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## SELF CONCEPT AS PREDICTOR OF ACHIEVEMENT BEHAVIOUR OF SECONDARY SCHOOL STUDENTS IN ENUGU STATE NIGERIA

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### Abstract

*The study investigated the extent to which academic self-concept predicts achievement behavior of secondary school students in Enugu State, Nigeria. One thousand two hundred students were selected randomly to participate in the study. A thirty item questionnaire each on self concept and Achievement behavior were used to generate data for the study. One research question and one hypothesis were tested in the study and data were analyzed using analysis of variance (ANOVA) and correlations to determine the correlation coefficient and to test the hypothesis at 0.05 levels of significance. The result indicated that self concept, though important, did not predict achievement behavior of the subjects. Based on the findings, appropriate recommendations were made to the governments and parents, teachers and students. It was also recommended that other variables that can influence academic achievement behaviour be further studied.*

**Keywords:** Self concept, Achievement behavior, Predictive, Self esteem, correlation

The performance of Nigerian students in the Secondary School Certificate Examinations (SSCE) administered by the West African Examination Council

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(WAEC), and the National Examination Council (NECO), has continued to decline from year to year. That of 2013/2014 has given researchers and stakeholders in this sector a lot of shock. According to WAEC(2014) Head of National office, Abuja, “there was over 8% decline in candidates’ performance as only 29.17% obtained credits in 5 subjects and above including English and Mathematics”(Vanguard, Nigeria, August 12<sup>th</sup>2014ed). He added that Nigeria had recorded a continuous decline in the last 3 years: 38.81% in 2012, 36.57% in 2013 and 31.28% in 2014. For Nigeria, a developing country that invests so much on the education of the youths, continuing poor performance of students at WAEC puts the country at a serious disadvantage in the competitive global economy. According to Cech (2003), a progressively complex world calls for increasingly skilled people who can compete favourably in the global labour market.

Researchers and educational psychologists(Akubuiro and Joshua, 2004, Osang 1990) have blamed the continuing poor performance of Nigerian secondary school students in public examinations, on such factors as the students’ poor self esteem, depressed self concepts and the consequent low achievement behaviour. Perceptual psychologists postulate that all persons create their own reality through their perceptions of what they believe to be real. They maintain that a person’s behaviour is contingent on how the individual perceives and interprets his/her experiences (Combs and Gonzales, 1994). Thus from the perspective of perceptual psychology, it is clear that to understand an individual’s behaviour, it is necessary to know how that individual perceives and interprets his/her experiences. In other words, to appreciate students’ academic performance, one needs to understand how students perceive and interpret school and school subjects.

The most influential and eloquent voice in self-concept theory was that of Carl Rogers who introduced an entire system built around the importance of the self (Hattie, 1992). In Rogers’ view, the self is the central ingredient in human personality and personal adjustment. Rogers described the self as a social product, developing out of interpersonal relationships and striving for consistency. He maintained that there is a basic human need for positive regard both from others and from oneself. He also believed that in every person there is a tendency towards self-actualization and development so long as this is permitted and encouraged by an inviting environment. There are a variety of ways to think about the self(Gross, 1992).. Two of the most widely used terms are self-concept and self-esteem. Self-concept is the cognitive or thinking aspect of self (related to one’s self-image) and generally means the totality of a complex, organized, and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about his or her personal existence (Purkey& Schmidt, 1987). Self-concept can also mean the general idea we have of ourselves. The idea of self-concept includes attitudes, feelings and knowledge about ability, skills, and social

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acceptance capability of the self. Self-concept covers all aspects of our cognitive, perceptual, and affective evaluation. Therefore, self-concept is simply a collection of personal attitudes towards oneself (Gross, 1992).

Psychologists (Purkey & Schmidt, 1987) have paid a lot of attention to factors related to the formation and development of self-concept. An individual's conception of his or her person is linked to the personality and to a certain extent determines the attitude of that person to his or her environment, and to a larger extent the person's academic performance. It may then be suggested that if self-concept is positive and normal, the individual will possess normal mental health. Adversely, if self-concept is negative and abnormal, the individual may behave abnormally in his or her environment. The implication is that good mental health (resulting from positive self-concept) makes for positive academic achievement. The consensus appears to be that self-concept is largely acquired.

