

A DISCOURSE ON QUALITY CONTROL OF ASSESSMENT BATTERIES IN SPECIAL EDUCATION

Adediran, O. A and Salako, A. A

*Special Education and Guidance and Counselling Faculty of Specialised and Professional Education
Emmanuel Alayande University of Education, Oyo, Nigeria*

Email: drsoladediran@gmail.com / adebayoadeyinka4real@gmail.com

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Abstract: *This paper examined the quality of assessment tools in the area of appropriateness, usage and evaluation of instruments for learners with special needs Equally examined are the objectivity in the tool usage by the professional evaluators, the fitness of the instruments for assessment purposes, efficient data collection mechanisms and technical adequacy of any test assessment viz-a-viz: psychometric properties of validity and reliability. These are thoroughly discussed in the paper. There is no doubt in the fact that the process of assessment underscores a significant role in the determination of special needs students learning outcome and teacher proficiency in teaching process.*

Introduction

Assessment battery is a term used among clinical and counseling psychologists to refer to the administration of series of psychological tests designed to assess multiple facets of learners psychological functioning. A typical battery may contain a combination of projective measure and rating scales measure that assess both personality and intelligence. The data gathered would be obtained both from the measurement instruments and the nature of the interpersonal relationship between the examiner and examinee. Information provided from such an assessment is useful and helpful in developing

effective treatment strategies for learners with special needs.

No doubt, all assessment batteries are customized and they can be used in different areas of applications; these include selection, placement, training and development, succession planning, leadership capability, team building, executive coaching, medic-legal assessment etc. Testing is one method of evaluating progress and determining searching outcomes an individual learner needs. Testing, however, is only one form of assessment. Assessment happens in every classroom including special education classrooms. A teacher observes the behaviours of a learner

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while solving Mathematical problems, the teacher checks the learner's answers and determines his/her ability to solve some types of Mathematical problems.

If a learner made mistakes, the teacher determines the types of errors and decides what step to be taken to correct the mistakes. The teacher therefore, observes behaviours, gathers information about the learner and makes instructional changes according to the information obtained.

Detterman and Thompson (2019) observed that if the routine assessment of learners' behavior is upheld, progress would be evaluated and interventions would be planned. Accordingly, with effective interventions, few learners will require additional assessment or special services. Some learners however, as observed do not respond to intervention, as such, they may continue to have academic difficulties. These learners may require additional assessment and evaluation for possible special education support. The very best assessment practices, however, must adhere to legal mandates, ethical standards and basic principles of measurement. Teachers and other educational personnel have a professional responsibility to be accountable for each decision taken about assessment. Therefore, knowledge of the fundamentals of assessment and the various types of assessment are necessary especially for learners with special educational needs: such as learners with

intellectual disability and learners with learning disability (Detterman and Thompson, 2019).

It is a constant cycle of improvement, the goal of assessment for an academic department on a programme is to provide among others, a clear conceptualization of intended students outcomes, it is ascription of how these outcomes are assessed and measured. Also, a description of the results obtained from the measure and how these results validate current practices or point to change needed to improve students' learning outcome.

Academic departments or programmes need to constantly and routinely engage the learners in the following; what do we want learners to be able to know, do and appreciate and how do we know that learners with special needs are achieving the intended learning outcomes? After implementing an assessment plan and measuring students learning outcome, there is need to analyse the results obtained and use it to make necessary change or improvement.

An assessment for learning disabilities in children is a comprehensive evaluation that can help identify strength and weakness in areas such as languages, memory, attention, processing speed, visual perception, motor skills, executive function, social-emotional development and self-regulation. Most children with learning disability are capable and smart but have significant challenges with reading, writing or Mathematics, as a result, their

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academic performance falls below the standard of their age, grade and intellectual ability.

Yesledyke, Nelson and Homse (2020) posited that assessment is an on-going process aimed at understanding and improving students learning. It involves making expectation explicit and public, viz-a-viz: setting goals clearly for measurable objectives with learner administrators and other stakeholders. Also, it involves setting appropriate criteria and high standards for learning qualities. Furthermore, significantly, systematically, how well performance matches those expectation and standards and lastly, using the results to document, explain and improve performance, thus, the examiner has an opportunity to re-examine objectives, methods and measures as feedback to help students to improve on their learning outcome.

Quality of Assessment Tools

Multidisciplinary evaluation teams and teachers are faced with myriads of problems of selecting assessment tools which are the most accurate, efficient, and effective means of data collection. This includes formal or norm-referenced tests and informal measures such as observations, reports, criterion-referenced assessment, curriculum-based assessment, portfolio assessment, and classroom assessment. The assessment battery must be comprehensive, but nonetheless, unnecessary duplication must be avoided. McLoughlin and Lewis (2016)

highlighted the following discussion to address the evaluation, appraisal and quality of assessment tools below:

- **The fitness of the instrument for assessment purpose:** It is particularly important to select an assessment measure that would address the reasons for its usage. If the goal is to compare a student performance to his or her peers, then a norm-referenced measure would be appreciated. If the usage focuses on classroom behavior, observational techniques would be adequate. If the teacher is to determine the mastery of specific academic skills, criterion-referenced tests, informal inventories, and teacher-made tests would provide the most valuable information.

