

*Full Length Research Paper*

# Personal factors as predictors of students' academic achievement in colleges of education in South Western Nigeria

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**Educational stakeholders have continued to express concerns over the poor academic performance of Nigerian students at virtually all levels of academic engagements. This paper investigated personal factors as predictors of students' academic performance in the South-Western Nigeria. The study employed the ex post facto design using a survey design and a multiple regression model. The samples used for the study consisted of 1,100 (200 and 300) National Certificate of Education (NCE) students in Federal, State and Private NCE-awarding institutions in South Western Nigeria, using stratified sampling techniques. The validated research instruments used for the study had the following psychometric properties: Cronbach alpha ( $\alpha$ ) [0.79 (students) and 0.73 (lecturers); Guttman split-half 0.78 (students) and 0.71 (lecturers; and Spearman-Brown equal length results were 0.69 (students) and 0.70 (lecturers)]. The study found that a number of personal factors like students' interests, home environment, parental support and study habits were significant predictors of students' academic achievement in the Colleges of Education sampled. On the other hand, students' perception of course and self-concept were not found to be significant predictors of academic achievement. The study proffered a number of recommendations to improve the quality of educational policy outcomes geared towards improving students' educational performance and hence enhance the achievement of national economic goals.**

**Key words:** Personal factors, academic achievement, Nigeria, ex post facto design, stratified random sampling, multiple regressions.

## INTRODUCTION

### Background to the Study

The development of any nation is hinged on solid educational foundation for its citizenry. This suggests that education is a means of effecting changes in the society

in order to build a well-developed country. The objective of education includes creativity, objectivity and intellectual adventure. Education enables a child to develop

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physically, mentally, socially, emotionally and intellectually. Education is the key to creating a society, which is dynamic and productive, offering opportunity and fairness to all. Therefore, it is axiomatic that efforts should be geared towards maintaining high standards in schools. The standards will be reflected in students' academic achievement.

Like in all other facets of national planning and development, education has its own share of poignant challenges. Academic problems are frequent indicators of larger problems, often having to do with personality and lifestyle, societal and economic factors and the family. Problems of non-achievers are numerous but the truth is that they lack the knowledge of their abilities and strengths, moreover, they have not developed the necessary study skills and techniques and they also lack the interest and motivation that are requisite for achievement.

For example, Uwadiae (in Dike 2007) stated that students' performance in the West African Senior School Certificate Examination (WASSCE) from 2001 and 2005 has declined with mass failure recorded in the two basic subjects that form the foundation for good academic achievement in tertiary institutions. This, no doubt calls for concern of stakeholders. Dike passed a guilty verdict on government and parents for students' failure in English Language and Mathematics.

Financial Standard (2008) in an editorial captioned 'Mass failure in WAEC Examination' described the performance of students in the May/June 2008 examination conducted by the Council as disturbing. Only 188,442 candidates, that is, 13.7% of 1,361,42 candidates who sat for the examinations made credit passes in English Language, Mathematics and three other subjects. A total of 232,755 other results have yet to be released due to errors made by the candidates during registration. Of the pending results, 74,956 were being investigated for various examination malpractices. Available examination statistics from WAEC showed that the May/June 2008 WASSCE result was the worst performance in the last seven years. According to the Council's examination statistics, the average failure recorded in English Language and Mathematics between 2001 and 2005 was roughly 38% of the total number of candidates that sat for the examination. It is upsetting that the results of the recently released May/June 2008 WASSCE showed that over 80% of the candidates did not score credit in English Language and Mathematics. The result showed that the number of candidates that obtained credit in English Language, Mathematics and three other subjects in the May/June 2008 WASSCE actually plunged by almost 6% from 2007 record.

Obe (1996) identified the causes of mass failure in examinations. The factors responsible for mass failure include students' weak background, students' low intelligence, lack of aptitude and poor interest for the subject, students' bad habits and poor study skills, students' weakness in comprehension and inability to express

themselves, lack of qualified teachers for some subjects, lack of parental motivation and support, teachers not dedicated to duty, poor school infrastructure and poor learning environment, overcrowded classrooms, lack of good textbooks and libraries and subsequently incessant strikes by teachers due to poor conditions of service.

The trend record of low academic achievement is not limited to secondary schools but also rampant among students of tertiary institutions. This has been a subject of major concern to educational planners, administrators, stakeholders in education and the students themselves. In support of this, Falola (2008) commented that a total number of 39 students of the Niger state owned University, Ibrahim Badamosi Babangida University, Lapai have been expelled from the institution over poor academic performance, while two others have been expelled for examination malpractices according to the vice chancellor. Professor Muhammed Chado, the vice chancellor, further stated that the students were dismissed for failure to meet up with the minimum academic requirements after two academic sessions on probation.

Previous research in related studies pointed out many factors that may account for students' academic achievement. Some of these researchers concentrated on the Nigerian environment (Osarenren, 1996; Ogunkola, 2000; Ojerinde, 1998; Fabiyi and Fagbamiye, 2001; and Kabiru, 2003); and other studies (for example, Nelson and Soli, 2000; Garzuk and Chagok, 2001; Mark, 2002; Bazargan, 2002; Sucharita, 2004) were based on foreign countries.

However, none of these studies have concentrated on personal factors in relation to colleges of education, especially in Nigeria. This might be due to the piecemeal approach to the research into academic achievement in the colleges of education in the country. This gap in knowledge should not be allowed to continue uninvestigated if the country is to achieve the educational objective of providing qualitative graduates to power Nigerian economic and political development programmes. The quality output of any operation is a function of the input that is processed. Consequently, the quality output of primary and secondary school certificate holders depends, to a large extent, on the quality of trained teachers from colleges of education. This factor is recognized by the Nigerian National Policy on Education (2004:33) which states that the minimum qualification for entry into the teaching profession shall be the Nigeria Certificate in Education (NCE).

