ASSESSMENT OF MATHEMATICS TEACHERS' COMPETENCY IN EVALUATING STUDENTS' AFFECTIVE DOMAIN OF SENIOR SECONDARY SCHOOL II MATHEMATICS CURRICULUM DURING INSTRUCTION

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Abstract:

The study assessed teachers' competency in evaluating students' affective domain of senior secondary school II Mathematics curriculum during instruction, in Federal Capital Territory Abuja. Four research questions and three hypotheses guided the study. To carry out the study, analytical survey research design was adopted. The population of the study was 241 Mathematics teachers' from the 62 government owned senior secondary schools in F.C.T-Abuja. The sample for the study was 121 Mathematics teachers. Rating scale on Mathematics teachers' competency in the evaluation of students' affective domain of SS II Mathematics curriculum (MTCESAD) was used as the instrument for data collection. The research questions were answered using mean and standard deviation while the hypotheses were tested using t-test and ANOVA, at 0.05 level of significance; respectively. The findings of the study revealed that Mean rating of Mathematics teachers competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons is low, also teachers' gender, qualifications and experiences have significant influence on Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons. It was recommended that Mathematics teachers should give attention to students' affective domain through proper assessment and modification where necessary. There should be an objective record of students' affective domain kept by teachers each term just as it is objectively done for the cognitive domain. Mathematics teachers should be encouraged to objectively evaluate students' affective domain in the curriculum.

Keyword: *Assessment, Affective, Domain, Mathematics, Curriculum.*

Introduction

The instrument for attaining National development in different countries today, especially in Nigeria is education. Education is one of the most important instruments of change. In the National Policy on Education (FRN, 2014), Nigeria's philosophy of education is based on the following set of beliefs: Education is an instrument for national development and social change; Education maximizes the creative potentials and skills of the individual for self –fulfilment and general development of the society; Education is compulsory and a right of every Nigerian irrespective of gender, social status, religion, ethnic background and any peculiar individual challenges; among others.

This philosophy of education of Nigeria is based on the development of the individual into a sound and effective citizen, and it is also based on the provision of equal opportunities for all the citizens of the nation at basic, secondary and tertiary levels both in the formal and informal school system. In a changing environment, Mathematics is being taught to meet the changing needs of modern society.

Mathematics is one of the subjects in science that has the function of developing students' skills, knowledge, attitude and values towards solving problems and satisfaction of

real needs in life. Thus, learning Mathematics has become a necessity for an individual's full development in today's complex society. Technological advances and the growing importance of the means of communication make it necessary for people to adapt to new situations that are arising out of social change. Mathematics is a tool and language of commerce, engineering and other sciences.

The objectives for teaching Mathematics at senior secondary school level are to: generate interest in Mathematics and to provide a solid foundation for everyday living; foster the desire and ability to be accurate to a degree relevant to the problem at hand; develop and practice logical and abstract thinking; develop the ability to recognize problems and to solve them with related Mathematical knowledge; provide necessary Mathematical background for further education; stimulate and encourage creativity (FRN,2014). In general, the national philosophy of education in Nigeria is geared towards social, cultural, economic, political, scientific and technological progress (FRN, 2014). This philosophy can only be attained if Nigerians are properly equipped with necessary knowledge and skills offered in sciences especially in Mathematics.

Every student needs to be given the opportunity to learn as much Mathematics as he/she can in order to function effectively and intelligently in the society. According to Usman (2002), Mathematics is a subject that encourages all aspects of human endeavour and has been described as the life wire in the study of various disciplines. Mathematics opens up the mind to logical reasoning and analytical thinking. Mathematics is one of the compulsory subjects in the curriculum for Senior Secondary Education.

The curriculum represents the total experiences to which all learners must be exposed to; the contents, performance objectives, activities for both teachers and learners, teaching and learning materials and evaluating guide are provided. According to the Nigerian Educational Research and Development Council, (NERDC, 2012), the objectives for teaching Mathematics at senior secondary school level are to: generate interest in Mathematics and to provide a solid foundations for everyday living; develop computational skills; foster the desire and ability to be accurate to a degree relevant to the problem at hand among others.

