

RELATIONSHIP BETWEEN SELF CONCEPT, TEST ANXIETY AND ACADEMIC PERFORMANCE OF NCE STUDENTS IN SHEHU SHAGARI COLLEGE OF EDUCATION, SOKOTO, SOKOTO STATE, NIGERIA: IMPLICATIONS FOR COUNSELLING

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Abstract

The study investigated the relationship between self-concept, test-anxiety and academic performance of students in Shehu Shagari College of Education, Sokoto State, Nigeria; its implications for counselling. Three research questions and hypotheses were formulated to guide the study. Research design adopted for this study was the correlational type. The population of the study comprised all National Certificate of Education (NCE II) students in the College numbering 4,435. A purposive sampling technique was used to select 4 schools out of 6 schools of academic programmes in the College. Research Advisors (2007) Table for determining sample size from a given population was used to select the sample of 351 respondents. Similarly, proportionate sampling technique was used to determine the proportion of the respondents from the sample due to the disparity of the figure in each school. Random sampling technique was used in selecting the respondents for the Study. Three (3) research instruments were used: - Adapted version of Adolescent Personal Data Inventory to measure self-concept with reliability index of 0.75, Adapted version of Test-anxiety Inventory to measure students' test-anxiety with reliability index of 0.65 and Academic Performance Test in Education core courses to measure students' academic performance with reliability index of 0.72. Pearson product moment correlation coefficient and Multiple Regression Analysis was used in analyzing the data for the study. Findings of the study among others are: - there was significant relationship between self-concept and academic performance while test anxiety was found to be not significantly related to students' academic performance. One of the counselling implications was that, as high self-concept is valued in the study, students with high self-concept should be encouraged to maintain their perception and low self-concept students to be encouraged to develop high self-concept. The recommendations are that, guidance and counseling offices should be made to improve the self-concept of students through modeling, mentoring and behavioural modification, especially students that were found to have low self-concept related to their academic performance and early intervention and proactive prevention programs that could help in reducing anxiety and nervousness in students that could create a high test or examination be developed and implemented by Planners, Lecturers and Counsellors.

Keywords: *Self-concept, Test Anxiety, Academic Performance, Counselling.*

Introduction

Tambawal (2006) viewed self-concept as one perception, memories, values, attitude, interest, experience, self-esteem, ideas, goals and ambition of a particular individual. However, self-concept serves as an attribute that gives power to attainment of identity, self-esteem and self-actualization or self-fulfillment prophecy. It encompasses a total awareness of one's potentialities which enable a person to express himself fully, to make

decision, to set goals, and to define strength and limitation. Therefore, one can say that self-concept plays a vital role in almost all parts of human behavior and action throughout life. It further aids in maintaining inner consistency in behavior and how one's experiences are interpreted. It also helps in distinguishing the similarities and dissimilarities in human behavior.

Anxiety is experienced by people whenever they encounter a situation that seems fearful or

worrisome. According to the social learning theory, people become anxious when they are confronted by painful stimuli that they can control only by avoidance. Thus, the degree of anxiety individuals experience in a stressful situation is largely dependent on how much control they feel over the situation. Sometimes individuals need some anxiety to prompt them into actions in tackling some of the problems of daily living that are perceived dangerous (Muhammad., 2011). This shows that anxiety could be of advantage to students to work hard and plan for achieving desired goal in academic pursuit test-anxiety or “examination anxiety”. Test Anxiety as defined by Zeidner, (2016), is a set of phenomenological, physiological and behavioral responses that accompany concern about possible negative consequence on an examination. Meanwhile, Spilberger and Vagg, (1995) identified two types of anxiety which impede academic performance. These are “State” and “Trait” anxieties. “State” anxiety manifests in form of tension, apprehension, nervousness and worry as well as other related physiological stimulations which emanate from the stimulation of the autonomic nervous system. These are symptoms of state anxiety, most students actually experience at the moment of taking tests or examinations, but the degree of its intensity will depend among other things on the students’ level of trait anxiety. “Trait” anxiety is a relatively stable proneness to react to situations or impending events with high level of worry or apprehension. However, an acceptable level of test anxiety in students motivates them to work hard and provides them with its positive consequences. Rasaq in Attahiru (2018) viewed Academic Performance as the performance of students in different school subjects over a period of time; this could be described as an individual’s performance in test and examination given within and outside the school system weekly, termly or at the end of every school year. While, Datta (2014) refers academic performance as to a students’ performance of educational objectives, usually in the aspect of cognitive domain and in specific subject matter.