### **Statement of the problem**

The consequences of not addressing the problem of students' academic achievement are many. Students by their nature do get involved in very many activities outside their studies. When students lose interest in their studies, failure rate will be higher. They may engage in very many unlawful activities like cultism, robbery,

prostitution and tyranny, among other vices. Furthermore, students' low academic achievement may result in failure. When failure becomes persistent, students may easily withdraw from the school system. Research finding has also shown that economic deprivation could lead to failure.

In addition to this, students may engage in all forms of disruptive behavior inside and outside the school system. Drug addiction is one of the problems likely to be encountered by the students. Research reports confirmed that more students are into drug addiction. Reports survey carried out in Lagos and Kano showed that cannabis, heroine and cocaine are widely abused by Lagos and Kano students. The national drug law enforcement agency (NDLEA) drug force reports showed that the common drugs abused mainly by smokers were marijuana (86.9%), cannabis (66%), alcohol (22%), cocaine (18%) and heroine (13.8%) (*Vanguard*, February 21<sup>st</sup>, 1994).

However, excessive alcohol consumption creates numerous health problems and shortens lifespan. Heavy drinkers are at greater risk of cancer, ulcer, heart disease, muscle wastage, malnutrition and cirrhosis of liver. These problems could lead to death. Low academic achievement could also lead to joblessness after the students have graduated. Hence, the students may find it difficult to compete with their colleagues who have passed out of the school system with very good grades. This may lead to further problems like robbery, prostitution, general violence, alcoholism, smoking and drug trafficking, among others.

Achievement is important in education. Despite the huge resources expended by government, results are not forthcoming. It is in view of these problems that research is currently being done to look into the personal factors that are responsible for students' academic achievement among students in colleges of education so as to enable the students to bring about better performance.

### ***Aim and objectives of the study***

The broad objective is to investigate the personal factors responsible for students' academic achievement in colleges of education in South-Western Nigeria,

- i. The specific objectives are: to identify the level of students' academic achievement in federal, state and private colleges of education in that part of the country.
- ii. It also includes a comparative study of personal factors as they affect students in colleges of education under study.

### ***Research Questions***

The study was designed to provide answers to the following questions:

- i. Is there any difference in the influences components of

personal factors affecting educational achievement across federal, state and private colleges of education in South Western Nigeria?

- ii. What is the significance of personal factors as predictors of students' academic achievement in the colleges of education in the South Western Nigeria?
- iii. What are the educational policy implications of the empirical findings of this study?

### ***The Statement of the Hypotheses***

In order to answer the research questions, the following propositions are made:

- i. Personal factors are not significantly related to students' academic achievement in colleges of education in South Western Nigeria.
- ii. There is no significant difference in the ranking of personal factors among students.

### ***Significance of the Study***

This study is significant in many respects. The study will help to reveal the components of personal factors responsible for students' academic achievement in colleges of education in South-Western Nigeria. It will compare the relationship of the variables with one another as they affect students from the colleges used for the study. Ranking of the factors will be done according to the perception of the students to make readers have an overview of the interrelatedness of the variables used for the study. This is of particular significance in a democratic environment where political parties attempt to improve educational performance in a competitive manner. The study therefore offers empirical support to assist educational policy makers, administrators and educators in the educational planning and implementation. Finally, students would also benefit from the study through suggestions offered on ways of improving students' academic achievement by the various interactions of the components of personal factors identified in the study and the study will lay a solid foundation which subsequent researchers in similar studies may build upon

### ***Scope of the Study***

The study investigated the personal factors responsible for students' academic achievement in Nigerian Colleges of Education in South Western Nigeria. It also reported how the factors is related to one another among the Colleges studied.

### ***Theoretical Framework/Conceptual models***

**Theoretical Framework:** The study of comparison of

factors responsible for students' academic achievement in identified Nigerian colleges of education cannot be complete without considering the theoretical background on which some of the factors are based. Consequently, this thesis is anchored on a number of fundamental theories. These include theory of achievement motivation; Watson's theory of learning; Thorndike (S-R) Reinforcement theory; Skinner's operant conditioning theory and Hull's theory of learning. The theories are explained thus:

(a) **Theory of Achievement Motivation:** This theory was propounded by McClelland (1951) of Harvard University. According to the theorist, the psychological study of the individual and the nation can contribute a great deal to the problem of economic growth. Human beings differ from one another in the strength of achievement motive. It is this difference in the strength of motivation to achieve that is important in understanding the differences in the economic growth of nations. This theory can be related to the study and has been upheld by a number of researchers (Misanchuk, 1977; Dunham, 1973 and Ajila and Olutola, 2000) and is also relevant to the current study.

For example, the development of achievement motives is affected by a number of variables in home, school and society. Home plays an important role in the early training of children for the development of attitudes and motives. Parental expectation and guidance will assist the child to develop the need for high achievement in life. The society and its social philosophy is an important variable in developing achievement motive. There are communities which are achievement-oriented. There are other societies which believe in fate and leave everything to God. The teacher can help students to develop achievement motive.