Due to the great importance attached to the learning of Mathematics, it becomes important to assess the competency possessed by Mathematics teachers' in the evaluation of Students' in Mathematics so as to find out whether learning is taking place or not. Evaluation, according to Nworgu (2015), is a process of seeking, obtaining and quantifying data with a view to making value judgment about objects, events or their characteristics. Evaluation is a very important part of education. Education has always been the greatest hope for both individual and society and for education to be functional, evaluation is needed. Educational Evaluation therefore refers to the collection of data and the use of such data to assess the quality of students' performance and the effectiveness of a programme.

Evaluation and assessment in education involve three domains, namely: cognitive, affective and psychomotor. Cognitive component includes those objectives that deal with intellectual outcomes of instruction, thinking, memory, knowing and problem solving rearrangement and evaluation. It has six levels which include remembering, understanding, applying, analyzing, evaluating and creating. Affective component deals with description of changes in interest, feelings, emotions, attitude, values and the development of appreciation and adequate adjustment. It is concerned with the worth a learner attaches to a phenomenon which is reflected by active participation on the part of the learner. The affective component has five levels which consist of receiving, responding, valuing, organization and

characterization. Mathematics teachers should show high degree of competency and skills in evaluating affective domain of students; this implies that, the evaluation of students' affective ability should be objectively done.

However, teachers appear to pay little or no attention to the affective domain. This calls for concern because for a student to attain` full development, the affective areas must be reflected while trying to measure educational objectives. To evaluate overall learners' ability of students' properly, especially the affective areas, continuous assessment is used. Continuous assessment has been adopted as the mode of assessment at all levels in Nigeria. This mode of assessment is expected to take into cognizance the overall ability of the learner (cognitive, affective and psychomotor) at all levels of the programme. To assess learners' affective areas, the teacher plays a vital role in identifying the affective abilities of the students. It is thus important to assess teachers' competency in the evaluation of students' affective domain of senior secondary II Mathematics curriculum.

Teachers as the implementer of the curriculum therefore should possess competency to evaluate students especially in the affective domain which is provided in the curriculum. Competency in teaching refers to the ability of a teacher to exhibit on the job skills and knowledge gained as a result of training (Adodo, 2013). These skills and knowledge prescribed in the training programme are apparently conceived by curriculum planners to relate to achievements of the desired education objectives. Unfortunately, not much attention has been paid to the area of teachers' competency, and so of all the competencies an instructor needs, probably none is neglected as that of evaluating a student's progress. Adodo went further to state that it is not unusual to find instructors or teachers who lack a grasp of basic principles of assessing students learning outcome or who lack the ability or skills necessary to produce a classroom test in evaluating students learning outcome. It is therefore important to know that teachers and others associated with the classroom teaching evaluation should possess the ability to construct and evaluate instruments that are capable of revealing the degree to which students' have attained pertinent educational objectives (Adodo, 2013). A competent teacher is a good teacher and is one who has the ability to put into practice in the classroom, the knowledge and skills acquired from professional training.

A teacher is seen as a store of knowledge acquired and adapted to meet the demands of the teaching profession. A teaching qualification is the academic and professional degrees a teacher acquire to become a registered teacher in primary, secondary and tertiary institution. These teaching qualifications may include Bachelor of Education or Post Graduate Diploma in Education, Bachelor Science or Higher National Diploma, Masters in Education and above. It is therefore necessary to determine the influence of educational qualifications on Mathematics teachers' competency in evaluating students' affective and psychomotor domains of senior secondary II Mathematics curriculum.

Teacher's experience cannot be neglected in teaching and learning processes. Successful teaching and learning which enhance proper evaluation of the students' affective and psychomotor components of Mathematics curriculum can be attained if such teachers combine their experiences with professional training. Experience in the views of Harris and Sass (2007), refers to professional growth that takes place in the educator as a result of continued stay, study on the job and other related processes. Experience therefore could be referred to as knowledge acquired in the job over a reasonable period of time which can be used to improve performance. An experienced Mathematics teacher in this study is one that

has acquired more subject content knowledge; pedagogical skills on Mathematics as a result of teaching Mathematics for over a period of time and years.

Another thing that adds to teachers' experiences is the 'in service' training they have obtained. This can be in form of workshops and conferences, attended in relation to the subject and the profession. It is yet to be ascertain whether Mathematics teachers with experience in teaching the subject get used to the curriculum and are able to evaluate students' affective component of Mathematics curriculum in the classroom properly. With this in mind, the researchers deemed it fit to assess the competency of a teacher in evaluating the affective component of senior secondary II Mathematics curriculum, in relation to years of experience on the job. Ewetan and Ewetan (2015) found out that teacher's teaching experience has significantly influenced students' academic performances in Mathematics as measured by their performance in the Senior School Certificate Examinations and as perceived by the respondents. In an earlier study, Joshua, Ekanem and Agborbechem (2010) showed among other things that teacher effectiveness was not significantly influenced by any of the three teacher characteristics (gender, academic qualification and teaching experience).

