypothesis of no significant difference between the trait, psychological-mindedness and the professional and socio-economic variables of the student teaching personnel except for the variables, present title, participation in collegiate extra-curricular programs, formal education, and marital status.

TABLE XL

RELATIONSHIP OF PERSONALITY TRAIT PSYCHOLOGICAL-MINDEDNESS TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Age						
Less than 20 years	0	0	0	0		
20 to 29 years	72	12	53	7		
30 to 39 years	11	0	10	1		
40 to 49 years	8	0	7	1	9.169_c^{NS}	+0.3393**
50 to 59 years	6	1	3	2		
60 years or above	21	1	14	6		
	N=118	14	87	17		
Marital Status						
Single	30	8	19	3		
Married	88	6	68	14	8.560_c^{*}	.3794
Other	0	0	0	0		
	N=118	14	87	17		
Size of Family						
No child	32	3	24	5		
1 child	21	1	17	3	6.687NS	
2 children	16	1	15	0		
3 children or more	20	1	13	6		
	N= 89	6	69	14		
Birth Order						
First-born	45	8	32	5		
Second-born	29	3	19	7		
Third-born	19	2	15	2	5.747_c^{NS}	
Fourth-born	7	0	6	1		
Fifth-born or later	17	1	14	2		
	N=117	14	86	17		
Sibling						
No sibling	4	2	2	0		
One sibling	27	4	18	5		
Two to four siblings	65	7	47	11	5.614_c^{NS}	
Five siblings or more	22	1	20	1		
	N=118	14	87	17		
Place Where Mostly Lived						
Rural farm or ranch	92	10	71	11		
Rural non-farm	8	2	5	1		
Town	9	2	5	2		
Small city	2	0	1	1	3.183_c^{NS}	
Medium-sized city	2	0	1	1		
Large city	4	0	3	1		
Metropolis	0	0	0	0		
	N=117	14	86	17		

TABLE XL Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	0	1	1	0.034_cNS	
$8000 to $8999	8	0	6	2		
$9000 or above	26	1	18	7		
	N= 36	1	25	10		
Father's Occupation						
Professional	7	0	7	0		
Managerial, technical, official, farmer	74	8	53	13		
Clerical or salesman	1	0	1	0	3.083_cNS	
Skilled worker	17	4	12	1		
Semi-skilled worker	11	1	9	1		
Unskilled worker	2	0	1	1		
Other	5	1	3	1		
	N=117	14	86	17		
Father's Education						
College graduate	2	0	2	0		
Attd. college for 1 or more years	15	3	10	2		
High school graduate	32	4	25	3		
Attd. high school for 1 or more years	28	3	17	8	8.015_cNS	
Elementary school grad.	23	3	17	3		
Attd. elementary school for 1 or more years	18	1	16	1		
	N=118	14	87	17		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

Flexibility*. The trait, flexibility, indicates the degree of flexibility and adaptability of a person's thinking and social behavior.

Flexibility and Professional Related Variables

The data presented in Table XLI show the relationship between the personality trait, flexibility, and the professional related variables of the student teaching personnel.

On examination of the data in Table XLI indicates that no variable had any significant relationship with the personality trait, flexibility. It means that the differences between the observed and the expected frequencies in all the professional related variables, supported the null hypothesis of no significant relationship.

On further examination of the data, it appeared that about 86 percent of the student teachers scored medium and high scores compared to about 81 percent of the cooperating teachers. Thus, the student teachers scored slightly higher than the cooperating teachers on the trait flexibility. The lower score on flexibility indicates that the cooperating teachers were found to be more formal, guarded, methodical, and rigid than the student teachers though not to a significant extent.

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*High Scores Tend to be Seen as: Insightful, informal, adventurous, confident, humorous, idealistic, assertive, and egoistic; as being sarcastic and cynical; and as highly concerned with personal pleasure and diversion.

Low Scores Tend to be Seen as: Deliberate, cautious, worrying, industrious, guarded, mannerly, methodical and rigid; as being formal and pedantic in thought; and as being overly differential to authority, custom and tradition.

TABLE XLI

RELATIONSHIP OF PERSONALITY TRAIT FLEXIBILITY TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Present Title						
Student teacher	80	11	55	14	1.339NS	
Coop. teacher	38	7	22	9		
	N=118	18	77	23		
Participation in High School FFA						
President or officer	82	13	51	18		
Member	21	2	16	3	2.038NS	
Not participated	15	3	10	2		
	N=118	18	77	23		
Participation in High School Extra-Curricular Programs						
President or officer	43	7	30	6		
Member	28	5	16	7	1.954NS	
Not participated	47	6	31	10		
	N=118	18	77	23		
Participation in Collegiate FFA						
President or officer	16	4	9	3		
Member	80	14	51	15	5.262NS	
Not participated	21	0	16	5		
	N=117	18	76	23		
Participation in Collegiate Extra-Curricular Programs						
President or officer	29	5	20	4		
Member	35	7	21	7	2.119NS	
Not participated	54	6	36	12		
	N=118	18	77	23		
Formal Education						
College senior	80	11	55	14		
Bachelor degree	1	0	0	1		
Bachelor with addl. work	12	1	9	2	7.428NS	
Master degree	8	3	2	3		
Master with addl. work	15	3	10	2		
	N=116	18	76	22		
Membership in Professional Organization						
One organization	35	6	21	8		
More than one organization	0	0	0	0	0.0NS	
No organization	0	0	0	0		
	N= 35	6	21	8		

TABLE XLI Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching Vo. Ag.						
Less than 1 year	0	0	0	0		
1 to 9 years	10	2	6	2	0.559_c^{NS}	
10 to 19 years	16	3	10	3		
20 to 20 years	10	2	5	3		
30 years or above	0	0	0	0		
	N= 36	7	21	8		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

Flexibility and Scio-economic Related Variables

The data presented in Table XLII show the relationship between the trait, flexibility and the socio-economic related variables of the student teaching personnel.

On examination of the data in Table XLII, it appears that no socio-economic related variable of the student teaching personnel was found to be significantly related to their personality trait, flexibility except the variable, father's education (X^2 -20.57; P <.01). The large chi-square value of the variables, flexibility and father's education yielded a fairly large amount of corrected coefficient of contingency ($\bar{C}$ = .4756). This indicated moderately strong relationship between the two variables, flexibility and father's education.

On further examination of the data in connection with the variable, father's education, it was found that the teachers whose fathers had 1 year or more high school education or high school graduate scored higher on the trait, flexibility, than the teachers whose fathers had either lower or higher than high school education.

On the basis of the data shown in Table XLI and XLII, the investigator failed to reject the null hypothesis of no significant difference between the trait, flexibility, and the professional and socio-economic related variables of the student teaching personnel except for the variable, father's education.

TABLE XLII

RELATIONSHIP OF PERSONALITY TRAIT FLEXIBILITY TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Age						
Less than 20 years	0	0	0	0		
20 to 29 years	72	10	49	13		
30 to 39 years	11	2	6	3		
40 to 49 years	8	1	6	1	1.121 $_c$NS	-0.0498
50 to 59 years	6	1	3	2		
60 years or above	21	4	13	4		
	N=118	18	77	23		
Marital Status						
Single	30	4	21	5		
Married	88	14	56	18	0.400 $_c$NS	
Other	0	0	0	0		
	N=118	18	77	23		
Size of Family						
No child	32	5	23	4		
1 child	21	3	10	8	10.982NS	
2 children	16	4	12	0		
3 children or more	20	3	11	6		
	N=89	15	56	18		
Birth Order						
First-born	45	9	28	8		
Second-born	29	6	17	6		
Third-born	19	1	14	4	4.351NS	
Fourth-born	7	1	5	1		
Fifth-born or later	17	1	12	4		
	N=117	18	76	23		
Sibling						
No sibling	4	0	3	1		
One sibling	27	6	17	4		
Two to four siblings	65	11	42	12	3.048 $_c$NS	
Five siblings or more	22	1	15	6		
	N=118	18	77	23		
Place Where Mostly Lived						
Rural farm or ranch	92	17	60	15		
Rural non-farm	8	0	7	1		
Town	9	1	5	3		
Small city	2	0	1	1	6.846 $_c$NS	
Medium-sized city	2	0	1	1		
Large city	4	0	3	1		
Metropolis	0	0	0	0		
	N=117	18	77	22		

TABLE XLII Continued

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	0	0	2	0.543_c NS	
$8000 to $8999	8	2	5	1		
$9000 or above	26	5	16	5		
	N=36	7	21	8		
Father's Occupation						
Professional	7	0	6	1		
Managerial, technical official, farmer	74	9	50	15		
Clerical or salesman	1	0	1	0		
Skilled worker	17	5	10	2	7.963_c NS	
Semi-skilled worker	11	2	5	4		
Unskilled worker	2	1	1	0		
Other	5	1	3	1		
	N=117	18	76	23		
Father's Education						
College graduate	2	0	2	0		
Attd. college for 1 or more years	15	4	8	3		
High School graduate	32	2	23	7		
Attd. high school for 1 or more years	28	1	16	11	20.575_c**	.4756
Elementary school grad.	23	7	16	0		
Attd. elementary school for 1 year or more	18	4	12	2		
	N=118	18	77	23		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
$_c$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

Femininity*. The trait, femininity, assesses the masculinity or femininity of interests. High scores indicate more feminine interests, low scores more masculine.

