RELATIONSHIP BETWEEN SELF-ESTEEM AND TEST ANXIETY OF SECONDARY SCHOOL STUDENTS IN ECONOMICS IN UGHELLI, DELTA STATE

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Abstract

The study was designed to determine the relationship between self-esteem and test anxiety of senior secondary school students in Economics in Ughelli, Delta State. Five research questions were raised and two hypotheses were formulated for the study. The study adopted correlational-descriptive research design. The population of study comprised 172 SS II Economics students from two private secondary schools in Ughelli. A sample size of 60 SS II Economics students made up of (30 male and 30 female Economics students) was selected for the study using convenient sampling technique. The researchers adapted Rosenberg Self-Esteem Scale (1965) and Test Anxiety Questionnaire (Suinn, 1969) as instruments for data collection. Cronbach alpha statistic was used to establish the reliability co-efficient of Rosenberg Self-Esteem Scale which yielded 0.76 while that of Test Anxiety Questionnaire was 0.81. Mean and standard deviation were used to answer research question 1 and 2 while Pearson Product Moment Correlation Coefficient was used to answer research question 3, 4 and 5 and in testing the hypotheses at 0.05 level of significance. Findings of the study revealed that private secondary schools male Economics students have high self-esteem score than their female counterparts. The study further disclosed that private secondary schools female Economics students have high test anxiety score than their male counterparts. In addition, the study revealed that a negative and low relationship exists between self-esteem and test anxiety of private senior secondary school students in Economics irrespective of their gender. More so, outcome of the study indicated that a significant relationship exists between male and female students' self-esteem and their test anxiety in Economics and the null hypotheses were rejected. The researchers concluded that high self-perception tend to reduces students' level of anxiety in Economics in private secondary schools. The study recommended among others that, female secondary schools students' should develop positive attitude and see Economics subject as an interesting subject.

Keyword: Secondary school education, Economics, self-esteem and test anxiety.

Introduction

Nigerian educational system is systematically structured into pre-primary, basic, secondary and tertiary education. Secondary school education is the education children within early to late adolescence receive after basic education and before tertiary education. The secondary level of education is not only a bridge between the basic and tertiary level of education systems but also provides a means whereby students who may not further in their academics can properly fit as responsible and useful citizens in the society. Secondary school education is important as it consumes the products' of primary schools and produce candidates for tertiary education in the nation (Abdulrahaman, 2014).

Secondary school education refers to post-primary formal education offered to children who have successfully completed their nine years basic school education. Currently, the Nigerian education system is operating the 9-3-4 system of education, which has the first nine years of basic and compulsory education up to the Junior Secondary School (JSS III) level, three years in the senior secondary school and four years in tertiary institution. The shift from the 6-3-3-4 to 9-3-4 system of education was implemented in order to fine tune Nigerian educational practices to current realities of the modern world. At the secondary school level of the 9-3-4 system of education, the core subjects are Mathematics, English language, Physics, Chemistry, Biology, Agricultural Science, one Nigeria language among: Yoruba, Igbo and Hausa and Economics. Economics is a core subject offered by business and social science students.

Economics is a social science subject designed to develop the right economic attitudes and consumer behaviour among Nigerian senior secondary school students. According to Robbins in Chakra (2016), Economics is a science which studies human behaviour as a relationship between ends and scarce means which have alternative uses. Correspondingly, Hall (2013) defined Economics as a subject that studies how individuals, firms and societies identify their most important needs, allocate and manage scarce resources in such a way that satisfies as many needs as possible. In line with this, the Federal Republic of Nigeria (2013) mandated the teaching and learning of Economics in secondary schools to equip students with the requisite knowledge on how to allocate scarce resources, make choices and to take rational decision on pressing economic issues.

Despite the importance of Economics, secondary school students' performance in the subject in West African Examination Council (WAEC) over the years has not been encouraging in Delta State. This is evidenced by the report of WAEC Chief Examiner_s Report (2017) that recorded an average of 43% pass of students' from 2012 –2016 in the subject. As at 2017, the Chief Examiner revealed that 23.67% passed while 76.33% failed the subject in Delta State. In trying to find out the causes of poor performance of students in Economics, Rotimira (2009) identified lack of current Economics text books and infrastructural facilities in the

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school, problem of curriculum content and lack of government and public support to Economics subject in secondary schools.

