

# GENDER AND SELF-EFFICACY AS A CORRELATE OF TEST CONSTRUCTION SKILLS AMONG PUBLIC SECONDARY SCHOOLS IN TARABA STATE

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## ABSTRACT

The study was carried out on gender and self-efficacy as a correlate of test construction skills among public secondary schools in Taraba State, Nigeria. Two purposes of the study, with corresponding research questions and null hypotheses guided the study. The study adopted the descriptive correlational design. The population of the study consisted of six hundred and four (604) Economics teachers in public secondary schools in Taraba State. The sample for the study was three hundred and ninety (390) Economics teachers selected through Multi stage sampling procedure. The instrument for data collection was a forty-six (46) item questionnaire titled Economics Teachers' Test Construction Skills Questionnaire (ETTECSQ). The instrument was validated by three experts from the Faculty of Education, Taraba State University, Jalingo. The reliability of the instrument was determined using Cronbach alpha statistic. A reliability index of 0.84 was obtained. Data collected from the study were analyzed using descriptive statistic of Mean, Standard Deviation and simple percentages to answer the research questions, while Independent t-test was used to test  $H_{01}$  and Simple Linear Regression was used to test  $H_{02}$ . All the null hypotheses were tested at 0.05 significant level. The findings revealed that there was a significant relationship between gender and self-efficacy on test construction skills of Economics teachers in public secondary schools in Taraba State, Nigeria. Based on the findings, the study concluded that gender and self-efficacy significantly correlate Economics teachers' test construction skills. The study therefore recommended, among others, that: experienced teachers with professional qualifications at higher levels should be made to teach Economics at the senior secondary school classes. Similarly, it is recommended that Economics teachers should harness their self-efficacy to improve their test construction skills which will in turn improve the students' academic achievement.

Key words; test construction skills, gender, self- efficacy and Economics teachers.

## Introduction

Test construction skill is one of the major dynamics that shape the focus of any educational system the world over, and teachers are the key pivot in this enterprise. Test of one kind or the other is a pre-requisite for the promotion and certification of learners. Test provides the teacher with information about knowledge gained, behavioural changes and other aspects of the development of learners (Idowu & Esere, 2010). Testing is the deliberate effort of the teacher to measure the effect of the instructional process, as well as the overall effect of school learning on the behaviour of students.

Continuous testing was introduced in schools as a result of the adoption of the 6-3-3-4 system of education by the Federal government of Nigeria in the year 1982. The intention was to make testing of the learner more reliable, valid, objective and comprehensive. Before continuous testing was introduced in secondary school, the old system of testing was summative. In the summative test, examination of learners was done only at the end of the term's work. The summative system of testing only made use of class test, while take-home assignments and projects are not often used in assessing the learner. Besides, the summative assessment of the old system had no feedback mechanism that reported on the student's area of weakness.

Continuous testing improves the academic achievement of learners and reduces such incidences as a do-or-die affair in competing to pass final examinations. Continuous testing lays more emphasis on comprehensive information on the cognitive, affective and psychomotor

measures of an individual. This is made possible if the teacher has the skills needed for test construction.

Test construction skills include competencies needed for developing quality tests based on stipulated principles of test construction. These competencies are outlined by Agu, Onyekuba and Anyichie (2013) as objectivity, communication, item validation skills and skills for applying appropriate strategies for ascertaining the reliability of test instruments. Skills in test construction enable teachers to construct tests with precision, appropriateness of language use, objectivity and good grading scales.

Continuous Testing, is primarily used in making classroom-level decisions, and is designed with particular reference to the objectives/learning goals of a specific subject (Mahajan, 2015). Over the years, tests evaluate students' understanding of a particular instructional domain in order to make decisions regarding the advancement of knowledge and skill acquired by the students. This important function of tests calls for teachers of subjects, such as Economics, to implement continuous test scores appropriately and with the right test construction skills.

Teachers of Economics can implement continuous testing with a variety of instruments, such as tests, questionnaires, observation techniques, interviews, socio-metric techniques, projective techniques and so on. However, the ability of the teacher to administer continuous test effectively can be influenced by certain teacher's characteristics such as gender and self-efficacy. The quality of a test in terms of validity and reliability is affected by a number of factors, such as teacher's characteristics in terms of teacher's knowledge of test construction, experience, level of education, professionalism and gender (Camble & Hamman-Tukur, 2017).

