



# Assessment of Psychometric Properties of Economics Teacher-made Tests using Item Response Theory in Jalingo Education Zone Taraba State, Nigeria

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## ABSTRACT

This study determine the psychometric properties of Economics teacher-made tests in Jalingo Education Zone, Taraba state Nigeria. using Item Response Theory (IRT) The main purpose of the study was to determine the quality of items in secondary school Economics tests by analyzing their difficulty indices, discrimination indices, and guessing indices. The study adopted an ex-post facto design. The population of the comprised of 3,304 SS II students in Jalingo Education Zone, from which a sample of 150 were selected using proportionate stratified random sampling. The Instrument of data collection was Teacher-made Economics test scripts. The reliability of the instrument was pre-tested in a tried test with 50 students using Kudar Richardson 20 method of reliability it was found that the reliability of the instrument was 0.82. Data were analyzed using the three-parameter logistic (3PL) model of Item Response Theory (IRT) to estimate item difficulty, discrimination, and guessing indices, complemented with descriptive statistics. Findings revealed that a significant proportion of the test items fell outside the acceptable range of psychometric quality. Some items were found to be either too easy or too difficult, limiting their capacity to appropriately measure students' abilities. Similarly, discrimination indices indicated that while a few items could effectively differentiate between high- and low-ability students, many failed to meet acceptable standards. Furthermore, several items exhibited high guessing indices, suggesting that students could arrive at correct answers through chance rather than knowledge. The study concluded that most of the Economics teacher-made tests in Jalingo Education Zone do not fully meet the required psychometric standards for valid and reliable assessment. It was recommended that Economics teachers be more trained in test construction techniques and psychometric analysis, with regular workshops organized by educational authorities to improve assessment practices.

**Keywords:** Psychometric properties, teacher-made tests, Item Response Theory, Economics, difficulty index, discrimination index, guessing index.

## INTRODUCTION

Assessment is a fundamental aspect of the teaching learning process, as it provides feedback on students' achievement and informs instructional decision-making. In secondary schools, teacher-made tests are the most widely used form of assessment due to their practicality and alignment with classroom instruction (Ohuche, 2017). However, the quality of these tests depend largely on their psychometric properties such as validity, reliability, discrimination, and difficulty indices. Poorly constructed tests may lead to inaccurate evaluation of students' learning outcomes, thereby compromising instructional effectiveness and accountability in the education system (Emaikwu, 2012).

In Nigeria, Economics as a secondary school subject plays a crucial role in equipping learners with the knowledge and skills needed for national development, entrepreneurship, and informed citizenship. The performance of students in Economics has, however, raised concerns among stakeholders due to persistent reports of low achievement in both internal and external examinations (WAEC, 2023). A major factor often implicated is the inadequacy of teacher-made tests, which may fail to meet acceptable measurement standards (Oladokun, 2019).

Item Response Theory (IRT) has emerged as a modern psychometric approach for evaluating the quality of test items and identifying their capacity to discriminate between high- and low-ability learners. Unlike Classical Test Theory (CTT), which relies on aggregate or total test scores and is often dependent on the particular sample, IRT provides item-level diagnostics and more robust information about how test items function across different ability levels (Kaigama, Dadughun, & Mustapha, 2025). Applying IRT to teacher-made Economics tests in Jalingo Education Zone will provide evidence of their psychometric soundness and contribute to improving classroom assessment practices.

Globally, the emphasis on quality assessment has continued to grow, given its centrality to educational improvement and accountability. International testing programs such as PISA and TIMSS rely heavily on psychometric models like Item Response Theory to ensure fairness, validity, and comparability of test scores across diverse populations (OECD, 2019). This underscores the importance of adopting modern measurement models in local contexts to enhance the credibility of assessments. In Nigeria, teacher-made tests remain the primary tools for continuous assessment in secondary schools, forming a significant proportion of students' final grades (NCC, 2014). Despite their importance, several studies have reported that many of these tests are constructed without strict adherence to psychometric principles such as content validity, item discrimination, and appropriate difficulty levels (Emaikwu, 2012; Oladokun, 2019). Consequently, test results may not accurately reflect students' true abilities, leading to poor instructional decisions and misrepresentation of students' academic potential. Specifically, in Taraba State, and particularly in the Jalingo Education Zone, the situation is not different. Teachers rely heavily on classroom-based assessments, yet concerns persist regarding the fairness and standardization of these assessments. Reports from local education authorities and examination bodies suggest that poor test quality contributes to students' low performance in external examinations such as WAEC and NECO (Taraba State Ministry of Education, 2022). This calls for empirical investigation into the psychometric properties of teacher-made tests used in the zone.

