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MOTIVATION AND GENDER AS DETERMINANTS OF ACHIEVEMENT IN SENIOR SECONDARY SCHOOL ECONOMICS

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***Abstract:** The paper considered the relationship between motivation and students' achievement, as well as male and female students' cognitive achievement in Secondary School Economics in Ibadan North Local Government Council Area of Oyo State. The population for the study was made up of all Economics students in the Local Government Area. Two-stage sampling was employed to randomly select four schools from forty Senior Secondary Schools in the area and an intact arm of SS11 from each of the sampled schools. Two instruments constructed and validated by the researchers were administered on the subjects; the resulting data were then collated and analysed using correlation and t-test. Results showed that motivation is positively related with students' cognitive achievement; likewise, gender also has no significant effect on students' cognitive achievement in Economics. The result also showed that there was no significant difference in the cognitive achievement in Economic on gender basis. Recommendations included: that all learners irrespective of gender and family background be given equal level playing ground in their study; that every student irrespective of sex or background be given the same level of encouragement and the necessary equipment be made available in the same quantum to all student for equal access and opportunities to the study of Economics.*

***Key words:** Secondary school, motivation*

INTRODUCTION

There is no doubt that Economics as a subject is a delight of all shades of students irrespective of whether they are more interested in the arts or in the sciences. According to Adeyemi (2010), Economics seems a basic entry requirement for admission into most management and social sciences courses in most Nigerian universities. This corroborates the assertion of Onuka (2006) that management and business management derives its existence from Economics, which means that Economics is the root from which business/management and all management related disciplines such as Insurance, Accounting, Purchasing and Supply, Marketing, Personnel, etc. derived their existence.

Adeyemi (2010) reported that performance in Economics at the secondary school level over the years have been less than satisfactory. The Federal Ministry of Education in 1985 stated that the objectives of Economics at this level of education are as follows:

- knowledge of basic economic principles, concepts and tools for economic analysis;
- knowledge of structure as the basis for National economic decision;
- ability to understand and explain the basis and structure of the West African economy including the roles of agriculture, industry and mining and their contributions to National Income;
- ability to follow the role and status of West African economies in international economic relationships etc p.1.

The question, therefore, is how can and how are these objectives realizable in terms of cognitive achievement in Economics at the level of secondary education in Nigeria. It may therefore be pertinent to find out whether motivation and gender are contributory factors to engendering greater achievement in Secondary School Economics.

There are a lot of factors capable of determining the performance level of students in a particular subject or course of study. These factors are school factors, teacher's qualification, instructional materials, availability of learning facilities, student's characteristics, availability of teachers, pupils to teacher ratio, motivation, and gender among others. Wentzel (1998) states that interest in activities tends to increase the likelihood that individuals formulate goals relating to those activities and invest time and efforts to accomplish them. Moreover, student or individual characteristics such as intelligence, cognitive style, and personality play important roles in learning and instruction as well as the context of learning. It is pertinent to note that individual student's characteristic variables such as motivational orientations, self-esteem and learning approaches are important factors influencing academic achievements. Of all the personal and psychological variables that have attracted researchers in this area of educational achievement, motivation seems to have gained more popularity and leading other variables (Tella, 2003).

Okoye (1985) opines that motivation holds the key to the understanding of human behavior. According to him, motivation explains why one individual dodges work, another works normally satisfactorily enough to reach the height, while yet others resort to illegal and unconventional means such as stealing, cheating, bribery, to achieve social, academic, economic, and political recognition.

Human beings are said to be extrinsically or intrinsically motivated. Intrinsic motivation is the tendency to engage in tasks because one finds them interesting, challenging, involving a satisfying delight and satisfaction in doing such tasks. Extrinsic motivation is the tendency to engage in tasks because of task-unrelated factors such as promise of rewards and punishment, dictates from superiors, surveillance and competition with peers (Deci & Ryan, 1985). Intrinsic motivation is seen as internal reward such as joy, or self-fulfillment. It is said to be derived internally in the job itself while extrinsic motivation is the incentive or reward and punishment that a person may attract after the job has been completed.

The idea of motivating learners is an important aspect of effective learning. In fact, some psychologists believe that motivation is a necessary ingredient for learning (Biehler and Snowman, 1986). It is believed that satisfactory school learning is unlikely to take place in the absence of sufficient motivation to learn (Fontana, 1981). Students' motivation has to do with stimulating someone with the aim of making him to participate in a particular cause of action. Lumsden (1994) views students' motivation as the reason for their involvement or non-involvement in academic activities. Although students may be equally motivated to perform a task, the sources of their motivation could differ.

A student who is intrinsically motivated undertakes an activity "for its own sake, for the enjoyment it provides, the learning it permits or the feeling of accomplishment it evokes" (Lepper, 1988). An extrinsically motivated student performs "in order to obtain some reward or avoid some punishment external to the activity itself" such as grades, stickers, or teachers approval (Lepper, 1988).

