

Full Length Research Paper

Personality traits of agricultural science teachers as correlate of effective school farm management in secondary schools in Cross River State, Nigeria

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This study set out to determine the extent to which personality traits of agricultural science teachers influence effective school farm management in Cross River State, Nigeria. To do this, six null hypotheses were formulated to guide the study. Available related literatures were reviewed according to the hypotheses postulated to provide direction and background information for the study. Two research instruments were designed and used for data collection for the study namely: Agricultural Science Teachers Personality Inventory (ASTPI), to measure their personality traits and Agricultural Science Teachers Effectiveness Questionnaire (ASTEQ) to measure their effectiveness. The sample for the study comprised 228 agricultural science teachers randomly drawn for the study area. The data obtained based on the questionnaire were quantified and statistically analyzed. For hypotheses 1 – 3, independent t-test analysis was used while for hypotheses 4 – 6, Pearson Product Moment Correlation Analysis was used to test the hypotheses. Each of the hypotheses was tested at 0.05 level of significance. The results of the analyses revealed that all the null hypotheses except hypotheses 5 and 6 were rejected. However, the discussions showed that to a large extent the findings conformed to some existing theories and empirical studies.

Keywords: Personality traits/characteristics; Extroversion – Introversion; Emotional stability – instability or emotionality (Neuroticism); Tough mindedness – Tender mindedness or psychoticism.

INTRODUCTION

One of the psychological constructs that lacks precise and universally accepted definition is the term personality. Its problem of definition stems from two major factors. The first factor could be traced to diverse theoretical orientations of scholars of the concept who have put forward these definitions. This situation gives room to multiplicity of irreconcilable definitions. The second factor is related to the etymology of the word personality.

The word personality as revealed by Agbakwuru (2000) was derived from the Greek word “*Persona*” which is a type of mask that covers the actor that exerts influence on the persona or mask. Personality is then perceived as the influence which the actor or person leaves on the audience. The viewers could see the mask, but not the real person behind it. Perhaps, this is why the understanding of personality is such a cumbersome

exercise. However, Prasad and Bannerjee (2007) were of the view that evaluation of the concept of personality includes an individual’s own evaluation about himself with other people’s perceptions. To others, personality is referred to as the biophysical characteristics of the individual. In this sense, personality means those qualities the individual is noted for. Some psychologists also adopt the omnibus approach in defining personality. To this group of scholars, personality means everything about the individual. There is also the integrative or organizational approach to its definition, which emphasizes the organization of patterns of behavior, which gives order to the individual’s behavior. Personality according to Hall and Lindzey (2008) is perceived as the uniqueness of individual behavior, as the essence of the human condition, as well as the mediating force in human adjustment.

Table 1 list of twelve common primary personality traits and their opposites

| S/No. | Primary Traits | Opposites |
|--------------|--|---|
| 1 | Easy going, genial, warm and generous | Inflexible, cold, timid, hostile and shy |
| 2 | Intelligent, independent, reliable | Foolish, unreflective |
| 3 | Emotionally stable, realistic, steadfast | Neurotic, evasive, emotionally changeable |
| 4 | Dominant, ascendant, self-assertive | Submissive, self effacing |
| 5 | Placid, cheerful, sociable, talkative | Sorrowful, depressed, seclusive, agitative |
| 6 | Sensitive, tender-hearted, sympathetic | Unemotional |
| 7 | Trained and cultured | Boorish, uncultured |
| 8 | Conscientious, responsible, painstaking | Emotionally dependent, impulsive, irresponsible |
| 9 | Adventurous, care-free, king | Inhibited, reserved, cautious, withdrawn |
| 10 | Vigorous, energetic, persistent, quick | Languid, slack, day-dreaming |
| 11 | Emotionally hyper-sensitive, excitable | Phlegmatic, tolerant |
| 12 | Friendly, trustful | Suspicious hostile |

Prasad and Bannergee (2007) quoting Allport defined personality as the dynamic organization within the individual of those systems that determine his characteristic behavior and thoughts. These authors were of the opinion that organization in this context mean that personality is not just a sum of traits, but rather the different traits or manifest aspect of personality patterns held together and influenced by a central core called the concept of life (person's inner world, his thoughts and feelings, fears and fantasies, etc) and an integrated system of learned responses. Personality to the layman means how huge or how small an individual is. It also means the individual's skills in handling situations or social interactions. However, personality is much more than these.