Femininity and Professional Related Variables

The data presented in Table XLIII show the relationship between the trait, femininity, and the professional related variables of the student teaching personnel.

The data in Table XLIII indicates that there was no significant relationship between the personality trait, femininity, and the professional related variables of the student teaching personnel except for the variable, present title, of the subjects (X^2 =7.20; P .05). The corrected coefficient of contingency ($\bar{C}$ = .3498) indicated moderately strong relationship between the variable, femininity, and present title, of the student teaching personnel. The student teachers scored relatively lower on the trait, femininity, compared to the cooperating teachers. This indicates that the student teachers were found to be more out-going, ambitious, and masculine in character.

Femininity and Socio-economic Related Variables

The data presented in Table XLIV show the relationship between the trait, femininity, and the socio-economic related variables of the

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*High Scores Tend to be Seen as: Appreciative, patient, helpful, gentle, moderate, persevering, and sincere; as being respectful and accepting of others; and as behaving in a conscientious and sympathetic way.

Low Scores Tend to be Seen as: Outgoing, hard-headed, ambitious, masculine, active, robust, and restless; as being manipulative and opportunistic in dealing with others, blunt and direct in thinking and action; and impatient with delay, indecision and reflection.

TABLE XLIII

RELATIONSHIP OF PERSONALITY TRAIT FEMININITY TO PROFESSIONAL RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained Low	Medium	High	X^2	$\bar{C}$ or r
Present Title						
Student teacher	80	15	55	10	7.202*	.3498
Coop. teacher	38	2	25	11		
	N=118	17	80	21		
Participation in High School FFA						
President or officer	82	16	54	12		
Member	21	0	17	4	8.362NS	
Not participated	15	1	9	5		
	N=118	17	80	21		
Participation in High School Extra-Curricular Programs						
President or officer	43	4	31	8		
Member	28	4	19	5	1.769NS	
Not participated	47	9	30	8		
	N=118	17	80	21		
Participation in Collegiate FFA						
President or officer	16	3	10	3		
Member	80	12	52	16	2.290NS	
Not participated	21	2	17	2		
	N=117	17	79	21		
Participation in Collegiate Extra-Curricular Programs						
President or officer	29	3	19	7		
Member	35	5	25	5	1.560NS	
Not participated	54	9	36	9		
	N=118	17	80	21		
Formal Education						
College senior	80	15	55	10		
Bachelor degree	1	0	0	1		
Bachelor with addl. work	12	1	10	1	9.831NS	
Master degree	8	1	6	1	$_c$	
Master with addl. work	15	0	9	6		
	N=116	17	80	19		
Membership in Professional Organization						
One organization	35	2	24	9		
More than one organization	0	0	0	0	0.0NS	
No organization	0	0	0	0		
	N= 35	2	24	9		

TABLE XLIII Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Tenure in Teaching Vo. Ag.						
Less than 1 year	0	0	0	0		
1 to 9 years	10	1	7	2		
10 to 19 years	16	0	12	4	0.266_c^{NS}	
20 to 29 years	10	1	6	3		
30 years or above	0	0	0	0		
	N= 36	2	25	9		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
c = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

student teaching personnel.

The data shown in Table XLIV indicates that there was no significant relationship between the trait, femininity, and the socio-economic variables except for the variables namely, age (X^2 =12.81; P$\angle$.05), and marital status (X^2 =6.06; P$\angle$.05). The degree of relationship between the trait, femininity, and the variable age of the teachers was determined by the correlation-coefficient (r = +.2310; P$\angle$.05).

Similarly, the degree of relationship between the trait femininity and the variable, marital status, was determined by the corrected coefficient of contingency ($\bar{C}$ = .3227).

On the basis of the data presented in Table XLIII and XLIV, the investigator failed to reject the null hypothesis of no significant difference between the trait, femininity, and the professional and socio-economic related variables of the student teaching personnel except for the variables, present title, age, and marital status.

Performance of the Two Groups of Student Teaching Personnel on the CPI Traits

To determine the significance of difference between the performance of the two groups of teaching personnel on the CPI traits, their mean responses were entered in Table XLV and subsequently t values were calculated on each of the CPI traits.

In order to test the hypothesis number three that there is no significant difference between the performance of the two groups of teaching personnel on any of the CPI traits, one tailed-tests of significance of difference were conducted and the t values were found to be highly significant in traits Do, Cs, Wb, Re, Sc, To, Gi, Ac, Ai,

TABLE XLIV

RELATIONSHIP OF PERSONALITY TRAIT FEMININITY TO SOCIO-ECONOMIC RELATED VARIABLES OF VO. AG. STUDENT TEACHING PERSONNEL

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Age						
Less than 20 years	0	0	0	0		
20 to 29 years	72	15	48	9		
30 to 39 years	11	1	8	2	12.815_c*	+0.2310*
40 to 49 years	8	0	7	1		
50 to 59 years	6	0	5	1		
60 years or above	21	1	12	8		
	N=118	17	80	21		
Marital Status						
Single	30	6	23	1		
Married	88	11	57	20	6.068_c*	.3227
Other	0	0	0	0		
	N=118	17	80	21		
Size of Family						
No child	32	8	19	5		
1 child	21	1	14	6		
2 children	16	1	10	5	8.581NS	
3 children or more	20	1	15	4		
	N= 89	11	58	20		
Birth Order						
First-born	45	7	30	8		
Second-born	29	6	19	4		
Third-born	19	2	13	4	2.667NS	
Fourth-born	7	1	5	1		
Fifth-born or later	17	1	12	4		
	N=117	17	79	21		
Sibling						
No sibling	4	1	2	1		
One sibling	27	5	19	3	1.706_cNS	
Two to four siblings	65	9	44	12		
Five siblings or more	22	2	15	5		
	N=118	17	80	21		
Place Where Mostly Lived						
Rural farm or ranch	92	13	63	16		
Rural non-farm	8	3	5	0		
Town	9	0	7	2		
Small city	2	0	1	1	6.246_cNS	
Medium-sized city	2	1	1	0		
Large city	4	0	3	1		
Metropolis	0	0	0	0		
	N=117	17	80	20		

TABLE XLIV Continued

Variables	N	Scores Obtained			X^2	$\bar{C}$ or r
		Low	Medium	High		
Income						
Less than $6000	0	0	0	0		
$6000 to $6999	0	0	0	0		
$7000 to $7999	2	1	1	0	1.66_c	NS
$8000 to $8999	8	0	7	1		
$9000 or above	26	1	17	8		
	N= 36	2	25	9		
Father's Occupation						
Professional	7	1	4	2		
Managerial, technical official, farmer	74	8	50	16		
Clerical or salesman	1	0	1	0		
Skilled worker	17	5	10	2	6.79_c	NS
Semi-skilled worker	11	2	8	1		
Unskilled worker	2	0	2	0		
Other	5	1	4	0		
	N=117	17	79	21		
Father's Education						
College graduate	2	0	1	1		
Attd. college for 1 year or more	15	4	9	2		
High school graduate	32	4	21	7		
Attd. high school for 1 year or more	28	4	18	6	3.59_c	NS
Elementary school grad.	23	2	18	3		
Attd. elementary school for 1 year or more	18	3	13	2		
	N=118	17	80	21		

** = significant at the .01 level;
* = significant at the .05 level;
NS = not significant;
$_c$ = chi-square value of the collapsed contingency table;
$\bar{C}$ = corrected coefficient contingency;
r = correlation coefficient.

TABLE XLV

MEAN SCORES OF THE TWO GROUPS OF VO. AG. STUDENT TEACHING PERSONNEL ON THE CPI SCALES AND T-VALUES

CPI Traits	Student Teachers N=80	Cooperating Teachers N=38	df	p	t	Observation
Dominance	27.7625	31.2632	116	.01	3.3694	**
Capacity for Status	17.3375	19.5526	116	.01	3.1399	**
Sociability	24.2625	26.1316	116	.05	2.2202	*
Social Presence	34.8250	33.6842	116	.05	1.0168	NS
Self-Acceptance	21.9750	21.1842	116	.05	1.1715	NS
Sense of Well-Being	36.4750	40.0263	116	.01	4.1344	**
Responsibility	28.2000	33.9737	116	.01	6.8716	**
Socialization	38.7875	40.4474	116	.05	1.7395	*
Self-Control	28.8000	36.1579	116	.01	5.5314	**
Tolerance	21.2625	25.1053	116	.01	4.4434	**
Good Impression	16.9000	21.2632	116	.01	3.6473	**
Communality	26.0875	26.6053	116	.05	1.3410	NS
Achievement via Conformance	26.6625	32.0789	116	.01	6.4178	**
Achievement via Independence	17.6000	20.6316	116	.01	4.6911	**
Intellectual Efficiency	36.3625	40.3684	116	.01	4.7017	**
Psychological-Mindedness	10.7875	12.6842	116	.01	4.3293	**
Flexibility	8.7250	8.1842	116	.05	0.8369	NS
Femininity	15.0125	16.8158	116	.01	3.1479	**

* = significant at the .05 level.
** = significant at the .01 level.
NS = not significant.

le, Py and Fe at the .01 level of probability. Similarly, the t-values were found to be significant in traits Sy and So at the .05 level of probability. However, the t-values were found to be significant in traits Sp, Sa, Cm, and Fx even at the .05 level of probability. Thus, the null hypothesis was retained for the traits Sp, Sa, Cm, and Fx. This means that both the groups of teachers were found to be functioning at the same rate of capacity for independent thinking and action; of poise, spontaniety, and self-confidence in personal and social interaction; of understanding of group norms and behavior; and, of flexibility and adaptability of persons' thinking and social behavior.