One of the most significant determinant of a teacher's competence in test construction is teacher's gender. In support of this, Nwosu (2016) remarks that gender is a social construct, describing behaviour and attributes expected of individuals on the basis of being born, either male or female. Gender attributes according to Nwosu are socially constructed and learned through socialization process. The series of steps involved in marking in continuous test construction would likely make female teachers uncomfortable because of the wrong societal expectation that calculations are not meant for women. This nature of teachers as either males or females may also play a significant role in teachers' level of test construction skill applied during testing. On the subject of the effect of gender, Anikweze and Sabo, (2016) investigate Teacher-Made Tests (TMT) for assessing cognitive outcomes in Economics at senior secondary schools in Nasarawa State. The main objective of the study was to determine if Economics TMTs adequately cover the Economics content of the syllabus. The findings revealed that: TMTs in Economics did not adequately cover the six levels of cognitive domain; there was poor coverage of Economics contents by TMTs; teachers at the S.S.S level do not set balanced TMTs, and that TMTs constructed by male teachers are more comprehensive, encompassing the six level of cognitive domain than TMTs set by female teachers.

Antecol, Eren and Ozbeklik (2015) have also reported that female teachers are less mathematical than male teachers, and those male teachers have more time to prepare more comprehensive test. Unfortunately, roles of teachers as regards test construction skills have been reported as a main source of anxiety for teachers, especially teachers with few years of classroom teaching experience (Ebinye, 2011). This test construction anxiety, according to Ebinye (2011), arises from inadequate test construction skills of the teachers. Scholars such as: Amedahe, 1989; Kazuko, 2012; Hamafyelto, Hamman-Tukur and Hamafyelto 2015 have also argued that test construction among teachers is not encouraging. Poor test construction skills imply that teachers may end up taking inaccurate information about students' learning.

Again, Yusuf and Adigun (2010) examine the influence of school type, sex and location on teachers' competence in secondary schools in Ekiti State of Nigeria. Findings from the study show that the level of teachers' competence was low. Findings also reveal that school type, sex and location have significant influence on teachers' competence. Ololube (2008) assesses the test construction skills of teachers in Nigeria and found that there are poor test construction skills among non-professional teachers. Another study by Ngozi, Chika and Aloysus (2013) finds that most teachers construct poor items which actually failed to function as it was supposed to. Some

teachers, acknowledging that they have weak test construction skills, resort to past or already existing questions to assess students.

Teachers' self-efficacy affects teachers' performance and may be a potential predictor for improving students' academic performances. In other words, teachers with high self-efficacy produce students with high literacy and numerical skills. According to Klassen et al., Klassen and Tze, as cited in Barni D, Danioni F and Bebevene P (2019), teachers' self-efficacy has been repeatedly demonstrated to be a relevant factor for the effectiveness of the teaching activity, as it is a powerful drive influencing the behaviour of teachers in the classroom and effort put in the endeavor. Based on the above, a teacher's self-efficacy could have an effect on test construction skills of a teacher. According to Tschannen-Moran and Hoy, as cited in Einar, Skaalvik and Sidsel (2011), a teacher's efficacy belief is a judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may have difficulty in learning or those not motivated to learn.

Durowoju and Onuka, (2015) examine the effect of teachers' self-efficacy enhancement and school location on students' achievement in Economics in senior secondary schools in Ibadan Metropolis of Oyo State, Nigeria. Some of the findings are: teachers' self-efficacy enhancement had significant main effect on students' achievement in Economics; school location also had significant main effect on students' achievement in Economics, while teachers' self-efficacy enhancement and school location had no significant interaction effects on students' achievement in Economics. It was recommended that teachers should be exposed to self-efficacy enhancement programmes to enable them imbibe the spirit of self-efficacy in carrying out their assignments. Furthermore, teachers should be made to understand and accept the fact that their students can perform excellently in their academic work, regardless of their school location, if they develop in themselves a high level of self-efficacy.

Emmanuel, Ruramayi, and Ifeoma (2012) in their work examine the influence of teachers' self-efficacy on students' academic performance in selected secondary school subjects in Southwestern Nigeria. The result shows that there was positive relationship between teachers' self-efficacy and students' academic performance. Hence, school culture (Teacher self-efficacy) was a potent predictor of improving students' academic performance in selected secondary school subjects. Therefore, secondary school principals should encourage teachers' self-efficacy in their schools.