It is also important to consider the types of results that would be available from the assessment Instrument. If a multidisciplinary evaluation team is determining eligibility, percentile ranks or standard scores may be required to provide answers to some questions. A simple frequency count of an undesirable behaviour might be all that is necessary to answer the question.

Other considerations include the scope or contents of the instrument. For example, if a multidisciplinary evaluation team is trying to measure written expression in a learner, a test such as the Kauffman Test of Educational Achievement (Kauffman, 2015) that only include a spelling subtest in the writing domain, would

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not be comprehensive enough to answer the referral question. The purpose of the assessment must be clearly identified before selecting the most appropriate assessment instrument. As a general rule, a test that is administered to groups of children should only be used if screening information is being gathered. When interpreting a low score on a test administered in a larger group, it would be difficult to determine that two procedures or instruments are equally appropriate to answer the referral question, then, the most efficient instrument should be selected.

- **Appropriateness of the evaluation instrument for students:** The needs and abilities of the learner must be considered in selecting assessment instruments or strategies. If standardized test are used, the learners' characteristics must be represented in the norm group on which the test was standardized. The examiners should look at the method of item presentation to determine if the test will be fair in assessing the learners' actual ability in that area. For example, is the learner asked to read, to listen, or to attend to a demonstration? It is possible that the child might have the knowledge or ability being assessed, and able to efficiently respond with the method required. For example, children are often asked to read word problem and solve the problem to demonstrate understanding of a Mathematics concept, in this

case, the mathematics ability may be significantly affected by a reading disability.

The response mode is also important to consider in order to confirm that a student has the skill to perform the tasks required such as speaking, darkening of squares, writing sentences, or pointing to the correct response. When possible, students who have poor written expression ability should be allowed to provide oral response during a test, unless the purpose of the test is to study written expression. Also, listening tests will require the child to listen to information and then circle one of four sentences that best summarizes what they had just heard. In this example the child's "listening" ability can only be measured if the child can "read" the summaries.

- **Objectivity in the tool's usage by the professional evaluator:** McLoughlin and Lewis (2016) suggested that the potential for bias goes farther than the careful selection of assessment instruments. Bias or prejudice can also be introduced into testing when the professionals administering the test are not adequately trained. Professionals should be educated to take notice of the individual differences of the learners they assess, particularly, when learners are from different cultures or have handicapping conditions which may impact test performance.

No assessment instrument should be administered by an individual who has not been

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adequately trained to administer and score the test and interpret the test results. The skills of the professional must match the administration requirements of the testing device.

- **Establishment of Psychometric Properties:** these are the technical qualities of a tool, scale or outcome measure that indicate its statistical strength or weakness. They are essential for assessing constructs in research studies and for effectively measuring cognitive abilities, skills or personality traits. Before teachers and multidisciplinary evaluation team members adopt an instrument to make decisions regarding placement or teaching effectiveness in special schools, the quality of that instrument must be validated. The techniques used to design the instrument must be sound and the instrument must be shown to be reliable and valid. Kerlinger and Lee (2000) suggested that the two primary issues of technical adequacy are reliability and validity. Reliability refers to a test's ability to provide consistent results. For example, if a child were administered a reliable test repeatedly, the scores would basically recommended as a minimal level of acceptance for group data, and a coefficient of .80 is recommended for any data that will influence screening decisions. For data that will be used to make important decisions such as special education placement, a coefficient of .90 is recommended (Silvia and Yesseldyke, 2021).

The validity of an assessed instrument refers to whether it actually measures what it is purported to measure. Again, if a test claims to be a measure of written language but only includes spelling, this would be considered an invalid measure of written language because of the narrow focus. Judging the validity of a test is not as direct with no set rules for judging the minimum standards for a validity coefficient. However, Anastasia (2018) stated that when the correlation with a repeated parallel test is used, the correlation should at least be statistically significant.

Information on technical data for tests is generally found in the test manual or in a technical supplement. It is always available on a highly respected standardized instrument and is generally available on measures such as rating scales, criterion-referenced tests, inventories, and checklists; however, the review of this information is critical before test adoption.

- **Factors to be considered for efficient data collection:** With the amount of paperwork required in all aspects of teaching and special education service delivery, the need for efficient methods for data collection is critical. Lawson (2019) was of the opinion that without sacrificing quality, evaluator must select an efficient device which gives the important information with a minimum expenditure of effort and time. Factors to consider include preparation, time needed by the tester, time in

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test administration, difficulty in scoring results, and time required for data analysis and interpretation. More difficult administrative requirements often take longer time to introduce a greater possibility of error. These are some of the advantages and disadvantages of formal and norm-referenced test and informal assessment measures and strategies for special needs learners.

Conclusion

Tests and other assessment tools are for adequate data collection. However, if the assessment tools cannot address some of the issues raised in this paper in the affirmative, the assessment tools should be dropped as it will not assess what it is supposed to assess and data collected will be faulty and full of ambiguities.

However, the process of assessment plays an important role in the determination of person with special needs learning outcome. It needs to emphasize the two issues of technical adequacy of any test or assessment, that is, the psychometric properties of validity and reliability. These are technical qualities of a tool, scale or outcome measure that indicate its statistical strength or weakness. They are essential for assessing constructs in research studies and for effectively measuring cognitive abilities, skills or personality traits, thus, the review of this information would be critical before tests adoption.

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