(b) **Watson's Theory of Learning:** According to the theorist, the explanation of learning, understanding of brain and its functioning is very essential. This theory holds that people's behaviour is learned by interacting with external environment stimuli. Emphasis is laid on providing conducive environment in school for efficient and permanent learning. Sufficient practice and exercise are necessary to make the bondages between S-R permanent. This theory has relationship with the current study because academic and social integration affect student persistence and achievement in colleges

## REVIEW OF RELEVANT LITERATURE

### History and Development of Teacher Education in Nigeria

In Nigeria, formal teacher education started with the arrival of the European missionaries. The missionaries introduced primary education referred to as elementary

schools. Secondary education and then teacher training colleges followed.

Specifically, the Phelps-Stoke Commission of 1920 identified the loopholes in the education provided by the missionaries. The way the curriculum was designed did not meet the aspirations of the people. Besides, there was a need for highly conscientious and efficient classroom teachers. The report led to the 1925 memorandum on education, which gave birth to the establishment of two types of teacher training colleges -- the grade III and grade II teacher training colleges. In addition to these, colleges were also established to produce teachers that were awarded grade I certificate to teach in the lower classes of secondary schools.

With the emergence of universal primary education programme, there was a need to expand primary and secondary school education because the teachers on ground could not match the increasing number of students' enrolment. This led the government to organize induction course for secondary school certificate leavers in order to qualify them to teach at the secondary schools.

The Ashby Commission of 1960 discovered a lot of discrepancies in this arrangement and its report led to the establishment of colleges of education. The colleges were established to expand the human resources in terms of personnel to teach in the colleges of education. Today, there are about seventy-two of such colleges (private, state and federal) all over the Nigerian federation.

### *Personal Factors that affect Students' Academic Achievement*

A number of variables appear to affect the effectiveness of teacher education in Nigeria. For national educational policies to achieve their goal of engendering national development, these factors may be of relevance to all educational stakeholders in Nigeria: Government, schools, provost/principals, teachers, students and the society at large.

The personal factors considered in this study as identified in literature include: home environment, students' interest, study habit, self-concept, peer influence, students' perception of course and parental support.

### *Personal Factors and Students' Academic Achievement*

**Home Environment:** Yusuf (2001) conducted a study on the future of teaching and learning mathematics in Katsina State. It was observed that pupils from educationally advanced homes, most often, required the teacher to confirm the knowledge and ideas they have already acquired informally, as different from waiting on the teacher as the custodians of knowledge. In other

words, students who are from formally educated parents are likely to learn faster and achieve more than students from illiterate parents.

In another study carried out by Gadagbui (1998) it was observed that most children had serious financial and sociological problems at home, which had effects on their academic progress. Furthermore, the West African Examinations Council (WAEC) Report (2000) indicated that children should also be blamed for academic failure. The report stated that many of the children were not committed to their studies. As a matter of fact, it was observed that many of them lacked English Language proficiency as they spent too much time watching television.

Children from alcoholic homes often experience stress, feel insecure, angry and frustrated and this affects their academic performance. Kuperman et al. (1999) carried out a research on students from alcoholic and non-alcoholic families. The researcher found that children from alcoholic families have more anxiety and low mood than children from non-alcoholic families. The children also have lower verbal and reading scores, increased delinquency, truancy and social inadequacy and more school related behaviour problems at age 13. Such children also begin to drink at an earlier age and as they grow older, they become alcoholics and develop increasing problems. In addition, Buyanov (1986) stated in his study that children born by alcoholic mothers have cerebrastrhenic syndrome (which is a brain defect during pregnancy). They suffer from travelling sickness, vomit a lot, poor memories and have short attention span. They sleep deep and cannot wake up to urinate; they are irritable or over joyful and careless. Worse of it all, they have poor marks at the end of each lesson with answers poorer than the first one.

In another study by Ajila and Olutola (2000), which investigated parents' socio-economic status on university students' academic performance, it was reported that the family exerts a great influence on the students' psychological, emotional, social and economic state. The researchers noted that the state of the home affects the individual since the parents are the first socializing agents in the individual's life. Therefore, the family background of an individual and the context of his family environments affect his retention to life situations and his level of performance. Furthermore, the study revealed that family income, occupations, house type, level of parent's education and dwelling area exert a significant influence on academic achievement. The study confirmed that the extent to which parents are able to care for their children financially, determines their disposition and motivation to educational achievement. The level of education and occupation of parents reflect their perception of educational importance, which influence the encouragements and involvement of such parents in their children's educational attainments.

In a similar study by Kingdom (1996) it was reported

that home factors have significant correlation with students' academic achievement. The researcher argued that student's age and number of hours of home study per week affect academic achievement. He confirmed that longer home study enhances learning particularly in mathematics and that age reflects the negative influences of low motivation and grade repetition. Travel time to school is also reported to have a positive influence on achievement. Kingdom (1996) also identified family economic status as being significantly related to academic achievement, for example low caste pupils have significantly lower achievement than their non-low caste colleagues, even after controlling for parental education and household wealth. The statistical tools used for the study are descriptive and inferential (regression). The findings of the study show that the number of siblings in a family affect academic achievement for parental attention will be less if children are many.

Additionally, Cutrona et al. (1994) investigated the presence of parental social support and reported that parental social support is positively related to college achievement. The researchers used multiple linear regression and Pearson moment correlation coefficient.

Chadwick, Bahr and Stauss (1976) conducted a study on Indian education in the city: correlates of academic performance and found that family instability affect academic achievement of male child more than the female because the son is deprived of male role model. Therefore, family instability is significantly related to GPA (Grade Point Average) for females and not for males.