Teachers may be classified based on their gender as either male or female. Gender of the teacher may also influence the acquisition of knowledge, skills and attitudes. Okoro, Ekanem and Udoh (2012), showed that the academic performance mean scores of pupils taught by male teachers do significantly differ from those of pupils taught by female teachers in favour pupils taught by male teachers. Odunaike, Ijaduola and Amode (2013), tested a number of variables on teachers gender and found out that female teachers put extra efforts in ensuring high standard of performance by students to their male counterparts who perceive teaching as a profession for the females. Healther, Ozkan and Serkan (2012), revealed that students who were assigned to female teachers suffered from lower Mathematics test scores at the end of the academic year. Based on the findings of the previous authors, most teachers have continued to focus only on the cognitive domain to the exclusion of the affective domain in students' evaluation, after the introduction of continuous assessment in the education system over many years. This implies that the overall ability of the learner may not be assessed. The continuous assessment programme gives the teacher the task of giving evidence of the child's achievements in the affective, cognitive and psychomotor domains. For the teacher to be able to do this effectively, the teacher needs to possess certain competency.

Students' anxiety, low interest, lack of motivation and attitude (affective behaviour) towards Mathematics are on increase. These make the students to shy away from Mathematics lessons and contribute greatly to the continuous poor performance of most secondary school students in Mathematics. The continuous poor performance of most secondary school students in Mathematics as evidenced by the West Africa School Certificate (WASC) results and the fewness of the number of candidates that registered for Mathematics as a discipline in the University Tertiary and Matriculation Examination (UTME) in Nigeria may not be good enough for a country that aims at making progress in Science and Technology.

Most of these problems arise because of teachers' inability to objectively evaluate students affective areas have in term created unsatisfactory state of affairs. It is therefore pertinent to assess the competency of Mathematics teachers in evaluating students' affective domain of senior secondary school II Mathematics curriculum during classroom lessons. The present study also determined the influence of gender, experience, and educational

qualification of Mathematics teachers on their competency in evaluating the affective domain of senior secondary school II Mathematics curriculum during lessons.

Purpose of the Study

The main purpose of this study was to assess the competency of Mathematics teachers in evaluating students' affective domain of senior secondary school II Mathematics curriculum. Specifically the paper,

1. Determined Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons.
2. Found out the influence of gender on Mathematics teachers' competency in evaluating the affective areas of SSII Mathematics curriculum during classroom lessons.
3. Ascertain the influence of qualification on Mathematics teachers' competency in evaluating the affective areas of SSII Mathematics curriculum during classroom lessons.
4. Determined the influence of experience on Mathematics teachers' competency in evaluating the affective areas of SSII Mathematics curriculum during classroom lessons.

Research Questions

The study was guided by the following research questions:

1. What is the mean rating of Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons?
2. What is the influence of gender on Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons?
3. What is the influence of qualification on Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons?
4. What is the influence of experience on Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons?

Hypotheses

The following hypotheses were formulated and were tested at 0.05 alpha levels of significance:

Ho_1. There is no significant influence of gender on Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons.

Ho_2. There is no significant influence of qua1ification on Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons.

.**Ho_3.** There is no significant influence of experience on Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons.

Methodology

In carrying out this study, analytical survey research design was adopted. This study was carried out in Federal Capital Territory, Abuja. Federal Capital Territory (F.C.T), is made up of

six area councils, namely: Abaji, Bwari, Gwagwalada, Kuje, Kwali and Municipal Area Council. Each of the area councils has one educational zone, totalling six educational zones in FCT – Abuja. The population of the study was 241 teachers and consisted of all the Mathematics teachers in Government owned Senior Secondary Schools in the six Educational Zones of FCT-Abuja. The sample size of this study was 121 (69 male and 52 female) SSII Mathematics teachers which is 50% of the population size. Purposive sampling technique was used to draw four Area Councils out of the six Area Councils in FCT-Abuja. The criterion for using purposive sampling is that Area Council with less than 20 Mathematics teachers were dropped whereas Area Council with 20 and above Mathematics teachers were selected for the study. The selected Area Councils were: Abuja Municipal, Bwari, Gwagwalada and Kwali Area Councils. Proportionate sampling technique was used to draw Mathematics teachers (male and female) who were included in the study to ensure equal representation of teachers from each of the selected Area Councils. The Area councils form the strata and Mathematics teachers were randomly drawn from each stratum according to their relative calculated proportions in the strata.