Counselling is all about understanding the client’s personal traits, environment, motivations and goals in life and how we can engage and tease out the relevant information to assist client in dealing with his issues in a

sympathetic and friendly manner. Counselling is not about giving advice or making judgment position or attempting to place client in a manner that we could have handled our personal situation if confronted with client’s problems. Similarly, the major role of the counsellor is to enable the client to explore many aspects of their life and feelings; by talking openly and freely and without bias and emotional involvement of the counsellor. Thus, effective counselling helps to reduce confusion and enthrone clarity in the mind of the client. Through the therapy session, the client is taken on exploratory journey that empowers the client to see clearly and takes responsibility for next course of action to embark upon.

Statement of the Problem

One of the problems facing Nigeria’s education system is poor academic performance of students in external examinations conducted by the West Africa Examination Council (WAEC) and National Examination Council (NECO) for years and which has made its way into tertiary institutions. This has resulted in frustration, high rate of withdrawal and expulsion of students by various institutions of learning. Students of SSCO, Sokoto are not exempted. Similarly, the researcher observed that most students do not prepare fully for any test or examination in good time but only prepare at the dying minute when the test or examination is about to start. Sometimes you see students running here and there looking for venue to write examination and at the end students become tired. It also creates serious anxiety in the students. As a result of the afore mentioned issues, the study intends to investigate if a relationship exists between self-concept, test-anxiety and academic performance of NCE II students in SSCO, Sokoto State, Nigeria and its Counselling Implications.

Objectives of the Study

The objectives of the study were to find out :

1. Relationship between self-concept and academic performance of NCE II Students in SSCO, Sokoto State, Nigeria.

2. Relationship between test-anxiety and academic performance of NCE II students in SSCO, Sokoto state, Nigeria.
3. Evidence to prove that self-concept and Test Anxiety are predictors of academic performance of NCE II Students in SSCO, Sokoto State, Nigeria.

Research Questions

The following research questions were formulated to guide the study.

1. What are the relationship between self-concept and academic performance of NCEII students in SSCO, Sokoto State, Nigeria?
2. What are the relationship between test-anxiety and academic performance of NCEII students in SSCO, Sokoto State, Nigeria?
3. What are the significant evidence to prove that self-concept and test anxiety are predictor of academic performance of NCE II students in SSCO, Sokoto State, Nigeria.

Research Hypotheses

To further address the issue, the following null hypotheses were postulated and answered.

1. There is no significant relationship between self-concept and academic performance of NCEII students in SSCO, Sokoto State, Nigeria.
2. There is no significant relationship between test-anxiety and academic performance of NCE II students in SSCO, Sokoto State, Nigeria.
3. There is no significant evidence to prove that self-concept and test anxiety are predictors of academic performance of NCE II students in Shehu SSCO, Sokoto State, Nigeria.

Review of Related Literature

Arif and Yousuf, (2010), investigated relationship between self-concept and academic achievement of B.A students. Correlational design was used and Female students considered as target population with sample of 1500 students. Two- stage cluster sampling technique was used for random

selection with reliability coefficient of 0.89. Self-descriptive questionnaire was used as a tool of the research. The findings indicated that self-concept is related to academic achievement (verbal ability, academic ability), although the relationship was not strong. In a research conducted by Cheraghian, Monghadam, Baraz, Bavarsad (2008), on secondary students, 14% of participants didn't have test anxiety and 48.7% of them had low level of test anxiety. Also, Rogers (1966) person-centered theories states that individuals experiencing maladaptive behavior are generally in a state of anxiety or tension. Looking at the philosophical point of view, one could deduce that individuals who have high test anxiety might have the problems of inconsistency in their way of thinking and presentation of ideas during examinations or tests. This is because, for individual to have self confidence in all verification, he should be able to co-ordinate and cope with situation capable of causing tension, especially during examinations or tests.