### **Achievement Behaviour**

According to Niss (1999), achievement behaviour is an important part of a secondary school students' development and which leads to his becoming effective and having a sense of mastery over his/her environment. Through achievement the student develops a positive self-esteem, self-concept, and academic self-efficacy belief, feeling of acceptance, adequacy and self-worth. Achievement behaviour develops early in childhood and is carried along through the entire schooling period to adult life (Abtany 2002). Early school experiences have a tremendous impact on the student's later achievement behaviour. Psychologists, (Niss 1999, Achua 2007), generally agree that early experience and mastery of tasks affect achievement motivation. As the adolescent develops, his achievement behaviour becomes more complex and abstract. Ikpeazu (2007) has shown that the secondary school student's achievement behaviour is fostered through an interaction between parents and teachers with the student so that he learns that one can master tasks. Achievement behavior also means the attainment of success of a student in his school work among his classmates. Studies by Eccles and Schunk, (2004) have confirmed that adolescent's personality characteristics like socio-psychological variables as reported by (Abeh, 1995, Umoinyang 2009, and Odinko, 2004) are good predictors of achievement behaviour. Also mentioned as good predictors of academic achievement behaviour are locus of control, interest in schooling and self-efficacy.

In the context of this paper, achievement behaviour is defined as the dynamic cognitive entities representing future-based possibilities that respond to changes in the person as well as the situation. Academic success is the purpose or aims that schooling adolescents want to achieve after learning a particular subject or course in school.

### **Statement of Problem**

The Nigeria nation and other nations of the world have shown tremendous concern about the poor performance of students in public examinations (Akubiro & Joshua, 2004; Bayer Corporation, 2003). The performance of Nigerian students at WASCE, in the last 3 years especially, has been on a continuous decline. This deplorable situation deserves the total attention of education planners, teachers and researchers in Nigeria.

Researchers (Akubiro and Joshua, 2004, Osang 1990) in education in Nigeria have been expressing concern on how the secondary school students in Nigeria are being affected by cognitive, psycho-social and behavioural variables. Such variables as low self concept, poor ego identity, depressed self efficacy may have negatively affected the achievement behavior of the students. The consequence is poor personal, social development and cognitive development as evident in the increase in the rate of secondary school students' high rate of failure in public examinations, aggressive behaviour, high drop out rate, absenteeism from class, general low achievement behaviour and alcohol abuse.

It is on the above premise that the researchers decided to examine two of these variables: self concept and achievement behavior. The focus of the study is on the relationship of self concept and the achievement behaviour of secondary school students in Enugu State, Nigeria. Put in question form what is the relationship between self concept and achievement behaviour of secondary school students in Enugu State, Nigeria? Does the former predict the latter, for example?

Previous studies on self concept and academic behaviour in Nigeria (Aremu, 2009, Odinko 2004), have focused on the combined factors affecting self concepts and achievement. Not much has been done on the relationship between self concept (as an independent factor), and achievement behavior. The goal of education as one of the most important components of human development, the engine of national development, and a ladder leading to a better and higher social status, can only be realized when students have the confidence to achieve the very best they can. This will serve as a platform from which they stand and deliver what the nation expects of them for national development. Aremu, (2004), had noted that self concept and achievement studies in Nigeria are under explored. There is therefore the absolute need for researchers to continue to explore this frontier of study.

### **Purpose of the Study**

Specifically, the purpose of this study was: to determine the extent to which self concept predicts achievement behaviour of secondary school students in Enugu State.

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### **Research Question**

For in-depth study on this phenomenon, the researchers posed only one research question and one null hypothesis:

To what extent does self concept predict achievement behaviour of secondary school students in Enugu State?

### **Hypothesis**

The following null hypothesis was formulated and was tested at 0.05 level of significance:

Self concept does not significantly predict achievement behaviour of secondary school students in Enugu State.

### **Method**

The design of this study was a correlation survey. Ali (2006) defined this type of design as a general approach to research that focuses on assessing the co-variation among naturally occurring dependent and independent variables. The correlation survey used here involved the employment of a predetermined set of questions making up the study questionnaire. The rationale for the use of correlation survey design is to enable the researchers obtain easily interpretable responses concerning the predictive relationships between self-efficacy beliefs and achievement behavior of the subjects under study.