Similarly, some educational scholars link the cause of poor academic performance of students to personality factors such as study habit, self-esteem and test anxiety. Self-esteem refers to the evaluation of one's personal abilities and values. In the scope of academics, Guay, Marsh and Boiving (2003) described self-esteem as how students feel about themselves as learners. According to Colquhoun and Bourne (2012) opined that self-esteem is the disposition to experience oneself as a component to cope with challenges of life and to be deserving of happiness. Self-esteem involves feelings of self-acceptance and self-respect, in contrast to the excessive self-regard and self-aggrandizement that characterizes self-centred individuals (Ackerman, Witt, Donnellan, Trzesniewski, Robins & Kashy, 2011). Another aspect of self-esteem, is the degree to which a student responds to academic setbacks and stress. It is believed that, self-esteem reduces test anxiety and improves students' academic performance.

Test anxiety is one of the most influential factors where examination settings are conducted. Alghamdi (2016) defined test anxiety is a combination of physiological over-arousal, tension and somatic symptoms, along with worry, dread, fear of failure that occur before or during test situations. The high premium placed on the once for all examination exercise could be responsible for the occurrence of test anxiety among students in a bid to attain good grades as demanded by educational authorities. According to Iroegbu (2013), this urge to excel by all means during examination situation leads to test anxiety. Test anxiety may occur as a result of a bad individual's self-concept of academic ability when the students believed they will fail or perform poorly in the examination (Gibson, 2014). Also, lack of study habits, lazy attitude towards to examinations and discomfort with certain subjects could lead to test anxiety in examination situations.

Arigbabu and Mji (2004) are of the opinion that in Nigeria, and perhaps the whole of Africa, gender disparity is still very prevalent in academic settings. Perhaps, students' gender could play an influential role in the relationship between self-esteem and test anxiety among secondary school Economics students in Delta State. Gender is a biological and social construct that describe masculine and feminine. The researchers have observed that majority of public secondary school students in Delta State experience some elements of anxiety when taking Economics examinations as most of them have labelled Economics as a difficult subject.

Hence, it becomes important to determine, if self-esteem correlates with test anxiety among secondary school students because the relationship between self-esteem and test anxiety has not been given adequate attention in Ughelli, Delta State. Again, there seems to be paucity of empirical studies in the area of study. Hence, the researchers are motivated in determining the relationship between self-esteem and test anxiety of secondary school students in Economics in Ughelli, Delta State

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Purpose of the Study

The main purpose of the study is to determine how self-esteem correlates with test anxiety of secondary schools students in Economics in Ughelli, Delta State. Specifically, the study sought to determine:

1. The self-esteem mean score of senior secondary school students in Economics in Ughelli, Delta State
2. The test anxiety mean score of senior secondary school students in Economics in Ughelli, Delta State
3. The relationship between self-esteem and test anxiety of senior secondary school students in Economics in Ughelli, Delta State
4. The relationship between self-esteem and test anxiety of male senior secondary school students in Economics in Ughelli, Delta State
5. The relationship between self-esteem and test anxiety of female senior secondary school students in Economics in Ughelli, Delta State

Research Questions

The following research questions were raised for the study.

1. What is the self-esteem mean score of senior secondary school students in Economics in Ughelli, Delta State?
2. What is the test anxiety mean score of senior secondary school students in Economics in Ughelli, Delta State?
3. What is the relationship between self-esteem and test anxiety of senior secondary school students in Economics in Ughelli, Delta State?
4. What is the relationship between self-esteem and test anxiety of male senior secondary school students in Economics in Ughelli, Delta State?
5. What is the relationship between self-esteem and test anxiety of female senior secondary school students in Economics in Ughelli, Delta State?

