International Journal of Innovative Education Research 12(4):324-335, Oct-Dec., 2024

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doi:10.5281/zenodo.20087278

The Influence Of Teacher's Competence On Test Instrument Construction And Quality In Obio/Akpo L.G.A Of Rivers State

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ABSTRACT
This study examined teachers' competence and test instrument construction and quality in public secondary schools in Obio/Akpor Local Government Area, Rivers State. Particularly, it looked at the effect of teachers' subject mastery competence, assessment or evaluation competence, and ICT or digital competence on the construction and quality of test instruments. The research design used was descriptive survey. The study population was all teachers in the public secondary schools in the selected area and a sample of 306 teachers was selected through simple random sampling. The data were collected through a structured questionnaire, "Teachers' Competence and Test Instrument Construction Questionnaire (TCTICQ)". This questionnaire was validated by experts and reliability was determined by Cronbach Alpha. Descriptive statistics (mean and standard deviation) were used to answer the research questions and the hypotheses were tested using independent samples t-test at 0.05 significance level. The research showed that teachers strongly agreed that subject mastery competence, assessment or evaluation competence, ICT or digital competence improve the quality of test instrument. It also showed no significant difference in the mean responses of male and female teachers about the impact of these competencies. The study showed that teachers' competencies are key to the development of valid, reliable and quality test instruments. The study concluded that continuous professional development should be facilitated to improve teachers' competence in subject matter, assessment/evaluation and ICT.
Keywords: Teachers' competence, subject mastery competence, assessment competence, ICT competence, test instrument construction, test quality

INTRODUCTION

The quality of educational outcomes in any school system is strongly dependent on the competence of teachers, particularly in their ability to design valid and reliable assessment instruments. Test construction is a core component of the teaching–learning process because it provides a systematic means of measuring students' achievement of instructional objectives. Scholars have emphasized that teachers must possess adequate competence in developing, selecting, and validating test items to ensure that assessments accurately measure intended learning outcomes (Dzidzornu & Xu, 2024). However, concerns persist in many developing contexts, including Nigeria, about the extent to which teachers possess the requisite competencies to construct high-quality test instruments.

Teacher competence is a multidimensional construct that encompasses subject mastery, assessment literacy, and digital (ICT) proficiency. Contemporary research highlights that professional competence significantly influences teaching effectiveness and learning outcomes, particularly when teachers are able to integrate knowledge, skills, and appropriate pedagogical practices in classroom activities (Gonzalez-Fernandez, Ruiz-Cabezas, Dominguez, Subia-Alava & Salazar, 2024). In test construction, subject mastery competence enables teachers to align test items with curriculum objectives and cognitive levels, thereby improving content validity and reliability of the instrument. Without sufficient subject knowledge, test items may fail to adequately represent the domain of learning, leading to poor-quality assessments.

Furthermore, assessment or evaluation competence plays an important role in enhancing the quality of test instruments. Teachers are expected to understand principles of measurement such as validity, reliability, item analysis, and standardization in order to construct effective tests. The ability to design appropriate assessment tools, interpret results, and provide feedback is central to achieving meaningful evaluation outcomes. Studies have shown that effective assessment practices are directly linked to improved student performance and overall educational quality, emphasizing the need for strong teacher competence in this area (Igbozuruike et al., 2024).

In addition, the increasing integration of technology in education has made ICT or digital competence an essential requirement for teachers in the 21st century. Digital competence involves the effective use of technological tools for instructional delivery, assessment, and data management. Recent studies indicate that teachers' ICT competence enhances not only instructional practices but also assessment processes, including the construction, administration, and analysis of test instruments. The use of digital tools can improve the efficiency, accuracy, and quality of test construction, particularly through automated item generation, online testing platforms, and data analytics (Igbozuruike, et al., 2024).

Despite the recognized importance of these competencies, there is all indication that many teachers still face challenges in integrating subject mastery, assessment literacy, and ICT skills into their professional practice, especially in sub-Saharan Africa. This gap raises concerns about the quality of teacher-made tests and their effectiveness in measuring students' learning outcomes. In Obio/Akpor Local Government Area of Rivers State, where educational development is a priority, it becomes imperative to examine how teachers' competence influences the construction and quality of test instruments (Dzidzornu & Xu, 2024). Therefore, this study seeks to investigate the influence of teachers' competence on test instrument construction and quality in Obio/Akpor L.G.A of Rivers State, with particular focus on subject mastery competence, assessment/evaluation competence, and ICT/digital competence.

