

Full Length Research

Assessment-mode Preference: A Factor towards High Academic Achievement in Senior Secondary School's Economics

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When assessing students' attitudes toward high academic performance in secondary schools, assessment mode preference appears to be taken into very little account. Hence, the study. Four research questions based on the Economics Students' Assessment Attitude Scale (ESAAS), a 31-item questionnaire, with a Cronbach's alpha reliability coefficient of 0.89 were examined in this study. The sample comprised 354 respondents from 5,766 SS 2 students spread over four local government areas of Oyo State. There is a strong relationship between gender and the way economics students approach assessments. The respondents' age significantly influence the way economics students feel about assessments. The combined effect of assessment-mode preference and subject relevance is statistically significant in predicting economics students' assessment attitudes. Finally, yet importantly, a considerable portion of respondents' assessment mode preference favours home assignments over objective and essay items. It is advised that economics teachers make conscious effort to stimulate their students' attention. When choosing the evaluation technique to be employed, it is important to consider the students' assessment preferences. Subject teachers should provide students with additional homework to boost academic achievement in economics, which is the most preferred assessment mode.

Keywords: Assessment, Economics, Assessment-mode Preference, Assessment Attitude

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INTRODUCTION

Assessment is described as "a purposeful, systematic, and collaborative process driven by the institution's desire to improve learning" (Rumiantsev, van der Rijst & Admiraal, 2023). Adewale (2008) defined assessment as a regular and ongoing procedure to measure how much a student has learned or accomplished a prescribed task in a school. This explains the importance of assessment in education as a tool to assist instructors and educators in assessing student learning progress, identifying areas for growth, and making defensible choices about instructional tactics. According to Adewale (2008), evaluating students' knowledge and understanding is a useful way to influence their behaviour.

Numerous assessment methods are employed in the field of education to gauge the learning and development of students. Typical forms of assessment include Summative Evaluation: This type of evaluation often occurs after a unit of instruction or a course to gauge students' overall performance (Centre for Innovative Teaching & Learning, 2023). Final exams, standardised assessments, or year-end performance reviews are a few examples. Summative evaluations offer a thorough review of what the pupils have learned. The other is formative evaluation. Continuous formative assessment aids teachers and students in tracking learning development throughout the teaching process. It offers insightful feedback that can be utilised to alter teaching strategies and enhance student comprehension (Juwah, Macfarlane-Dick,

Matthew, Nicol, Ross, & Smith, 2004). Exams, homework, class debates, and instructor observations are a few examples.

Another type is diagnostic assessment. Before beginning a new unit or course, this is done to determine the students' skills, weaknesses, and prior knowledge. Teachers can better personalise instruction to each student's needs with the use of diagnostic tests (Brown & Harris, 2021). Pre-tests, questionnaires, and interviews are a few examples. In addition to diagnostic testing, there are authentic tests, which concentrate on real world, practical tasks that mimic real-life scenarios (Lowell & Tagare, 2023). They demand that students apply their learning to concrete, applicable circumstances. Research projects, portfolios, presentations, and simulations are a few examples.

Performance tests are a type of evaluation that gauges how well pupils can do particular tasks or skills (Indeed, 2022). They typically involve active participation from the students in projects or activities that are hands-on. Oral presentations, experiments, shows, and artistic performances are a few examples. Self-evaluation is yet another unexplored assessment. Self-assessment gives students the ability to evaluate their own growth and development (Chung, Chen & Olson, 2021). It challenges people to assess their advantages, disadvantages, and opportunities for growth (Yan, 2022). To evaluate their own work, students can use a variety of tools, including notebooks, checklists, and rubrics. Finally, peer assessment entails students commenting on one another's work (Hanlon, Murray & Niculae, 2020). It promotes teamwork and critical thinking and offers chances for helpful criticism. Group assignments, peer reviews, and group conversations can all be used for peer assessment.