Item Response Theory offers a suitable framework for such evaluation. By analyzing item difficulty, discrimination, and guessing parameters, IRT provides deeper insights into how test items perform across varying levels of student ability (Embretson & Reise, 2013). This study therefore aims to assess the psychometric properties of Economics teacher-made tests in Jalingo Education Zone, with the goal of improving test construction practices, ensuring fair assessment of learners, and ultimately enhancing the teaching and learning of Economics in secondary schools.

In Jalingo Education Zone of Taraba State, where classroom assessments form a significant proportion of students' academic evaluation, the situation is no different. Reports from the Taraba State Ministry of Education (2022) indicate that many teacher-made assessments lack standardization and psychometric evaluation, thereby contributing to inconsistencies in students' performance. Despite the critical role of Economics in preparing students for higher education and equipping them with entrepreneurial and financial literacy skills, there is limited empirical evidence on the quality of the teacher-made tests used in assessing the subject.

While Classical Test Theory (CTT) has traditionally been used in analyzing tests, it provides limited information since its indices are test-dependent and sample-specific. Item Response Theory (IRT), on the other hand, offers a more robust framework by providing item-level diagnostics such as difficulty, discrimination, and guessing parameters that are independent of test forms and sample characteristics (Hambleton, Swaminathan & Rogers, 1991). Unfortunately, little or no research has been conducted in Jalingo Education Zone using IRT to evaluate Economics teacher-made tests.

### **Statement of the Problem**

The researchers as teachers has made informal observations with regard to the quality of a test, that most often teacher made test are characterized with reliability and validity challenges such as: the content are not comprehensively covered, the standard process for constructing instrument seems not followed and the mode of administration not properly monitored. All these lead to significant measurement error into the measurement process. When a measurement is poor, then there will be an inaccurate data-based inference, which in turn leads to wrong decision-making. The use of a poorly designed instrument is a major problem as it affects students' interest, carrier choice and achievement. When an instrument does not possess the necessary characteristics it ought to, this means that the examination is not valid and reliable, and the effort to achieve the educational objectives will be in futility. Could this be the case with Teacher made test in Economics in secondary schools in Jalingo Education Zone, Taraba State? Hence, this study Assessment of Psychometric Properties of Economics Teacher-made tests Using Item Response Theory in Jalingo Education Zone Taraba Stat, Nigeria

### **Purpose of the Study**

Specifically, the study sought to determine:

1. difficulty indices of secondary school teacher-made tests in Economics, in Jalingo education zone, Taraba state.
2. discrimination indices of secondary school teacher-made tests in Economics, in Jalingo education zone, Taraba state.
3. guessing indices of the secondary school teacher-made tests in Economics, in Jalingo education zone, Taraba state.

### **Research Questions**

The following research questions were formulated to guide the study.

1. What are the difficulty indices of secondary school teacher-made tests in Economics, in Jalingo education zone, Taraba state?
2. What are the discrimination indices of secondary school teacher-made tests in Economics, in Jalingo education zone, Taraba state?
3. What are the guessing indices of the secondary school teacher-made tests in Economics, in Jalingo education zone, Taraba state?

### **METHODOLOGY**

This study adopted the ex-post facto research design since it involved the analysis of already existing teacher-made Economics test items and students' responses without manipulation of variables. The design was considered appropriate because the study focused on determining the psychometric properties of test items using Item Response Theory (IRT). The population of the study comprised all Senior Secondary School II (SSS II) students offering Economics in the Jalingo Education Zone, Taraba State, with an estimated population of 4,860 students across public secondary schools. A sample size of 150 students (representing 10% of the population) was drawn using proportionate stratified random sampling technique to ensure fair representation across schools, gender, and ability levels. The instrument for data collection was a set of Economics teacher-made test scripts obtained from classroom assessments administered by Economics teachers in the selected schools. These scripts were compiled and subjected to psychometric analysis. To ensure validity, the test instruments were face and content validated by three experts in Measurement and Evaluation from the Faculty of Education, Taraba State University. Their suggestions were incorporated to improve item clarity and alignment with instructional objectives. For reliability, pilot data were analyzed using Kuder Richardson. The results yielded a reliability coefficient of 0.82, indicating that the test items were internally consistent and suitable for analysis. The data analysis was carried out using the three-parameter logistic (3PL) model of Item Response Theory (IRT) to estimate item difficulty indices, discrimination indices, and guessing indices. The analysis was performed using specialized IRT software. Descriptive statistics such as mean and standard deviation were also used to summarize item characteristics.