Research Design

The research design adopted for this study was the correlational type. The correlational design was chosen because it involves collection of data through development of questionnaire and involves assessing attitudes or opinions towards individuals, and relationship between variables (Salawu, 2009). And the population of the study comprised all NCE 11 students in the College numbering 4,435,. A purposive sampling technique was used to select 4 schools out of 6 schools of academic programmes in the College. Research Advisor (2007) was used to select the sample of 351 respondents. Similarly, proportionate sampling technique was used to determine the proportion of the respondents from the sample due to the disparity of the figure in each school. Random sampling technique was used in selecting the respondents for the Study.

The instrumentations used were adapted version of Adolescent Personal Data Inventory (APDI) by Tambawal (2001) which measured Self-concept of teachers. The item consisted of 50 items and was validated by expert. The reliability of the 50 items instrument were 0.87, after a test re-test of four weeks interval between the first and second test

administration. But for the items to suits the current study, the researchers made some modifications and pilot tested the items to sixty respondents who are not part of the study targets, that is NCE 11 Intensive students of SSCOEE, Sokoto. Pearson product moment correlation was used in analyzing the modified data, with 0.75 reliability index. This made the researchers to use the modified items for the current study. Scoring the respondents, positive rating takes 2 points and negative rating takes 1 point. Thus, the maximum possible score takes 100 points while the minimum score takes 50 points. Hence, individual respondents who rated his or her scores between 50-100 points shall be said to have positive self-concept while the respondent who rated his or her scores between 1-49 points is said to have negative self-concept.

The second instrument used was adapted version of Spielberger, (1980) Test Anxiety Inventory (TAI) which measured student's test-anxiety. The original instrument is a 4-point Likert type scale, (1) Almost Never (2) Sometimes (3) Often and (4) Almost Always. The original instrument consists of 20 items with reliability index of 0.96; the original instrument was modified by the researcher to 35 items to suit the socio-culture of the current respondents through face validation by the researcher supervisors. The reliability index of 0.65 was obtained and Cronbach Alpha method was used in analyzing the scores, through test re-tests method at three weeks interval of the first and second administration of the items. Scoring the respondents, positive respond carried 2 points while negative respond carried 1 point. Thus, the maximum possible score is from 35-70 points while the minimum score is from 1-34points. Hence, 35-70 score points shall indicate high positive anxiety while between 1-34 score indicate negative anxiety.

The third instrument used in this study was the researcher designed Academic Performance Test in Education core courses (APTE) which measure students' academic performance. The researcher used the core course contents of Research Method and Statistics, Micro-teaching (Theory), Measurement and Evaluation and Administration and Planning. All the four courses are core subjects offered by all NCE II students of the college. The

items consisted of 40 multiple choice and fill in the blank questions in section "A", "B", "C" and "D". Item analysis method was used to determine the quality of the questions and the difficulties before Administered to the students. The items were validated by expert in the field of education, Usmanu Danfodiyo University, Sokoto and Shehu Shagari College of Education, Sokoto. After some corrections and observations were made, the items were found to have content validity. And the reliability of the items was 0.72 after the pilot test with an interval of three weeks of test re-test method, using Pearson product moment correlation. The test was administered to independent respondents who are not part of the study. Scoring the respondents, correct answer carried 2 points, thus, the respondents who scored between 40- 80 in the test were said to have high academic performance while respondents who scored between 1-39 in the test were said to have low academic performance. This is to give the researcher a benchmark in analyzing the scores.

Method of Data Collection

The researcher administered the instrument with the help of four research assistants from the Department of General Studies who explained to the respondents the procedure of filling the questionnaires and collected them back instantly. The following day was set aside for the administration of the 40 fill in blank APTE question paper to the respondents in one of the lecture hall in SSCOEE, Sokoto, with the collaboration of the researcher and research assistants for proper coordination. To be sure that only the students that participated in the filling in the questionnaire exercise participated in the writing test; students were given identification cards to show at the venue of the test. This enabled the researcher corroborate with the results of the first and second exercises for possible analysis. After the time of 1hour allocated to the respondents is over, all answered scripts were retrieved from the respondents. The researcher also employed quantitative method of data collection through questionnaire and qualitative method for academic performance test. The techniques employed by the researcher in the analysis of the data collected from the respondents include descriptive statistics for analyzing the demographic data of the respondents; the Pearson Product

Moment Correlation Coefficient was used for testing hypotheses 1 and 2, while Multiple

Regression Analysis was used for testing hypothesis 3

Null Hypothesis 1 (H01)

There is no significant relationship between self-concept and academic performance of NCEII students in SSCO, Sokoto.