Each form of assessment has a distinct function and can offer important insights into students' development. A combination of these tests can provide a thorough picture of students' progress and support teachers in making defensible instructional choices (Munna & Kalam, 2021). Typically, achievement tests are used to undertake institutional or school assessments. Achievement tests, a measure of the cognitive domain, are made to offer empirical information about how well a person has completed a training or course of study (Osebhohiemen, 2019). Achievement tests, however, only show the level of students' cognitive abilities and ignore other domains. Poor focus on other areas that can foster great performance calls for attention. Therefore, it is an aberration to ignore the emotive domain, which is concerned with how students perceive and behave toward a given subject (Goetz, Haag, Lipnevich, Keller, Frenzel, & Collier, 2014).

According to several sources, attitude is an assessment of a person's mental and psychological propensities or dispositions toward an object, event, or thing, which can be positive or negative. Researchers like Kpolovie, Joe, & Okoto (2014) focused on the relationship between motivation in learning and attitude toward school, while Adeyemo, Onongha & Agokei (2009) looked at attitudes toward teaching. Oladimeji (2023) evaluated students' learning attitudes. Others have looked at pre-service teachers' attitudes toward diversity and inclusion, including Garmon (2004), Turner (2003), Johnson & Howell (2005), and Turner (2003) on attitudes toward inclusion and technology. Regarding students' attitudes toward assessment mode, very little study has been done. Miron (2014) to ascertain their attitudes toward various evaluation methods surveyed 346 Israeli undergraduate students. In a separate study, Abu-Dabat (2014) examined and quantified the impact of students' attitudes toward evaluation methods at the faculty of arts at the Jordanian Al-Zaytoonah University on their overall performance in a few academic disciplines, specifically curriculum and teaching methods. These studies on assessment methods and evaluation systems had university students as their primary subjects.

The method or setting used to assess students' knowledge, abilities, or skills is known as the assessment mode (OECD, 2018). Assessments are commonly used to gauge how well students grasp a particular subject or how far they have come academically generally. The subject, educational level, and evaluation objective can all influence the assessment method. When in assessment mode, teachers can use a variety of assessments, such as tests, projects, presentations, and performance-driven assignments (Sanga, 2016). Teachers and students can identify their regions of competence and potential for development with the use of these exams, which offer pertinent feedback. Teachers can measure students' learning outcomes, monitor their progress, and create lesson plans that work with the aid of the evaluation mode (Ghaicha, 2016). Students may exhibit their knowledge and abilities in the evaluation mode through written answers, oral presentations, practical exercises, or other appropriate formats. Exam results can be used by teachers to assess their students' learning, give feedback, and adjust lessons in the wake of finding any gaps or misconceptions. The assessment mode also helps to pinpoint areas that can benefit from extra guidance or enrichment (Indeed, 2022).

A student's performance as well as the general effectiveness of the curriculum, instructional strategies, and educational initiatives can all be evaluated using the assessment mode. By acquiring and reviewing assessment data, educational institutions can enhance their methods for teaching and learning. It is crucial to keep in mind that the assessment process should be planned and executed in a fair, trustworthy, and valid manner. This guarantees that test results fairly reflect students' skills and knowledge and that they can be applied to make informed choices. To make sure that the assessment mode best supports students' learning and development, education specialists and professionals are responsible for devising and putting into practice appropriate assessment strategies. When doing this, professionals

take into account how students prefer to be assessed when determining the intended results. According to Van de Watering, Gijbels, Dochy, & van der Rijt (2008), assessment (mode) preference is described as an imagined choice among assessment options with the potential for ranking these choices. According to Adewale (2008), test professionals have categorised achievement tests (assessment mode) using a variety of criteria. Essay-type and objective-type are two categories for assessment mode. Contrarily, subject relevance is a key idea that entails picking and creating learning activities, assessments, and instructional materials that are relevant and in line with the desired learning goals. Students are more likely to participate actively, comprehend ideas thoroughly, and apply what they have learned to practical situations when the material is relevant (Darling-Hammond, Flook, Cook-Harvey, Barron, & Osher, 2020). The goal of subject relevance is to give students a meaningful education that prepares them for the possibilities and problems they will face in their personal and professional lives (OECD, 2018).