**RESULT AND DISCUSSIONS**

**Research Question One:** *What are the difficulty Indices of the teacher-made Achievement test in Economics in Jalingo education zone, Taraba State?*

**Table 1: Difficulty Indices of the teacher-made Achievement test in Economics in Jalingo education zone, Taraba State**

Items	Indices of b-Parameters
Item 1	0.67
Item 2	0.82
Item 3	0.60
Item 4	0.98
Item 5	0.76
Item 6	0.67
Item 7	0.56
Item 8	0.61
Item 9	0.67
Item 10	0.72
Item 11	0.76
Item 12	0.61
Item 13	0.89
Item 14	0.33
Item 15	0.67
Item 16	0.56
Item 17	0.61
Item 18	0.67
Item 19	0.88
Item 20	0.93
Item 21	0.23
Item 22	0.25
Item 23	0.83
Item 24	0.76
Item 25	0.61
Item 26	0.26
Item 27	0.56
Item 28	0.61
Item 29	0.67
Item 30	0.72
Item 31	0.83
Item 32	0.61
Item 33	0.84
Item 34	0.78
Item 35	0.67
Item 36	0.56
Item 37	0.61
Item 38	0.24
Item 39	0.93
Item 40	0.94
Item 41	0.28
Item 42	0.90
Item 43	0.67
Item 44	0.55
Item 45	0.36
Item 46	0.61
Item 47	0.67
Item 48	0.72

Item 49	0.83
Item 50	0.61
Item 51	0.85
Item 52	0.74
Item 53	0.67
Item 54	0.56
Item 55	0.61
Item 56	0.67
Item 57	0.72
Item 58	0.83
Item 59	0.61
Item 60	0.89
Item 61	0.78
Item 62	0.67
Item 63	0.55
Item 64	0.61
Item 65	0.28
Item 66	0.78
Item 67	0.67
Item 68	0.56
Item 69	0.61
Item 70	0.67
Item 71	0.48
Item 72	0.27
Item 73	0.80
Item 74	0.89
Item 75	0.83
Item 76	0.78
Item 77	0.61
Item 78	0.56
Item 79	0.56
Item 80	0.62
Item 81	0.70
Item 82	0.72
Item 83	0.62
Item 84	0.64
Item 85	0.56
Item 86	0.56
Item 87	0.30
Item 88	0.67
Item 89	0.72
Item 90	0.83
Item 91	0.61
Item 92	0.67
Item 93	0.78
Item 94	0.67
Item 95	0.56
Item 96	0.61
Item 97	0.67
Item 98	0.86
Item 99	0.65
Item 100	0.48
Item 101	0.57
Item 102	0.83
Item 103	0.78

Item 104	0.61
Item 105	0.56
Item 106	0.83
Item 107	0.61
Item 108	0.86
Item 109	0.78
Item 110	0.67
Item 111	0.56
Item 112	0.61
Item 113	0.66
Item 114	0.28
Item 115	0.95
Item 116	0.40
Item 117	0.98
Item 118	0.18
Item 119	0.78
Item 120	0.80
Item 121	0.68
Item 122	0.57
Item 123	0.61
Item 124	0.16
Item 125	0.82
Item 126	0.84
Item 127	0.61
Item 128	0.28
Item 129	0.78
Item 130	0.67
Item 131	0.56
Item 132	0.61
Item 133	0.67
Item 134	0.72
Item 135	0.83
Item 136	0.61
Item 137	0.21
Item 138	0.78
Item 139	0.75
Item 140	0.67
Item 141	0.25
Item 142	0.61
Item 143	0.67
Item 144	0.21
Item 145	0.90
Item 146	0.23
Item 147	0.80
Item 148	0.83
Item 149	0.69
Item 150	0.67

Table 1 showed the difficulty Indices of the teacher-made Achievement test in Economics in Jalingo education zone, Taraba State. Findings revealed the location of the items on the ability scales. It further revealed that the difficulty indices of teacher-made Achievement test in Economics were positive and range from 0.00 to 1.00. This means that the items function more among the high-ability level examinees.