Table 1: Showing relationship between students' self-concept and academic performances.

Variables				Std.				
	N	Mean	Deviation	r-cal	r-crit	p-value	Decision	
Self-concept	351	53.12	35.93					
				.191	0.113	.000	Ho ¹	
Academic performance	351	36.25	13.97				Rejected	

At .05 level of Significance.

From the result of Table 1, the calculated p-value is .000 while the level of significance is .05. Since the calculated *p-value* is less than the .05 level of significance ($p > 0.05$), therefore, the null hypothesis is rejected which means that there is significant relationship between self-concept and academic performance.

Null Hypothesis 2 (H02)

There is no significant relationship between test-anxiety and academic performance of NCEII students' in SSCO, Sokoto state, Nigeria.

Table 2: Showing relationship between students' test-anxiety and academic performances.

Variables				Std				
	N	Mean	Deviation	r-cal	r-crit	p-value	Decision	
Test-anxiety	351	46.01	19.38					
				.075	0.133	.159	Ho ²	
Academic performance	351	36.25	13.97				Retained	

At .05 level of Significance.

Table 2 shows that the calculated p-value is .159 while the level of significance is .05. Since the calculated *p-value* is greater than the level of significance of .05 ($p > 0.05$), the null hypothesis is retained means that there is no significant relationship between Test anxiety and academic performance.

Null Hypothesis 3 (H03)

There is no significant evidence to prove that self-concept and test anxiety are predictors of academic performance of NCE II students in SSCO, Education, Sokoto state, Nigeria.

This hypothesis was tested by subjecting the self-concept and test anxiety scores to regression analysis to predict academic performance of the respondents as shown in table 3.

Table 3: Showing Self-Concept and Test Anxiety Prediction to Academic Performance.

Variables	R	R ²	Adjusted R ²	SE	F	B	T	p-value
Test Anxiety	.104	.011	.005	13.93	1.91	.017	.309	.757
Self-Concept	.201	.040	.032	13.74	4.87	.180	3.27	.001

Table 3 revealed that the squared part correlations revealed that test anxiety accounted for 10.4% of the variance in academic performance $R^2_{adj} = .011$, $F(2, 348) = 1.91$, $p > .05$. and self-concept accounted for 20.1% of the variance in academic performance $R^2_{adj} = .040$, $F(3, 347) = 4.87$, $p < .05$. Thus, the significant results of the procedure indicated that the combination of the predictor variables was able to account for a significant amount of variance in the dependent variable. Although test anxiety was an explanatory variable of academic performance, analysis of regression coefficients indicated that self-concept, $\beta = .180$, $t = 3.27$, $p < .01$ emerged as the significant predictor when all variables were in the model. This indicated that self-concept is more related to students' academic performance than test anxiety. Thus, it is concluded that self-concept was a better predictor of students' academic performance than their test anxiety.

Discussion of the Findings

From the result of the first hypothesis observed relationship between self-concept and Academic performance. The result concurs with that of Boyi, (2014) reported a positive correlation between academic self-concept and academic achievement. It also agrees with Bulbul in Tambawal, (2006) who established that significant positive relationship exist between self-concept and academic achievement. The findings also support Arif and Yousuf, (2010) who found out that self-concept is related to academic achievement of students.

Hypothesis two findings revealed that there is no significant relationship between test-anxiety and students' academic performance. The finding agrees with the report of Cheraghian, (2008) who found that no meaningful relationship exists between test-anxiety and academic performance of nursing students. However, Rogers (1966) person-centered theory, viewed that individuals who experience maladaptive behavior are generally in a state of anxiety or tension, and also indicates that individuals who have high test anxiety might have the problems of inconsistency in their way of thinking and presentation of ideas during examinations or tests. This opinion of Rogers contradicted the current findings.

Hypothesis three finding indicated that self-concept is more related to students' academic performance than test anxiety. Thus, it is concluded that self-concept was a better predictor of students' academic performance than their test anxiety going by the findings of the study.