Assessment modes, which are used to gauge students' levels of cognition, knowledge, competency, and skill acquisition, can take different formats such as multiple-choice test, essay test, hybrid tests of essay and multiple-choice questions, submitted homework, student projects, and student notes (Okwilagwe, 2011). The method used to gather and give this is referred to as traditional assessment mode, and it uses paper and pencil. On the other hand, computer-based testing (CBT) has become a viable alternative to conventional assessment methods in the use of technology in education. Online assessments, according to Rubab & Imran (2023), are frequently given via a learning management system (LMS) or other online platforms and come in a variety of formats, such as quizzes, exams, essays, and assignments. "Comparing the effectiveness of different assessment modes in higher education" was the major topic of a study conducted by Smith & Johnson (2018). The usefulness of project-based assessments, online exams, and traditional exams in evaluating students' learning outcomes is assessed in this article. In an associated investigation, Brown & Thompson (2017) examine how various assessment formats—such as essays, presentations, and multiple-choice exams—affect students' performance as well as how they view the worth and equity of the assessment procedure.

Gupta & Shukla (2020) review several assessment methods, such as practical exams, case studies, and simulations, and explain how they affect students' development of practical skills within the context of skill-based learning programs. A review of the literature was undertaken by Chang & Hsu (2019) to investigate assessment techniques that support authentic learning approaches, such as performance reviews, portfolio reviews, and peer reviews, and to highlight the benefits and drawbacks of each. In a separate review, Black, Harrison, Lee, Marshall, & William (2011) examine the research on using technology-enhanced formative assessment tools, such as interactive simulations and online quizzes, to increase student engagement and learning.

Assessment attitude has a significant impact on students' learning performance, according to researchers like Dhindsa, Omar, & Waldrip (2007), Birenbaum & Feldman (1998), and Struyven, Dochy, & Janssens (2005) who have studied the role of students' attitudes toward learning. The relationship between students' learning-related qualities and their attitudes toward two assessment styles (constructed response and choice response) was explored by Mussawy (2009) and Birenbaum & Feldman (1998). Students' attitudes about the two assessment forms (constructed response versus multiple-choice response) were discovered to be related to their learning-related cognitive and affective processes. In a different study, Birenbaum & Feldman (1998) compared students' attitudes toward the multiple-choice format and the open-ended format of exams with their perceptions of their academic self-concept, their use of reflective and agentic learning strategies, their test anxiety, worry, and emotionality, and their academic self-concept. They discovered that the multiple-choice format was substantially connected with sex, agentic processing, and methodical research. Additionally, the study reveals that male participants generally have higher favourable sentiments regarding the multiple-choice format than female ones. According to Abu-Dabat's (2014) study of students' opinions regarding evaluation systems, grades between male and female students differ significantly, favoring female students. According to Miron (2014), the three modes—paper, essay, and objective—are all seen favourably. Although students had positive opinions toward all three evaluation methods, papers received the greatest scores, while objective tests received the lowest ratings. Over the years, it has been observed that performance in Economics has encountered zigzag wave that has bothered the mind of all stakeholders in education industry.

This study was set to investigate the effect of gender, age, assessment mode preference and subject relevance as precursors towards high academic achievement in senior secondary school's Economics.

METHOD

The research employed an *ex-post facto* design because the researcher did not manipulate any variable in the study. An attitude scale based on four point Likert scale (strongly agree, agree, disagree, and strongly disagree) was developed with the help of experts in the field. The researcher adapted items of the scale. The Students' Perception of Assessment Questionnaire (SPAQ) by Mussawy (2009) was modified to create the Economics Students' Assessment-

Mode Attitude Scale (ESAAS). The SPAQ has 24 elements; however, the ESAAS has 31 items that have been drawn from and adjusted to fit economics. While Section B of the ESAAS was focused on the primary 31 items concentrating on respondents' assessment attitude, Section A of the survey provided an introduction and demographic data about the respondents. In order to make sure the validity of the instrument experienced professor and experts in the field were consulted. The instrument's reliability coefficient and consistency were calculated at 0.89 using Cronbach's alpha.