Statement of the Problem

Despite the central role of assessment in the teaching–learning process, concerns persist about the quality of teacher-constructed test instruments in secondary schools in Obio/Akpor Local Government Area of Rivers State. Many classroom tests appear to lack adequate validity, reliability, and alignment with instructional objectives, thereby raising questions about their effectiveness in accurately measuring students' learning outcomes. This situation suggests possible deficiencies in teachers' competence required for sound test construction.

Specifically, inadequate subject mastery among some teachers may result in poorly structured test items that do not fully represent the content domain or expected cognitive levels. In addition, limited assessment or evaluation competence may hinder teachers' ability to apply essential measurement principles such as item analysis, standardization, and appropriate test formatting. Furthermore, the growing demand for technology-driven assessment practices highlights the need for ICT competence, yet many teachers may lack the digital skills required to design, administer, and analyze modern test instruments effectively.

Although teacher competence has been widely acknowledged as a determinant of instructional quality, there is limited studies on how specific competencies subject mastery, assessment literacy, and ICT skills collectively influence the construction and quality of test instruments in Obio/Akpor L.G.A. This gap

creates uncertainty for educational stakeholders seeking to improve assessment practices and students' academic outcomes. Therefore, this study seeks to address this problem by examining the influence of teachers' competence on test instrument construction and quality in the study area.

Purpose of the Study

The study is aimed at the influence of teacher's competence on test instrument construction and quality in Obio/Akpo L.G.A of Rivers State. Specifically, the study shall achieve the following objectives:

1. Investigate how subject mastery competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State
2. Determine how assessment/evaluation competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State
3. Ascertain how ICT/digital competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State

Research Questions

The following research questions were formulated to guide the study:

1. How does subject mastery competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State?
2. How does assessment/evaluation competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State?
3. How does ICT/digital competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State?

Hypotheses

The following hypotheses were tested at 0.05 level of significance

1. There is no significance difference in the mean responses of male and female teachers on subject mastery competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State.
2. There is no significance difference in the mean responses of male and female teachers on assessment/evaluation competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State.
3. There is no significance difference in the mean responses of male and female teachers on ICT/digital competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State.

LITERATURE REVIEW

Concept of Teacher Competence

According to Hassan et al (2020), teacher competence can be defined as the integrated combination of knowledge, skills, attitudes, and professional behaviours required for effective teaching. It extends beyond mere mastery of subject content to encompass the ability to facilitate learning, manage the classroom environment, assess learners' progress, and adapt instruction to meet the diverse needs of students. According to Tope (2018), cited in Evangelio and Escote (2024), "teacher competence refers to the ability of a teacher to use professional standards efficiently to help, lead, and counsel his/her students so that they can get good achievement." This suggests that fostering successful learning outcomes and kids' academic performance requires multifaceted teacher competency. Studies have shown that teacher competence is the backbone of educational quality and successful curriculum reform, and without competent teachers, even well-designed competency-based curricula cannot achieve their intended outcomes (Hassan et al., 2020). One of the core professional competencies of a teacher is assessment competencies, which deals with the ability to construct valid test instruments. Teachers' competence in constructing test instruments is a critical dimension of assessment literacy, requiring the ability to design valid, reliable, and well-structured items that accurately measure intended learning outcomes. Competent teachers demonstrate skills in aligning test items with instructional objectives, ensuring appropriate

difficulty and discrimination indices, and constructing clear stems and plausible distractors, particularly in objective tests. Empirical evidence shows that test construction competence encompasses key components such as content validity, item formulation, and test assembly, all of which significantly influence the quality of classroom assessments and students' performance measurement (Kissi et al., 2023)