The instrument for data collection was an observation rating scale titled "Mathematics teachers' competency in evaluation of students' affective domain of senior secondary school II Mathematics curriculum (MTCESAD)". MTCESAD was developed by researchers SS II Mathematics curriculum as guide. The instrument has two sections A and B. Section A captured the demographic information of the teachers while Section B sought for information on Mathematics teachers' competency in evaluating students' affective domain of senior secondary school II Mathematics curriculum during lessons. It has three point-rating scale as follows: Highly Competent (3), Competent (2) and Low Competent (1). MTCESAD was subjected to face validated by three experts, one in Mathematics Education and two in Measurement and Evaluation from University of Nigeria Nsukka. Corrections and comments made by the experts were used to improve the final version of the instrument. The internal consistency of the instrument was determined using Cronbach Alpha technique and the reliability coefficient of 0.83 was obtained indicating that the instrument was reliable**.**

The data collection involved a direct observation of Mathematics teachers. 10 postgraduate students who were briefed for a three hours on how to use the rating scale constituted the research assistants. Each research assistant was assigned to observe 12 Mathematics teachers and one assistant observe 13 Mathematics teachers. The research assistants used rating scale to indicate the level to which the Mathematics teachers are competent in evaluating students' affective domains of SSII Mathematics curriculum. The level of Mathematics teachers' competence in evaluating students' affective domains were observed and rated during instruction. At end of each day observation, the research assistants submit the rated instrument to the researchers. This process was repeated until the observation of 121 Mathematics teachers was completed. The entire process for data collection lasted for six day. Mean and Standard deviation were used to answer the research questions, while the t-test of independent was used to test the null hypothesis one and Analysis of variance (ANOVA) for null hypotheses two and three respectively at 0.05 level of significance.

RESULTS

The results of this study are presented according to the research questions and hypotheses that guided the study.

Research Question One:

What is the mean rating of Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons?

Table 1: Mean and Standard Deviation of Mathematics Teachers' competency to objectively evaluate students' affective areas during Mathematics lesson

S/N	Affective Measures	Mean	SD	Decision
1	Punctuality to Mathematics lessons	2.10	0.77	Competent
2	Attendance to Mathematics classes	2.01	0.76	Competent
3	Attentiveness during Mathematics classes	1.92	0.75	Low Competent
4	Carrying out Mathematics assignments	1.76	0.68	Low Competent
5	Organizational ability in Mathematics task	1.90	0.78	Low Competent
6	Neatness in presentation of solution to Mathematics problem on paper	2.00	0.79	Competent
7	Politeness in explaining solution to Mathematics problems	1.84	0.71	Low Competent
8	Honesty in reporting Mathematics work	1.95	0.83	Low Competent
9	Cooperation among colleagues during problem-solving in Mathematics	1.92	0.72	Low Competent
10	Obedience to instructions during Mathematics lessons	1.90	0.69	Low Competent
11	Sense of responsibility in taking turn to solve Mathematics problems	1.94	0.62	Low Competent
12	Attitude to class activities	2.04	0.80	Competent
	Grand Mean	**1.92**	**0.75**	**Low Competent**

Mean reference/criterion = 2.0

The result in Table 1 shows that items 1, 2, 6 and12 had a mean above 2.0 which is the benchmark, while item 3, 4, 5, 7, 8, 9, 10 and 11 had a mean below the benchmark. Also, the grand mean is 1.92, which is below the benchmark. This implies that the Mathematics teachers do not possess the competency to objectively evaluate students' affective areas during Mathematics lesson.

Research Question Two:

What is the influence of gender on Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons?

Table 2: t-test Analysis of the influence of gender on Mathematics teachers' competency to objectively evaluate students' affective areas of SS II Mathematics curriculum,

Gender	n	$\bar{X}$	SD	df	T	Sig.	Dec
Male	69	1.68	0.53	119	-2.35	0.02	S
Female	52	2.08	0.60				

The result in Table 2 shows that male Mathematics teachers' had a mean score of 1.68 and standard deviation of 0.53 while the female Mathematics teachers had a mean of 2.08 and standard deviation of 0.60. The mean scores indicate that, female Mathematics teachers' had mean rating in evaluating students' affective component of SSII Mathematics curriculum than male Mathematics teachers.