Students who have high intrinsic motivation differ from those who are low in intrinsic motivation in the sense that, when given an interesting task or assignment without being promised reward or punishment upon completion of the task, the former would devotedly work on the task, whereas students with low intrinsic motivation would stop working. Furthermore, in the absence of incentives, students high in intrinsic motivation proactively explore the environment seeking interesting stimuli and opportunity for action, whereas students low in intrinsic motivation come to a halt and remain passive until the environment provides them with incentives.

On the other hand, students who are high in extrinsic motivation typically do not enjoy what they do while they are doing it, and, thus, enjoyment does not energize their work. Yet, their minds look ahead and anticipate the rewards or punishments (the "carrot" or the stick") that will be received upon completion of the task or failure to

complete the task. The anticipation of the consequences of one's actions is the "fuel" used by the extrinsically motivated student. Students with high extrinsic motivation tend to engage the shortest and easiest path to the end, and enjoy work only after its completion, when they can savour the reward or celebrate the avoidance of punishment. By contrast, students with low extrinsic motivation tend to ignore incentives and are less likely to undertake actions in order to obtain rewards or avoid punishments.

Cheng (1998) hypothesizes that conception of success of achievement goal affect both the inclination to and actual performance. This was tested in a sample of 673 Chinese adolescents. Sex differences were found in the conception of success. As part of larger project concerned with motivation factors in educational attainment, Siana, Genda, Lighthbody, Pauline, Stock, Ruth and Walsh David (1998), focusing on Asian girls, using 985 secondary school students found that Asian students of both sexes rated parents and friends as more important in contributing to academic success.

Relating motivation to success, Bank and Finlapson (1950) observed that successful students were found to have significantly higher motivation for achievement than unsuccessful students. Furthermore, Johnson (1996); Sandra (2002); Skaalvik and Skaalvik (2004); Skaalvik and Skaalvik (2006); Broussard and Garrison (2004), revealed that there is significant relationship between academic performance and motivation.

It is pertinent to stress that the issues of motivation of students in education and the impact on academic performance are considered as an important aspect of effective learning. However, a learner's reaction to education determines the extent to which he or she will go in education. It is obviously evident that students who possess high intrinsic and extrinsic motivation tend to attain higher cognitive achievement than those with low intrinsic and extrinsic motivation in their course of study.

2.Statement of Problem

In view of the foregoing, it became imperative to find out the extent to which motivation and gender determine learners' achievement in Senior Secondary Economics.

3.Research Hypotheses

In this study, two null research hypotheses were generated and tested at significance level of 0.05.

- (1) There is no significant relationship between motivation and students' cognitive achievement in Economics.
- (2) There is no significant difference in male and female students' cognitive achievement in Economics.

METHODOLOGY

Research Design

This is a survey research adopting ex-post facto procedure to collect data since the researchers have no direct control over independent variables as their manifestations have already occurred (Kerlinger & Lee, 2000).

Population

The target population for this study comprised of all public Senior Secondary School II students in Ibadan North Local Government Area of Oyo State of Nigeria.

Two-stage sampling technique was used to randomly select four Senior Secondary Schools from forty Senior Secondary Schools in Ibadan North Local Government Area of Ibadan. An arm of SS II was randomly selected from each of the four schools. The selected arm was used as an intact class giving a total number of two hundred (200) subjects.

Instruments and Instrumentation

- (a) Instruments
- (i) Academic Motivation Scale (AMS)
- (ii) Economics Achievement Test (EAT)
- (b) Instrumentation

The AMS was designed and earlier validated by the researchers. The instrument was originally made up of 26 items and these were then reduced to 18 items as a result of the validation exercise in addition to the biodata part of the instrument. The instrument was administered on 30 students who did not participate in the study. The reliability was computed using Cronbach Alpha and this yielded a reliability coefficient of 0.70. The instrument consisted of two sections. Section A elicited information about the background of the respondents, while Section B was made up of items on academic achievement to which the respondents have to indicate the degree of their agreement.

The second instrument which is the Economics Achievement Test which consisted of multiple choice items, it was developed by the researchers and given to other experts in Economics for content and face validity. Pilot testing was carried out on 30 students in order to establish the discriminatory index and difficulty level as well as the reliability of the instrument, using Kuder Richardson on formula 20 which provides an estimate of what is called internal consistency. The reliability coefficient of the instrument was 0.91. From the results obtained in the item analysis, the items were categorised under level of difficulty. Out of the 100 items tested, 18 were found to be too difficult for this category of students, 40 items were moderately difficult while 42 were considered to be too simple. The 40 items which were moderately difficult were used as the final instrument and the test was correlated with the subjects' second term scores in the subject to obtain concurrent validity coefficient of 0.79.