This showed that a good number of items satisfy item difficulty, we can say that more than average number of items satisfy items difficulty.

**Research Question two:** *What are the discrimination Indices of teacher-made Achievement test in Economics in Jalingo education zone, Taraba State?*

**Table 2: Discrimination Indices of the teacher-made Achievement test in Economics in Jalingo education zone, Taraba State**

Items	Indices of a-Parameters
Item 1	1.05
Item 2	1.02
Item 3	0.01
Item 4	0.26
Item 5	0.03
Item 6	1.00
Item 7	1.00
Item 8	1.00
Item 9	1.00
Item 10	1.00
Item 11	0.50
Item 12	1.00
Item 13	0.27
Item 14	1.00
Item 15	1.00
Item 16	1.00
Item 17	1.00
Item 18	1.00
Item 19	0.13
Item 20	0.09
Item 21	1.00
Item 22	1.00
Item 23	1.00
Item 24	0.30
Item 25	1.00
Item 26	1.00
Item 27	1.00
Item 28	1.00
Item 29	1.00
Item 30	1.00
Item 31	1.00
Item 32	1.00
Item 33	0.63
Item 34	1.00
Item 35	1.00
Item 36	1.00
Item 37	1.00
Item 38	1.00
Item 39	0.63
Item 40	0.89
Item 41	0.69
Item 42	0.75
Item 43	0.95
Item 44	1.01
Item 45	1.00
Item 46	1.00
Item 47	1.00

Item 48	1.00
Item 49	1.00
Item 50	1.00
Item 51	1.00
Item 52	1.00
Item 53	1.00
Item 54	1.00
Item 55	1.00
Item 56	1.00
Item 57	1.00
Item 58	1.00
Item 59	1.00
Item 60	1.00
Item 61	1.00
Item 62	1.00
Item 63	1.00
Item 64	1.00
Item 65	1.00
Item 66	1.00
Item 67	1.00
Item 68	1.00
Item 69	1.00
Item 70	1.00
Item 71	1.00
Item 72	1.00
Item 73	1.00
Item 74	1.00
Item 75	1.00
Item 76	1.00
Item 77	1.00
Item 78	1.00
Item 79	1.00
Item 80	1.00
Item 81	0.97
Item 82	1.00
Item 83	1.00
Item 84	0.98
Item 85	1.00
Item 86	1.00
Item 87	1.00
Item 88	1.00
Item 89	1.00
Item 90	1.00
Item 91	1.00
Item 92	0.49
Item 93	1.00
Item 94	1.00
Item 95	1.00
Item 96	1.00
Item 97	1.00
Item 98	1.00
Item 99	1.00
Item 100	1.00
Item 101	1.00
Item 102	1.00

Item 103	1.00
Item 104	1.00
Item 105	1.00
Item 106	1.00
Item 107	1.00
Item 108	0.43
Item 109	1.00
Item 110	1.00
Item 111	1.00
Item 112	1.00
Item 113	1.01
Item 114	1.00
Item 115	0.66
Item 116	0.64
Item 117	0.85
Item 118	1.00
Item 119	1.00
Item 120	0.98
Item 121	0.99
Item 122	0.99
Item 123	1.00
Item 124	1.00
Item 125	0.87
Item 126	0.99
Item 127	1.00
Item 128	1.00
Item 129	1.00
Item 130	1.00
Item 131	1.00
Item 132	1.00
Item 133	1.00
Item 134	1.00
Item 135	1.00
Item 136	1.00
Item 137	1.00
Item 138	1.00
Item 139	0.81
Item 140	1.00
Item 141	1.00
Item 142	1.00
Item 143	1.00
Item 144	1.00
Item 145	1.00
Item 146	1.00
Item 147	1.00
Item 148	1.00
Item 149	1.00
Item 150	1.00

Table 2 showed the discrimination Indices of the teacher-made Achievement test in Economics in Jalingo education zone, Taraba State. Findings revealed how well an item can differentiate between examinees having abilities below the item location and those having abilities above the item location. It further reveals that item 11 has discrimination index of 5.50 which mean very high discrimination index, while items 33, 39, 92 and 116 had discrimination indices between 0.49 and 0.64 which means low

discrimination indices but items 1-10, 12-32, 34-38, 40-91, 93-115 and 117-150 had discrimination indices between 0.66 and 1.27. This means that these items had moderate discrimination indices.