From the academic point of view, personality means a hypothetical construct used to account for observed irregularities or inconsistencies in the behavior of an individual that differs from those behaviours of some other individuals (Stand and Wrightsman, 2001). Onyejiaku (2008) also defined it as the organization of human behaviour, the changing nature of personal growth, the psychological and genetic basis of actions, and the motivational and natural emotional determinations and individual's behavior in certain situations.

With these scientific definitions of personality presented above, one can point out some common features that cut across them. Ukpong (2008) identified them thus; that no two human beings are exactly alike. Each has unique personality traits and characteristics; that personality is not a situational or chance occurrence. It is a characteristic of the individual; personality is a product of nature-nurture interaction, and personality is organized and consistent patterns of behaviour. Personality is central to all human actions. It often determines one's degree of social adjustment as well as the level of success which one attains in one's behaviours. It is shaped by those nature-nurture factors like; general morphological and physical features; constitutionally based attributes of temperament; abilities,

talents and facilities that make for effectiveness of personal functioning; generalized and pervasively organized behaviour dispositions; and finally learned patterns of social behaviours and functioning including the various attitudes, beliefs, prejudices and the like that affects one's interpersonal relationship (Ukpong, 2008).

Therefore, personality traits refer to consistent differences between the behaviour or characteristics of two or more people. It is also defined as any distinguishable relatively enduring way in which one individual varies from another. Personality traits are the ultimate realities of psychological organizations. They determine human tendencies or predispositions to respond to situations.

In his contributions to personality traits, Agbakwuru (2000) quoting Odebunmi (1983), listed twelve common primary personality traits and their opposites. These are presented in a tabular form thus:

Some of these personality traits commonly discussed in most literature include cognitive styles, temperaments, honesty, aggressiveness, rigidity, emotionality, introversion and extroversion, and the striving to achieve high standards of excellence. Some of these personality characteristics and how they influence administration or leadership processes in organizations need to be thoroughly understood. According to Mullins (2006) personality is the heart of individual differences. Success in any human endeavour, particularly in agricultural education programme could be adjudged to be a function of the individual personal traits given that other resources are available.

Consequently, attempts should be made to have in-depth understanding of human behaviour. One of such ways of doing this is by examining the personality traits vis-à-vis performance in an organization. Baron and Byrone (2001) stated that a normal healthy personality by contrast shows disorganization. They postulated further that there must be something about the individual – possibly inherited, possibly learned in the early childhood that acts to give the person's behaviour. Rather than to be

an adjudicator on the prominent role being played by heredity and environment on personality, it is better to be an unbiased arbiter by stating that both are of great importance to the issue under discourse. However, Prasad and Bannerjee (2007) concluded that all qualities of life are in the heredity; and all evocations of quality depend on the environment. The higher the potentiality of an individual, the greater the demands on the environment. The unpredictable nature of personality could be why Allport and Odbert as cited by Baron and Byrne (2001) identified one hundred and seventy-one (171) different traits in an individual.

The styles and methods of management adopted by agricultural science teachers in the management of the school farms are varied. Adedeji (2000) asserted that professionals that are graduates Agricultural education from various universities and other higher institutions in Nigeria are being totally marginalized in the management of day-to-day activities of schools at the local government, state and federal level. That before now, the excuse had always been that Nigeria is yet to produce enough professional Agricultural education personnel to run the country's agricultural education programmes in our schools. Oyewusi (2000) emphatically stated that Nigeria has a good number of trained agricultural educators who are already tested and found to be capable. The level of capability of these personnel is however, contestable as individual differences or personality plays a major role in the measurement of capability.

The onerous task of preparing first class agricultural science students should be carried out by professionals who are current with present state of school farm management. School farm management generally has advanced beyond what mediocres can toy with (Odewumi, 2003). Oyewusi (2000) opined that agriculture and training have since gone scientific. For these reasons schools cannot pretend not to know the importance of agriculture to the individual and the society as a whole.

Achieving management efficiency has to come with good structural base of well articulated organization goals or objectives. Many researchers have carried out research into the various variables that could be associated with lack of luster performance in agriculture and school farm management in schools in Cross River State in recent time. Such variables focused on facilities, equipment, funds and professional preparation of agricultural science teachers amongst others. However, not much or nothing has been done to ascertain the personality traits being portrayed by teachers of agriculture that are managing school farms in schools in Cross River State.

It is not uncommon that despite the availability of other resources, the nature of an individual in an organization could mar or improve utilization of these other material resources. In essence, the nature of human resources is

paramount in a given organization. Udom (2009) asserted that it is difficult to talk about management without talking about people. Mullins (2006) also opined that where needs of the individual and the demands of the organization are incompatible, the concomitant is frustration and conflict which may result to failure and poor productivity.