### **Statement of the Problem**

Tests and test results constructed by teachers are very much respected by parents, employers, the public and students as a requisite component of academic performance. There can be serious consequences if testing is inaccurate. Lack of proper monitoring by the teachers, poor grammar/sentences, good grading skills, and strategies for ascertaining the reliability of test, among others, might be as a result of the teacher's lack of effective test construction skills. The lack of test construction skills has negative consequences on the students. These negative consequences can come in form of test anxiety on the part of the students, loss of interest in the subject, and cheating during testing. Lack of test construction skills by teachers might result in false assessment of students' achievements. Therefore, it becomes very imperative to emphasize the importance of having a clear articulation of what to assess using tests. That is, the knowledge, skill, and/or behaviour the stakeholders would like to measure. Test constructors have to determine how to measure the intended learning outcomes.

The researchers, as teachers, have made informal observations, with regard to the quality of test construction and administration in general in some secondary schools in Taraba State. Some of these include the inability to follow the guidelines for item construction and administration, unclear purpose as to the reason for the use of classroom tests, an imbalance between the test and time allotted for tests, extreme extraneous factors like ambiguities, grammatical errors, and unclear instructions, among others. Some teachers fail to adhere to recommended classroom assessment practices which make most of them prepare test that is not based on test blue print.

It is against this background that the study sought to determine the relationship of teacher's characteristics such as: gender and self-efficacy and the test construction skills of Economics teachers in public secondary schools in Taraba State, Nigeria.

### **Purpose of the Study**

The main purpose of the study was to determine gender and self efficacy as a correlate of Test Construction Skills in public secondary schools in Taraba State, Nigeria. Specifically, the study sought to determine:

1. the mean difference in the relationship between gender and Economics Teachers' test construction skills in public secondary schools in Taraba State.
2. relationship between self -Efficacy and Economics Teachers' test construction skill in public secondary schools in Taraba State.

### **Research Questions**

Based on the purpose of the study, the following research questions were formulated to guide the study:

1. What is the relationship in mean difference between gender and Economics Teachers' test construction skills in public secondary schools in Taraba State?
2. What is the relationship between self-efficacy and Economics teachers' test construction skills in public secondary schools in Taraba State?

### **Research Hypotheses**

The following null hypotheses were formulated to be tested at 0.05 levels of significance:

**H<sub>01</sub>:** There is no significant mean difference in the relationship between gender and Economics Teachers' test construction skills in public secondary schools in Taraba State.

**H<sub>02</sub>:** There is no significant relationship between self-efficacy and Economics teachers' test construction skills of Economics teachers in public secondary schools in Taraba State.

### **Research method**

The research design for this study was descriptive correlational design. The correlational design was used because it involves analysis of the relatedness of independent and dependent variables. Olalere, (2014) reports that correlational design enables the researcher to collect original data from the respondents themselves and describe the variables as they are in order to establish the extent of relationship between the independent and dependent variables in the study.

The total population of the study was 604 Economics teachers from 301 public secondary schools in Taraba State (Taraba State Post Primary Education Board, 2019). The population was made up of 353 male and 251 female Economics teachers with professional background or teaching requirements.

A total sample of four hundred (400) respondents was selected for the study. Multi-stage random sampling procedure was used to ensure that all units of analysis such as Education Zone, Local Government Area, public secondary schools and Economics teachers from the six (6) out of Ten (10) education zones of Taraba State were selected. The advantage of this sampling technique is that the sample drawn will be more comprehensive and representative of the population of the study (Emaikwu, 2015).

The main instrument used for data collection is a self-designed forty-six (46) item questionnaire titled: Economics Teachers' Test Construction Skills Questionnaire (ETTECSQ). ETTECSQ was designed in simple and clear language, with precision to ensure validity and item reliability of the responses. Instructions on how to answer the items in the research instrument were contained in the questionnaire.