According to the Moynihan (1965) thesis, the matriarchic nature and instability of the Black family contribute to the economic, social and psychological disadvantages, which Blacks frequently experience in India. Conclusively, it was found that family instability may contribute to inappropriate behaviour such as: delinquency, crime, suicide, alcoholism, and other pathologies and this may lead to inadequate school performance. However, family instability was found to be inversely related to academic achievement.

**Students' Interest:** Interest also contributes to students' academic achievement. Interest has to do with a learner's predisposition to react positively in certain ways toward certain aspects of the environment and interest is usually developed in relation to and remain allied to more basic motives. Interest reaction to any situation depends upon the situation's potential or actual fulfilment of personal needs and goals. Students' interest in courses has been cited as a partial explanation for overall course ratings, occupational choice and achievement. Bycio and Allen (2007) in their study of factors associated with performance on the Educational Testing Service pointed out that GPA and motivation were significantly related to major field achievement test in business performance. Multiple regression and t-tests were used to examine the degree to which the entire set of predictors (that is. GPA,

SAT and the student motivation scale) could account for scholastic performance. Similarly, Okebukola (1997) observed the link between attitude and academic success and noted that a positively high level of attitude towards a particular subject is said to translate into a high level of need for achievement and ultimately, a high level of performance. In other words, if students have positive attitude towards a particular subject, there is assurance of good performance. This gives credence to the fact that interest contributes in remarkable dimensions to students' academic achievement.

**Study habit:** Study habit is an important factor in students' academic achievement. Many students pay little or no attention to their studies and may also not be regular at school. As a matter of fact, some of them could abandon the classrooms to engage in non-profitable tasks like stealing, gossiping, bullying other students, visiting video clubs and engaging in other unwholesome group behaviour. Adesemowo (2000) noted in her study that a major cause of under achievement at school is poor study habit; even a brilliant student can underachieve if he has faulty study habit. Richter (2006) studied the inter-temporal consistency predictors of student performance and reported that study habit, high school grades and standardized tests of educational achievement have the greatest predictive power with respect to the academic performance of students in University education when compared with other factors. The researcher made use of regression and analysis of variance. The study further revealed that high school grades are the most important predictors of the performance of business administration students.

Adesoji and Oladele (2003) conducted a study on student and teacher related variables as determinants of secondary school students' academic achievement in chemistry in Lagos State, Nigeria. The study revealed that study habit and attitude had no significant and direct relationship with secondary school students' academic achievement. According to the researchers, this is not to say that they did not have effect but their effects are not significant particularly in the presence of the teacher variables such as teacher experience, teacher qualifications and teacher's age. This finding established the importance of teacher in a teaching-learning situation.

**Peer Influence:** Peer group relationship may also lead to acts of truancy and absenteeism on the part of the students. Adolescence is a period of increasing influence of one's peers and peer values and a diminished role of parents as a primary reference group. Their main values are social participation, group loyalty, individual achievement and responsibility. Peer acceptance is particularly crucial to the adolescent and the influence of the group may be powerful and all encompassing. This is because whatever is right to their friends automatically becomes the right thing to do. This accounts for the reason why

students would insist that they must buy certain things, which members of their peer group already possess.

Reinforcement of students' academic work by significant others like parents, teachers, peer group and fellow students affect academic performance. Oldfather and McLaughlin (1993) in their study found that students are motivated to learn in classrooms where teachers impress the students that they can make it, where teachers praise and encourage students for efforts made and where teachers encourage students not only to compete with others but also to compete with themselves. They confirmed that when students are taught in this manner, they are always motivated to learn to fulfil their teachers' prophecy that they can make it. Such students become academic successes.

**Students' Perception of Course:** Campbell, Brownlee and Smith (1996) carried out a study on the differential impact of teachers' approaches to teaching on secondary school students' approaches to learning. They found that students' conception of learning significantly affected differential impact of teacher's approaches to teaching. The researchers used some models of teaching and learning in their investigation. Besides, one-way analysis of variance was used to test for differences between six classes on each scale of LPQ and for learner self-concept. According to the researchers, university students conceptualized learning in six qualitatively different ways, which are increasing one's knowledge, memorizing and reproducing, applying, understanding, seeing something in a different way and changing a pattern. These six categories can be further categorized into quantitative (reproductive) and qualitative (constructivist) dimensions, which relate to particular epistemological positions, and influence students' approaches to learning (Biggs, 1989). The first three conceptions represent a quantitative orientation to a learning similar to Perry's "dualists" where knowledge is viewed as absolute and categorical and learning involves surface strategies (Perry, 1981). The second three conceptions reflect a qualitative conception, which is likely to involve deep approaches to learning.

**Parents' Support:** The family has an important role to play in the education of children. Parents are the custodians of their children's education. Their attitude to the education of their children may make their (children) educational achievement. The levels of parents' education, their income and their occupation or socio-economic status exert a significant influence on their children's educational achievement. Race also has a remarkable role to play in educational achievement. In Nigerian setting, for instance, there is the general belief among the Hausas that a female child should get married earlier it is also observed in other major ethnic groups (Yoruba and the Igbo). The northern Nigerian culture also favours religious education over the western education.

Indeed, Opare (1999) noted that parents' education,

especially, mother's level of formal education is strongly related to their productivity to reinforce their children's academic work. Hence, literate mothers more than literate fathers tend to offer psychological support to their children's work and this has a positive effect on the children's academic achievement. In this study, data were collected from 600 students, 254 boys and 346 girls and the results showed a strong positive relationship between mother's reinforcement of their children's academic work on one hand and the children's academic effort on the other. This suggests that mothers are more likely to offer psychological support to their children's school-work and that such a support motivates the children to work harder. The findings of this study corroborate that of Kalmjin (1994), which showed that educated mothers provide their children with more materials and activities that promote high educational outcomes. These findings are also consistent with research findings that educated mothers tend to reinforce their children's effort at school and that such children invariably do well in school (Handa, 1996).