Hypothesis One:

H_{01}: There is no significant influence of gender on Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons.

The result in Table 2 also shows that the t-value of 2.35 with associated probability value of 0.02 was obtained. Since the associated probability value was less than the level of significance 0.05 set a benchmark for taking decision, the null hypothesis was rejected. Hence, the inference drawn was that, there is significant influence of gender on Mathematics teachers' competency to objectively evaluate the students' affective domain in SS II Mathematics curriculum in favour of female.

Research Question three:

What is the influence of qualification on Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons?

Table 3: Mean and Standard Deviation analysis of the influence of qualification on Mathematics teachers' competency in evaluating students' affective areas of SSII Mathematics curriculum

Qualification	**n**	$\bar{X}$	**SD**	**Std Error**
B.ED / B.SC/HND	66	1.99	0.58	0.07
PGDE	33	1.68	0.55	0.10
M.ED AND ABOVE	16	2.16	0.46	0.10
Total	121	1.94	0.05	0.05

The result in Table 3 shows that Mathematics teachers' with B.ED/ B.SC/HND, PGDE, M.ED and above have the following mean scores 1.99, 1.68 and 2.16 and standard deviation of 0.58, 0.55 and 0.46 respectively. This implies that, Mathematics teachers' with masters degree and above are more competent in evaluating students' affective component of SSII Mathematics curriculum, followed by those with B.ED/ B.SC/HND and PGDE degree being the least among the group

Hypothesis Two:

There is no significant influence of qua1ification on Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons.

Table 4: ANOVA on the influence of qua1ification on Mathematics teachers' competency to objectively evaluate students' affective areas of SS II Mathematics curriculum

Variable	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.449	2	1.724	5.701	0.00
Within Groups	35.696	118	.303		
Total	39.145	120			

$\alpha = 0.05$

The result in Table 4 shows that an F-ratio of 5. 70 with associated probability value of 0.00. Since probability value is less than the level of significance 0.05, the null hypothesis was rejected. Hence, there is significant influence of qualification on Mathematics teachers' competency to objectively evaluate the students' affective component in SS II Mathematics curriculum during lesson. To test for the direction of the difference, see the result of the post hoc test in Table 5.

Table 5: Post Hoc Test of the Comparison between the Mean rating of influence of qua1ification on Mathematics teachers' competency to objectively evaluate students' affective areas of SS II Mathematics curriculum.

(I) Qualification	(J) Qualification	Mean Difference (I-J)	Std. Error	Sig.	Dec
B.Ed/B.Sc/HND	PGDE	.31061*	.11726	.009	S
	Masters and above	-.16793	.13540	.217	NS
PGDE	B.Ed/B.Sc/HND	-.31061*	.11726	.009	S
	Masters and above	-.47854*	.15138	.002	S
Masters and above	B.Ed/B.Sc/HND	.16793	.13540	.217	NS
	PGDE	.47854*	.15138	.002	S

The result in Table 5 is a multiple comparison test of the difference in the mean ratings among B.Ed/B.Sc/HND, PGDE and Masters Degree and above on the Mathematics teachers' competency to objectively evaluate the students' affective component in SS II Mathematics curriculum during lesson. The mean difference between B.Ed/B.Sc/HND and PGDE was 0.31 with associated probability value of 0.009. The result showed that there was a significant difference between the mean ratings of B.Ed/B.Sc/HND and PGDE Mathematics teachers in favour of B. Ed/B.Sc/HND teachers. This is because the associated probability value of 0.009 was less than 0.05 level of significance. A comparison of PGDE and Masters degree and above show a mean difference of 0.48 with associated probability value of 0.002. The result of the study showed that there was a significant difference between the mean ratings of PGDE and Masters Degree and above in favour of Masters degree. The result of Table 5 also shows that the mean difference of B.Ed/B.Sc/HND and Masters degree and above was 0.17 with associated probability value of 0.217. This implies that there is no significant difference between the mean ratings of B. Ed/B.Sc/HND and Masters degree and above. Hence the significant difference observed in hypothesis two ($\mathbf{H_{02}}$) was between B.Ed/B.Sc/HND and PGDE in favour of B.Ed/B.Sc/HND; PGDE and Masters degree and above only in favour of Masters degree.