ETTECSQ was divided into three sections; section A contains items on personal data of respondents that will help in the demographic analysis of the sampled population. Section B contains thirty-one (31) items on Economics Teacher's Test construction skills. Lastly, section C contains eleven (11) items that helped to collect information on the extent to which Self-Efficacy influences Economics Teachers' Test Construction Skills. The respondents were required to tick

(√) the chosen response from a four -point rating scale as follows: Very High Extent (VHE), High Extent (HE), Moderate Extent (ME) and Low Extent (LE) with the scores of 4, 3, 2 and 1 respectively. All positive statements were scored from maximum to minimum that is from a score of 4 for Very High Extent, 3 for High Extent, 2 for Moderate Extent and 1 for Low Extent. All negative statements were scored in the reverse order, which is 4 for Low Extent, 3 for Moderate Extent, 2 for High Extent and 1 for Very High Extent.

The validity-evidence of the questionnaire was done through face and content validation by three experts from the Department of Educational Foundations, Taraba State University, Jalingo. The experts determined the adequacy, comprehensiveness and suitability of the items. Based on the observations and corrections from one of the experts, items number 20, 35, 36, 37 and 41 were modified. After scrutiny of the questionnaire, the corrected copies were produced for data collection.

A pilot test was carried out on ETTECSQ to determine its reliability. ETTECSQ was administered to 25 Economics teachers in public secondary schools of Adamawa State who have the same characteristics in terms of qualification, gender and experience as the teachers in the area of study but who were not part of the study. 30 public secondary schools in Adamawa State were used for the pilot test. 25 respondents were selected and administered the instrument. The results were collated and the reliability of the instrument was obtained using Cronbach alpha method of testing reliability, it yielded reliability coefficient of 0.84. According to Umar and Usman (2015), Cronbach alpha provides a coefficient of inter-item correlations, that is, the correlation of each item with the sum of all the other items. This is a measure of the internal consistency among the items.

The procedure for administration of the instrument was carried out as follows:

**Step 1:** The researchers obtained an introduction letter from the Head, Department of Educational Foundations, Taraba State University, Jalingo to go to the schools to collect data for the study.

**Step 2:** The researchers used five (5) research assistants, who were briefed on the method of administration and collection of the questionnaire. This was done to facilitate and minimize the rate of uncompleted questionnaire. To ensure a high percentage return rate for the research instrument, the researchers and the research assistants administered the questionnaire personally to the respondents and retrieved them immediately after completion.

**Step 3:** The researchers visited each of the selected schools to administer the instrument, with the help of research assistants. A total of four hundred (400) copies of ETTECSQ were administered, but three hundred and ninety (390) were valid and used for the study. This is because some of the ETTECSQ were not properly filled by the respondents.

The data obtained were edited, coded, organized and analyzed using simple percentages and descriptive statistics. The data were converted to interval by adding the ordinal value of the options (VHE, HE, ME, LE) and 4,3, 2, and 1 respectively  $(4+3+2+1) = 10$  and dividing the sum by the number of options which is 4. The decision rule for the acceptance of the mean is 2.50. This means that any item with a mean of 2.50 and above were considered accepted; while any item with a mean of 2.49 and below were rejected. Mean and standard deviation were used to analyze research question 1 while research question 2 was answered using simple percentages. Similarly, inferential statistics of t-test was used to test null hypotheses  $H_{01}$ , and linear regression was used to test null hypothesis  $H_{02}$  at 0.05 significance level.  $H_{01}$  was tested using T-test because it is used to compare the mean of two groups.  $H_{02}$  was tested using simple regression because simple regression is used in testing the association between one independent variable and one dependent variable. According to Louis, Lawrence, and Keith, (2011) Linear regression is a linear approach to modeling the relationship between a scalar response (or dependent variable) and one or more explanatory variables (or independent variables). In linear regression, the relationships are modelled using linear predictor functions, whose unknown model parameters are estimated from the data. The Linear regression is justified for analysis of data in this study because the goal is to explain variation in the dependent variable (test construction skills) that can be attributed to variation in the independent variables (Economics

Teachers' Gender and Self- efficacy), and to quantify the strength of the relationship between the variables.

### Results

The Data collected for the study were analysed using Mean, Standard Deviation and Simple Percentages in answering the research questions; while inferential statistics of Linear Regression was used to test null hypotheses at 0.05 level significance.

#### Research question one

What is the mean difference in the relationship between gender and Economics Teachers' test construction skills in Public secondary schools in Taraba State?