Concept of Test Instrument Construction

A test is a systematic technique used in education to measure an individual's knowledge, skills, abilities, or achievement in a specified subject through a set of standardized questions or tasks, thus providing a basis for evaluation and decision making (Popham, 2020). In contrast, a test instrument refers to the actual tool or machinery employed to gather such data, covering the structured set of items, instructions, scoring guides, and administration procedures designed to ensure validity and reliability in measurement (Brookhart, 2024). Both ideas are essential to successful educational evaluation because the test instrument embodies the concrete framework through which students' responses are solicited and analyzed, while the test itself represents the assessment process. The effectiveness and quality of educational assessments are ensured by adhering to test building standards, which encompass reliability, validity, objectivity, and usability. The term "validity" describes how well a test measures its intended construct, ensuring that test items are in line with instructional goals, as opposed to "reliability," which describes how well test findings hold up over several administrations or environments (Popham, 2020). While usability focuses on the test's practicality in terms of time, cost, ease of administration, and result interpretation, objectivity emphasizes the removal of scorer bias through clear marking schemes and standardized procedures, especially in subjective assessments (Brookhart, 2024). Collectively, these principles guide teachers in developing high quality test instruments that produce accurate, consistent, and meaningful data for educational decision making (Kissi et al., 2023).

Concept of Test Instrument Quality

Quality in assessment relates to how well an assessment method or instrument assesses learners' achievements in a valid, reliable, fair, and relevant way, while also allowing for appropriate educational decisions concerning learning progress and instructional improvement. It emphasizes the alignment of assessment activities with learning objectives, the consistency of scoring systems, and the fairness of administration to ensure that outcomes correctly represent students' genuine abilities rather than external circumstances. High-quality assessment also assures transparency, clear criteria, and the application of data to improve teaching and learning outcomes in the educational system (Brookhart, 2024).

Teachers' Subject Mastery Competence and Test Instrument Construction and Quality

Teachers' subject mastery competence plays a key role in determining the quality of test instrument construction because it enables teachers to effectively translate curriculum content into valid and well-structured assessment items that reflect the intended learning outcomes. Teachers with strong subject mastery are better positioned to align test items with instructional objectives, ensure adequate coverage of content areas, and construct questions that assess both lower order and higher order cognitive skills, thereby enhancing the validity and effectiveness of classroom tests (Sodipo, 2022). On the other hand, inadequate subject mastery often leads to poorly constructed items, conceptual inaccuracies, and a mismatch between instruction and assessment, which ultimately weakens the reliability and fairness of classroom evaluation. Studies within the Nigerian educational context further show that teachers' content knowledge significantly affects the clarity, relevance, and overall quality of test construction, as well as the extent to which assessment instruments align with curriculum standards (Oladele, 2019).

Teachers' Assessment/Evaluation Competence and Test Instrument Construction and Quality

Teachers' assessment or evaluation competence is a crucial factor that influences the construction and quality of test instruments, as it involves the knowledge and skills required to design, administer, and interpret assessments in line with accepted measurement principles. Teachers who are assessment literate are more capable of developing test items that are valid, reliable, and properly aligned with instructional objectives, thereby ensuring that such instruments accurately measure students' learning outcomes and cognitive abilities (Popham, 2014). This competence also enables teachers to apply appropriate item

writing techniques, develop clear scoring rubrics, and maintain objectivity during scoring, which improves the fairness and consistency of assessment results. Evidence from the Nigerian educational context further shows that teachers with higher evaluation competence tend to produce more standardized and instructionally relevant test instruments, resulting in better quality classroom assessment and more dependable evaluation outcomes (Babatimehin et al., 2024).

Teachers' ICT/digital Competence and Test Instrument Construction and Quality

Teachers' ICT or digital competence is an important factor in improving the construction and quality of test instruments, as it provides teachers with the ability to effectively use digital tools in designing, administering, and analyzing assessments. Teachers who are digitally competent can develop computer based tests, utilize online assessment platforms, and apply automated scoring systems, which help to improve the accuracy, efficiency, and objectivity of the assessment process (Redecker, 2017). In addition, this competence allows for the integration of multimedia elements and interactive item formats, as well as the use of data analytics, thereby enhancing the validity and practical usefulness of test instruments while also promoting greater student engagement. Evidence from Nigerian studies further indicates that teachers' digital competence contributes significantly to the quality of classroom assessment, as it improves item construction, minimizes errors in scoring, and facilitates timely feedback to learners (Okafor, 2024).