Agricultural Science teachers often display some measures of individuality in the way they project themselves. While some are sociable, easy going and accommodating, others appear to be aloof, not very friendly and sometimes domineering and temperamental. In the school farm management, the behaviour of some agricultural science teachers has also been noticed in this regard. It would be wrong to assume that the perceived poor interactions of these agricultural science teachers are caused by their personality characteristics. Some make friends with students and colleagues quite easily and enjoy the company of their fellow staff and subordinates, others tend to be on their own, some temperamental and others hard to understand.

It has thus become glaring that the way some persons react to social and administrative activities could enhance or jeopardizes effective management processes of harmonious development in an organization. Personality affects the management and development of an establishment in terms of human and material resources. Some personalities make one interact better than others. One could also notice that aggressiveness, obsession, cynicism, extroversion and introversion, tough mindedness and tender mindedness, and unstable personalities may fail to encourage effective performance in an organization. To prevent wrong guesses, there is need to carry out a scientific study aimed at examining the influence of some of these personality traits of agricultural science teachers on effective management of secondary school farm in Cross River State.

Extroversion – Introversion and effective school farm management.

The importance of extroversion – introversion in personality theory and research has long been recognized and is widely accepted. Morris (2001) explained that the basic difference between the two lies in person's preferences for attending to the inner world of subjectivity with an emphasis on reflective, introspective cognitive activity (introversion) versus an emphasis on active involvement in the environment (extroversion). Moreover, Morris (2001) has pointed out that extroverts are sociable, cheerful, talkative and do not like to be alone. They enjoy excitement, take risk and are generally impulsive and outgoing, optimist, active and lively while the introvert is the opposite of this, cold, retiring and aloof. That is an indication that extroverts have good

human relationship, friendly, ability to motivate and of course hardworking in terms of administration.

In a related study, Hogan, Hogan and Roberts (2006) submitted that introverts are associated with antisocial, withdrawn, neurotic behaviour. Thus measures of extroversion reflect those behaviours, and individuals classified as having positive characteristics while introverted having negative characteristics. However, Comb and Snygg (2009) in contrast to this view saw introversion as the enjoyment of personal space and privacy, the ability to work and function in isolation. In essence, they do not see any particular behavior(s) as good or bad; instead, the appropriateness of behavior is determined by the situational context and whether or not the behavior leads to the accomplishment of the desired objectives.

Lombardo, Ruderman and McCauley (2008) in their study on "success and derailment in management positions" discovered that managers tend to be more extroverted than the average person, and the extroversion has a positive correlation with success in management. However, according to them, success in management is dependent upon much more than extrovertedness. Indeed, being too extroverted is likely to reduce success and/or prolong the cycle hence success in management depends upon many other factors.

In support of this study, Barrick, Mount and Judge (2001) while using Eysenck's scale discovered that extroverts particularly stable extroverts are superior to introverts up till age 13 and up till age 12 or 14 in studies using Cattell's scale. Findings on study by Morris (2001) on introversion – extroversion and performance showed that in one position level of extroversion and introversion remain the same and performance stays the same and the degree of extroversion – introversion changes.

A study by Turner (2005) on the performance of first grade teachers of pre-school first – grade children indicated a strong superiority of extroverted over introverted teachers. The subjects in the study were tested for personality and effectiveness difference with Metropolitan Achievement Test. The personality measure used was Schaeffer's Classroom Behaviour Inventory, which involves teachers' attributes and is scored for positive social behavior, extroversion – introversion, and positive task orientation. Of all the measures taken, extroversion was the best predictor of achievement and effectiveness, showing a strong positive relationship to the three Metropolitan Achievement Test sub-areas of world knowledge, teaching – learning achievement and subject mastery.

Banks and Finlayson (2003) carried out a detailed longitudinal study on personality and school examination performance using 345 boys, the ages of 11 – 15 years. In general, extroverts performed effectively, especially in

two schools where ability and aspiration levels were higher. And the relationship between introversion and performance increase with age, particularly for students with higher neuroticism scores.

Goffin and Rothstein (2006) investigated on correlation between extroversion and high achievement and effectiveness among 78 university students, and 49 high school students in the United States. The results showed that there were no differences between groups on Eysenck Personality Questionnaires aggregation scores, indicating that differential correlation between extroversion and achievement was significant only at the university level and was higher for a group of science students than for social studies students.

Studies involving actual classroom learning experiences of introverted and extroverted students have been conducted by Leith (2003). Results indicated that adolescent introverts do better if there is more guidance, prompting, and structure, whereas extroverts do better in more ambiguous exploratory atmospheres.