Data answering this research question are contained in Table 1

Table 1

Response of Teachers on the Mean Difference in the Relationship Between Gender and Economics Teachers' test construction skills in Public Secondary Schools in Taraba State

Gender	N	$\bar{x}$	SD	%
Male	210	38.31	2.95	53.85
Female	180	36.53	1.03	46.15
Total	390			100

Field Survey 2021

From Table 1, it can be observed that 210 representing 53.85% of the total respondents were male and mean difference of 38.31, while 180 (46.15%) were female with a mean difference of 36.53. The results of the analysis indicated that the male have a higher mean difference and percentage than those of the female. This implies that there is influence of gender on test construction skills of Economics teachers in secondary schools in Taraba State. This was equally evident in the hypothesis findings which revealed that gender significantly relates with teachers' test construction skills in public secondary schools in Taraba State.

#### 4.2.2 Research question two

What is the relationship between self-efficacy and Economics teachers' test construction skills in public secondary schools in Taraba State?

Data answering this research question are contained in Table 2.

Table 2

Results of Responses Between Teachers' Self-efficacy and Economics Teachers' Test construction skills in public secondary schools in Taraba State (N = 390)

S/N	ITEMS	RESPONSES					
		f	A %	F	D %	Total	%
36	I am capable to construct good test items	333	69.84	57	30.16	390	100
37	I can prepare alternate form of test to deter cheating	299	64.35	81	35.65	390	100
38	I can provide for make- up testing if need be	265	58.87	125	41.13	390	100
39	My test construction skill is sufficient to develop content valid test.	240	61.29	150	38.71	390	100
40	My test instructions are as clear as possible.	285	62.10	105	37.90	390	100
41	I am capable of designing test blueprint when constructing test	265	58.87	125	41.13	390	100
42	I can design valid test that will help students pass external examinations	240	61.29	150	38.71	390	100

43	I have adequate financial resources to develop 50 items multiple test to enhance critical thinking through my test	285	62.10	105	37.90	390	100
44	I possess adequate number of years of experience to measure all the levels of cognition in Economics test.	241	61.13	149	38.87	390	100
45	I am capable to use a variety of Test strategies.	320	67.74	160	32.26	390	100
46	I can provide immediate feedback to students on their test performance	220	62.58	170	37.42	390	100

Field survey, 2021

The result in Table 2 shows that 333 (69.84%) of the total respondents agreed that they are capable to construct good test items, while 57 (30.16%) did not agree. 299 (64.35%) agreed that they can prepare alternate form of test to deter cheating, while 81 (35.65%) did not. 265 (58.87%) agreed that they can provide for make-up testing if need be; while 125 (41.13%) did not. 240 (61.29) agreed that their test construction skill is sufficient to develop content valid test; while 150 (38.71%) did not. 385 (62.10%) agreed that their test instructions are as clear as possible; while 235 (37.90%) did not. 265 (58.87%) agreed that they are capable of designing test blueprint when constructing test; while 135 (41.13%) did not. 240 (61.29%) agreed that they can design valid test that will help students pass external examinations; while 150 (38.71%) did not. 285 (62.10%) agreed that they have adequate financial resources to develop 50 items multiple test to enhance critical thinking through their test; while 125 (37.90%) did not. 241 (61.13%) of the total respondents agreed that they possessed adequate number of years of experience to measure all the levels of cognition in Economics test, while 149 (38.87%) did not. 200 (67.74%) agreed that they are capable to use a variety of Test strategies, while 190 (32.26%) did not. While 220 (62.58%) agreed that they can provide immediate feedback to students on their test performance, 170 (37.42%) did not.

The result of the analysis, indicated that the percentage of agreement for all the eleven items were higher than 50. This result therefore signifies that there is significant relationship between self-efficacy and Economics Teachers' test construction skills among public secondary schools in Taraba

### Research hypothesis testing

This deals with the result of the statistical analysis of data gathered for this study, as well as their interpretation and discussion. The presentation of the data was done following the trends of the two hypotheses directing the study.

### General description of variables

The main independent variables for this study are:

- i) Teacher's gender
- ii) Teacher's self-efficacy

### Hypotheses Testing

In this section, each hypothesis is re-stated, and the result of the data analysis carried out to test it is presented. Each hypothesis of the study was tested at .05 level of significance.