Data Collection Procedure

The two instruments were employed to collect data in the four secondary schools in the study. The Academic Motivation Scale (AMS) was first administered on the students and seven weeks after, the second instrument (EAT) was administered.

Data Analysis

The items in the Academic Motivation Scale (AMS) were scored as follows:

Strongly Agree	=	4
Agree	=	3
Disagree	=	2
Strongly Disagree	=	1

The resulting data were then collated and analyzed on the basis of motivation and gender. Correlation and Independent t-test were used to answer hypotheses 1 and 2 respectively.

RESULTS

Research Hypothesis 1

There is no significant relationship between motivation and students' cognitive achievement in Economics.

Table I: Relationship between Motivation and Students' Cognitive Achievement in Economics

VARIABLES	N	x	SD	r	Sig.
Motivation	200	48.49	12.741	0.64	.03
Cognitive Achievement		28.87	9.567		

Significant at $p < 0.05$

The result in Table I show that there is significant relationship between motivation and the cognitive achievement of students in Economics. The data yielded a positive correlation of 0.64 which is significant with P value $.03 < 0.05$. This means that motivation has a positive relationship with students' cognitive achievement in Economics.

Research hypothesis 2

There is no significant difference between male and female students' cognitive achievement in Economics.

Table II: Independent T-test

VARIABLES	N	x	SD	df	t	Sig.
Male	100	27.47	74 11.1	19	-0.145	0.501
Female	100	25.37	99 10.3	8		

Significant at $p > 0.05$

The results in Table II show that there is no significant difference between male and female cognitive achievement in Economics.

DISCUSSION OF FINDINGS

The result revealed that there is significant relationship between motivation and students' cognitive achievement in Economics. In other words, it implies that students with high motivation also have high achievement in Economics and vice-versa.

This finding therefore agrees with Bank and Finkpson (1950) who observed that successful students were found to have higher motivation for achievement than unsuccessful students. In the same vein it agrees with the findings of Johnson (1996); Sandra (2002); Skaalvik and Skaalvik (2004); Skaalvik and Skaalvik (2006); Broussard and Garrison (2004) who also found that there were significant relationships between academic performances and motivation. Consequently, motivation plays a significant role in students' academic achievement in Economics.

The result was however in contrary with the finding of Onuka and Durowoju (2010), that motivation has no significant relationship with students' achievement in Junior Secondary School Business Studies. The disparity between the findings of the two studies may not be unconnected with the facts that the levels at which both studies were carried out were different. The result in this study may be an indication that maturation may have contributed to the positive significant relationship between motivation and cognitive achievement at the Senior Secondary School level. Hence, parents and other stakeholders should maintain or increase this tempo of motivating their wards while teachers should continue to motivate their students for greater achievement in Economics.

The result of the study also indicated that there is no significant difference in students' academic achievement in Economics on gender basis. This finding affirms the findings of Onosode (2003), Olajide (2008) and Onuka and Durowoju (2010) that gender did not play any significant role in students' achievement in essay writing and in Business Studies respectively.

The congruence between this study and that of Onuka and Durowoju (2005) that there was no relationship between gender and achievement in Business Studies may be as a result of the fact that both belong to the management sciences. This finding may also be due to the fact that there is quite a relatively high level of writing in Economics as it is also in Business Studies.

The implication is that writing is usually an acquired skill which comes from constant practice. Contradicting this finding, however, are studies of such investigators as Iyagba (1993), Olaboopo (1999), Granewell (2000), Ogunkola (1997) Abijo (2008) who all concluded that female had greater achievement in essay writing than their male counterparts.

The non-significant difference between the male and female students' academic achievement in Economics could be due to the free interaction between male and female students. It may also be because both male and female students have equal perception of what success is all about. In other words, the female students did not feel inferior to their male counterparts and thus they were able to compete favourably with them. It appeared the male students did not also feel superior to their female counterparts. Thus, it implies that both have a level playing ground hence, no gender differences occurred in their achievement.

CONCLUSION

The results of this study revealed that motivation is necessary and important in academic achievement in Economics. It also revealed that there is no significant difference in male and female students' cognitive achievement.

The findings of this study have meaningful implications for principals, teachers, parents, educational planners, educational evaluators and learners. Therefore, all learners should be given equal opportunity and the same level of encouragement irrespective of their gender. Learners should be thoroughly and deliberately motivated to engender higher level of performance in Secondary School Economics and indeed in all subjects at that level of education.

RECOMMENDATIONS

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

- ❖ All students irrespective of their gender and family background should be given the same level of encouragement and attention for better cognitive achievement in Economics.
- ❖ All stakeholders in education should ensure that students are highly motivated by providing necessary materials, enabling environment and adequate reward system.

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