The cooperating teachers were found to be functioning at a superior level than those of the student teachers in traits Do, Cs, Wb, Re, Sc, To, Gi, Ac, Ai, and Py. Thus, the investigator concluded that the cooperating teachers were found to be more effective in leadership ability, social interaction, and dependable disposition, self-regulation and control, intellectual achievements, and in understanding the psychological problems in behavior modification than those of the student teachers. However, the student teachers were found to be significantly different from those of the cooperating teachers in trait Fe. This means that the student teachers were found to be more outgoing, restless, ambitious, and masculine in character than those of the cooperating teachers.

Personality Test Scores and Academic Achievements

It was stated in Chapter I that one of the purposes of this study was to determine the validity coefficients of correlation between the test scores and the criterion, academic achievements (grade point

averages) of the student teaching personnel.

The grade point averages of all the subjects during their entire undergraduate degree programs were collected from the Office of the Registrar, Oklahoma State University, and carefully matched with their personality test scores to calculate product moment coefficients of correlation.

Data presented in Table XLIV show the relationships between the test scores and the grade point averages of the student teachers included in the study. It appears from analysis of data that varying degrees of relationships existed between the personality test scores and the grade point averages of the student teachers.

On further examination of the data, it was found that almost zero degree of relationship existed between the grade point averages and the test scores on capacity for status; and as well with the test scores on psychological-mindedness. Some degree of relationship was detected between the grade point averages of the student teachers and their test scores on dominance, sociability, social-acceptance, social-control, tolerance, communality, achievement via conformance, intellectual efficiency, flexibility and femininity. A closer relationship was detected between the grade point averages and the test scores on the traits, social presence, sense of well-being, responsibility, good impression, and achievement via independence. However, none of the relationships shown in Table XLVI was found to be statistically significant except for the test scores on socialization($r = .2383$; $P < .05$). A negative relationship, however, existed between the grade point averages and the test scores on the traits, sociability, social presence, sense of well-being, social control, good impression, and

TABLE XLVI

RELATIONSHIP OF PERSONALITY TRAITS TO ACADEMIC ACHIEVEMENTS OF VO. AG. STUDENT TEACHERS

Personality Traits	Coefficient of Correlation N=80
Dominance	0.0507
Capacity for Status	0.0098
Sociability	-0.0187
Social Presence	-0.1269
Self-Acceptance	0.0898
Sense of Well-Being	-0.1669
Responsibility	0.1531
Socialization	0.2383*
Self-Control	-0.0179
Tolerance	0.0573
Good Impression	-0.2199
Communality	-0.0120
Achievement via Conformance	0.0810
Achievement via Independence	0.1585
Intellectual Efficiency	0.0611
Psychological-Mindedness	-0.0084
Flexibility	0.0369
Femininity	0.0340

*Statistically significant at the .05 level.

psychological-mindedness.

On the basis of the study, it was inferred that the student teachers who were found to be socially matured, industrious, steady, honest, and conscientious, achieved the higher grades.

Data presented in Table XLVII show the relationship between the personality test scores and the grade point averages of the cooperating teachers.

Data in Table XLVII confirm that varying degrees of relationship existed between the grade point averages and the test scores of the cooperating teachers. Statistically significant negative relationships were detected between the grade point averages and the test scores on the traits, capacity for status ($r = -.04332$; $P < .01$), and flexibility ($r = -.03071$; $P < .05$). Though the relationship between grade point averages and test scores on the trait, femininity was not statistically significant yet substantial negative relationship was detected between the variables.

Certain facets of the study revealed that cooperating teachers who scored low on the traits, capacity for status and flexibility, were found to also earn high grade points. In other words, cooperating teachers who earned high grade points in their undergraduate degree programs were found to be mild, shy, restricted in new social situations but mostly guarded, methodical, and mannerly. Though statistically not significant, an amount of positive relationship was detected between the grade point averages of the cooperating teachers and their test scores on the traits, dominance, sense of well-being, social control, achievement via conformance, and psychological-mindedness. A substantial amount of negative relationship existed between the grade point

TABLE XLVII

RELATIONSHIP OF PERSONALITY TRAITS TO ACADEMIC ACHIEVEMENTS OF VO. AG. COOPERATING TEACHERS

Personality Traits	Coefficient of Correlation N=38
Dominance	0.1302
Capacity for Status	-0.4332**
Sociability	-0.0679
Social Presence	-0.0373
Self-Acceptance	-0.1953
Sense of Well-Being	0.1408
Responsibility	-0.0923
Socialization	-0.1110
Self-Control	0.1012
Tolerance	0.0124
Good Impression	0.0652
Communality	0.0226
Achievement via Conformance	0.1178
Achievement via Independence	-0.0202
Intellectual Efficiency	-0.0192
Psychological-Mindedness	0.1465
Flexibility	-0.3540*
Femininity	-0.3071

*Statistically significant at the .05 level;
**Statistically significant at the .01 level.

averages of the cooperating teachers and their test scores on the trait femininity. This indicates that the cooperating teachers who were identified as outgoing, ambitious, active and opportunistic in dealing with other, had a tendency to earn somewhat higher grade points.

Data presented in Table XLVIII show the relationship between the grade point averages and the test scores of all the student teaching personnel. These data indicate that there existed a few statistically significant relationships between the grade point averages and test scores of the student teaching personnel. A positive and statistically significant relationship was observed between the grade point averages of the student teaching personnel and their test scores on the trait, responsibility ($r = +0.2049$; $P < .05$). Similar statistically significant relationships were observed between the grade point averages of the student teaching personnel and their test scores on the traits, socialization ($r = +0.1923$; $P < .05$); achievement via conformance ($r = +0.1930$; $P < .05$); and achievement via independence ($r = +0.1918$; $P < .05$). This indicates that the student teaching personnel who scored high in the CPI traits, responsibility, socialization, achievement via conformance and achievement via independence, also scored high in academic performance. A meaningful amount of relationship, though not statistically significant, was observed between the grade point averages of the student teaching personnel and their test scores on the traits, dominance, social presence, social control, tolerance, intellectual efficiency, psychological-mindedness, and flexibility.

On further examination of data shown in Table XLVIII, it was revealed that a negative relationship existed between the grade point averages of the subjects and their test scores on the trait, flexibility.

TABLE XLVIII

RELATIONSHIP OF PERSONALITY TRAITS TO ACADEMIC ACHIEVEMENTS OF VO. AG. STUDENT TEACHING PERSONNEL

Personality Traits	Coefficient of Correlation N=118
Dominance	0.1349
Capacity for Status	-0.0387
Sociability	0.0172
Social Presence	-0.1192
Self-Acceptance	-0.0069
Sense of Well-Being	-0.0083
Responsibility	0.2049*
Socialization	0.1923*
Self-Control	0.1196
Tolerance	0.1291
Good Impression	-0.0521
Communality	0.0260
Achievement via Conformance	0.1930*
Achievement via Independence	0.1918*
Intellectual Efficiency	0.1304
Psychological-Mindedness	0.1209
Flexibility	-0.1145
Femininity	0.0070

*Statistically significant at the .05 level.

Similar negative relationship was observed between the grade point averages and the test scores on the traits, capacity for status, social presence, social acceptance, sense of well-being, and good impression. However, none of the negative relationships was statistically significant. Almost zero relationship was discovered between grade point averages and test scores on the trait, femininity.

The correlation-coefficients shown in Table XLVI, XLVII, and XLVIII are known as Validity Coefficients or may be called Concurrent Validity Coefficients. Though the question of grade point averages of the cooperating teachers did not exactly fit the concurrent situation, it was the best available criterion that could be considered along with that of the student teachers.

On the basis of data shown in Table XLVIII, the investigation failed to reject the null hypothesis of no significant relationship between the academic achievements and the test scores of the student teaching personnel except for the traits, responsibility, social control, achievement via conformance, and achievement via independence. In drawing such a conclusion, the investigator acknowledges the assertion that the validity of any test is a relative concept. The test user must have a concept of what psychological function the test actually measures and accordingly should judge the relevance of such functions to the propsed use to which he aspires to put the test.

To use the CPI as a predictor test to the scholastic ability of the student teaching personnel, the investigator suggests that the prospective test users concentrate on test scales listed in the CPI Class III.

Out of three variables in the CPI Class III, two of them were

found to be statistically significant to maintain relationships with grade point averages of student teaching personnel. The third one, intellectual efficiency, though not found statistically significant, yielded an appreciable amount of positive relationship to grade point averages of the student teaching personnel.

Inter-Trait Associations of the Personality Traits

It was one of the purposes of the study to determine the inter-trait associations of the personality traits of the student teaching personnel as measured by the CPI scales.

Data presented in Table XLIX show the inter-trait associations of the personality traits of the student teaching personnel.