### Hypothesis one

There is no significant mean difference in the relationship between gender and Economics Teachers' test construction skills in public secondary schools in Taraba State.

The independent variable in this hypothesis is gender (male and female); while the dependent variable is the test construction skills of Economics teachers. To test this hypothesis, the test construction skills of Economics teachers by male and female teachers were compared using Independent t-test analysis. The result of the analysis is presented in Table 3.

Table 3

Independent t-test Analysis of the Mean Difference in the Relationship between Economics' Teacher's Gender and Test Construction Skills (N=390)

Gender	N	$\bar{x}$	SD	t-value	Sig.
Male	210	38.31	2.95	8.19	.000
Female	180	36.53	1.03		

\* Significant at .05, df = 388

The result of the analysis as presented in Table 3 revealed that the calculated t-value of 8.19 is significant at .05 level of significance with 388 degree of freedom. With this result, the null hypothesis which stated that there is no significant mean difference in the relationship of teacher's gender on the test construction skills of Economics teachers in Taraba State, Nigeria was rejected. This result implied that, there is a significant mean difference between Economics teacher's gender and test construction skills of Economics teachers Taraba State, Nigeria

### Hypothesis two

There is no significant relationship between self-efficacy and Economics teachers' test construction skills of Economics teachers among public secondary schools in Taraba State.

The independent variable in this hypothesis is teacher's self-efficacy; while the dependent variable is the test construction skills of Economics teachers. Simple regression analysis was employed to test this hypothesis. The result of the analysis is presented in Table 4.

Table 4

Simple Regression Analysis Result of the Relationship between Teacher's Self-efficacy and Test Construction skills of Economics Teachers

Model	R	R. square	Adjusted R. square	Std error of the estimate	
1	.706(a)	.498	.494	2.52963	
Model	Sum of square	df	Mean square	F	p-value
Regression	736.083	1	736.083	384.779*	.000(a)
Residual	742.290	388	1.913		
Total	1478.373	389			
Variables	Unstandardized regression weight B	Standardized regression weight	Beta weight	t	p-value
(Constant)	14.252	1.879		7.583	.000
Teacher's self-efficacy	.966	.090	.706	10.725	.000

\* Significant at .05 level.

The simple regression analysis of the relationship between Teacher's self-efficacy and Economics teachers test construction skills produced an adjusted  $R^2$  of .494. This indicates that the Teacher's self-efficacy account for 49.4% of the determinant, the test construction skills of Economics teachers in the study area. This finding is a critical indication that Teacher's self-efficacy is relatively high in the area of the study. The F-value of the Analysis of Variance (ANOVA) obtained from the regression table was  $F = 384.779$  and the sig. value of .000 (or  $p < .05$ ) at the degree of freedom (df) 1 and 388. The implication of this result is that Economics teachers' self-efficacy has a significant relationship with their test construction skills. The result shows that an improvement in economics teachers' self-efficacy contributes to an improvement in their test construction skills..

To sum up, it was found that most of the items on teachers' self efficacy were accepted by the respondents to have a relationship with teachers' test construction skills. This was equally evident from the hypothesis findings which indicated that self efficacy contributed 49.4% of the determinants of teachers test construction skills.

### Summary of major findings

The main purpose of the study was to determine gender and self efficacy as a correlate of Test Construction Skills in public secondary schools in Taraba State, Nigeria.

The following are the summary of the major findings of the study;

1. There is a significant mean difference between teachers' gender and Economics teachers' test construction skills in public secondary schools in Taraba State. This agrees with Anikweze and Sabo's (2016) claim that Teacher-Made-Tests (TMT) constructed by male

teachers are more comprehensive, encompassing the six levels of cognitive domain than TMTs set by female teachers. The finding also aligns with Yusuf and Adigun's (2021) assertion that school type, gender and location of school have significant influence on teachers' competence. Similarly, it also mirrors Antecol, Eren and Ozbekik's (2015) claim that female teachers are less mathematical than male teachers and that male teachers have more time to prepare for more comprehensive tests.

2. There is a significant and positive relationship between teachers' self efficacy and Economics teachers' test construction skills among public secondary schools in Taraba State. The finding agrees with Bekele and Babu's (2022) study that there is a moderate positive statistically significant relationship between teachers' self-efficacy and test construction.