## RESEARCH METHODS

### Research Design

The research design employed for the study is *ex-post facto* using a survey design and a multiple regression design. Asika (1991) stated that *ex-post facto* research is a systematic empirical study in which the researcher does not in any way control and manipulate the independent variables because the situation for the study already exists or has already taken place. The author further opined that the researcher could not manipulate the independent variables because they cannot be manipulated. However, the researcher can indeed create or contrive a situation that will generate the requisite data for analysis. In this study, the authors located the personal factors studied from education literature.

### Population

The population for the study consisted of 1,900 lecturers and 12,420 (200 Level and 300 Level) NCE students in federal, state and private NCE-awarding institutions in South Western Nigeria: Ekiti, Lagos, Ogun, Ondo, Osun and Oyo States.

### Sample and Sampling Technique

The sample for the study was drawn from the Colleges of Education in each of the six States of the South Western Nigeria. The population was stratified into the homogeneous groups of federal, states and private Colleges of Education. Subsequently, random sampling technique was applied to pick the institutions for the study. In all, there are seventeen Colleges of Education in the population. On the basis of this selection process, the sampled Colleges of Education are listed in Appendix 1 of this research report.

Some States (Osun, Ekiti and Ondo States) have no privately owned Colleges of Education at the time the study was conducted. Hence, the sample of privately owned Colleges of Education is limited to two States. One hundred students were randomly selected for the study from each of the institutions and questionnaires were

administered on them. In addition to this, questionnaire was administered on at least ten lecturers from each of the institutions in order to make the data robust.

The questionnaire required the students to rank the personal variables that affect students' academic achievement from the most significant variable to the least. Students were also required to state other factors, that are not listed in the instrument, which affect their academic achievement. Opinions of lecturers were also sought on factors they thought were likely to affect students' academic achievement.

### Research Instruments

Two similarly structured questionnaires were used for the study. The first questionnaire was designed for the students while the second was targeted at the lecturers. The instruments are 4-point likert scale questionnaires aimed at eliciting the respondents' perceptions of personal factors that are likely to affect students' academic achievement in the State, Federal and Private Colleges of Education in South Western Nigeria.

Part One of the questionnaires sought for information on demographic data such as sex, age, name of institution, department, state of origin, level of schooling, qualifications, residential area, parental social-economic status, grade point average in school tests and exercises and assignments. Part two of the questionnaire required the respondents to supply information on personal factors that affect their academic achievement. The data gathered was analyzed using multiple regressions. Part three of the questionnaire requested the respondents to rank the personal variables affecting students' academic achievement from the most highly ranked to the least. Such ranking enabled the comparison of the multiple regression results with the ranking of the variables by respondents.

### Instrument Validation

**Content Validity:** Validation is the process of ensuring the degree of effectiveness of each of the items in the research instrument. It is the process of determining the extent to which each of the items measures what it is designed to measure. The draft questionnaires were given to some advanced students in two Colleges of Education who were to serve as the representative sample of the population of subjects to be used for the study. Their comments were noted and these were considered in preparing the second draft. This approach was necessary to ensure that the items were clear enough and easily understood and to know whether there was a need to include more items.

The draft questionnaires were also given to lecturers in Olabisi Onabanjo University who are experts in the fields of education and institutional management to enable them make their inputs. These were subsequently incorporated, before the final questionnaires were printed.

**Reliability of the Instrument:** Reliability is necessary to ascertain whether the instruments are capable of reproducing consistent or similar results after a number of repeated administrations. Copies of the final drafts were administered to 30 students and 10 lecturers in Colleges of Education. Their responses were found to be consistent and reliable, after two administrations. Reliability tests were also carried out to determine whether the measuring Instruments were consistent and reproducible. The results are Cronbach alpha ( $\alpha$ ) 0.79 (students) and 0.73 (lecturers); Guttman split-half 0.78 (students) and 0.71 (lecturers) and Spearman-Brown equal length results are 0.69 (students) and 0.70 (lecturers). Given these results, the questionnaires were considered reliable for the study.

### Data Collection

Primary and secondary data were generated and used for the study. The two sources of data were exploited to ensure that reasonably robust and reliable analyses were made.

#### Primary Data Collection

Primary data were derived from respondents' opinions on the items in the questionnaires to be administered. This was used to ensure that the researcher got direct information from respondents. The method would afford the researcher the opportunity to structure the questions in such a way that respondents would understand them. In addition to this, their responses would be easier to manage because the questionnaire items are structured.

This method however is not without some shortcomings. The researcher was not able to retrieve the entire questionnaire sent out. Respondents might have reacted similarly as the instruments were administered at the same time in the same environment. In addition to this, respondents might have been biased in their responses and this might make the findings to be subjective. However, the administration of the questionnaire was carried out as independently as possible from one respondent to the other. Also, the benefits of using the questionnaires appeared to outweigh the costs to be incurred.

#### Secondary Data Collection

The data realized from this source consist of relevant data not directly prepared for the current study. The most relevant of these is the students' Cumulative Grade Point Average (CGPA), which constitutes the dependent variable. The two sources of data (primary and secondary) were used in order to generate sufficient facts for the study.