Hypotheses

1. There is no significant relationship between male students' self-esteem and their test anxiety in Economics in Ughelli, Delta State
2. There is no significant relationship between female students' self-esteem and their test anxiety in Economics in Ughelli, Delta State

Method

Correlational-descriptive research design was adopted for the study. According to Nworgu (2015), correlational survey study is the type of study that seeks to establish the relationship that exists between two or more variables. Nworgu also stated that correlational research design indicates the direction and magnitude of the relationship between the variables. The study was conducted in Lulu Secondary Schools and Onoriode International Schools, in Ughelli, Delta State. The population of the study comprised 172 senior secondary school Economics students II. A sample size of 60 Economics students II made up of (30 male and 30 female Economics

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students) was selected for the study using convenience sampling technique. The researchers adapted Rosenberg Self-Esteem Scale (1965) and Test Anxiety Questionnaire (Suinn, 1969) as instrument for data collection. The reliability of the instruments was established through the method of measure of internal consistency where the instruments were administered to 20 senior secondary school Economics students II of Government College, Ughelli who were not part of the research population. Cronbach alpha analysis was used to establish the reliability co-efficient of Rosenberg Self-Esteem Scale which yielded 0.76 while that of Test Anxiety Questionnaire was 0.81. The researchers employed the services of two assistants and the class perfects that assisted with the communication and administration of the research instruments to respondents. Mean and standard deviation were used to answer research question 1 and 2 and determine the homogeneity or otherwise of the respondents' views. For the purpose of this study, the mean score of 50.00 and below was grouped as low self-esteem and test anxiety while those with 51.00 and above was grouped as high self-esteem and test anxiety. Pearson Product Moment Correlation Coefficient was used to answer the research question 3, 4 and 5 and employed in testing the hypotheses at 0.05 level of significance. A hypothesis was accepted where the p-value is equal to or greater than the alpha level of 0.05 ($p > 0.05$), at a degree of freedom; otherwise, the null hypothesis was rejected. The analysis was carried out using SPSS version 23.0

Results
Research Question 1
Data collected in respect to this research questions were analyzed and the results presented in Tables below.
What is the self-esteem mean score of senior secondary school students in Economics in Ughelli, Delta State?

Table 1
Self-esteem mean score of senior secondary school Economics students

Gender	Min. Score	Max. Score	Range		SD
Male	20	98	59	68.76	7.26
Female	20	72	46	52.06	5.16

Data in Table 1 shows that the self-esteem mean score of male senior secondary school Economics students is 68.76 with a standard deviation of 7.26 while female senior secondary school Economics students is 52.06 with a standard deviation of 5.16. This indicates a high self-esteem score among male and female secondary school Economics students. The standard deviation indicates that the self-esteem score of students were clustered around the mean score and this indicates

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homogeneity of students' response. On the whole, the self-esteem mean score of male secondary school students is greater than their female counterparts in Ughelli, Delta State.

Research Question 2
What is the test anxiety mean score of senior secondary school students in Economics in Ughelli, Delta State?

Table 2
Test anxiety mean score of senior secondary school Economics students

Gender	Min. score	Max. score	Range	Mean	SD
Male	20	70	45	33.04	4.41
Female	28	90	59	46.65	5.76

Data in Table 2 shows that the test anxiety mean score of male senior secondary school Economics students is 33.04 with a standard deviation of 4.41 while female senior secondary school Economics students is 46.65 with a standard deviation of 5.76. This indicates a low self-test anxiety score among male and female secondary school Economics students. The standard deviation indicates that the test anxiety score of students were clustered around the mean score and this indicates homogeneity of students' response. On the whole, the test anxiety mean score of female secondary school students is greater than their male counterparts in Ughelli, Delta State.

Research Question 3
What is the relationship between self-esteem and test anxiety of senior secondary school students in Economics in Ughelli, Delta State?

Table 3:
Summary of correlational analysis between students' self-esteem and test anxiety in Economics

Variables Pearson Correlation coefficient (r)	Self-esteem
	-0.20
Test Anxiety	

Table 3 shows a Pearson coefficient (r) of -0.20 which indicates a negative relationship exist between self-esteem and test anxiety of senior secondary school students in Economics. Data in Table 3 further shows a negative and low relationship exists between self-esteem and test anxiety of senior secondary school students in Economics in Ughelli, Delta State

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Research Question 4

What is the relationship between self-esteem and test anxiety of male senior secondary school students in Economics in Ughelli, Delta State?