Assessment Literacy Theory

Assessment Literacy Theory, as proposed by assessment experts such as Stiggins (1991) and elaborated by Popham (2009), was developed in the area of educational assessment to account for the knowledge and skills that are required by teachers for the design, interpretation and use of assessment data for learning. It argues that teachers must understand key assessment principles including validity, reliability, fairness, objectivity and congruence between test items and curriculum objectives to design good quality test instruments and use the results for effective teaching. It also emphasises that assessment is not a technical process but a professional competency that integrates subject, pedagogic and measurement knowledge. For the purpose of this study, Assessment Literacy Theory helps to explain the impact of teachers' subject mastery competence, evaluation competence, and ICT competence on the construction of test instruments and their quality in public secondary schools. It also supports the argument that teachers with greater assessment literacy may be more likely to design well structured, valid and reliable test instruments, thus improving assessment practices in the classroom and the quality of test instruments used for the evaluation of students' academic performance.

METHODOLOGY

The study adopted the descriptive research design and the population of the study was all the teachers in senior secondary school in Obio/Akpor L.G.A, Rivers State (1314 teachers). This includes the sample size of 306 as determined by Taro Yamane of the simple random sampling method. The Teachers Competence on Test Instrument Construction and Quality Questionnaire (TCTICQ) was used to gather data from the respondents and validated by three experts from the department of Measurement and Evaluation, Ignatius Ajuru University of Education. The research questions were responded to by the mean and standard deviation while the null hypotheses were tested by the t-test at 0.05 level of significance.

RESULTS AND DISCUSSIONS

Answers to Research Questions

Research Question 1: *How does subject mastery competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State?*

Table 1: Summary of Descriptive statistics (Mean & S.D.) on how Subject Mastery Competence of Teachers enhance Test Instrument Construction and Quality in Obio/Akpo L.G.A of Rivers State

S/N	Subject Mastery Competence	Male Teachers (n=122)		Female Teachers (n=184)		Mean Set (n=306)	Remark
		Mean	SD	Mean	SD	Mean	
1.	Knowledge of subject matter enables teachers to construct test items that accurately reflect curriculum objectives.	2.87	0.57	2.67	0.63	2.73	High Extent
2.	Mastery of subject content helps teachers set test questions that discriminate between high and low-achieving students.	2.70	0.65	2.76	0.53	2.60	High Extent
3.	Teachers with strong subject knowledge construct test items appropriately aligned to various cognitive levels	2.60	0.56	2.58	0.56	2.53	High Extent
4.	Subject mastery competence enables teachers to identify and eliminate ambiguous or misleading test items before administration.	2.70	0.70	2.57	0.55	2.61	High Extent
5.	Teachers who demonstrate high subject mastery produce test instruments that are content-valid and reflective of instructional coverage.	2.85	0.57	2.60	0.57	2.65	High Extent
	Grand Total	**2.74**	**0.61**	**2.64**	**0.57**	**2.62**	**High Extent**

The data in table 1 shows that both male and female teachers agreed that subject mastery competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State to a high extent (Mean= 2.62). The table further shows that teachers agreed that knowledge of subject matter enables teachers to construct test items that accurately reflect curriculum objectives (Mean=2.73), mastery of subject content helps teachers set test questions that discriminate between high and low-achieving students (Mean=2.60), teachers with strong subject knowledge construct test items appropriately aligned to various cognitive levels (Mean=2.53), subject mastery competence enables teachers to identify and eliminate ambiguous or misleading test items before administration (Mean=2.61), and teachers who demonstrate high subject mastery produce test instruments that are content-valid and reflective of instructional coverage (Mean=2.65).