The researcher surveyed by employing attitude scale in order to seek answers of the questions raised in the study. Three secondary schools from each of the four local governments of Oyo Educational zone were reached by researcher and research assistants contacts. Data from three hundred and fifty-five (354) students were received and analyzed. Data collected through attitude questionnaire was analyzed. Inferential statistics like the t-test and analysis of variance (ANOVA) were calculated to gauge the dispositions and to find out the association among different items of the factors.

Population and Sample

All economics students at Senior Secondary School 2 (SSS 2) in Oyo State made up the study's population. The participants were chosen using a multistage sampling process. Afijio, Atiba, Oyo East, and Oyo West are the four local government areas (LGAs) that were specifically chosen from the State and these form Oyo educational zone. In each LGA, three (3) schools were chosen at random based on the number of schools in the zone. Twelve (12) schools took part in the study. Out of five thousand seven hundred and sixty-six (5,766) students in the SS 2 classes, three hundred and fifty-five (354) students formed the sample for the study.

Research Questions

The following research questions were probed in the study:

1. Do gender and age have relationship with assessment mode attitude among economics students?
2. Is there any joint contribution of assessment-mode preference and subject relevance in the prediction of the assessment attitude among economics students?
3. What are the relative contributions of assessment-mode preference and subject relevance in the prediction of assessment attitude among economics students?
4. Which assessment mode do students prefer most in economics classes?

RESULTS

Research Question one: Do gender and age have relationship with assessment attitude among Economics students?

Table 1: Correlation Matrix table of Gender, Age and Students' Assessment Attitude

Variables	Gender	Age	Assessment Attitude
Gender	1		
Age		1	
Assessment Attitude	0.87	0.33	1

*** Significant @ $p < .05$; $n = 354$*

The inter-correlation matrix from table 1 reveals the relationship coefficients of predictor variables (gender and age) and the criterion variable (students' assessment attitude) reveals significant positive relationship between gender and students' assessment attitude ($r = .87$, $p < .05$). In addition, the result shows that age is significant on students' assessment attitude ($r = .33$, $p < .05$). This reveals that age of respondents correlates with students' assessment attitude. Hence, conclusion can be drawn that gender and age have significant relationship with students' assessment attitude in economics.

Research Question Two: Is there any joint contributions of assessment-mode preference and subject relevance in the prediction of the assessment attitude among Economics students?

Table 2: Regression Summary and ANOVA of Assessment mode preference and subject relevance to Students' Assessment Attitude in Economics

Multiple R = .67					
R Square = .45					
Adjusted R Square = .44					
Standard Error = 4.31					
Source of Variance	Sum of Squares	df	Mean Square	F	Sig.
Regression	5266.13	2	2633.06	141.62	0.00
Residual	6526.20	351	18.59		
Total	11792.33	353			

Table 2 shows that the multiple correlation coefficients (R) of the joint independent variables with the use of students' assessment attitude in Economics was 0.67. This implies that there is 67% association between assessment mode preference, subject relevance and students' assessment attitude in Economics, R square = 0.45. The adjusted R^2 , which estimates the variance on criterion variable measure accounted for by the combination of the predictor variable, was 0.44. This implies that all the independent variables: assessment mode preference and subject relevance made 44% contribution to the variance in students' assessment attitude. Regression ANOVA produced ($F_{(2,351)}=141.62, p<.05$). This indicates a significant composite contribution of the two-predictor variables: assessment mode preference and subject relevance investigated in the study with students' assessment attitude in Economics is statistically significant.

Research Question Three: What are the relative contributions of assessment-mode preference and subject relevance in the prediction of assessment attitude among economics students?

