

## Validity and Reliability of Quran Mastery Test Instrument among Islamic Studies Students in Higher Education

Nuril Ham Al Hafizah Zahari<sup>1</sup>, \*Sharifah Norshah Bani Syed Bidin<sup>1</sup>, Muneer'deen Olodo al-Shafi'i<sup>1</sup>, Tasnim Abdul Rahman<sup>1</sup>, Noor Najihan Jaafar<sup>2</sup>, Mohamed Fathy Mohamed Abdelgelil<sup>3</sup>

<sup>1</sup>Faculty of Islamic Contemporary Studies, Universiti Sultan Zainal Abidin, Kuala Nerus, Terengganu, Malaysia, <sup>2</sup>Faculty of Quranic and Sunnah Studies, Islamic Sciences University of Malaysia, Nilai, Negeri Sembilan, Malaysia, <sup>3</sup>Faculty of Usuluddin, University of Sultan Sharif Ali, Bandar Seri Begawan, Brunei Darussalam

\*Corresponding Author Email: sharifahns@unisza.edu.my

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### Abstract

The Quran is a Muslim's guide to life. Therefore, this study aims to examine the validity and reliability of the instrument to evaluate test questions that will be used in an actual study to assess the level of mastery of the Quran among students in the field of Islamic studies in institutions of higher learning (IPT), by focusing on four main constructs, namely tilawah, tajwid, tahfiz, and tadabbur. Content validity was obtained by distributing test questions to 10 experts, five of whom experts in the Quran and Malay language are. Expert validation is required to obtain feedback on the items developed from the aspects of the content built, as well as the selection of words, language, and sentence structure. A pilot study was conducted on 30 students at the Faculty of Contemporary Islamic Studies, Sultan Zainal Abidin University. The results found that the Cronbach's alpha coefficient value was at  $\alpha = .972$ . This shows that all the items that were constructed have gone through the measurement phase, have high reliability values, and are suitable for use as a measurement tool in assessing the level of mastery of the Quran in terms of recitation, tajwid, tahfiz, and tadabbur among students in the field of Islamic studies at IPT. Therefore, this study can provide an initial picture of the level of mastery of the Quran among students in the field of Islamic studies, which can then potentially be the basis for improving the teaching and learning methods of the Quran at the higher education level.

**Keywords:** Validity, Reliability, Instruments, Quranic Mastery, IPT Students

### Introduction

The Quran is the holy book that is the main guide for Muslims in all aspects of life. Mastery of the Quran not only involves the ability to read and understand its contents but also the ability

to carry out Allah's commands in daily life. For students of Islamic studies, especially in institutions of higher learning (IPT), mastery of the four main elements of the Quran, namely tilawah, tajwid, tahfiz, and tadabbur, is an important element to ensure their mastery and understanding of the Quran is holistic. These elements are interrelated and play a role in shaping students who are excellent in spiritual, intellectual, and moral aspects.

Although the teaching of the Quran has been taught and strengthened at various levels of education, whether formal or informal learning, the level of student mastery of the four main elements is still a question that requires detailed study. Several previous studies have shown that there are students who still face difficulties in reading the Quran fluently (Hanapi et al., 2022), mastering the rules of tajwid including makhraj, letter characteristics, and fasahah (Razali et al., 2022), remembering the verses of memorization of the Quran (Fakhruddin et al., 2020) and understanding the deep meaning contained in the holy verses (Saad et al., 2020). This is in line with Aziz (2021), namely that students' weaknesses in reading the Quran, which include aspects of oral skills, reading fluency, fasahah skills, recitation with tajwid and reading in tadwir and tartil among Muslim students, still occur whether at the primary, secondary, or higher education level. Therefore, this situation triggers the need to assess the extent of mastery of the Quran among IPT students, especially in the field of Islamic Studies, in terms of mastery of these elements.

Systematic assessment can help the management of higher education institutions and educators to identify existing weaknesses, thus devising more effective strategies in the teaching and learning process of the Quran. Assessment is part of the teaching and learning process to improve the performance of the students being assessed and is a systematic process that involves collecting, analyzing, and interpreting the level of student achievement towards teaching objectives (Said, 2020). This approach is in line with efforts to strengthen the ability of the younger generation of Muslims to better understand, appreciate, and practice the teachings of the Quran. Based on this, this study was conducted to see an initial picture of the level of mastery of the Quran among students in the field of Islamic studies at higher education institutions. This study also provides initial knowledge to the management of higher education institutions that offer Islamic studies programs in general and lecturers in the field of the Quran in particular about the current level of mastery of the Quran among higher education students, thus taking the initiative in improving the effectiveness of Quran education to produce a generation of Muslims who are not only knowledgeable but also practice Islamic teachings.