Research Question 2: *How does assessment/evaluation competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State?*

Table 2: Summary of Descriptive statistics (Mean & S.D.) on how Assessment/Evaluation Competence of Teachers enhance Test Instrument Construction and Quality in Obio/Akpo L.G.A of Rivers State

S/N	Assessment/Evaluation Competence	Male Teachers (n=122)		Female Teachers (n=184)		Mean Set (n=306)	Remark
		Mean	SD	Mean	SD	Mean	
6.	Teachers' knowledge of assessment principles enhances the reliability and consistency of test instruments constructed for classroom use.	2.73	0.64	2.59	0.63	2.57	High Extent
7.	Competence in evaluation enables teachers to develop test items that are valid measures of students' learning outcomes.	2.70	0.70	2.57	0.55	2.61	High Extent
8.	Teachers skilled in assessment design appropriately balance the use of formative and summative test items in their instruments.	2.73	0.64	2.60	0.63	2.57	High Extent
9.	Assessment/evaluation competence helps teachers construct test items with clear marking schemes that promote objective scoring.	2.70	0.70	2.56	0.55	2.61	High Extent
10.	Teachers with sound evaluation competence effectively use a table of specifications (test blueprint) when constructing test instruments.	2.73	0.64	2.58	0.63	2.57	High Extent
	Grand Total	**2.72**	**0.66**	**2.60**	**0.60**	**2.59**	**High Extent**

The data in table 2 shows that teachers agreed that assessment/evaluation competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State to a high extent (Mean=2.59). The table further shows that both male and female teachers agreed that teachers' knowledge of assessment principles enhances the reliability and consistency of test instruments constructed for classroom use (Mean=2.57), competence in evaluation enables teachers to develop test items that are valid measures of students' learning outcomes (Mean=2.61), teachers skilled in assessment design appropriately balance the use of formative and summative test items in their instruments (Mean=2.57), assessment/evaluation competence helps teachers construct test items with clear marking schemes that promote objective scoring (Mean=2.61) and teachers with sound evaluation competence effectively use a table of specifications (test blueprint) when constructing test instruments (Mean=2.57).

Research Question 3: *How does ICT/digital competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State?*

Table 3: Summary of Descriptive statistics (Mean & S.D.) on ICT/Digital Competence of Teachers enhance Test Instrument Construction and Quality in Obio/Akpo L.G.A of Rivers State

S/N	ICT/Digital Competence	Male Teachers (n=122)		Female Teachers (n=184)		Mean Set (n=306)	Remark
		Mean	SD	Mean	SD	Mean	
11.	Teachers' proficiency in ICT tools enables them to design well-formatted, professionally structured test instruments.	2.70	0.59	2.62	0.63	2.66	High Extent
12.	The use of digital platforms by teachers enhances the variety and creativity of test item formats	2.83	0.70	2.77	0.65	2.80	High Extent
13.	ICT-competent teachers are better able to store, retrieve, and update test items using item banks and digital repositories.	2.77	0.68	2.64	0.53	2.70	High Extent
14.	Digital competence enables teachers to use online item analysis tools to evaluate the difficulty and discrimination indices of test items.	2.83	0.52	2.65	0.58	2.74	High Extent
15.	Teachers who are ICT-proficient effectively administer computer-based tests that improve the security and integrity of test instruments.	2.70	0.53	2.95	0.58	2.83	High Extent
	Grand Total	**2.77**	**0.60**	**2.73**	**0.59**	**2.75**	**High Extent**

The data in table 3 shows that teachers agreed that ICT/digital competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State to high extent (Mean=2.75). The table further shows that both male and female teachers agreed that teachers' proficiency in ICT tools enables them to design well-formatted, professionally structured test instruments (Mean=2.66), the use of digital platforms by teachers enhances the variety and creativity of test item formats (Mean=2.80), ICT-competent teachers are better able to store, retrieve, and update test items using item banks and digital repositories (Mean=2.70), digital competence enables teachers to use online item analysis tools to evaluate the difficulty and discrimination indices of test items (Mean=2.74) and teachers who are ICT-proficient effectively administer computer-based tests that improve the security and integrity of test instruments (Mean=2.83).

Testing of Hypotheses

HO_1: There is no significance difference in the mean responses of male and female teachers on how subject mastery competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State.