### **Conclusion**

Based on the results and findings of the study, the following conclusions were reached. Economics teachers' self-efficacy and gender have an impact on their test construction skills. Teachers' belief in their capacity to be able to construct test effectively actually improves and enhances their competence in actually doing so. Again, Teachers' genders have significant relationship with their test construction skills.

### **Recommendations**

Based on the conclusion above, the following recommendations were made:

1. The result of the findings shows that male Economics teachers have better test construction skills than the female Economics teachers; as such, there should be regular training on test construction skills by academic planners, this will improve the test construction skills of female teachers so as to elicit the right response from their students and also strengthen the male teachers' performance in test construction.
2. Since there is the presence of self-efficacy in the teachers, they should utilize it to improve more on their test construction skills, which will in turn improve the students academically.

### **REFERENCES**

- Agu, N. N., Onyekuba, C., & Anyichie, A. C. (2013). Measuring teachers' competencies in constructing classroom-based tests in Nigerian secondary schools: need for a test construction skill inventory. *African Journal of Education*, 12 (3), 22-34.
- Antecol, H., Eren, O., & Ozbeklik, S. (2015). The effect of teacher gender on student achievement in primary school. *Journal of Labor Economics*, 33 (1), 63-89.
- Anikweze, C. M., & Sabo, E. S. (2016). *Evaluation of teacher-made test for assessing cognitive outcome in economics in senior secondary schools in Nasarawa state*. Nasarawa State University, Faculty of Education. Keffi: Star Clear Press.
- Barni, D. Danioni, F. & Bebevene, P. (2019). Teachers' Self Efficacy the role of personal values and motivations for teaching. *Journal of Frontiers, Psychology*, 10:1645.
- Bekele, M & Babu, P. S. (2022). *Teachers' self-efficacy and competence in test construction*. Riga, Latvia: KS Omniscryptum Publishers.
- Cambie, E. R., & Hamman-Tukur, A. (2017). Teachers' characteristics and knowledge of test construction in day secondary schools in Maiduguri metropolis, Borno state Nigeria. *Research journal's Journal of Education*, 5 (4), 1-13.
- Durowoju, E. O., & Onuka, A. U. (2015). Teacher self-efficacy enhancement and school location: implication for students' achievement in economics in senior secondary school in Ibadan, Oyo State, Nigeria. *Journal of Education and Practice*, 6 (11), 109-115.
- Ebinye, P.O. (2011) Problems of Testing under the Continuous assessment programme . *J Qual. Educ*, 4(1.), 12-19.
- Emaikwu, S. O. (2015). *Fundamentals of research methodology and statistics*. Benue: Selfers Academic Press.
- Emmanuel, O. A., Ruramayi, T., & Ifeoma, E. (2012). Teachers' self-efficacy as correlates of secondary school students' academic achievement in southwestern Nigeria. *Discovery*, 2 (4), 8-16.

- Idowu, A. I., & Esere, M. O. (2010). Assessment in Nigerian schools: a counsellor's viewpoint. *Edo Journal of Counselling*, 2 (1), 17-27.
- Louis, C., Lawrence, M., & Keith, M. (2011). *Research Methods in Education* (7th ed.). United Kingdom: Routledge;
- Mahajan, G. (2015). Construction and validation of achievement test in economics. *International Journal of Humanities and Social Sciences Studies*, 1 (6), 54-60.
- Nwosu, P. O. (2016). Demographic variables and work Stress among Academic Administrators of Universities in South East Nigeria. *PhD thesis submitted to the faculty of Education, University of Nigeria Nsuka.*
- Ololube, N. P. (2008). Evaluating competencies of professional and non-professional teachers in Nigeria, studies in educational evaluation (SEE). *Journal of Education*, 34 (1), 44-51.
- Olalere, O. O. (2014). The strategic place of statistical methods in analyzing data and making inferences in scientific research. *Journal of Education Research and Behavioral Sciences*, 3 (10), 343-346.
- Umar, H. S., & Usman, M. (2015). The imperative of population sampling in social science research. *Global Journal of Political and Science and Administration*, 3 (3), 49-57.
- Yusuf, M. A. & Adigun, J.T. (2010). The Influence of School Sex, Location and Type on Students' Academic Performance. *Int, journal of educational Sciences*, 2(2): 81-85