Although extroverted persons have limited long term memory than the introverted but they possess a more efficient short-term memory or working ability. Extroverts who tend to be sociable are more likely to join groups, more inclined to engage in conversations both inside and outside their environment. In reviewing the literature on effects of extroversion on communication, Ellis (2004) identified that extroverts do better in acquiring basic interpersonal communication skills than introverts.

The extroverted according to Eysenck (2003) is energized when around other people. They tend to "fade" when alone and can easily become bored without other people around. Extroverts tend to think as they speak.

On the other hand, introversion is the state of or tendency toward being wholly or predominantly concerned with and interested in one's own mental life. Introverts tend to be quite, low-key, deliberate and relatively non-engaged in social situations. They take pleasure in solitary activities such as reading, writing, watching movies, listening to music, inventing and designing (Laney, 2002). Ruach (2003) submitted that an introverted person is likely to enjoy time spent alone and find less reward in time spent with large groups of people. Although they may enjoy one-to-one or one-to-few interactions with close friends. They prefer to concentrate on a single activity at a time and like to observe situations before they participate. Introversion, Ruach explained is not the same as shyness. That introverts choose solitary over social activities by preference, whereas shy people avoid social encounters out of fear. According to Eysenck (2002) that introverts are energized when alone. They tend to "fade" when with people and can easily become over-stimulated with too many others around.

Emotional stability – instability (Neuroticism) and effective school farm management

Emotionality is a collective concept for the individual nature of the emotional life and of the control and processing of effects. It relates to intensity and control of emotional responses (Eysenck, 2006). Pederson and Breglio (2008) found a significant relationship between self-interaction and the stability – instability scale of their personality inventory. However, there were significant differences for males both in terms of total depth and amount of interaction with the data indicating that the more emotionally unstable males tended to disclose more about their personality and functions than did the stable males. In another study, Pederson and Higbee (2009) reported evidence of a negative correlation between neuroticism and self interaction of administrators to subordinates and a positive correlation between neuroticism and self-interaction to best male friends. Stanley and Bownes (2006) administered a self-disclosure questionnaire and the Maudsley Personality Inventory (MPI) to 72 male and 65 female first year students and found no consistent relationship between self-disclosure and neuroticism.

Chaikin, Bayman and Shaw (2005) used the MPI to group subjects as “normal” or “neurotic”, though it should be noted that their normal sample was biased in the direction of stability. They found that normal subjects reciprocated disclosure at a level of intimacy, similar to the confederate’s but neurotics disclosed at a moderate level regardless of whether the initial disclosure was intimate or superficial. These results suggest that neurotics are less able to reciprocate self-disclosure than normal and that neuroticism may be related to inappropriate disclosure rather than to any characteristically high or low level of disclosure.

Nelson and Coxhead (2007) in their study on neuroticism and social desirability studied 260 single British undergraduates of whom 191 were male and 69 females. All subjects were aged 24 and above. Group administrations of the Eysenck Personality Inventory (EPI) Form A (Eysenck and Eysenck, 1976) and of the Marlow – Crowne Social Desirability Scale, SDS were used (Crowne and Marlow, 2000).

Depue and Collins (2009) explained that neuroticism is also known inversely as emotional instability. It refers to the tendency to experience negative emotions. That those who score high on neuroticism may experience primarily one specific negative feeling such as anxiety, anger or depression, but are likely to experience several of those emotions. They further emphasized that people high in neuroticism are emotionally reactive.

Bagby, Marshall and Georgiades (2005) pointed out that neuroticisms respond emotionally to events that would not affect most people and their reactions tend to be more intense than normal. That they are more likely to

interpret ordinary situations as threatening, and minor frustrations as hopelessly difficult. Their negative emotional reactions tend to persist for unusually long periods of time, which means they are often in a bad mood. These problems in emotional regulations according to Bagby, et al (2005) can diminish a neurotic’s ability to think clearly, make decisions, and cope effectively with stress, hence it affects one’s ability to function and carry out his/her daily activities either as subordinates, or heads of administration in establishments.

At the other end of the scale, Bagby et al (2005) asserted that individuals who score low in neuroticism are less easily upset and are less emotionally reactive. They tend to be calm, emotionally stable, and free from persistent negative feelings. That freedom from negative feelings does not mean that low scorers experience a lot of positive feelings; frequency of positive emotions is a component of the extroversion domain. Invariably, individuals with low neuroticism scores would be better followers and good administrators who can manage an organization that would produce positive results.