The area of this study is Enugu State, Nigeria. Enugu State is composed of six education zones, thus: Enugu, Nsukka, Agbani, Awgu, Obollo-Afor and Udi education zone. (Planning, Research and Statistics unit, Post Primary Schools Management Board (PPSMB) Enugu Office, Enugu 2012)

The population of the study comprised all the 11,827 SS2 2012/2013 mixed and single sex Senior Secondary Schools (class two (SSII)) schooling adolescents in the six education zones that make up Enugu State. The six education zones including: Enugu education zone with 24 secondary schools, and 7518 SS11 students; Nsukka education zone with 58 secondary schools, and 8428 SS11 students; Agbani education zone with 45 secondary schools and 5970 SS11 students; and Awgu education zone with 52 secondary schools, and 4889 SS11 students; Obollo-Afor education zone with 47 secondary schools and 8035 SS11 students; and Udi education zone with 51 secondary schools and 4582 SS11 students Total population of SS11 schooling adolescents from the six Education zones in Enugu State, numbering **11,827** (5854 males and 5973 females) (PPSMB, Education Zonal Office, Enugu 2012). Enugu State has a total of 277 secondary schools, consisting of 133 single sex and 144 mixed sex secondary schools the choice of these groups was guided by the fact that they were then not preparing for any external examination.

The sample for the study comprised 1200 randomly selected Senior Secondary School (SSII) students, consisting of 600 students from mixed- sex secondary schools and 600 students from single- sex secondary students in Enugu State. From these two groups, the researchers randomly selected 5 mixed sex and 5 single sex secondary schools making 10 secondary schools for each education zone. The single sex students consisted of 600 and the mixed sex students consisted of 600.

Two instruments developed by the researchers were used in this study, namely:

- a. Adolescent Self Concept Scale (ASCS)
- b. Achievement Behaviour Scale (ABS)

### **Adolescent Self Concept Scale (ASCS)**

This adolescent self concept instrument constructed by the researchers consists of 30 items. It is a four (4) point scale meant to determine students' self concept in terms of low, medium, or high knowledge about a person's self concept. The items relate to the seven dimensions of self concept. It is a general broad based scale covering all aspects of the adolescents. For each dimension, 6 items were constructed. In each statement, to which the students indicated their level of agreement or disagreement on the responses, the range of response consisted of: Strongly Agree (4), Agree (3), Disagree (2) and Strongly Disagree (1) point.

The seven dimension areas included, items relating to emotional self concept, social self, intellectual ability or Academic self concept, moral self, physical self, family self. The questionnaire was framed based on the seven dimensions of self concept such as physical self concept (4items), academic self concept (5 items), social self concept (4 items), emotional self concept (4 items), intellectual self concept (5 items) and moral self concept (4 items) and family self concept (4 items). The four point ratings given were Strongly Agree 4, Agree 3, Disagree 2, and Strongly Disagree 1. Positive items were given the ratings of 4 to 0 and negative items were given the ratings of 0 to 4 respectively.

The construction of Achievement Behaviour questionnaire was based on the operational definition put forward by the researchers. Achievement behaviour is defined to consist of the following: the ability to accomplish academic task, ability to persist on academic task, ability to show scholastic competence on academic task, ability to put more effort on academic task, and ability for a choice of academic task, and achievement goal for academic task.

The questionnaire has 30 items. It covers all the major aspects of Achievement Behaviour as defined above. The response was based on a four (4) point scale of Strongly Agree, Agree, Disagree and Strongly Disagree, in line with Likert summated rating. The rating range consisted of 4 point for Strongly Agree, 3 point for Agree, 2

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point for Disagree, and 1 point for strongly disagree. Positive items were given the rating of 4 to 0 and negative items were given the rating of 0 to 4 respectively.

The uniform number of 30 items in each instrument was taken by the researchers after considering advice from the experts that validated these instruments. Adolescent Self Concept Scale (ASCS) instrument developed by the researchers was face validated by four experts in Educational Psychology and Measurement and Evaluation. The Achievement Behaviour questionnaire was developed by the researchers. The items covered achievement behaviours components in a school system. The instrument was face and content validated by 4 experts each in Educational Foundation, 2 from Educational Psychology and 2 from Educational Measurement and Evaluation.

The Adolescent Self Concept Scale (ASCS) instrument was trial tested by administering it to 30 SSII students drawn from a mixed -sex and single- sex secondary schools in Enugu Education zone not in the sample. The internal consistency reliability estimate of the instrument was determined using the Cronbach Alpha method and the obtained reliability estimate was 0.88. This index suggests high reliability of the scale.

The Achievement behaviour instrument was subjected to the same treatment and had a value of 0.83. These indexes were high and suggested high internal consistency reliability.