Table 4

Correlational analysis between male students' self-esteem and their test anxiety in Economics

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Variables Pearson Correlation coefficient (*r*)   Self-esteem_____

-0.08

Test Anxiety_____

Table 4 shows a Pearson coefficient (r) of -0.08 which indicates a negative relationship exist between self-esteem and test anxiety of male senior secondary school students in Economics. Data in Table 4 further shows a negative and low relationship exists between self-esteem and test anxiety among male senior secondary school students in Economics in Ughelli, Delta State

Research Question 5

What is the relationship between self-esteem and test anxiety of female senior secondary school students in Economics in Ughelli, Delta State?

Table 5

Correlational analysis between female students' self-esteem and their test anxiety in Economics

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Variables   Pearson Correlation coefficient (*r*)____

Self-esteem

-0.12

Test Anxiety_____

Table 5 shows a Pearson coefficient (r) of -0.12 which indicates a negative relationship between self-esteem and test anxiety of female senior secondary school students in Economics. Data in Table 5 further shows a negative and low relationship exists between self-esteem and test anxiety among female senior secondary school students in Economics in Ughelli, Delta State

Testing the Null Hypotheses

Hypothesis One

There is no significant relationship between male students' self-esteem and their test anxiety in Economics

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Table 6

Significance of relationship between male students' self-esteem and their test anxiety in Economics

Summary of correlation coefficient of the relationship between male Economics students' self-esteem and their test anxiety

Variables	*r*	p-value	Decision
Self-esteem			
	-0.08	0.000	S
Test anxiety			

S – Significant correlation at 0.05 level of significance

The two variables were significantly correlated, ($r_{(30)}$ = -0.08, df 28, = p < 0.05) as it is shown by Table 6. This shows that a significant relationship exists between self-esteem and test anxiety of male students in Economics in Ughelli, Delta State and the null hypothesis is rejected.

Hypothesis Two
There is no significant relationship between female students' self-esteem and their test anxiety in Economics

Table 7

Significance of relationship between female students' self-esteem and their test anxiety in Economics

Summary of correlation coefficient of the relationship between female Economics students' self-esteem and their test anxiety

Variables	*r*	p-value	Remark
Self-esteem			
	-0.12	0.001	S
Test anxiety			

S – Significant correlation at 0.05 level of significance

The two variables were significantly correlated, ($r_{(30)}$ = -0.12, df 28, p < 0.05) as it is shown by Table 7. Thus, this indicates that a significant relationship exists between self-esteem and test anxiety of female students in Economics in Ughelli, Delta State and the null hypothesis is rejected.

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Discussion of findings

Findings of the study revealed that self-esteem mean score of male secondary school students in Economics is greater than their female counterparts. The study further disclosed that the test anxiety score of female secondary school students in Economics is greater than their male counterparts. These findings is in tandem with the findings of Sar, Bilek and Çelik (2017) which discovered that female students have high test anxiety than male students and lower self-esteem than male students. Perhaps, male secondary school students have positive attitude towards Economics and the quantitative aspect of the subject could be the reason why female students have high test anxiety than their male counterparts. The fact that female students' tends to develop strong interest for verbal and reading based subjects while male students are more interested in problem solving and analytical subjects could be responsible for male students' high self-esteem and low test anxiety in Economics than their female counterparts. This finding is also in agreement with Tekta, Paulsen and Sel (2013) which reported that female students experience high levels of test anxiety than male students and female students' self-esteem is lower than male students.

In addition, the study revealed a negative and low relationship exists between secondary schools male and female students' self-esteem and their test anxiety in Economics. This implies that, the higher the self-esteem of students, the lesser their test anxiety levels and vice versa. This study is in tandem with the discovery of Rezazadeh and Tavakoli (2009) which revealed a low and negative relationship exists between students' self-esteem and test anxiety. This implies that both male and female Economics students think positively about themselves in private secondary schools. This supports the study of Liu, Meng and Xu (2006) which reported that a negative relationship exists between self-esteem and test anxiety of students. More so, outcome of the study shows that a significant relationship exists between secondary schools male and female students' self-esteem and their test anxiety in Economics and the null hypotheses were rejected. The quality of school attended and relationships with peers and common social backgrounds of these students could be responsible for the significant relationship between self-esteem and test anxiety of the students in Economics. This finding is consistent with the study of Sowislo and Orth (2013) which reported that a significant relationship exists between self-esteem and test anxiety of students' based on their gender. The finding can be attributed to the common characteristics shared by most male and female students in private secondary schools giving their socio-economic background.