Table 4: Summary of t-test on the difference in the mean responses of Male and Female Teachers on how Subject Mastery Competence of Teachers enhance Test Instrument Construction and Quality in Obio/Akpor L.G.A of Rivers State

Teachers	N	Mean	SD	Df	t-test	Sig.	Remark
Male	122	2.74	0.61	304	1.461	0.145	NS
Female	184	2.64	0.57				

NS= Not Significant

The above table shows that in Obio/Akpo L.G.A., Rivers State, there was a difference in the mean replies of male and female teachers about how topic mastery ability of instructors affects the development and quality of test instruments. Female educators had a mean answer of 2.64 and a standard deviation of 0.57, whereas male educators had a mean response of 2.74 and a standard deviation of 0.61. With 304 degrees of freedom, the calculated t-test value is 1.145, and the corresponding significance level is 0.145, which is higher than the significance level of 0.05. Consequently, in Obio/Akpo L.G.A., Rivers State, there is no statistically significant difference between the means of male and female instructors with regard to the ways in which teachers' subject-matter expertise improves the design and reliability of assessment tools. Therefore, at the 0.05 level of significance, the null hypothesis one is accepted.

HO_2: There is no significance difference in the mean responses of male and female teachers on assessment/evaluation competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State.

Table 5: Summary of t-test on the difference in the mean responses of Male and Female Teachers on how Assessment/Evaluation Competence of Teachers enhance Test Instrument Construction and Quality in Obio/Akpor L.G.A of Rivers State

Teachers	N	Mean	SD	Df	t-test	Sig.	Remark
Male	122	2.72	0.66	304	1.646	0.101	NS
Female	184	2.60	0.60				

NS= Not Significant

The table above displays the gender gap in the mean replies of male and female teachers in Obio/Akpo L.G.A., Rivers State, on how assessment and evaluation competency of teachers improves the development and quality of test instruments. With a standard deviation of 0.66 for male instructors and 2.60 for female teachers, the mean answer is 2.72 and 0.60, respectively. The computed t-value is 1.646, and with 304 degrees of freedom, the associated significance level is 0.101, which is more than 0.05. In Obio/Akpo L.G.A., Rivers State, Nigeria, there is no statistically significant difference between the genders of the instructors who were asked how their assessment and evaluation skills improve the quality and development of test instruments. Therefore, at the 5% level of significance, the null hypothesis two is accepted.

HO_3: There is no significance difference in the mean responses of male and female teachers on how ICT/digital competence of teachers enhance test instrument construction and quality in Obio/Akpo L.G.A of Rivers State.

Table 6: Summary of t-test on the difference in the mean responses of Male and Female Teachers on how ICT/Digital Competence of Teachers enhance Test Instrument Construction and Quality in Obio/Akpor L.G.A of Rivers State

Teachers	N	Mean	SD	Df	t-test	Sig.	Remark
Male	122	2.77	0.60	304	0.577	0.565	NS
Female	184	2.73	0.59				

NS= Not Significant

The table above shows that in Obio/Akpo L.G.A., Rivers State, there is a difference in the mean replies of male and female teachers about how teachers' ICT/digital competence improves the development and quality of test instruments. In terms of standard deviation, male educators have a mean of 2.77 while a female educator has a mean of 2.73 and a standard deviation of 0.59. With 304 degrees of freedom, the t-test yields a significance value of 0.565 (> 0.05), and the p-value is 0.577. Teachers' use of information and communication technologies (ICT) and digital competence improves the design and reliability of assessment tools in Obio/Akpo L.G.A., Rivers State, regardless of whether the respondents are male or female. Accordingly, at the 0.05 level of significance, we accept the null hypothesis 3.

DISCUSSION OF FINDINGS

Subject Mastery Competence of Teachers and Test Instrument Construction and Quality in Obio/Akpo L.G.A of Rivers State

The result presented in table 1 and 3 revealed that teachers in Obio/Akpor L.G.A. generally agreed to a high extent that subject mastery competence enhances test instrument construction and quality. Specifically, teachers acknowledged that adequate knowledge of subject matter enables the development of test items that align with curriculum objectives, discriminate effectively between varying levels of student ability, and reflect appropriate cognitive demands. This suggests that subject mastery contributes significantly to ensuring content validity, clarity, and overall quality of assessment instruments. The finding is consistent with the position of Oladele (2019), who reported that teachers' subject matter knowledge significantly influences their competence in test construction, particularly in ensuring alignment with instructional content and appropriateness of test items. Furthermore, the absence of a statistically significant difference between male and female teachers indicates that perceptions of the role of subject mastery in test construction are consistent across gender, reinforcing the universal importance of content knowledge in assessment practices. This aligns with the assertion that effective assessment practices are largely dependent on teachers' professional competence rather than demographic variables (Brookhart, 2024).