#### Method/Procedure for Data Analysis

**Model development for the components of Personal Factors Responsible for Students' Academic Achievement:** Correlation and multiple regression techniques were employed to analyze the data obtained. These techniques have been employed in many prior studies (for example De Berard et al., 2004; Adesoji and Oladele, 2003; Fabiyi and Fagbamiye, 2001; Pascarella et al., 1996). In the model:

$$ACADACH = \beta_0 + \beta_1HOMENV + \beta_2STINT + \beta_3SHABIT + \beta_4SELFCON + \beta_5PEERINF + \beta_6SPERCEP + \beta_7PSUP + \varepsilon \quad (1)$$

The dependent variable (students' academic achievement - ACADACH) was regressed on the following personal factors:

Home Environment (HOMENV)  
 Students' Interest (STINT)  
 Study Habit (SHABIT)  
 Self Concept (SELFCON)  
 Peer Influence (PEERINF)  
 Students' Perception of Course (SPERCEP)  
 Parental Support (PSUP)  
 $\beta_0$  = constant term  
 $\varepsilon$  = residual term

The variables of this study are operationalised by representing the dependent variable (Academic Achievement) by the cumulative grade point average collected from the students' records in the various institutions. The data for the independent variables are

gathered through the responses to the questionnaire items.

#### Statistical Tools/Analytical Procedure of Survey Data

The statistical tools that were used for the survey part of this study were means, variances and standard deviations. These enabled the researcher compare the variables identified easily. Parametric and non-parametric statistics were used to test for differences in perceptions of some of the independent variables while the differences between two means scores in pairs were also tested. Kendall's W (coefficient of concordance) was also used. In addition, various weights were attached to the rankings of the personal factors affecting students' academic achievement collected through Part Three of the questionnaires. The weights used are:

Ranking	Weights
7	7
6	6
5	5
4	4
3	3
2	2
1	1

These weights enabled the calculation of the total scores per variable, which were subsequently ranked for the purpose of determining the rank-order correlation coefficients.

## RESULTS

### Research Question 1

*Is there any difference in the influences of components of personal factors affecting educational achievement across federal, state and private colleges of education in South Western Nigeria?*

Table 1 presents the descriptive statistics for 1,100 students' ranking of the seven components of personal factors proposed to affect academic achievement (home environment, student's interest, study habit, self-concept, peer influence, student's perception of the course and parental support).

The minimum rank is 1.00 while the maximum rank is 7.00. This range of ranks applies to all the components of personal factors. However, student's interest with a mean rank of 5.1482 and a standard deviation of 1.7289 is adjudged as the most important personal variable. This is followed by home environment (mean = 5.0445; standard deviation = 1.9851) and parental support (mean = 4.8345; standard deviation = 2.2014). On the other hand, the least ranked components of personal factors are student's perception of the course (mean = 4.3287; standard deviation = 1.8184) and peer influence (mean = 4.4255; standard deviation = 1.8071) respectively.

In order to test hypothesis one, the above descriptive findings were also subjected to inferential statistical test. Kendall's W Test is applied to determine if there is any significant difference in the various ranks. The resulting statistic represents the level of agreement among the



**Table 1.** Descriptive Statistics of Personal Factors (Students) Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Homenvir	1100	5.0445	1.985512	1.00	7.00
Student	1100	5.1482	1.72886	1.00	7.00
Stdhabit	1100	4.8182	1.65044	1.00	7.00
Sconcept	1100	4.4591	1.76333	1.00	7.00
Peerinfl	1100	4.4255	1.80710	1.00	7.00
Spercept	1100	4.3827	1.81839	1.00	7.00
Parsupp	1100	4.8345	2.20139	1.00	7.00

Source: SPSS output

**Table 2.** Kendall's W Test (Students' Ranking of Personal Factors)

Ranks	Mean rank
Homenvir	4.36
Student	4.53
Stdhabit	4.06
Sconcept	3.65
peerinfl	3.61
Spercept	3.53
parsupp	4.26

**Test Statistics**

N	1100
Kendall' W <sup>a</sup>	.039
Chi-Square	254.185
df	6
Asymp. Sig.	.000

a. Kendall's Coefficient of Concordance

Source: SPSS output

groups of Federal, State and Private colleges of education students in the South Western Nigeria. The result of this test is presented in Table 2.

From Table 2 Kendall's W (coefficient of concordance) is 0.039. The p-value is 0.000. This shows that there is a significant difference among the rankings of the various components of personal factors. In other words the components are significantly different in accounting for students' academic performance.

Table 3 shows the statistics for 110 lecturers' ranking of the seven components of personal factors proposed to affect academic achievement (home environment, student's interest, study habit, self-concept, peer influence, student's perception of the course and parental support).

The lecturers from the three groups of colleges of education also ranked student's interest with a mean rank

of 5.7000 and a standard deviation of 1.4561 as the most important personal variable. This is followed by home environment (mean = 5.1000; standard deviation = 1.6534) and study habit (mean = 5.0545; standard deviation = 1.4453). On the other hand, the two least ranked components of personal factors are student's self concept, (mean = 4.3818; standard deviation = 1.6422) and student's perception of the course (mean = 4.8727; standard deviation = 1.4596) respectively.

The descriptive findings from the lecturers were also subjected to inferential statistical test using Kendall's Coefficient of Concordance. This is to determine if there is any significant difference in the various ranks. The resulting statistic represents the level of agreement among the lecturers in Federal, State and Private colleges of education in the South Western Nigeria. The result of this test is presented in Table 4.

Table 4 shows a coefficient of concordance of 0.084. The p-value is 0.000. This shows that there is a significant difference among the rankings of the various components of personal factors. The components are significantly different in accounting for students' academic achievement.