Research Question Four:

What is the influence of experience on Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons?

Table 6: Mean and Standard Deviation analysis of the influence of experience on Mathematics teachers' competency in evaluating students' affective areas of SSII Mathematics curriculum

Experience	**n**	$\bar{X}$	**SD**	**Std Error**
1-8years	72	1.90	0.50	0.06
9-16years	33	1.74	0.62	0.11
17years and above	16	2.54	0.33	0.08
Total	121	1.94	0.57	0.05

The result in Table 6 shows that Mathematics teachers' with 1-8 years, 9-16 years, 17 years and above have the following mean scores 1.90, 1.74 and 2.54 and standard deviation of 0.50, 0.62 and 0.33 respectively. This implies that, Mathematics teachers' with 17 years and above experience are more competent in evaluating students' affective component of SSII Mathematics curriculum, followed by those with 1-8 years and 9-16 being the least among the group.

Hypothesis three:

There is no significant influence of qua1ification on Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons.

Table 7: ANOVA on the influence of qua1ification on Mathematics teachers' competency to objectively evaluate students' affective areas of SS II Mathematics curriculum

Variable	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.153	2	3.577	13.192	.000
Within Groups	31.992	118	.271		
Total	39.145	120			

$\alpha = 0.05$

The result in Table 7 shows that an F-ratio of 5. 70 with associated probability value of 0.00 were obtained. Since probability value was less than the level of significance 0.05, the null hypothesis was rejected. Hence, there is significant influence of experience on Mathematics teachers' competency to objectively evaluate the students' affective component in SS II Mathematics curriculum during lesson. To test for the direction of the difference, see the result of the post hoc test in Table 8.

Table 8: Post Hoc Test of the Comparison between the Mean rating of influence of experience on Mathematics teachers' competency to objectively evaluate students' affective areas of SS II Mathematics curriculum.

(I) Qualification	(J) Qualification	Mean Difference (I-J)	Std. Error	Sig.	Dec
1-8yrs	9-16yrs	.16425	.10946	.136	NS
	17yrs and above	-.63484*	.14391	.000	S
9-16yrs	1-8yrs	-.16425	.10946	.136	NS
	17yrs and above	-.79908*	.15862	.000	S
17yrs and above	1-8yrs	.63484*	.14391	.000	S
	9-16yrs	.79908*	.15862	.000	S

The result in Table 5 is a multiple comparison test of the difference in the mean ratings among 1-8 years, 9-16 years, 17 years and above on the Mathematics teachers' competency to objectively evaluate the students' affective component in SS II Mathematics curriculum during lesson. The mean difference between 1-8 years and 9-16 years was 0.16 with associated probability value of 0.136. The result showed that there was no significant difference between the mean ratings of 1-8 years and 9-16 years Mathematics teachers. This is because the associated probability value of 0.12 was greater than 0.05 level of significance. A comparison of 1-8 years and 17 years and above show a mean difference of 0.63 with associated probability value of 0.00. This result of showed that there was a significant difference between the mean ratings of 1-8 years and 17 years and above in favour of 17 years. The result of Table 5 also shows that the mean difference of 9-16 years and 17 years and above was 0.80 with associated probability value of 0.00. This implies that there is a significant difference between the mean ratings of 9-16 years and 17 years and above in favour of 17 years. Hence the significant difference observed in hypothesis three ($\mathbf{H_{03}}$) was

between 1-8 years and 17 years and above; 9-16 years and 17 years and above in favour of 17 years and above for both comparison.

Summary of Findings

From the analysis of data presented above, the following major findings emerged:

1. Mean rating of Mathematics teachers competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons is low.
2. Teachers' gender, qualifications and experiences have significant influence on Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons .

Discussions of the Findings

Mean rating of Mathematics teachers' competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons was generally low. The result of Table 1 revealed that Mathematics teachers are competent only in evaluating students punctuality to Mathematics lesson; Neatness in presentation of solution to Mathematics problem on paper; attendance to Mathematics classes and Attitude to class activities. Whereas they are not competent in evaluating students in the following affective areas; attentiveness during Mathematics class, carrying out Mathematics assignments, organizational ability in Mathematics task, politeness in explaining solution to Mathematics problems, honesty in reporting Mathematics work, spirit of cooperation among colleague during problem solving in Mathematics, obedience to instruction during Mathematics lesson and sense of responsibility in taking turn to solve Mathematics problems. This implies that Mathematics teachers do not possess the competency to objectively evaluate students' affective areas during Mathematics lessons. The result revealed that only four out of many affective areas listed in students' dossier was objectively evaluated by Mathematics teachers. This finding agrees with that of Chioma (2016) who reported that Mathematics teachers' were incompetent in coordinating teaching with affective assessment as well as taking note of students' awareness of teacher's presence in class.

The result of Table 2 shows that there is a significant influence of gender on Mathematics teachers' competency to objectively evaluate the students' affective domain of SS II Mathematics curriculum in favour of female. This finding means that female teachers' were more competent than their male counterparts in evaluating the students' affective domain. This finding agrees with that of Adodo (2014), who observed a significant difference in teachers' gender and their competency in evaluating science learning outcomes. However, the finding contradicts with that of Healther, Ozkan and Serkan (2012), which revealed that teacher's gender does not have any influence on students' achievement in Mathematics; taking into account teacher's academic background in Mathematics. The finding of this study has established that female Mathematics teachers are more competent in objectively evaluating students' affective domain of SS II Mathematics curriculum than their male counterparts.

The findings of this study also revealed that there is a significant influence of qualification on Mathematics teachers' competency to objectively evaluate students' affective areas of SS II Mathematics curriculum as shown in Table 4 and 5. This finding is in line with that of Aliyu, Yashe and Adeyeye (2013) and Abe (2014) who reported that there is a significant influence of qualification on students taught by teachers of different

qualifications. However, this finding, contradicts that of Musau and Abere (2015), who observed that teachers' qualifications does not have any significant influence on students. The current study has established that Mathematics teachers with B.Ed/B.Sc/HND, Masters degree and above qualifications are more competent in objectively evaluating students' affective component of SS II Mathematics curriculum than their counterparts with PGDE qualification. This result is so because, Mathematics teachers with B.Ed/B.Sc/HND, Masters degree and above qualifications may have gotten more opportunities in participating in several teaching practices than their PGDE counterparts.

The finding equally revealed that teachers' experience has significant influence on Mathematics teachers' competency to objectively evaluate the students' affective areas of SS II Mathematics curriculum as shown in Table 7 and 8. This implies that experienced Mathematics teachers are more competent in evaluating students' affective areas of SS II Mathematics curriculum than less experience Mathematics teachers. This finding agreed with that of Oyewole (2011), who showed a significant relationship between teacher's years of experience and teacher's job performance as well as that of Ewetan and Ewetan (2015), which revealed that teachers' teaching experience significantly influenced students' academic performance in Mathematics. However, the finding contradicts that of Adodo (2014), which reported that teachers' years of experience and qualification do not have any effect on teachers' competency in evaluating students' cognitive and psychomotor achievement in basic science and technology. The current study has established that Mathematics teachers with 17years and above experiences are more competent in objectively evaluating students' affective component of SS II Mathematics curriculum than their counterparts with 1-8 years and 9-16 years. This result is so because, Mathematics teachers with 17years and above experiences may have gained more skills in evaluating the affective domain of learning than their 1-8 years and 9-16 years counterparts.

Conclusions

Mathematics teachers possess low competency to objectively evaluate students' affective areas of SSII Mathematics curriculum during classroom lessons. Female Mathematics teachers are more competent in objectively evaluating students' affective domain of SS II Mathematics curriculum than their male counterparts during classroom lessons. Mathematics teachers with B.Ed/B.Sc/HND, Masters degree and above qualifications are more competent in objectively evaluating students' affective component of SS II Mathematics curriculum than their counterparts with PGDE qualification. Mathematics teachers with 17years and above experiences may have gained more skills in evaluating the affective domain of learning than their 1-8 years and 9-16 years counterparts during classroom lessons

Recommendations

Based on the findings of this study and their implications, the following recommendations were made:

1. Mathematics teachers should be encouraged to improve in their competency to objectively evaluate students' affective areas. There should be an objective record of students' affective areas kept by teachers each term just as it is objectively done for the cognitive areas.
2. Teachers should be encouraged to go for a higher degree in education, seminars and workshops in order to increase their knowledge and skills to objectively evaluate students' affective areas.

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