Tough mindedness – tender mindedness (Psychoticism) and effective school farm management

This dimension of personality identifies the solitary, insensitive and uncaring character at one pole and the gregarious and empathetic type at the other. According to Eysenck (2006) tough mindedness – tender mindedness is a less widely known personality dimension. The traits entering into tough mindedness are aggressiveness, assertiveness, achievement-orientation, manipulation, sensation – seeking, dogmatism and masculinity. So it will not come as a surprise that most sport administrators are more tough minded than others. Eysenck (1983) claimed a correlation between tough mindedness and extroversion.

Eysenck (2005) administered a 60-item Public Opinion Inventory at a large sample of twin pairs. The two major social attitude variables measured were radicalism and tough mindedness , and it was found that there was a positive correlation between extroversion and tough mindedness but no correlation with radicalism. Tough mindedness has to do with displaying practical, selfish, and expedient attitudes in contrast to idealistic attitudes that on some test batteries would be labelled psychological mindedness.

Powell (2007) hypothesized that there are at least three ways of conceptualizing psychoticism – as measuring a predisposition towards psychotic illness; as measuring tough mindedness; and indicting a basic dislike of people. The first conceptualization seems to have little relevance here. The second concerning tough

mindedness is congruent with the observed positive correlation between psychoticism and punishment, ethical values and the negative correlation with religion; but tough mindedness seemed tangential to sexual permissiveness and cannot easily, therefore, explain the slight positive association between psychoticism and sex. Similarly, the third option stressing interpersonal hostility also fits with high ethnocentrism, high punitive and low religiosity. The second alternative is slightly favoured for the explanation of why high psychoticism persons hold certain attitudes. They are tough minded and hold congruent attitudes.

The main purpose of this study was to examine the relationship between personality traits of agricultural science teachers as they correlate to effective school farm management in secondary schools in Cross River State. The study was specifically designed to:

- * Determine the influence of extroversion-introversion as personality traits of agricultural science teachers and effective school farm management.

- * Find out the influence of emotional stability-instability as personality traits of agricultural science teachers and effective school farm management.

- * Determine the influence of tough mindedness – tender mindedness as personality traits of agricultural science teachers and effective school farm management.

For the purpose of guiding the researcher, the following research questions were posed.

The following research questions were posed to guide the study:

1. To what extent does extroversion – introversion as personality traits of agricultural science teachers correlate effective school farm management?

2. To what extent does emotional stability – instability as personality traits of agricultural science teachers correlate of effective school farm management?

3. To what extent does tough mindedness – tender mindedness as personality traits of agricultural science teachers correlate effective school farm management?

These hypothesis were also designed for the study

1. Extroverted agricultural science teachers are not significantly more effective in managing the school farm than introverted agricultural science teachers.

2. Emotionally stable agricultural science teachers are not significantly more effective in school farm management than the emotionally unstable agricultural science teachers.

3. Tough minded agricultural science teachers are not significantly more effective in school farm management than the tender minded agricultural science teachers.

METHODOLOGY

This research adopted the survey inferential approach using the ex-post factor design.

This research is located in Cross River State. Cross River State is located within the south-south geopolitical zone of Nigeria on latitude $5^{\circ}32'$ and $4^{\circ}27'$ North of the equator, and longitude $7^{\circ}50'$ and $9^{\circ}28'$ East of the Greenwich Meridian. It covers a landmass of 23,074,245 kilometers, with a population of over 2.5 million people. The population of this study comprises agricultural science teachers teaching agricultural science and managing the school farms in the selected secondary schools in the study area. The sampling technique adopted for this study was simple random sampling, in selecting the participating schools and Agricultural science teachers for the study. The sample of this study is made up of four hundred and fifty six (456) agricultural science teachers randomly selected from the three education zones of the state for the study. Two research instruments were designed for the collection of data for this study. The instruments were designed and developed by the researcher with the help of the supervisors. The first was Agricultural Science Teachers Personality Inventory Questionnaire (ASTPIQ) designed to measure their personality traits. The questionnaire was divided into two sections. Section A of the instrument deals with personal data of the respondents such as age, sex, qualification, teaching status and local government of origin. Section B is a ninety (90) Yes and No items designed to measure personality traits of the teachers of agricultural science. The second instrument was agricultural science teachers Effectiveness Questionnaire (ASTEQ) designed to measure their effectiveness with a total 34 of items (ASTEQ). To determine the reliability of the instruments, a trial testing was done in the population area using fifty (50) respondents. The Test – Retest Reliability Estimates were computed and used to test each of the variables of the study. The reliability coefficient values for ASTPIQ and ASTEQ were within the generally accepted ranges from 0.83 – 0.88 for ASTPIQ and from 0.78 – 0.89 for ASTEQ. It was concluded that the instrument is reliable. The questionnaire for the study was administered by the researcher personally with the help of two research assistants.