On examination of the data, it appears that the inter-trait associations of dominance to capacity for status; and to sociability; and to social presence; and to self-acceptance; and to responsibility; and to tolerance; and to achievement via conformance; and to psychological-mindedness were found to be statistically significant at the .01 level. Similarly, the inter-trait associations between dominance and sense of well-being; dominance and socialization; dominance and communality; and dominance and intellectual efficiency were found to be statistically significant at the .05 level. The inter-trait relationships between dominance and self-control; dominance and good impression; dominance and flexibility; and dominance and femininity were found to be not statistically significant.

The trait, capacity for status was found to be significantly correlated with all the traits except for the traits, socialization, communality, and femininity. Similarly, the trait, sociability was

found to be not significantly correlated with socialization, self-control communality, and flexibility. The trait, femininity was found to be not significantly correlated with any of the traits except for the traits, sociability, social presence, responsibility, and social control. Similarly, the trait, communality, was not found to be significantly correlated with fourteen traits. The trait, intellectual efficiency was found to be significantly correlated with all traits except for the traits, communality, and femininity.

It was also observed that Ac was found to be correlated with Ai, +0.5080; and with Ie, +0.6879. Ai was found to be correlated with Ie, +0.5288. Therefore, Ac, Ai and Ie were found to be measuring something in common of the student teaching personnel.

Similarly, Py was found to be correlated with Fx, +0.0646; and with Fe, +0.0898. None of the intercorrelations of the CPI Class IV was found to be statistically significant. They were found to be relatively independent than the other traits of the CPI.

Out of the 153 intercorrelation-coefficients, 97 were found to be statistically significant. The intercorrelation-coefficients ranged from -0.3643 to +0.7992. Data shown in Table XLIX largely supported the CPI cluster-system.

The investigator, based on the data shown in Table XLIX, rejected the null hypothesis of no significant inter-trait relationship among the personality traits of the student teaching personnel except for the 56 intercorrelations-coefficients out of 153.

TABLE XLIX

INTERCORRELATION OF PERSONALITY TRAITS OF VO. AG. STUDENT TEACHING PERSONNEL AS MEASURED BY THE CPI SCALES (N=118)

	Do	Cs	Sy	Sp	Sa	Wb	Re	So	Sc	To	Gi	Cm	Ac	Ai	Ie	Py	Fx	Fe
Do		.5269 **	.6009 **	.3147 **	.5411 **	.2172 *	.4382 **	.2205 *	.0562 NS	.2959 **	.1136 NS	.2175 *	.4347 **	.1664 NS	.4670 *	.3054 **	-.1607 NS	-.1047 NS
Cs			.6669 **	.4599 **	.3613 **	.4337 **	.4316 **	.0523 NS	.2290 *	.5573 **	.3714 **	-.0545 NS	.4925 **	.4274 **	.6246 **	.3574 **	.2303 *	.0767 NS
Sy				.5577 **	.5691 **	.3765 **	.3910 **	.1527 NS	.0572 NS	.4161 **	.2737 **	.0051 NS	.4638 **	.2658 **	.5308 **	.3911 **	.0425 NS	-.1960 *
Sp					.4890 **	.1435 NS	-.0993 NS	-.1722 NS	-.3082 **	.1996 *	-.1414 NS	-.0224 NS	-.0224 NS	.0320 NS	.2740 **	.2613 **	.3456 **	-.3194 **
Sa						-.0892 NS	.0069 NS	-.0124 NS	-.3620 **	-.0498 NS	-.1615 NS	.1297 NS	.0519 NS	-.1140 NS	.2203 *	.0983 NS	-.0919 NS	-.1614 NS
Wb							.4188 **	.3076 **	.6940 **	.6607 **	.6545 **	.1004 NS	.6676 **	.4752 **	.6077 **	.4413 **	-.0787 NS	-.0459 NS
Re								.4765 **	.5561 **	.5439 **	.5082 **	.0508 NS	.6904 **	.5296 **	.4953 **	.3870 **	-.1051 NS	.2711 **
So									.3942 **	.1824 *	.2668 **	.2165 *	.4562 **	.1169 NS	.2637 **	.0593 NS	-.2195 *	.1610 NS
Sc										.5777 **	.7992 **	-.0311 NS	.6840 **	.5243 **	.4321 **	.3095 **	-.1723 NS	.2339 *
To											.5505 **	-.1223 NS	.6033 **	.7053 **	.6643 **	.4693 **	.2045 *	.0575 NS
Gi												.1200 NS	.6481 **	.4143 **	.3974 **	.3202 **	-.1904 *	-.1437 NS
Cm													.1294 NS	-.1639 NS	.1160 NS	.0985 NS	-.3643 **	.0363 NS
Ac														.5080 **	.6879 **	.4067 **	-.1647 NS	.1544 NS
Ai															.5288 **	.4584 **	.2143 *	.0331 NS
Ie																.4660 **	.2143 *	.0331 NS
Py																	.0646 NS	.0358 NS
Fx																		-.0898 NS
Fe																		

*Statistically significant at the .05 level; **Statistically significant at the .01 level.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

Vocational Education programs in agriculture serve society and the individual through various facets of the teaching-learning milieu. It prepares the youth for both farm and off-farm agricultural occupations. Recent changes in both production agriculture and agri-business have created a demand for different types of agricultural education programs in the public school system. This in turn, has created an increasing awareness among teacher educators of the need to prepare vocational agriculture teachers with additional emphasis on professional and social competencies. It is a considered opinion that the effectiveness of vocational agriculture programs depends not only on the technical skills of the vocational agriculture teachers but also on their developing professional and social skills; these being of maximum value in planning and implementing meaningful and relevant programs with their clientele. In a real sense, teachers of vocational education in agriculture are a group of social engineers; because they prepare the young people to be socially effective in society. Further, they are not only change agents but also constantly provide an image and an ideal for countless young people who aspire to be socially, economically and intellectually effective in society. This calls for a continued effort to appraise the personal qualities, professional competencies and social skills of

the vocational agriculture teachers including the student teachers in agriculture. In fact, this has become a growing concern to the teacher education faculty in their attempt to provide for effective management of the student teaching programs in agriculture.

Purpose of the Study

The study was undertaken in an attempt to undergird the development and further improvement of effectiveness of student teaching personnel in agriculture. The primary purpose of the study was to assess the personality traits of the Oklahoma student teaching personnel and to determine the relationships of the personality traits of these student teaching personnel to their professional and socio-economic related variables.

In order to accomplish the study, specific purposes were considered and are listed as follows:

1. To identify, compare, and discuss the personality traits of the student teaching personnel in vocational agriculture as measured by the CPI scales.

2. To determine the relationships between the personality traits of the student teaching personnel and their selected professional and socio-economic related variables.

3. To determine the differences between the personality trait scores of the cooperating teachers and those of the student teachers in vocational agriculture.

4. To determine the validity coefficients of the predictor test scores to the criterion scores, grade point averages of the student teaching personnel.

5. To determine the inter-trait relationships of the personality traits of the student teaching personnel included in the study.

Methodology

The Subjects

Subjects for this study included 43 cooperating teachers and 80 student teachers in vocational agriculture in the State of Oklahoma serving during the 1969-1970 school year. Five of the cooperating teachers failed to respond to the questionnaires in time. Therefore, the total number of the subjects to be included in the study was 118.

The Instruments

In this study three different kinds of instruments were used to collect relevent data: the personality inventory; the questionnaire "A"; and the questionnaire "B". The personality inventory used was the California Psychological Inventory (CPI) developed by Gough. The CPI instrument, designed for normal people, was used to assess the personality traits of the student teaching personnel. This instrument has a wide and pervasive applicability to behavioral study. The CPI scales measure eighteen personality traits, grouped into four broad categories, which seek to emphasize the psychological and psychometric clusterings that exist among them. The scales of CPI are principally designed to measure personality characteristics important for social living and social interaction. The CPI, a true-false test, contains 480 statements. The questionnaire "A" and the questionnaire "B" were developed by the investigator to collect data on profession and socio-economic related variables of the cooperating and the student teachers, respect-

ively. In addition, the grade point averages of the subjects for their undergraduate degree programs, were used as criterion scores to determine validity coefficients of the predictor test scores.

Hypotheses Advanced and Tested

In order to conduct the study and to achieve the objectives on the basis of statistical findings, the following null hypotheses were advanced and tested:

1. There is no significant difference in variability of the personality traits of the two groups of vocational agriculture student teaching personnel.

2. There is no significant relationship between the personality traits and the professional and socio-economic related variables of the vocational agriculture student teaching personnel.

3. There is no significant difference between the performance of the two groups of student teaching personnel on the CPI traits.

4. There is no significant relationship between the predictor test scores and the criterion scores, the grade point averages of the student teaching personnel.

5. There is no significant inter-trait relationship among the personality traits of the student teaching personnel as measured by the CPI scales.

Statistical Treatments Used

In order to make the study specific and meaningful, and also to test the null hypotheses, a few statistical indices, namely, standard deviation, coefficient of variation, Chi-square, t-ratio, product-moment

correlation-coefficient, and corrected coefficient of contingency were used by the investigator.

To measure the central tendency of the data, means and percentages were used while standard deviations and coefficients of variation were used for the measurement of the variability of the data.

The t-ratio was used to measure the significant differences between the performance of the two groups of teachers. The statistic Chi-square test was used to determine possible significant differences between the personality traits and the selected professional and socio-economic variables. Whenever a difference was found to be statistically significant, a corrected coefficient of contingency or a product-moment correlation-coefficient was calculated to measure the strength of association between the variables considering the nature of the data. The product-moment correlation-coefficients also were used to determine validity-coefficients of the predictor test scores and inter-trait relationships among the personality traits of the student teaching personnel.