Conclusion

From the findings of the study, there is a reciprocal relationship between self-esteem and test anxiety. Suffice to say, therefore, that students' self-esteem have a substantial bearing on how they tackle test anxiety. The researchers concluded that high self-perception tend to reduces students' level of anxiety in Economics in private secondary schools. This is probably because the socio-economic background of the

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students, their study habits as well as school climate boasts their self-esteem and therefore reduce their test anxiety.

Implication of the Study

The finding of female students low self-esteem and high test anxiety implies that instructional language used by Economics teachers could be one that limits one gender from participating in class activities. This point to the fact that Economics teachers may not be gender sensitive in engaging female students in class activities, taking up roles and participation in projects.

Recommendations

From the findings and conclusion of the study, it was recommended that;

1. Female secondary schools students' should develop positive attitude and see Economics subject as an interesting and simple subject. They can achieve this by seeking counselling services in the school.
2. School counsellors should hold counselling sessions with students before examinations to help reduce and manage text anxiety among students.
3. Management of secondary schools should create examination environments that are stress free to enable students handle examination exercises without any forms of anxiety associated with test taking.

REFERENCES

Abdulrahaman, M. (2014). Principals' administrative process strategies for the achievement of quality assurance in secondary schools in Kogi State. *Unpublished masters' thesis*, Department of Educational Foundations, Faculty of Education, University Of Nigeria, Nsukka

Ackerman, R. A., Witt, E. A., Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., & Kashy, D. A. (2011). What does the Narcissistic Personality Inventory really measure? *Assessment*, *18*, 67–87.

Alghamdi, A.R. (2016). Test anxiety: Concept and implication. *Journal of Nursing and Health Science, 5*(3), 112-115

Arigbabu, A. A., & Mji, A. (2004). Is gender a factor in Mathematics performance among Nigerian pre-service Teachers? *Sex Role, 51* (12), 749 – 754

Chakra, B. K. (2016). Effectiveness of teaching Economics in higher secondary school level, Nepal. *Economic Journal of Development Issues, 21 & 22,* (1-2), 99 – 126.

Colquhoun, L.K., & Bourne, P.A. (2012). Self-esteem and academic performance of 4th graders in two elementary schools in Kingston and St. Andrew, Jamaica. *Asian Journal of Business Management, 4*(1), 36-57.

Federal Republic of Nigeria (2013). *National policy on education.* Lagos: NERDC Publishers.

Gibson, H.A. (2014). A conceptual view of test anxiety. *Nurs Forum, 49*(4), 267–77.

Guay, F., Marsh, H.W., & Boiving, M. (2003). Academic self concept and achievement: developmenmtal perspective on their causal ordering. *Journal of Educational Psychology, 95,* 124-136.

Iroegbu, M.N. (2013). Effect of test anxiety, gender and perceived self-concept on academic performance of Nigerian students. *International Journal of Psychology and Counselling, 5*(7),143-146

Liu, J.T., Meng, X.P., & Xu, Q.Z. (2006). The relationship between test anxiety and personality, self-esteem in grade one senior high students. *PubMed,40*(1), 50 - 62

Nworgu, B. G. (2015). *Educational research: Basic issues and methodology*. Nsukka: University Trust Publishers.

Rezazadah, M, & Tavakoli, M. (2009). Investigating the relationship among test anxiety, gender academic achievement and years of study: A case of Iranian EFL University students. *English Language Teaching*, *2*(4) 68-74.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Sar, S.A., Bilek, G., & Çelik, E. (2017). Test anxiety and self-esteem in senior high school students: a cross-sectional study. *Nord J Psychiatry, 72*(2), 84-88.

Sowislo, J.F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychol Bull., 139*(1), 213–40

Tekta, O.Y., Paulsen, F., & Sel, S. (2013). Test anxiety among German medical students and its impact on lifestyle and substance abuse. *Med Teach, 35*(11), 969 – 1003

West African Examination Council (WAEC) (2017). *Chief Examiner's Report on Students Performance in Senior School Certificate Economics Examination.* West African Examination Council Lagos, Nigeria