RESULTS AND DISCUSSION

The findings that emerged from data analyses and the discussion of these findings are presented as per the hypotheses designed for the study below.

Table 2: Independent t-test analysis of the effectiveness in school farm management between extroverted and introverted agricultural science teachers. (N = 228)

| S/N | Effectiveness | | n | \bar{X} | SD | t-value |
|-----|---------------------|--------------|------------|--------------|-------------|---------|
| 1 | Human relations | Extroverted | 131 | 21.52 | 2.22 | 10.67 |
| | | Introverted | 97 | 18.25 | 2.34 | |
| | | Total | 228 | 20.13 | 3.19 | |
| 2 | Ability to motivate | Extroverted | 131 | 17.15 | 1.99 | 7.57 |
| | | Introverted | 97 | 15.04 | 2.14 | |
| | | Total | 228 | 16.25 | 2.52 | |
| 3 | Communication | Extroverted | 131 | 18.17 | 2.12 | 6.21 |
| | | Introverted | 97 | 16.43 | 2.07 | |
| | | Total | 228 | 17.43 | 2.41 | |
| 4 | Knowledge of skills | Extroverted | 131 | 22.26 | 2.33 | 8.50 |
| | | Introverted | 97 | 19.65 | 2.27 | |
| | | Total | 228 | 21.15 | 3.27 | |
| 5 | Discipline | Extroverted | 131 | 18.49 | 2.31 | 8.84 |
| | | Introverted | 97 | 15.86 | 2.15 | |
| | | Total | 228 | 17.37 | 2.18 | |
| 6 | Total effectiveness | Extroverted | 131 | 35.42 | 3.08 | 6.34 |
| | | Introverted | 97 | 32.58 | 3.52 | |
| | | Total | 228 | 34.21 | 5.33 | |

* Significant at .05 level, critical $t = 1.96$, $df = 226$

Hypothesis one

Extroverted agricultural science teachers are not significantly more effective in the management of school farm than introverted agricultural science teachers. The result of the analysis is presented in Table 2.

The result in Table 2 reveals that the calculated t-values for human relations (10.67), ability to motivate (7.57), communication (6.2), knowledge of skills/training (8.50), discipline (8.84) and total effectiveness (6.34) are respectively higher than the critical t-value of 1.96 at .05 level of significance with 226 degrees of freedom. With these results, the null hypothesis is rejected. This result therefore indicates those extroverted agricultural science teachers are significantly more effective in managing the school farm than introverted agricultural science teachers.

Hypothesis two

Emotionally stable agricultural science teachers are not significantly more effective in school farm management than the emotionally unstable agricultural science teachers. The result of the analysis is presented in Table 3.

The result in Table 3 shows that the calculated t-values for human relations (7.47); ability to motivate (7.16); communication (2.75); knowledge of skills (5.53); discipline (2.19) and total effectiveness (4.81) are

respectively greater than the critical t-value of 1.96 at .05 level of significance with 226 degrees of freedom. With this result the null hypothesis was rejected. The result therefore means that emotionally stable agricultural science teachers are significantly more effective in school farm management than the emotionally unstable agricultural science teachers.

Hypothesis three

Tough-minded agricultural science teachers are not significantly more effective in school farm management than the tender minded agricultural science teachers. The result of the analysis is presented in Table 4.

The result in Table 4 indicates that the calculated t-values for human relations (8.78); ability to motivate (5.87), communication (3.77); knowledge of skills/training (4.58), discipline (6.66) and total effectiveness (6.19) are respective higher than the critical t-value of 1.96 at .05 level of significant with 226 degrees of freedom. With this result the null hypothesis was rejected. This result implies that tough-minded agricultural science teachers are significantly more effective in school farm management than the tender minded agricultural science teachers.