Summary of Findings

It was found that the percentage of the student teaching personnel having scores average or above the CPI norms stood as follows:

> Communality, 78.81 percent; Self-acceptance, 76.27 percent; Socialization, 73.73 percent; Psychological-mindedness, 68.64 percent; Dominance, 67.80 percent; Sense of well-being, 62.71 percent; Achievement via conformance, 61.86 percent; Self-control, 56.78 percent; Sociability, 54.24 percent; Tolerance, 53.39 percent; Achievement via independence, 51.69 percent; Flexibility, 50.00 percent; Social presence, 49.15 percent; Responsibility, 49.15 percent; Good impression, 38.98 percent; Intellectual efficiency, 38.13 percent; Capacity for status, 37.29 percent; and Femininity, 36.44 percent.

The two groups of teachers, namely, the student teachers and the cooperating teachers who scored average or above the CPI norms stood as follows:

> Dominance, 60.00 percent and 84.21 percent; Capacity for status, 32.50 percent and 47.37 percent; Sociability, 47.50 percent and 68.42 percent; Social presence, 53.75 percent and 39.47 percent; Self-acceptance, 77.50 percent and 73.68 percent; Sense of well-being, 53.75 percent and 81.58 percent; Responsibility, 31.25 percent and 86.84 percent; Socialization, 66.25 percent and 89.47 percent; Self-control, 43.75 percent and 84.21 percent; Tolerance, 42.50 percent and 76.32 percent; Good impression, 30.00 percent and 57.89 percent; Communality, 77.50 percent and 81.58 percent; Achievement via conformance, 47.50 percent and 92.11 percent; Achievement via independence, 41.25 percent and 73.68 percent; Intellectual efficiency, 28.75 percent and 57.89 percent; Psychological-mindedness, 61.25 percent 84.21 percent; Flexibility, 52.50 percent and 44.74 percent; and Femininity, 28.75 percent and 52.63 percent, respectively.

The findings that the majority of the student teaching personnel scored average or above the CPI mean standard line. It is important to note, however, that the CPI norms used in this study are those fixed by the mean standard scores and recommended for college students. All the cooperating teachers included in the study had formal education beyond the Bachelor's degree. The student teachers were graduating seniors when the CPI test was given to them. Notwithstanding, the following percentages of the student teaching personnel were found to be scoring below the CPI norms:

> Communality, 21.19 percent; Self-acceptance, 23.73 percent; Socialization, 26.27 percent; Psychological-mindedness, 31.36 percent; Dominance, 32.20 percent; Sense of well-being, 37.29 percent; Achievement via conformance, 38.14 percent; Self-control, 43.22 percent; Sociability, 45.76 percent; Tolerance, 46.61 percent; Achievement via independence, 48.31 percent; Flexibility, 50.00 percent; Social presence, 50.85 percent; Responsibility, 50.85 percent; Intellectual efficiency, 61.87 percent; Capacity for status, 62.71 percent; and Femininity, 63.56 percent.

These findings clearly support the propriety of the original questions raised in the study relative to the need for additional professional training of the student teaching personnel in vocational agriculture.

Based on the above findings, the investigator concluded that an apprisal of the personality traits of the student teaching personnel at regular intervals would enable the Agricultural Education Department and the teacher education administration to better organize teacher education programs for professional improvement of the student teaching personnel.

Hypothesis Number One

In order to test the hypothesis of no significant difference in variability of the personality traits of the two groups of student teaching personnel, the investigator found the maximum and the minimum amount of variability in traits, sense of well-being and femininity, respectively. The relative variability of the traits for the whole group of teachers was found to be significantly different as shown in Table VII. Therefore, the investigation failed to sustain the hypothesis as such.

CPI Traits and Selected Professional and Socio-Economic Variables

The association of each of the eighteen CPI traits to each of the professional and socio-economic variables used in this study are summarized and stated as follows:

Dominance. There was a significant difference between the trait, dominance, and the title of the student teaching personnel. Significant

differences also were noticed between the trait, dominance, and the attribute, collegiate extra-curricular activity; and the attribute, formal education; and the attribute, age; and the attribute, marital status of the student teaching personnel.

The investigator concluded from the findings that the cooperating teachers who assumed more responsible positions and administrative duties, tended to exhibit better leadership abilities and initiativeness. The student teaching personnel in general, as advanced in age and also earned higher educational degrees, tended to be more confident and planful. The student teaching personnel who were married and also played leadership roles in collegiate extra-curricular activities, tended to become more independent, persuasive and self-reliant. In contrast, the student teaching personnel who were practice teachers, younger in age and also lower in academic careers, tended to be indifferent and avoiding of situations of tension and decision.

Capacity for Status. Statistical significant differences were observed between the trait, capacity for status, and the attributes, present title; and collegiate extra-curricular activity; and formal education; and tenure in teaching vocational agriculture; and age; and marital status; and size of the family of the student teaching personnel.

The investigator, based on the findings, concluded that the student teaching personnel who had been working as cooperating teachers and had longer tenure in teaching vocational agriculture, tended to become more adept at insights, more resourceful and ascendant in interpersonal relationship. The student teaching personnel who were married and had two or more children, tended to be more ambitious and self-seeking than the teaching personnel who had none or one child. In contrast, the teachers

of younger age or single-status, tended to be restricted in outlook and interests, and also tended to be unfamiliar to most social situations.

Sociability. No statistical significant difference was observed between the trait, sociability and the professional and socio-economic related variables of the student teaching personnel.

Based on the findings, the investigator concluded that the professional and socio-economic related variables of the student teaching personnel had no differential bearing on their personality characteristics such as, outgoing, sociable, and participative temperament.

Social Presence. No statistical significant difference was observed between the trait, social presence and the professional and socio-economic related variables of the student teaching personnel except for the variable, marital status.

The investigator, based on the findings, concluded that the student teaching personnel who were married, tended to be somewhat poised and self-confident in personal and social interaction than the teaching personnel of unmarried-status. However, a slight negative correlation was found between age and social presence.

Self-Acceptance. No statistical significant difference was observed between the trait, self-acceptance, and the professional and socio-economic variables of the student teaching personnel except for the variable, participation in collegiate extra-curricular programs.

The investigator, based on the findings, concluded that the student teaching personnel who had leadership experience in collegiate extra-curricular programs, tended to be aggressive, demanding and self-confident in social behavior and intellectual endeavor. In contrast, the student teaching personnel who had no previous leadership experience,

tended to be dependent, easy-going and conservative in attitudes and interests. A slight negative correlation was observed between self-acceptance and age.

Sense of Well-Being. No statistical significant difference was observed between the variable, sense of well-being, and the professional and socio-economic related variables of the student teaching personnel except for the variables, present title, formal education, age, size of family and place where they mostly lived.

The investigator, based on the findings, concluded that the student teaching personnel who were designated as cooperating teachers, tended to be more productive and active compared to the performance of student teachers. The student teaching personnel who had graduate work experience tended to be relatively free from self-doubt and disillusionment compared to the teaching personnel who had no such experience. The student teaching personnel who had one or more children were found to be better adjusted and productive than the teachers who had none. The student teaching personnel of age thirty or above and also those who mostly lived in small cities, tended to be ambitious, energetic and enterprising.

Responsibility. No statistical significant difference was observed between the trait, responsibility, and the professional and socio-economic related variables of the student teaching personnel except for the variables, present title, participation in high school FFA, participation in high school extra-curricular programs, participation in collegiate extra-curricular programs, formal education, age, marital status, size of family and place where mostly lived.

The investigator, based on the findings, concluded that the student

teaching personnel who were designated as cooperating teachers and those who played leadership roles in school and college careers, tended to be conscientious, resourceful and efficient in dealing with their clientele. The student teaching personnel of age thirty or above and also those who had higher education tended to be more planful, responsible and progressive.

Socialization. No statistical significant difference was observed between the trait, socialization and the professional and socio-economic related variables of the student teaching personnel except for the variables, present title, marital status and place where mostly lived.

The investigator, based on the findings, concluded that the student teaching personnel who were designated as cooperating teachers and also those who had more often lived on rural farms or ranches tended to be sincere, modest and obliging. The student teaching personnel who were married, tended to be more conscientious and responsible than those of the personnel who were unmarried.

Self-Control. No statistical significant difference was observed between the trait, self-control, and the professional and socio-economic related variables of the student teaching personnel except for the variables, present title, formal education, age and marital status.

The investigator, based on the findings, concluded that the student teaching personnel who were classified as cooperating teachers and also those who had experience in graduate work, tended to be free from impulsivity and self-centeredness. The student teaching personnel of age thirty or above and also those who were married, tended to be more calm, patient, practical and thoughtful than the personnel who were of age less than thirty and also of single status.

Tolerance. No statistical significant difference was observed between the trait, tolerance and the professional and socio-economic related variables of the student teaching personnel except for the variables, present title, tenure in teaching vocational agriculture, age, income, and place where they had more likely resided.