A comparison of the students' and lecturers' rankings of the seven components of personal factors reveals an interesting development captured in Table 5.

The two groups of respondents (students and lectures) across all the eleven schools studied from Federal, State and Private Colleges of Education ranked students' interest as the most important component of personal factors. Also, home environment is ranked as the second most important component of personal factor. However, study habit was ranked third by the lecturers in contrast to the rank of fourth given by the students. The most significant difference in the rankings are in relation to self-concept ranked fifth by the students and seventh by the lecturers, just as peer influence was ranked fourth by the lecturers and sixth by the students and parental support ranked third by the students and fifth by the lecturers. The three least ranked factors by the students are students' perception of the course, peer influence; and self-concept, in comparison to self-concept, students'

**Table 3.** Descriptive Statistics of Personal Factors (Lecturers)

	N	Mean	Std. Deviation	Minimum	Maximum
lhomevir	110	5.1000	1.65336	1.00	7.00
lstudint	110	5.7000	1.45608	1.00	7.00
lstdhabi	110	5.0545	1.44525	1.00	7.00
llsconce	110	4.3818	1.64223	1.00	7.00
lpeerinf	110	5.0091	1.55920	1.00	7.00
lispercep	110	4.8727	1.45960	1.00	7.00
lpersupp	110	4.7364	1.80050	1.00	7.00

Source: SPSS output

**Table 4.** Kendall's W Test (Lecturers' Ranking of Personal Factors)

Ranks	Mean rank
lhomevir	4.20
lstudint	5.02
lstdhabi	4.08
llsconce	3.06
lpeerinf	4.04
lispercep	3.76
lparsupp	3.85

**Test Statistics**

N	110
Kendall's W <sup>a</sup>	.084
Chi-Square	55.210
Df	6
Asymp.Sig.	.000

Kendall's Coefficient of Concordance

Source: SPSS output

perception of the course and parental support given by the students. The two rankings could not be statistically treated further because of the low robustness of the data from the lecturers (110 data points) compared to the students' 1,100 data points. However, it is significant that lecturers and students alike reached significant and equal rankings of students' interest and home environment as the most important components of the personal factors affecting students' academic achievement in the South Western part of Nigeria.

**Research Question 2**

*What is the significance of personal factors as predictors of students' academic achievement in the colleges of education studied in the South Western Nigeria?*

The analysis undertaken to answer the second research question proceeds to regress CGPA on the components of personal factors. The results of the multiple regression model for the CGPA (a measure of academic achievement) and the seven components of personal factors are shown in Table 6. It is evident that the Variance Inflation factor (VIF) statistics are sufficiently low as to preclude the existence of multicollinearity. The adjusted R<sup>2</sup> shows that 45% of the variance in the academic achievement of colleges of education students is accounted for by the independent variables included in this regression model. An inspection of the regression model co-efficients in Table 6 shows that STUDENTS' INTEREST ( $p < 0.01$ ), STUDY HABIT ( $p < 0.05$ ), HOME ENVIRONMENT ( $p < 0.01$ ) and PARENTAL SUPPORT ( $p < 0.05$ ) were significant in explaining academic achievement. The result of the regression further suggests that SELF CONCEPT ( $P > 0.05$ ), PEER INFLUENCE ( $p > 0.05$ ) and STUDENT PERCEPTION ( $p > 0.05$ ) had no significant predictive power.

**Research Question 3**

*What are the educational policy implications of the empirical findings of this study?*

The answer to the research question can be provided from two major perspectives to the study of educational management: positive perspective and normative perspective. The positive perspective to the study of educational management deals with objective and scientific explanation of the application of educational psychology, methods and techniques in educational management. Provision of answers to research questions one to five has relied mainly on the positive approach. Here, descriptive and inferential statistics have been mainly used as tools of analysis. The aim of the positive approach to educational management is to explain scholastic and institutional decisions and the effects of these decisions on educational achievement of students. In relation to the impact of personal and institutional

**Table 5.** Comparison of Students' and Lecturers' Rankings Of the Components of Personal Factors

Variable	Students' Ranking	Lecturers' Ranking
Home environment	2	2
Student's interest	1	1
Study habit	4	3
Self concept	5	7
Peer influence	6	4
Student's perception of course	7	6
Parental support	3	5

**Source:** Computed from Administered Questionnaire

**Table 6.** Model 1: Regression of CGPA on the Components of Personal Factors

Model	Coefficients		T	Sig	Collin Earity VIF
	B	Std. Error			
1 (Constant)	1.833	.360	5.090	.000	
Log_Stint=LG10(stint)	.856	.129	6.640	.000	2.600
Log_study_habit	.051	.234	2.180	.031	1.100
Log_self_concept	-.139	.303	-.458	.647	1.083
Log_home_environment	.494	.092	5.390	.000	1.000
Log_per-influence	-.262	.171	-1.530	.126	1.200
Log_student_perception	.125	.500	.251	.802	1.200
Log_parental_support	.389	.184	2.120	.036	2.400

**Dependent Variable:** cgpa

Model Statistics: Adj.  $R^2 = 0.45$ ;  $F(7, 292.87)$   $p < 0.001$

**Source:** SPSS Output

factors as predictors of students' academic achievement in Colleges of Education, the purpose of the positive study is to satisfy curiosity about why the educational management and outcomes are as practised and the outcomes are as observed. Secondly, the positive approach is adopted in order to have some bases for predicting how students and institutions will respond to educational policies at a specific point in time.