DISCUSSION

The discussion of findings of this study is presented

Table 3: Independent t-test analysis of the effectiveness in school farm management between emotionally stable and emotionally unstable agricultural science teachers. (N = 228)

| S/N | Effectiveness | | N | \bar{X} | SD | t-value |
|-----|---------------------|----------------------|------------|--------------|-------------|---------|
| 1 | Human relations | Emotionally stable | 125 | 21.50 | 2.14 | 7.47* |
| | | Emotionally unstable | 103 | 19.01 | 1.98 | |
| | | Total | 228 | 20.13 | 3.19 | |
| 2 | Ability to motivate | Emotionally stable | 125 | 17.18 | 2.21 | 7.16* |
| | | Emotionally unstable | 103 | 15.11 | 2.16 | |
| | | Total | 228 | 16.25 | 2.52 | |
| 3 | Communication | Emotionally stable | 125 | 17.78 | 1.99 | 2.75* |
| | | Emotionally unstable | 103 | 17.01 | 2.17 | |
| | | Total | 228 | 17.43 | 2.41 | |
| 4 | Knowledge of skills | Emotionally stable | 125 | 21.99 | 2.59 | 5.53* |
| | | Emotionally unstable | 103 | 20.13 | 2.48 | |
| | | Total | 228 | 21.15 | 3.27 | |
| 5 | Discipline | Emotionally stable | 125 | 17.65 | 2.15 | 2.19* |
| | | Emotionally unstable | 103 | 17.03 | 2.1 | |
| | | Total | 228 | 17.37 | 2.18 | |
| 6 | Total effectiveness | Emotionally stable | 125 | 35.05 | 3.21 | 4.81* |
| | | Emotionally unstable | 103 | 33.07 | 3.28 | |
| | | Total | 228 | 34.21 | 5.33 | |

* Significant at .05 level, critical $t = 1.96$, $df = 226$.

Table 4: Independent t-test analysis of the effectiveness in school farm management of tough minded and tender minded agricultural science teachers (N = 228)

| S/N | Effectiveness | | N | \bar{X} | SD | t-value |
|-----|---------------------|---------------|------------|--------------|-------------|---------|
| 1 | Human relations | Tough minded | 128 | 21.22 | 2.15 | 8.78* |
| | | Tender minded | 100 | 18.73 | 2.11 | |
| | | Total | 228 | 20.13 | 3.19 | |
| 2 | Ability to motivate | Tough minded | 128 | 16.96 | 2.14 | 5.87* |
| | | Tender minded | 100 | 15.34 | 2.01 | |
| | | Total | 228 | 16.25 | 2.52 | |
| 3 | Communication | Tough minded | 128 | 17.91 | 2.15 | 3.77* |
| | | Tender minded | 100 | 16.82 | 2.17 | |
| | | Total | 228 | 17.43 | 2.41 | |
| 4 | Knowledge of skills | Tough minded | 128 | 21.95 | 2.41 | 4.58* |
| | | Tender minded | 100 | 20.12 | 2.85 | |
| | | Total | 228 | 21.15 | 3.27 | |
| 5 | Discipline | Tough minded | 128 | 18.10 | 2.01 | 6.66* |
| | | Tender minded | 100 | 16.43 | 1.78 | |
| | | Total | 228 | 17.37 | 2.18 | |
| 6 | Total effectiveness | Tough minded | 128 | 35.55 | 4.01 | 6.19* |
| | | Tender minded | 100 | 32.49 | 3.46 | |
| | | Total | 228 | 34.21 | 5.33 | |

* Significant at .05 level, critical $t = 1.96$, $df = 226$.

based on the hypotheses tested.

Extroversion – Introversion and effective school farm management

The result of this study showed that extroverted agricultural science teachers are significantly more effective in school management than the introverted. This

result is in line with Morris (2001) when he pointed out that extroverts are sociable, cheerful, and do not like to be alone. They enjoy excitement, take risk, and are generally impulsive and outgoing, optimist, active and lively, while the introverts are the opposite of this; cold, retiring and aloof. Hence Hogan, Hogan and Roberts (1996) in a related study submitted that introverts are associated with anti-social, withdrawn and neurotic behaviours and seen as having negative characteristics

that can not influence people positively.

The result is in consonance with the findings of Lombardo, Ruderman and McCauley (2008), in a study on "success and derailment in management positions". They discovered that managers tend to be more extroverted than the average person and that extroversion has a positive correlation with success in management. The result also confirmed the study of Turner (2008) on the performance of first grade teachers in schools which indicated a strong superiority of extroverts over introverted teaches. The subjects in the study were tested for personality and effectiveness difference with Metropolitan Achievement Test. The personality measure used was Scaeffe's Classroom Behaviour Inventory, which involves teachers' attributes and is scored for positive social behaviour, extroversion – introversion, and positive task orientation. It was proved that of all the measures taken, extroversion was the best predictor of achievement and effectiveness showing a strong positive relationship to the three Metropolitan Achievement Test sub-areas of knowledge of classroom management, teaching – learning achievement and subject mastery.