The investigator, based on the findings, concluded that the student teaching personnel who were classified as cooperating teachers and also those who had experience of teaching vocational agriculture for ten years or more, tended to be tolerant, resourceful and persons of clear-thinking. The student teaching personnel who were identified as student teachers and also those who had teaching experience less than ten years tended to be impulsive, excitable and self-centered. The teachers who had an annual income of $9,000 (nine thousand dollars) or more, and those who had more likely lived on a farm or ranch, tended to be persons having broad and varied interests and resources.

Good Impression. No statistical significant difference was observed between the trait, good impression, and the professional and socio-economic related variables of the student teaching personnel except for the variables, present title, formal education, age and marital status.

The investigator, based on the findings, concluded that the student teaching personnel who were classified as cooperating teachers, and also those who had higher academic degrees, and of older age, tended to be more cooperative, helpful, warm and sociable. The married teaching personnel tended to be classified as persons capable of creating favorable impressions and also be concerned about others' reaction.

Communality. No statistical significant difference was observed

between the trait, communality and the professional and socio-economic related variables of the student teaching personnel.

The investigator, based on the findings, concluded that the professional and socio-economic related attributes of the student teaching personnel had no significant differential effect on the trait, communality. However, a slight positive correlation was found between communality and age of the teachers.

Achievement via Conformance. No statistical significant difference was observed between the trait, achievement via conformance and the professional and socio-economic related variables of the student teaching personnel except for the variables, present title, formal education, age, marital status, and size of family.

On the basis of the findings, the investigator concluded that the student teaching personnel who were classified as cooperating teachers and also those who were married and of age forty or above, tended to be efficient, organized and cooperative. The teaching personnel who had higher academic degrees tended to be persistent and industrious. The teachers who had two or more children tended to be more responsible than the teachers who had one or none.

Achievement via Independence. No statistical significant difference was observed between the trait, achievement via independence, and the professional and socio-economic related variables of the student teaching personnel except for the variables, present title, formal education, age, and marital status.

The investigator, based on the findings, concluded that the student teaching personnel who had higher academic degrees and also those who were married, and of age forty or above, tended to be forceful, strong,

dominant, and superior in intellectual ability and judgment.

Intellectual Efficiency. No statistical significant difference was observed between the trait, intellectual efficiency and the professional and socio-economic related variables of the student teaching personnel except for the variables, present title, participation in high school FFA, participation in collegiate extra-curricular programs, formal education, age, and size of family.

On the basis of the findings, the investigator concluded that the student teaching personnel who were classified as cooperating teachers and those who had leadership roles in school and college careers, and also graduate work experience, tended to be capable, intelligent, and persons of placing high value on cognitive and intellectual matters. The teaching personnel who were of age thirty or more and those who had one or more children, tended to be planful, ambitious and dynamic in thinking.

Psychological-Mindedness. No statistical significant difference was noticed between the trait, psychological-mindedness, and the professional and socio-economic related variables of the student teaching personnel except for the variables, present title, participation in collegiate extra-curricular programs, formal education, and marital status.

The investigator, based on the findings, concluded that the student teaching personnel who were classified as cooperating teachers and those who had experience of leadership roles in college career, and who had experience of graduate work, and also were married, tended to be more observant, socially ascendant and responsive to the inner needs of others.

Flexibility. No statistical significant difference was observed between the trait, flexibility and the professional and socio-economic related variables of the student teaching personnel except for the variable, father's education.

The investigator, based on the findings, concluded that the student teaching personnel whose fathers attended high schools or graduated from high schools, tended to be more insightful, informal, and concerned with personal pleasure and diversion than the teachers whose fathers had either less or more than high school education.

Femininity. No statistical significant difference was noticed between the trait, femininity, and the professional and socio-economic related variables of the student teaching personnel except for the variables, present title, age, and marital status.

The investigator, based on the findings, concluded that the student teaching personnel who were classified as cooperating teachers, and those who were married and also were in higher age brackets, tended to be more helpful, gentle and manneredly in behaving with others than the practice teachers and the teachers of younger age and of unmarried-status.

Hypothesis Number Two

On the basis of the above findings, the null hypothesis of no significant relationship between the personality traits and the professional and socio-economic related variables of the student teaching personnel was retained in all the cases except three.

Performance of Two Groups of Teachers

The cooperating teachers were found to be functioning at a signi-

ficantly superior level than those of the student teachers in traits, dominance, capacity for status, sense of well-being, responsibility, self-control, achievement via independence and psychological-mindedness.

The investigator, based on the findings, concluded that the cooperating teachers were found to be more effective in leadership ability, social interaction, dependable disposition, self-regulation, self-control, intellectual achievements and also in understanding the psychological problems of others than those of the student teachers. In contrast, the student teachers were found to be more outgoing and masculine in character.

Hypothesis Number Three

On the basis of the findings, the null hypothesis of no significant difference between the performance of two groups of student teaching personnel on the CPI traits was rejected except for the traits, social presence, self-acceptance, communality and flexibility.

Personality Traits and Academic Achievements

Hypothesis Number Four

On the basis of the findings shown in Table XLVII, the null hypothesis of no significant relationship between the predictor test scores and the academic achievements (grade point averages) of the student teaching personnel was not rejected except for the traits, responsibility, social control, achievement via conformance, and achievement via independence.

In drawing such a conclusion, the investigator was inclined to state that the validity of any tests ia a relative concept and depends

upon the psychological functions that are being measured by the test.

Finally, the investigator concluded that the student teaching personnel who were found to be planful, responsible, conscientious, sincere, honest steady, cooperative, forceful and organized, tended to be scoring high grade point averages. In other words, the student teaching personnel who were found to be scoring low grade point averages,tended to be lazy, impulsive, moody, self-centered, shrewd, subborn, pessimistic, inhibited and lacking in self-insight and self-understanding.

Inter-Trait Relationship of the CPI Traits

Hypothesis Number Five

On the basis of the data shown in Table XLIX, the null hypothesis of no significant inter-trait relationship among the personality traits of the student teaching personnel was rejected except for 56 intercorrelation-coefficients out of 153.

On the basis of the findings, the investigator concluded that the CPI cluster system was largely supported by the intercorrelation-coefficients. The traits, psychological-mindedness, flexibility, and femininity in Class IV, were found to be relatively independent.

Recommendations and Implications

Recommendations

Findings of this study have particular relevance to one of our major theses that our changing society needs a greater number of flexible, conscientious, cooperative, sharp-witted, progressive, responsible and creative vocational agriculture teachers with adequate leadership ability, intellectual power and highly developed human potentials. It

is understood that the teacher education administration and faculty have assumed the primary responsibility for occasional apprisal of such qualities of the vocational agriculture student teaching personnel to direct the vocational agriculture education program to its excellence.

The investigator, in this connection, believes that this study may throw some light on teacher preparation and developmental programs. Notwithstanding, the investigator is aware of the limitations of the study which is primarily nomothetic in character. A nomothetic study fails to differentiate between an imbecile and an Aristotle. Secondly, many important attributes related to professional and socio-economic backgrounds of the student teaching personnel could not be accommodated in this study for want of time and space. This creates a demand for further study which should include investigation of attributes such as, wives' education and occupation, mothers' education and occupation, religion, race and job satisfaction of the student teaching personnel. Further, to differentiate between an imbecile and an Aristotle, idiographic studies may be undertaken and individual-psychograph may be developed from the existing data shown in Appendix G.

Findings of this study may be made available to the teacher participants in the study in order to inform them about their successes and failures in social and interpersonal relationships. A considerable portion of the student teaching personnel, particularly those who were classified as student teachers, failed to achieve scores up to the level of CPI norms. This indicates need for further study into the causes of such failures.

There is also a need for conducting longitudinal studies on the personality traits of the student teaching personnel in order to provide

further information about the nomothethc as well as idiographic characteristics of the said personnel.

Implications

The growing emphasis in recent years on the behavioral sciences has provided new knowledge related to the sciences of man. The psychological approach used in this study might be helpful in evolving new principles and concepts about the development of professional improvement programs for the student teaching personnel.

The study has major implications in three areas: (1) administration, (2) counseling and guidance, and (3) further research.

The immediate purpose of the teacher education administration is to identify each individual teacher with his psychograph to foster educational development programs. During recent years a growing tendency on the part of the student teaching personnel in vocational agriculture has been noted as definitely toward graduate studies. In order to predict who will be doing what in graduate studies, the use of regression analysis on the undergraduate grade point average might be used. The teacher education administration may also use the findings of the study in matters of personnel selection and promotion in vocational agriculture. The findings of the study may also be used by school systems as an aid in identifying teachers for selection and promotion-needs of the school appropriate to the system.

Secondly, the research findings may be used for counseling and guidance of the student teaching personnel toward human development programs and professional improvement. For example, the student teaching personnel who attained low grade point averages tended to be seen

as somewhat moody, stubborn, headstrong, undependable, dissembled, disorganized, inhibited and lacking in self-insight, and also in self-understanding.

Findings of the study also reveal that the student teaching personnel having certain professional and socio-economic attributes tended to score higher in almost all of the CPI personality traits. Such attributes were identified as follows: advanced formal education, longer tenure in teaching vocational agriculture, leadership roles in high school and college careers, preference for living on rural farms or small sized cities, middle age, medium size family, high income level and high school level education of father.

Student teaching personnel identified as having attributes as described above, along with the ability to plan, organize and communicate were also seen as most effective teachers. These findings may serve as guides in identifying student teaching personnel needing attention for counseling and guidance.