On the other hand, the normative approach to understanding educational management outcomes offers recommendation on personal value judgement. It is presumed, however, that the judgement would be informed by a working knowledge of educational administration along with its possible variations in different educational institutions across the various categories of colleges: Federal, State and Private. For example, there is a current national policy on the teaching faculty of primary schools to the effect that the minimum teaching qualification for this level of schooling is NCE. When the demand for NCE holders at the secondary school level is added to the faculty requirements, the increasing demand in the number of NCE teachers cannot be over-emphasised. It therefore becomes important to train

soundly qualified NCE graduates with high academic achievements, which will enable them to undertake further courses leading to higher level of certification.

The purpose of Nigerian educational policy is to provide the needed manpower development to stir the nation's socio-economic exigencies left by the colonial masters. The non-directional policy issues have been the bane of the educational system particularly with reference to the curriculum structure. So far, the country has had three different systems borne out of incessant changes in policies: 9-5-4 (nine years of elementary education, five years of secondary and four years of tertiary education); 6-3-3-4 (six years of elementary education, three years of junior secondary, three years of senior secondary and four years of tertiary education) and now 9-3-4 (nine years of basic education, three years of secondary and four years of tertiary education). It has become a tradition to abandon policy mid-stream. The effect of this policy tumble cannot be over-stressed. Lack of initiative, innovation, skills, independent/constructive mind and creative ideas has been held to characterize the current system of Nigerian education. This system encourages memorization in learning processes and theoretical

explanation to areas that need practical illustration. The system favours cognitive development above other domains of education. Bolaji (2007) argues that Nigeria's school system is geared toward building students with cultural orientation with deficiency in problem-solving approach that requires more than simply recall or performance of rudimentary skills. Philosophers in the field of education are yet to come to terms with a national ideology with the cardinal objective to build a self-reliant nation contrary to what is apparent in the present system of education. Oduolowu (2001) opines that no positive impact whatsoever will be made with a system that promotes theoretical knowledge, places emphasis on paper certification rather than stressing the development of innate abilities in a learner evolving through training and practice. In other words, there exists an aberration in policy formulation and implementation. The need to revisit the existing educational policy has become necessary; hence the urgent need to save Nigeria's educational system from the gully of irrelevances and hopelessness that manifests in poor academic achievement. In all these policy changes, the services of high quality graduates of Colleges of Education are of great significance.

## SUMMARY AND DISCUSSION OF FINDINGS

This study found that a number of personal factors (students' interest, home environment, parental support and study habit) were significant predictors of academic achievement in the Colleges of Education. The findings regarding students' interest was similar to those of Okebukola (1997), Pressley and McCormic (1995) and Grolinics and Slowiaczer (1994). It should, however, be noted that all the researchers based their study on foreign institutions except that of Okebukola (1997).

The findings of the current study, says home environment is a predictor of academic achievement, was corroborated by Yusuf (2001), Gadagbui (1998), and Ajila and Olutola (2000) and Dike (2007) and Uwadiae (in Financial Standard, 2008). All the studies took place in Nigeria and Ghana, which share similar socio-economic characteristics of developing countries. The study conducted by Opare (1999) into the significance of parents' support also corroborated the findings in the current study. This predictor cuts across both developing and industrialized countries to underline its importance.

Study habit is not only found to be significant in the current research, it was also upheld by Adesemowo (2000) and Adesoji and Oladele (2003). Its pervasiveness is also attested to by the findings in McCausland and Stewart (1974).

A number of other personal factors were not found to be significant predictors in the current study. For instance, self-concept was found to be a significant predictor by Nedwek and Neal (1994), the results in Bassey and

Ubangha (2003) study were not found to be remarkably relevant in the current study. Whereas Campbell, Brownlee and Smith (1996) found student perception of the course as significant, the current study did not find the variable as significant.

Similarly, peer influence was not found to be a strong predictor of academic achievement. On the other hand, Oldfather and McLaughlin (1993) held peer influence, Among other factors, as a predictor of academic achievement. One explanation for the divergent findings could be the perception of teacher's education, especially, in Nigeria. Student teachers in Nigeria might exhibit a high level of discipline impressed upon them by the regimented school environment. This might have significantly reduced the level of peer influence. Age might also have an effect. Many teacher-trainees in Colleges of Education have been out of the secondary schools for a few years, have tried without success to gain admission to the university and have probably settled for Colleges of Education after attaining a significant state of maturity which tended to reinforce their personal interest and commitment.

In relation to the gender of student-respondents, both male and female students found home environment to be the most important predictor of students' academic achievement. However, while students' interest was found to be the next most significant factor for female students, the male students ranked self-perception as the next significant factor determining academic performance after home environment. Educational managers should focus attention on policies that will stimulate positive change in the following personal factors:

- i. student's interest;
- ii. study habit and
- iii. Peer influence.

Educational managers should also play an active role in evolving other socio-economic policy initiatives that will favour home environment and increase parental support.

## CONCLUSION

The current study has been able to ascertain some relevant personal variables that educational stakeholders need to address in order to improve the quality of educational outcomes in the NCE students in Nigeria. Educational stakeholders, especially the regulators need to, as a matter of policy, commission research into the dynamic relationship among personal factors and academic performance. This may involve the injection of research funds and the sensitisation of researchers to promptly access the required funds. There is also the need to set up a feedback mechanism to continually assess the extent to which policy objectives have been achieved. The current study focussed on Colleges of

Education in the South Western Nigeria, though the study sample appeared to be robust, in order to improve the level of generalisation of findings future research should extend this frontier to cover all the educational institutions in Nigeria.

### Conflict of Interests

The author(s) have not declared any conflict of interests.

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