Although extroverted persons have a limited long-term memory than the introverted, but they (extroverted) possess a more efficient memory or working ability and communication skills. This is in lien with Ellis (2004), Cook (2001) and Swain (2005) who identified that extroverts do better in acquiring basic interpersonal communication skills than the introverts. These results and findings are indications that extroverts have positive human relations, friendly, can inspire and of course hard working of which these are all attributes of effective management of an organization.

However, the result of this study is contrary to the views of Comb and Snygg (2009) who saw introversion as the enjoyment of personal space and privacy, the ability to work and function in isolation. In essence, they do not see any particular behaviour as good for bad, instead, the appropriateness of behaviour is determined by the situational context and whether or not the behaviour leads to accomplishment of the desired objectives.

Emotional stability – instability (Neuroticism) and effective school farm management

The result of this study showed that emotionally stable agricultural science teachers are significantly more effective in school farm management than the emotionally unstable. A pertinent explanation may be that an emotionally stable individual tends to be sure of himself and what he wants to achieve in life. As such, he galvanizes his effort, both mental and physical towards the achievement of such goals. An individual who is not

perturbed even in the face of seeming worrisome situations is likely to concentrate and take his job or duties very seriously in order to be effective in his administration so as to achieve high productivity in the establishment which he manages.

The result is in line with the findings of Chaikin, Bayman and Shaw (2005). They found that a correlation exists between emotional stability and performance or achievement. The result is also in agreement with the study of Nelson-Jones and Coxhead (2007) in their study on neuroticism and social desirability found out that males are more stable than females hence they make better administrators than females and the emotionally unstable individuals irrespective of their status.

The result is however inconsistent with the findings of Perderson and Highee (2009), Stanley and Bownes (2006). These found negative correlation between neuroticism and effective performance in terms of interaction with subordinates in an establishment. One should note that it is significantly evidenced that an emotionally stable individual functions well in any field of endeavour of which school farm management is not an exception.

Tough mindedness – tender mindedness (psychoticism) and effective school farm management.

The study revealed that a significant positive difference between tough mindedness agricultural science teachers and tender mindedness agricultural science teachers exists. A possible explanation for this is that an agricultural science teacher who is tough minded is one who embraces life challenges with all amount of vigour. Such a teacher applies this approach to his duty in defiance of any possible barrier and so there is always discipline, hardwork and smooth interpersonal relationship in the work place with subordinates and coworkers in the organization.

The work in the school farm is one unique are in the teaching of agriculture. This is so because there are students are not ready to be involved in practical farm work at all. To be able to cope with them a teacher need to be tough minded.

This result is supported by Eysenck (2006). According to Eysenck, aggressiveness, assertiveness, achievement, orientation, manipulation, sensation-seeking and dogmatism are traits entering into tough mindedness. This is why agricultural science teachers prefer the "hard-nose" approach to dealing and management of their students to "easy-going" approach. This is in agreement with Douglas McGregor's (1906 – 1964) Theory X and Y which states that human beings need to be forced to work because they do not like working. On the other hand, there is need to be

motivated, there should be flow in communication, human relations, discipline and of course exhibition of knowledge of skills in ones area of endeavour. When all these traits are possessed by the agricultural science teacher, there is a leeway towards achievement of the organizations' goals which invariably portrays effectiveness in the management of the school farm.

CONCLUSION

On the basis of the findings of this study, it was concluded that personality traits of agricultural science teachers such as: extroversion – introversion, emotional stability – instability, tough mindedness – tender mindedness, aggressiveness, obsessiveness and cynicism significantly influence and related to effective school farm management in Cross River State.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Authorities of the State Education Board in Cross River State should ensure that teachers of agriculture for employment in to schools should take personality tests as added criteria for reselection exercise. This is necessary because it would enable the management have a knowledge of baseline personality traits of these teachers so employed as this could assist in giving out some specific assignments.

2. It is urgently incumbent on the Education Ministry in the State to look seriously at methods of changing the agricultural science teachers' personality into a positive one. One of the ways of getting this positive personality change is to create necessary enabling environment.

3. They should be an urgent acquisition of farmlands for all secondary schools in the state to enable such schools have school farms. This does not mean that such schools should turn the practical activity into exploitative venture like in most schools in the rural areas where students are forced to bring yam and cassava seedlings every year for the school farms. This singular aspect of exploitation had forced most parents to grumble and pick up quarrels with school authorities and challenge the authenticity of such school farms.

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