Counselling Implications.

Since self-concept of students is related to their academic performance as indicated in the study, counselors and psychologists need to continue to build and encourage students' self-esteem, self-actualization, which serves as an attribute that gives power for attainment of identity in performing positively in academics. Counselling as a more direct method of helping an individual to understand himself better in life, hence the importance of using modeling technique in counselling to encourage positive self-concept and reduce negative self-concept cannot be over emphasis, especially among students with low self-concept, and poor academic performance. Serious-minded and successful students can be used as models for unserious students in the college. Doing these will improve positive self-concept for a successful academic performance among the students in Shehu Shagari College of Education, Sokoto.

As the result shows, test-anxiety has no significant relationship on the students' academic performance reflected in the study, therefore, the need for proper guidance and supervision on test anxious students so as to make them free from any form of anxiety that will affect their performance. Early intervention and proactive prevention programmed that would aid the continued reduction of anxiety and nervousness in students be developed and implemented by counselors and managers of educational institutions in Nigeria, more especially in Shehu Shagari College of Education, Sokoto, Sokoto State.

Recommendations

1. As the students' self-concept is more related to their academic performance, efforts should be made by Guidance and Counselling Officers, more especially in SSCO, Sokoto, to improve and maintain the self-concept of students through proper modeling, mentoring and behavioral modification.
2. As significant relationship was not found in the study between test-anxiety and academic performance of students, the study recommends that early intervention and proactive prevention programs that could help in reducing anxiety and nervousness in students that could create a high test or examination be developed and implemented by Planners, Lecturers and Counsellors.

References

- Attahiru, H. (2018). Relationship Among Attribution, Self Concept, Test Anxiety and Academic Performance of NCE Students in SSCO, Sokoto. A PhD. Thesis Submitted to Postgraduate School UDU Sokoto.
- Arif, H.M & Yousuf, I.M (2010). Relationship of academic, physical and social self-concepts of students with their academic achievement. *Contemporary issues in education research*, 3: 24-36.
- Boyi, A. (2014). Relationship among Emotional Intelligence, Cognitive Ability, Self-concept and Students' Academic Performance of secondary schools in Sokoto metropolis.
- Unpublished Ph.D. Thesis submitted to department of educational Foundations, Faculty of Education and Extension services, Usmanu Danfodiyo University, Sokoto.
- Cheraghian, B. F, Moghadam, M, Baraz-Pardjani & Bavarsad, N. (2008). Test Anxiety and its relationship with Academic Performance among Nursing Students. *In Journal of Knowledge, and Health*, 3 (3-4): 25-29.
- Datta, A.S, (2014). *Education and Society: A Sociology of African Education*. London: Macmillian Publishers pp. 91-93
- Mohammad, M. R. (2011). Relationship among anxiety stress factors and counseling Needs of retired secondary school teachers in Niger state. Unpublished M.Ed. submitted to Department of Educational Foundations, Faculty of Education and Extension Services, Usmanu Danfodiyo University, Sokoto.
- Research Advisers (2007). Table for determine sample from the given population.
- Rogers. C.R (1966). Person-centered theories. View on human nature, Rochester society for the prevention of cruelty to children.
- Salawu, A.A. (2009). Research methods. Unpublished manuscripts, Usmanu Danfodiyo University' Sokoto, Department of Educational Foundations, Sokoto Nigeria.
- Spielberger, C.D. (1980). *Test anxiety inventory: preliminary professional manual*. Palo Alto, C.A; consulting psychologist press.
- Spielberger, C. D, & Vagg, P.R. (1995). *Test anxiety: Theory, assessment, and treatment*. Washington D.C: Taylor and Francis.
- Tambawal, M.U. (2001). Relationship among self-concept, self-other motivation and

- career maturity of teachers in tertiary institutions in Sokoto state. Unpublished PhD. Thesis, submitted to PG school Usmanu Danfodiyo University, Sokoto
- teachers intertiary institutions in Sokoto state. *The Farfaru Journal of Multi-disciplinary Studies*, **5** (2): 24-34
- Tambawal, M.U. (2006). Relationship between self-concept and career maturity of
- Zeidner, M. (1998). *Test Anxiety: The State of the Art*, New York: Plenum Press.