Assessment/Evaluation Competence of Teachers and Test Instrument Construction and Quality in Obio/Akpo L.G.A of Rivers State

The finding in table 2 and 5 showed that teachers of Obio/Akpor LGA strongly agreed that the quality of test instruments is improved through assessment or evaluation competence. The teachers agreed that teachers' knowledge of evaluation principles enhance the reliability and consistency of test instruments, enables the creation of valid measures of students' learning outcomes, and influence the use of appropriate materials like test blueprints and clearly defined marking schemes to ensure objectivity during scoring. The implication of this is that teachers with good evaluation competence are more likely to develop well balanced and standardised assessment instruments that reflect students' performance. The result is consistent with Kissi et al. (2023), who reported that teachers' assessments competence significantly impacts the quality of test construction, particularly in terms of validity, reliability and item formulation. Similarly, Babatimehin et al. (2024) found that teachers' understanding of school based assessment enhances their ability to develop effective and reliable test instruments. Furthermore, the study demonstrated that there was no gender difference in the responses of male and female teachers, suggesting that the opinions on the impact of assessment competence on test construction and quality are not gender dependent but more related to teachers' professional knowledge of evaluation.

ICT/Digital Competence of Teachers and Test Instrument Construction and Quality in Obio/Akpo L.G.A of Rivers State

The presented in table 3 and 6 showed that teachers agreed to a high extent that ICT or digital competence enhances test instrument construction and quality in Obio/Akpor L.G.A. The teachers indicated that proficiency in ICT supports the development of well-structured and properly formatted test instruments, encourages creativity in item construction, and makes it easier to store, retrieve, and update test items through the use of digital platforms. In addition, ICT competence promotes the use of online item analysis

tools for determining difficulty and discrimination indices, as well as the administration of computer based tests, which helps to improve test security and integrity. This implies that digital competence contributes significantly to the efficiency, accuracy, and overall quality of assessment practices. The finding agrees with Igbozuruike et al. (2024), who found that teachers' ICT competence improves instructional effectiveness and supports the integration of technology in various aspects of teaching and assessment. In the same vein, Okafor (2024) reported that the use of digital tools in assessment enhances the design, administration, and evaluation of test instruments, resulting in more reliable and valid outcomes. Furthermore, the study revealed that there was no significant difference between the responses of male and female teachers, indicating that the perceived influence of ICT competence on test construction and quality is not gender based but depends more on the level of teachers' digital skills.

CONCLUSION

The study investigated the impact of teacher competence on the quality and construction of test instruments in Obio/Akpor L.G.A. of Rivers State. The research determined that the quality and construction of test instruments in public secondary schools in Obio/Akpor L.G.A. of Rivers State are significantly influenced by the competence of the instructors. In particular, the development of valid, reliable, objective, and well-structured test instruments was significantly improved by subject proficiency competence, assessment or evaluation competence, and ICT or digital competence. The results also indicated that these competencies allow teachers to align test items with curriculum objectives, implement appropriate assessment principles, and utilize digital tools to enhance the efficiency and accuracy of test construction. Furthermore, the investigation demonstrated that there is no substantial disparity in the perceptions of the influence of these competencies between male and female educators, suggesting that professional skills, rather than gender, are responsible for the efficacy of test construction practices. In conclusion, the study emphasizes the necessity of enhancing the competencies of educators in order to enhance the quality of classroom assessment and educational outcomes.

RECOMMENDATIONS

Based on the findings, the researcher recommends the following:

1. Educational authorities should organize regular professional development programmes and workshops to strengthen teachers' subject mastery and enhance their ability to construct valid and high quality test instruments.
2. School administrators should prioritize continuous training in assessment and evaluation practices, including the use of test blueprints and item analysis techniques, to improve the reliability and objectivity of classroom assessments.
3. Government and relevant stakeholders should invest in ICT infrastructure and provide targeted digital literacy training for teachers to enable effective integration of technology in test construction, administration, and analysis.

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