**Research Question three:** *What are the guessing indices of the teacher-made Achievement test in Economics in Jalingo education zone, Taraba State?*

**Table 2: Guessing indices of the teacher-made Achievement test in Economics in Jalingo education zone, Taraba State**

Items	Indices of c-Parameter
Item 1	0.2
Item 2	0.2
Item 3	0.2
Item 4	0.2
Item 5	0.2
Item 6	0.2
Item 7	0.2
Item 8	0.2
Item 9	0.2
Item 10	0.2
Item 11	0.2
Item 12	0.2
Item 13	0.2
Item 14	0.2
Item 15	0.2
Item 16	0.2
Item 17	0.2
Item 18	0.2
Item 19	0.2
Item 20	0.2
Item 21	0.2
Item 22	0.2
Item 23	0.2
Item 24	0.2
Item 25	0.2
Item 26	0.2
Item 27	0.2
Item 28	0.2
Item 29	0.2
Item 30	0.2
Item 31	0.2
Item 32	0.2
Item 33	0.2
Item 34	0.2
Item 35	0.2
Item 36	0.2
Item 37	0.2
Item 38	0.2
Item 39	0.2
Item 40	0.2
Item 41	0.2
Item 42	0.2
Item 43	0.2
Item 44	0.2
Item 45	0.2
Item 46	0.2
Item 47	0.2

Item 48	0.2
Item 49	0.2
Item 50	0.2
Item 51	0.2
Item 52	0.2
Item 53	0.2
Item 54	0.2
Item 55	0.2
Item 56	0.2
Item 57	0.2
Item 58	0.2
Item 59	0.2
Item 60	0.2
Item 61	0.2
Item 62	0.2
Item 63	0.2
Item 64	0.2
Item 65	0.2
Item 66	0.2
Item 67	0.2
Item 68	0.2
Item 69	0.2
Item 70	0.2
Item 71	0.2
Item 72	0.2
Item 73	0.2
Item 74	0.2
Item 75	0.2
Item 76	0.2
Item 77	0.2
Item 78	0.2
Item 79	0.2
Item 80	0.2
Item 81	0.2
Item 82	0.2
Item 83	0.2
Item 84	0.2
Item 85	0.2
Item 86	0.2
Item 87	0.2
Item 88	0.2
Item 89	0.2
Item 90	0.2
Item 91	0.2
Item 92	0.2
Item 93	0.2
Item 94	0.2
Item 95	0.2
Item 96	0.2
Item 97	0.2
Item 98	0.2
Item 99	0.2
Item 100	0.2
Item 101	0.2
Item 102	0.2

Item 103	0.2
Item 104	0.2
Item 105	0.2
Item 106	0.2
Item 107	0.2
Item 108	0.2
Item 109	0.2
Item 110	0.2
Item 111	0.2
Item 112	0.2
Item 113	0.2
Item 114	0.2
Item 115	0.2
Item 116	0.2
Item 117	0.2
Item 118	0.2
Item 119	0.2
Item 120	0.2
Item 121	0.2
Item 122	0.2
Item 123	0.2
Item 124	0.2
Item 125	0.2
Item 126	0.2
Item 127	0.2
Item 128	0.2
Item 129	0.2
Item 130	0.2
Item 131	0.2
Item 132	0.2
Item 133	0.2
Item 134	0.2
Item 135	0.2
Item 136	0.2
Item 137	0.2
Item 138	0.2
Item 139	0.2
Item 140	0.2
Item 141	0.2
Item 142	0.2
Item 143	0.2
Item 144	0.2
Item 145	0.2
Item 146	0.2
Item 147	0.2
Item 148	0.2
Item 149	0.2
Item 150	0.2

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Table 3 showed the guessing indices of the teacher-made Achievement test in Economics in Jalingo education zone, Taraba State .Findings revealed that the value of guessing parameter did not vary as a function of the ability level. It further revealed that the guessing index was 0.2 for all examinees. Thus, the lowest and highest ability examinees have the same probability of getting the item correctly by guessing.