In dealing with the psychology of personality of the subjects included in this study, the investigator suggests the assumption that each individual is a neutral-interactive person in his environment. This indicates the scope of using the laws of learning as a tool in behavior modification and personality development. This indicates that psychology of teaching and learning and also consideration of the problems inherent in human existence must be an integral part of teacher education curriculum.

In connection with the implementation of the findings, let us look back to a few important outcomes which were found to be affecting the vocational agriculture education system. The data shown in Figure 2

indicates that the student teaching personnel failed to secure scores up to the CPI norms in traits, Cs, Re, Gi, and Ie. This means that the group as a whole tended to be restricted in outlook and interests, impulsive in behavior, inhibited and confused as being conventional and stereotyped in thinking. Particularly, the student teachers were found to be facing some difficulty in matters of being alert to ethical and moral issues and in becoming effective in communications. This problem demands for further research studies to be undertaken to determine the causes of such failures on the part of the student teaching personnel.

Finally, the vocational education service in agriculture, because of rapid changes in agricultural production and occupations, needs to be more watchful and concerned about further education and in-service training of the student teaching personnel. The continued professional development of the student teaching personnel is of paramount importance in providing the highest quality of vocational education service in agriculture.

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APPENDIXES

QUESIONNAIRE FOR THE STUDY OF PERSONALITY TRAITS OF THE STUDENT TEACHING PERSONNEL IN VOCATIONAL AGRICULTURE, OKLAHOMA.

Name_____

Please answer all the questions by checking the appropriate answers. Thank you!

1. Please indicate you age bracket.

below 20 years	( )
20-24 years	( )
25-29 years	( )
30-34 years	( )
35-39 years	( )
40 or above	( )

2. Please indicate your marital status.

single	( )
married	( )
other (specify)_____	

3. Please indicate the size of your family.

husband and wife only	( )
husband-wife with 1 child	( )
husband-wife with 2 children	( )
husband-wife with 3 children	( )
husband-wife with more than 3 children	( )
other (specify)_____	

4. What was the status of your participation in the high school FFA Chapter? Please check one.

President	( )
Officer other than President	( )
member	( )
not participated	( )

5. Please indicate any other high school extra-curricular organizations with which you were associated and office held, if any.

	Organization	Office
1.		
2.		
3.		
4.		

6. What was the status of your participation in the Collegiate FFA Chapter?

President	( )
Officer other than President	( )
member	( )
not participated	( )

7. Please indicate any other collegiate extra-curricular organizations with which you were associated and office held, if any.

	Organization	Office
1.		
2.		
3.		
4.		

8. Please indicate your father's occupation.

Professional	( )
Proprietor, farmer, manager, or official	( )
Clerk, salesman, or kindredworker	( )
Skilled worker or foreman	( )
Semi-skilled worker	( )
Unskilled worker	( )
Other (specify)_____	

9. Please indicate the educational level of your father.

College graduate or above	( )
Attended college for 2 years or more	( )
High school graduate	( )
Attended high school	( )
Elementary school graduate	( )
Attended elementary school	( )

10. How many brothers and sisters do you have? (Put number. If none, put zero.)

Brothers	( )
Sisters	( )

11. Indicate your status in order of birth among your brothers and sisters.

First	( )
Second	( )
Third	( )
Fourth	( )
Other (specify)_____	

12. Which represents best, where you have lived most of your life?

Rural farm or ranch ( )
Rural non-farm ( )
Town under population of 2,500 ( )
City, population 2,500 or above ( )
City, population 10,000 or above ( )
City, population 50,000 or above ( )
Metropolis, population 1,000,000 or above ( )

13. Please indicate your highest degree.

Bachelor ( )
Bachelor with additional graduate work ( )
Master ( )
Master with additional graduate work ( )
Doctorate ( )
Other (specify)_____

14. Please indicate your membership. Check appropriate ones.

The National Association of Vo-Agriculture Teachers ( )
The State Organization of Teachers of Vo-Ag ( )
The American Vocational Association ( )
The National Education Association ( )
The State Education Association ( )
Other (specify)_____

15. Please indicate your tenure in teaching Vocational Agriculture.

Less than 1 year ( )
1-9 years ( )
10-19 years ( )
20-29 years ( )
30 years or above ( )

16. Please indicate your income bracket.

Less than $6,000 ( )
$6,000 to $6,999 ( )
$7,000 to $7,999 ( )
$8,000 to $8,999 ( )
$9,000 or above ( )

APPENDIX B

QUESTIONNAIRE FOR THE STUDY OF PERSONALITY TRAITS OF THE STUDENT TEACHING PERSONNEL IN VOCATIONAL AGRICULTURE, OKLAHOMA.

Name_____

Please answer all the questions by checking the appropriate ones. Thank you!

1. Indicate your age bracket.

below 20 years ( )
20-24 years ( )
25-29 years ( )
30-34 years ( )
35 or above ( )

2. Indicate your marital status.

single ( )
married ( )
other (specify)_____

3. If married, indicate the size of your family.

husband and wife only ( )
husband-wife with 1 child ( )
husband-wife with 2 children ( )
husband-wife with more than 2 children ( )
other (specify)_____

4. What was the status of your participation in the high school FFA Chapter?

President ( )
Officer other than President ( )
member ( )
not participated ( )

5. Indicate any other high school extra-curricular organizations with which you were associated and office held, if any.

	Organization	Office
1.		
2.		
3.		
4.		

6. What was the status of your participation in the Collegiate FFA Chapter?

President	( )
Officer other than President	( )
member	( )
not participated	( )

7. Indicate any other collegiate extra-curricular organizations with which you were associated and office held, if any.

	Organization	Office
1.		
2.		
3.		
4.		

8. Indicate your father's occupation.

Professional	( )
Proprietor, manager, official, or farmer	( )
Clerk and kindredworker	( )
Skilled worker or foreman	( )
Semi-skilled worker	( )
Unskilled worker	( )
Other (specify)_____	

9. Indicate the educational level of your father.

College graduate or above	( )
Attended college 2 years or more	( )
High school graduate	( )
Attended high school	( )
Elementary school graduate	( )
Attended elementary school	( )

10. How many brothers and sisters do you have? (Put number. If none, put zero.)

Brothers	( )
Sisters	( )

11. Indicate your status among your brothers and sisters.

First	( )
Second	( )
Third	( )
Fourth	( )
Other (specify)_____	

12. Which represents best, where you have lived most of your life?

Rural farm or ranch	( )
Rural non-farm	( )
Town under population 2,500	( )
City, population 2,500 or above	( )

City, population 10,000 or above ( )
City, population 50,000 or above ( )
Metropolis, population 1,000,000 or above ( )

APPENDIX C

FACTORS FOR CORRECTING C FOR BROAD GROUPING
AS STATED BY PETERS AND VORHIS *

Number	Correction Factor (t_r t_c)
2	.798
3	.859
4	.915
5	.943
6	.959
7	.970
8	.976
9	.981
10	.985
11	.987
12	.989
13	.991
14	.992
15	.993

* C. C. Peters and W. R. Van Vorhis, Statistical Procedures and Their Mathematical Bases. New York: McGraw-Hill Book Company, Inc., 1940, p. 398.

APPENDIX D

GRADE POINT AVERAGES OF THE COOPERATING TEACHERS

Code	GPA	Code	GPA
A01	2.54	A20	2.53
A02	2.41	A21	2.85
A03	2.65	A22	2.92
A04	2.87	A23	2.48
A05	3.58	A24	2.69
A06	2.73	A25	2.68
A07	2.33	A26	2.44
A08	2.79	A27	3.01
A09	2.40	A28	3.70
A10	2.56	A29	2.87
A11	2.76	A30	3.19
A12	3.23	A31	3.44
A13	3.16	A32	3.45
A14	2.84	A33	2.82
A15	2.72	A34	3.09
A16	2.75	A35	2.83
A17	2.78	A36	2.26
A18	2.43	A37	2.68
A19	2.70	A38	3.56

GRADE POINT AVERAGES OF THE STUDENT TEACHERS

Code	GPA	Code	GPA
B01	2.78	B25	2.77
B02	2.73	B26	2.20
B03	2.65	B27	2.54
B04	2.60	B28	2.89
B05	2.89	B29	2.63
B06	2.89	B30	2.79
B07	3.64	B31	2.67
B08	3.13	B32	2.42
B09	2.82	B33	2.21
B10	3.50	B34	2.60
B11	2.85	B35	3.28
B12	2.40	B36	2.55
B13	2.42	B37	2.35
B14	2.05	B38	3.41
B15	3.26	B39	2.47
B16	2.69	B40	2.21
B17	3.21	B41	2.66
B18	2.26	B42	2.38
B19	2.55	B43	1.92
B20	2.56	B44	2.11
B21	2.52	B45	2.41
B22	2.67	B46	2.57
B23	3.04	B47	3.21
B24	2.77	B48	2.46

Code	GPA	Code	GPA
B49	1.97	B65	2.98
B50	2.31	B66	2.45
B51	2.12	B67	3.00
B52	2.22	B68	2.55
B53	2.64	B69	3.15
B54	3.82	B70	2.05
B55	2.77	B71	3.23
B56	2.50	B72	2.19
B57	2.38	B73	2.86
B58	2.19	B74	2.06
B59	2.36	B75	3.00
B60	2.41	B76	3.05
B61	2.45	B77	2.24
B62	2.38	B78	2.25
B63	2.68	B79	2.75
B64	2.18	B80	3.11

APPENDIX E

VALUES OF r AT THE 5% AND 1% LEVELS OF SIGNIFICANCE
AT N-2 DEGREES OF FREEDOM *

Degrees of Freedom	5%	1%	Degrees of Freedom	5%	1%
1	.997	1.000	50	.273	.354
2	.950	.990	60	.250	.325
3	.878	.959	70	.232	.302
4	.811	.917	80	.217	.283
5	.754	.874	90	.205	.267
6	.707	.834	100	.195	.254
7	.666	.798	125	.174	.228
8	.632	.765	150	.159	.208
9	.602	.735	200	.138	.181
10	.576	.708	300	.113	.148
11	.553	.684	400	.098	.128
12	.532	.661	500	.088	.115
13	.514	.641	1000	.062	.081
14	.497	.623			
15	.482	.606			
16	.468	.590			
17	.456	.575			
18	.444	.561			
19	.433	.549			
20	.423	.537			
30	.349	.449			
40	.304	.393			

*Allen L. Edwards. Statistical Analysis for the Psychology and Education. New York: Rinehart and Company, Inc., 1946, p. 331.