A total of 1200 instruments were distributed physically with the help of research assistants and teachers in the individual schools. The same number was collected back. This is because the number of instruments distributed per stream for each selected secondary school was 20 copies based on the randomly selected students sampled per stream. Only 10 secondary schools were randomly selected per education zone. The data collected after administering questionnaires were analyzed in line with the research questions and hypothesis. Analyses of variance (ANOVA) and correlations to determine the correlation coefficient was used to test the hypothesis at 0.05 levels of significance.

**Results**

**Research Question One**

To what extent does self concept predict achievement behaviour of secondary school students?

**Table 1: A Summary of the R Beta, R square and Adjusted R square in Regression Analysis of self Concept on Achievement Behaviour**

<b>Model</b>	<b>R</b>	<b>Beta</b>	<b>R-square</b>	<b>Adjusted R square</b>	<b>STD of the Estimate</b>
1	0.001	0.001	0.000	-0.001	37.144

Predictors: constant, self concept

Data in table 1 indicate the extent self concept predicts achievement behaviour of secondary school students. This is shown by the beta value of 0.001 which suggested that 0.1% of the change observed in the students’ achievement behaviour was as a result of their self concept. By implication self concept was not a predictor of achievement behaviour of secondary school students with a very low percentage value. This result answers the research question 1.

**Hypothesis One**

**Table :2 The Significant Levels Regression Analysis of Variance. (ANOVA)**

<b>Model</b>	<b>Sum of Square</b>	<b>Df</b>	<b>Mean square</b>	<b>F-ratio</b>	<b>Significant 0.05</b>
1	0.000	1	0.001	0.975	0.000
Residual	165.282	1198	0.138		
<b>Total</b>	<b>165.282</b>	<b>1198</b>			

**Table 3: The Beta Coefficients of Regression R**

<b>Model</b>	<b>Unstandardized Coefficient</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Significant 0.05</b>
	<b>B</b>	<b>STE Error</b>	<b>Beta</b>		
Constant	3.192	0.094		33.933	0.000
Self concept	0.001	0.033	0.001	0.031	0.975

The results in tables 2 and 3 indicated that self concept was not significant predictor of secondary school students’ achievement behaviour. The calculated value of

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F-ratio was 0.001 which revealed that it was not significant at 0.05 levels. The t-value calculated was 0.031 and was not significant at 0.05. Therefore the Null hypothesis of no significant prediction of self concept on achievement behaviour of students was accepted

The results presented above reveal that the extent self concept predicts achievement behaviour was 0.1% and the null hypothesis of no significant prediction of achievement behaviour is accepted, indicating that self concept was not a predictor of achievement behaviour of secondary school students in Enugu state.

### **Discussion of Results**

The result on model summary and analysis of variance and analysis of coefficients of regression show no meaningful prediction by self concept on achievement behaviour. Result on model summary indicated that beta value was 0.001. This result shows that 0.1% was contributed by the independent to prediction of achievement behaviour. The analysis of variance also revealed that F-ratio calculated value of  $0.001p < 0.975$  was not significant at 0.05 levels and t-value calculated was  $0.031p < 0.975$  at 0.05 levels. The null hypothesis of no significant prediction is accepted. These results indicate that self concept was not a predictor of achievement behaviour of the subjects. Obilor(2014) had shown in a study that Mathematics Self-concept is significantly related to Mathematics achievement, general Academic achievement and general academic self-concept.

Bandura (1997) however, had posited that to predict achievement behaviour from adolescents' self concept, self concept beliefs should be measured in terms of particularized judgments of capability that may vary across realms of activity, different levels of task demands within a given activity domain, and under different circumstances. Elliot (2008) asserted that the prediction of self concept on achievement behaviour did not support a significant relationship between the two variables.

Overall, there is yet limited research in Nigeria on the relationship between self concept and achievement behaviour. Self concept has been criticized as being too global in nature and does not correlate highly with achievement(Elliot 2008). In view of this, more recent self concept research focus on domain specific areas. It is the view of the present researchers that more research in this area is necessary now that educational system is emphasizing quality learning for secondary school students.

### **Conclusion/Recommendations**

That the present study did not show significant prediction of self concept on achievement behavior does not mean that it is not important. It is therefore recommended that both teachers and parents should work together to enhance the self concepts of their wards. Governments should also provide enabling study environment

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in all institutions of learning. Schooling adolescents should be encouraged to aspire for greater heights as this has been discovered to boost the confidence in them and eventual high academic performance.

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