## **DISCUSSION OF FINDINGS**

The findings revealed that the difficulty indices of the teacher-made Economics achievement test items ranged between 0.16 and 0.98, which falls within the acceptable range (approximately 0.00 to 1.00). This suggests that most items were positively located on the ability scale, functioning better among high-ability examinees. In practical terms, this means that the test was more effective at distinguishing stronger students from weaker ones. According to Acquaye (2023), items with difficulty parameters around the midpoint (e.g., ~0.50) are considered optimal for maximizing differentiation across ability levels. In this study, more than half of the items fell within the moderate difficulty range (0.30–0.70), indicating that a substantial proportion of the test was appropriately targeted to the student population. However, a few items were either too easy or too difficult, which may limit their effectiveness in accurately reflecting the full ability continuum. These findings are consistent with those of Afemikhe & Imasuen (2025), who found that most items in a Mathematics achievement test in Edo State were difficult, with only a moderate number of items performing at moderate difficulty levels, affecting the overall utility of the test.

**Discrimination Indices of Teacher-Made Economics Tests.** The results further indicated that the discrimination indices of the test items varied widely. While the majority of the items recorded moderate discrimination values between 0.66 and 1.27, some items had very low discrimination indices (e.g., Items 33, 39, 92, and 116, ranging from 0.49 to 0.64), and a few displayed exceptionally high discrimination values, such as Item 11, with an index above 5.00. Discrimination indices measure how well an item differentiates between high- and low-ability students (Bichi, 2015). Items with indices between 0.40 and 1.00 are considered acceptable, while values close to zero or negative indicate poor discrimination (Bichi & Talib, 2018). The findings therefore suggest that, although a majority of the Economics test items were effective in differentiating learners, there were inconsistencies in item quality. This confirms the observation of Ibeawuchi (2016) that teacher-made tests in Nigerian schools often suffer from weak item discrimination because teachers lack adequate training in psychometric principles.

**Guessing Indices of Teacher-Made Economics Tests.** The analysis of guessing indices revealed a uniform value of 0.20 for all items across all examinees. This implies that both high- and low-ability students had an equal probability of answering items correctly by chance. In the three-parameter logistic model of IRT, a guessing index of 0.20 is typical for multiple-choice items with five alternatives (Cobbinah & Ntumi, 2022). The uniformity of guessing indices in this study suggests that the items were structured with plausible distractors, thereby minimizing the advantage of random guessing. However, the fact that guessing probability did not vary by ability level also indicates that item construction may have relied heavily on balanced distractor patterns, which may not fully capture variations in student reasoning. This aligns with the argument of Shogbesan (2024), who observed that in many recent Economics multiple-choice tests in Nigeria, most items are not vulnerable to guessing due to high quality distractors and proper item calibration.

The combined findings of this study indicate that while a majority of the Economics teacher-made test items in Jalingo Education Zone displayed acceptable difficulty and discrimination characteristics, several items were either too easy, too difficult, or exhibited low discrimination. This undermines the overall validity of the assessment. Furthermore, the uniform guessing indices suggest that students may have had equal chances of arriving at correct answers through guessing, which limits the diagnostic power of the test. These outcomes highlight the need for systematic training of Economics teachers in item-writing and psychometric evaluation. As noted by Mawak, Efomo, & Mustapha (2024), high-quality tests require that items be carefully designed, reviewed, and empirically validated using models such as IRT.

## **CONCLUSION**

This study assessed the psychometric properties of Economics teacher-made achievement tests in Jalingo Education Zone, Taraba State, using Item Response Theory (IRT). Specifically, it examined the difficulty indices, discrimination indices, and guessing indices of the items. The findings revealed that most items had acceptable difficulty indices, showing they were moderately challenging and suitable for differentiating between high- and low-ability students. The discrimination indices further demonstrated

that a majority of the items could effectively distinguish between students of varying abilities, though a few items showed poor discrimination and therefore require revision or elimination. Additionally, the guessing indices were uniform across items, with a value of 0.20, indicating that low-ability and high-ability students had equal probabilities of guessing correctly. These findings suggest that while teacher-made Economics tests in Jalingo Education Zone possess a generally sound psychometric foundation, there remain areas for improvement in ensuring that items consistently measure students' abilities with precision. Therefore, teacher-made tests should be systematically validated to enhance their reliability, fairness, and ability to support effective instructional decision-making.

## RECOMMENDATIONS

Based on the findings, the following recommendations were made:

1. Teachers in Jalingo Education Zone should be trained in test development, and item analysis techniques (to enable them produce a moderate, tone difficulty of teacher-made tests.
2. Schools should institutionalize routine item analysis of teacher-made tests to ensure that poorly discriminating items were revised and eliminated.
3. Teachers should collaborate with measurement and evaluation experts in developing assessment tools, ensuring that items meet psychometric standards before being administered. to reduce guessing conditions

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