Table 3: Relative Contribution of Regression Summary and ANOVA of Assessment Mode preference and Subject Relevance in the prediction of assessment Attitude among economics students

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	6.93	1.32		5.24	0.00
Subject Relevance	0.76	0.09	0.44	8.39	0.00
Assessment Mode preference	0.25	0.05	0.29	5.50	0.00

Table 3 shows the relative contributions of independent variables (subject relevance and assessment mode preference) on criterion variable (students' assessment attitude). The contribution of the independent variables in the prediction of students' assessment attitude in Economics is different. These are subject relevance ($\beta = .44, t = 8.39, p < .05$) and assessment mode preference ($\beta = .29, t = 5.50, p < .05$). The value of the standardised regression weighted associated with subject relevance and assessment mode preference show that they are potent predictors of students' assessment attitude in Economics. Moreover, subject relevance has greater contribution than assessment mode preference in the prediction of assessment attitude among Economics students.

Question 4: Which assessment mode do students prefer most in Economics classes?

Table 4: Descriptive Statistics on Assessment mode Preference

Assessment mode Preference	Mean	Std. Deviation	N
Objective Mode	2.74	0.94	354
Essay Mode	2.43	0.90	354
Home Assignment Mode	2.84	0.98	354

Table 4 reveals the mean value of each assessment mode preference considered in this study. The contribution of the preference modes are objective ($\sum fx = 2.74, Sd = .94, n = 354$), essay ($\sum fx = 2.43, Sd = .90, n = 354$) and home assignment ($\sum fx = 2.84, Sd = .98, n = 354$). The descriptive statistics associated with objective, essay and home assignment modes show that home assignment is far preferred to objective and essay modes, while objective mode is preferred to essay mode.

Discussion of findings

The finding reveals a significant correlation between gender and assessment attitude among economics students. The result implies gender or sex play a significant role in predicting assessment attitude of economics students, and that teachers should often consider gender when observing attitude because female students highly demonstrate positive attitude to the study of Economics. The result of this investigation is consistent with the reports of Owan, Bassey, & Ekpe (2020), Mamadelo & Adegbile (2020) and Birenbaum & Feldman (1998). According to Owan, et al. (2020), Mamadelo & Adegbile (2020) and Birenbaum & Feldman (1998), male and female students have quite different attitudes toward taking tests in secondary schools and the multiple-choice format, respectively. Abu-Dabat (2014), on the other hand, asserts that female students, as compared to male students, showed a greater overall ability to memorise the information and the contents of the topic. The results of this investigation likewise supported by Abu-Dabat's findings. However, the result negates the findings of Wheldall & Limbrick (2010) as cited in Mamadelo & Adegbile (2020).

The finding of this study indicates a significant relationship between age and students' assessment attitude in economics. The result connotes that age is significant in determining students' assessment attitude, that is to say, age bracket is enough to define students' disposition to learn and performing in Economics. Mamadelo & Adegbile's (2020), Abubakar & Oguguo (2011) and Birenbaum & Feldman (1998) uphold this result. Their reports reveal significant relationship between age and their dependent variables.

The result of joint contribution of assessment-mode preference and subject relevance towards assessment attitude is significant on students' assessment attitude. Van de Watering, et al. (2008) and OECD (2018) findings support this study. The combined effect of assessment-mode preference and subject relevance is statistically significant in predicting economics students' assessment attitudes.

The finding from this study reveals that students prefer home assignment (submitted homework) above objective and essay modes. This result corroborated Okwilagwe's (2011) identification of home assignment (submitted homework) as one of the assessment mode preference that is being used in evaluating students, and that has potential to improve students' performance in Economics.

CONCLUSION

This paper examined gender, age, assessment mode preference and subject relevance as precursors towards high academic achievement in senior secondary school's Economics. Owing to the result of the study, it has been observed that gender and age are essential in boosting students' attitude towards high academic achievement in Economics. In other words, students' attitude aids high achievement in school subjects. It is also established that the joint contributions of assessment mode preference and subject relevance on students' assessment attitude is significant to promote high achievement in senior secondary schools' Economics.

RECOMMENDATIONS

The researcher submitted that Economics instructors ought to make an effort to stimulate students' interests. When choosing the evaluation technique to be employed, it is important to consider the students' attitudes. Subject teachers should assign more homework to students to increase performance in economics through assessment mode preference. This will call for timely feedback and corrections, as well as regular marking of such homework or assignments.

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