APPENDIX F

SCALE FOR DETERMINING PERSONS OBTAINING SCORES BELOW, AVERAGE OR ABOVE CPI NORMS ON EIGHTEEN PERSONALITY TRAITS AND FOUR CLASSES

Trait and Classes	Scores Below Norms		Scores Average or Above Norms	
	Raw Scores *	Standard Scores	Raw Scores	Standard Scores
Class I				
Do	26	48	27	50
Cs	19	49	20	52
Sy	24	49	25	51
Sp	33	48	34	50
Sa	19	49	20	52
Wb	17	49	38	51
	158	292	164	306
Class II				
Re	30	48	31	50
So	36	49	37	51
Sc	30	49	31	50
To	22	38	23	50
Gi	19	48	20	50
Cm	25	49	26	54
	162	291	168	305
Class III				
Ac	27	39	28	51
Ai	18	48	19	51
Ie	39	49	40	52
	84	147	87	154
Class IV				
Py	10	46	11	50
Fx	8	47	9	50
Fe	16	49	17	52
	34	142	37	152

* Raw scores are equivalent to standard scores established by the CPI Manual, pp. 38-39.

RAW SCORES OBTAINED BY THE TWO GROUPS OF STUDENT TEACHING PERSONNEL ON THE CPI TRAITS

A01	26	24	24	31	21	41	35	45	43	26	30	27	36	25	45	14	9	18
A02	26	17	25	32	19	40	32	39	41	14	26	25	31	17	30	13	6	17
A03	38	17	29	33	23	43	35	40	34	26	17	27	32	23	44	15	6	16
A04	25	19	31	33	21	42	38	39	35	25	24	26	31	21	38	13	10	13
A05	41	22	33	51	23	42	34	39	32	31	21	27	35	22	45	17	8	15
A06	28	16	22	29	19	38	35	41	36	25	16	27	31	23	44	13	11	18
A07	32	24	26	43	24	35	34	36	27	29	13	26	30	26	41	12	15	15
A08	27	15	18	32	18	38	33	42	31	26	21	26	25	19	35	12	8	18
A09	28	21	25	34	26	32	32	28	29	18	15	27	26	21	39	8	8	19
A10	26	24	28	33	16	44	38	37	47	31	36	20	36	25	43	15	13	21
A11	33	24	28	37	23	34	29	36	22	17	10	28	30	15	40	14	14	15
A12	28	15	27	32	26	34	31	39	27	18	11	22	28	19	36	11	12	11
A13	40	24	30	43	23	42	37	41	32	28	18	25	33	25	46	18	10	13
A14	35	17	24	31	20	42	30	41	34	27	19	28	29	19	38	11	11	15
A15	28	22	25	31	20	40	37	39	43	28	29	27	33	22	40	10	11	19
A16	33	27	32	44	21	41	32	40	35	30	25	26	43	20	40	13	12	12

A17	33	18	27	30	21	44	41	44	42	26	29	25	36	19	39	12	6	16
A18	30	20	29	32	22	43	33	44	46	28	27	26	38	25	43	11	8	20
A19	26	17	30	25	20	34	32	46	29	22	18	28	27	17	36	12	3	17
A20	32	19	26	39	21	40	34	42	37	25	22	28	35	17	37	13	7	16
A21	37	21	31	37	26	43	32	30	31	26	21	25	34	19	39	13	13	17
A22	36	19	25	28	23	41	40	43	45	28	28	28	34	20	43	10	5	22
A23	28	21	25	37	22	40	36	37	36	30	17	28	34	23	42	13	12	19
A24	33	22	28	36	24	41	36	42	36	27	19	28	32	24	47	13	9	13
A25	32	17	23	26	19	39	34	50	36	19	15	28	35	18	39	10	6	19
A26	33	23	24	32	24	40	34	43	36	27	24	26	34	17	44	12	8	22
A27	39	23	28	38	23	43	35	40	35	29	24	28	34	21	43	14	5	15
A28	25	13	19	30	16	42	35	44	43	21	25	28	35	18	40	14	6	17
A29	36	19	18	25	20	37	32	32	31	20	19	27	30	16	36	10	1	18
A30	33	15	25	35	19	39	25	38	31	23	12	25	28	25	33	12	12	13
A31	33	17	23	28	20	40	28	37	43	25	23	26	33	19	40	13	0	18
A32	27	16	24	27	16	42	38	40	44	30	28	27	34	22	28	12	0	16
A33	33	19	26	24	20	43	33	36	39	24	22	27	30	18	39	8	2	16
A34	28	20	29	30	25	37	30	39	30	21	17	28	31	21	38	13	6	16

A35	31	19	33	39	26	41	33	38	31	27	24	27	32	19	44	14	8	14
A36	32	21	24	39	20	42	35	47	38	23	15	28	29	18	42	18	12	21
A37	29	21	27	31	17	41	37	41	39	31	22	28	32	24	40	13	11	19
A38	28	15	22	33	18	41	36	42	47	23	26	28	34	22	37	13	7	20
B01	23	20	22	33	23	40	29	33	30	18	14	26	30	20	35	11	9	18
B02	33	18	29	39	27	39	28	35	27	21	13	28	25	17	41	13	6	12
B03	29	21	28	43	20	44	29	35	34	28	19	22	28	22	36	11	12	13
B04	23	13	20	24	19	40	31	50	41	28	29	23	31	20	42	10	9	20
B05	34	17	28	31	22	30	34	36	27	20	16	28	30	18	34	11	13	19
B06	13	16	21	28	16	37	27	40	33	18	17	21	26	13	33	5	7	18
B07	34	20	33	43	23	38	34	42	26	23	17	27	30	17	39	13	11	11
B08	22	16	23	34	17	36	27	37	33	25	13	26	28	19	39	11	13	14
B09	31	17	29	35	27	33	29	42	20	15	11	27	29	14	39	8	3	17
B10	21	11	17	19	18	33	30	46	29	16	11	27	26	19	30	8	5	11
B11	28	21	27	42	25	40	22	33	36	23	17	26	26	18	40	12	7	15
B12	25	19	25	42	25	41	23	40	25	23	15	28	25	16	39	12	14	19
B13	24	15	21	24	23	28	34	29	26	22	14	24	27	20	37	13	7	20
B14	28	21	25	35	15	41	31	42	31	26	23	27	32	18	43	13	9	14

B15	38	18	23	29	22	31	34	46	33	22	18	27	33	18	40	10	7	20
B16	24	12	21	25	21	30	21	44	26	15	7	27	22	16	30	10	9	15
B17	27	17	23	33	23	33	29	34	23	19	10	28	28	16	31	10	10	18
B18	28	16	21	27	19	40	34	44	34	24	24	27	28	23	31	12	5	13
B19	37	17	25	34	23	36	33	47	30	20	11	27	29	13	38	11	8	16
B20	33	22	30	31	21	43	35	36	43	31	28	26	30	23	43	13	10	14
B21	21	16	19	32	19	38	26	31	23	23	7	27	26	17	35	10	10	17
B22	33	21	25	29	21	37	23	39	25	19	15	28	24	15	33	12	5	14
B23	26	20	24	41	22	39	33	43	34	19	22	26	33	20	39	9	7	17
B24	28	18	22	33	24	29	29	42	26	16	15	28	25	11	38	6	9	16
B25	36	20	28	41	27	34	27	44	30	23	15	27	29	18	36	10	6	14
B26	21	12	23	34	21	28	25	39	21	15	11	27	19	13	34	10	9	16
B27	35	16	25	38	28	29	21	28	14	15	11	27	19	13	34	11	6	14
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B79	34	20	31	44	25	39	25	38	18	19	12	27	29	15	38	10	8	9
B80	20	15	22	32	15	38	26	36	42	23	28	25	27	19	35	11	8	14

VITA

A F M Serajul Islam

Candidate for the Degree of

Doctor of Education

Thesis: AN INVESTIGATION OF THE RELATIONSHIPS BETWEEN CERTAIN PERSONALITY TRAITS AND SELECTED PROFESSIONAL AND SOCIO-ECONOMIC VARIABLES OF OKLAHOMA STUDENT TEACHING PERSONNEL IN VOCATIONAL AGRICULTURE

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