### **Objectives**

This study was conducted to determine the validity and reliability of the instrument built in analyzing the level of mastery of the Quran from the aspects of recitation, tajwid, tahfiz, and tadabbur among students in the field of Islamic studies in institutions of higher learning. The test question instrument was built by the researcher himself. Therefore, the specific objectives of this study are as follows:

- a) Determine the suitability of the constructs and items for analyzing the level of mastery of the Quran from the aspects of recitation, tajwid, tahfiz, and tadabbur among students in the field of Islamic studies in institutions of higher learning.
- b) Determine the reliability value of the instrument through Cronbach's alpha coefficient analysis.

## Literature Review

Mastery of the Quran among Islamic studies students in higher education institutions includes four main areas, namely recitation, tajwid, tahfiz, and tadabbur. Each area plays an important role in ensuring that every Muslim is not only able to read the Quran well but also understand and appreciate its contents and practice it in daily life. In research on recitation, especially reading the Quran with the pronunciation of letters, Halim et al. (2024) conducted research on adult students at three Quran study centers. This is because the issue of weakness in pronouncing the letters of the Quran perfectly and accurately still occurs among adult students even after undergoing Quran reading guidance for a certain period. The study found that there were 20 letters that respondents pronounced incorrectly, namely Alif, Ba, Ta, Tha, Jim, Ha, Kha, Zal, Ra, Zai, Syin, Sad, Dhod, Tho, Zho, Ain, Ghain, Qaf, Lam, Mim. This letter pronunciation error is related to the inaccuracy of the place where the letter comes out (makhrāj), the imperfection of some of the letter properties, and the tendency of the letter sound towards lahjah instead of Arab when pronouncing the letter sound. Therefore, this study shows that teachers need to take this into account to improve the quality of pronunciation of the letters of the Quran among adults in Malaysia.

Razali et al. (2021) said that students' Quran reading skills are weak since primary school. This is due to several factors, including the curriculum not focusing on mastery of tajweed. Teaching and learning that only focuses on reading ability without giving special emphasis on the rules of tajweed affects the ability to read the Quran when moving on to secondary school. In addition, less effective teaching and learning methods, teachers who are less skilled in the subjects taught, the absence of effective teaching materials, and no additional efforts from parents in ensuring children's Quran reading skills with tajweed also contribute to this problem. Therefore, this study produced a self-training module for tajwid "Red-Sign" as a teaching aid for teachers as well as self-training for students that can be monitored by parents at home to introduce the rules of tajwid to students. Therefore, this can, to some extent, help ensure that students read the Quran with tajwid.

Next, the verses of the Quran need to be memorized to preserve the continuity of the Quran so that it continues to be passed on from one generation to the next. Therefore, Kamaruddin et al. (2021) conducted a meta-analysis of the Quran memorization methods that are generally practiced in the tahfiz movement. There are three basic methods, namely talaqqi and musyafahah, tiktār (repetition), and tasmik, with an action method in each basic method. Of the two methods, there are two control/monitoring methods, namely tabshir (reward) and tanzir (punishment). As a result of exploring the teaching and learning practices of Quran memorization in the Ulul Albab IMTIAZ program, the study shows that there are eight methods used by teachers and students, namely talaqqi and musyafahah, tiktār (repetition), and tasmik which remain the basic methods of learning tahfiz al-Quran. Meanwhile, halaqah, murajaah, fiqh ayat, gundal (repeating memorization or recording memorization through notes in each student's book), and taqsim (division) are the methods of action. Therefore, this study provides knowledge to the public on the basic matters related to Quran memorization, initial preparation before memorizing, and the best method to memorize the Quran.

Discussion on tadabbur al-Quran, which is a comprehensive reflection process while reading and listening to the Quran that includes the pronunciation of letters, words, and

recitation of the Quran as well as understanding the meaning and appreciation of the Quranic verses in practice, was carried out by Saad et al. (2020, 2021). Tahfiz students, especially those who are close to the Quran, are seen to face difficulties in dividing their focus into memorization and tadabbur; in fact, the aspects of understanding and interpretation of verses are not included in the learning and facilitation methods but are instead taught in separate subjects, which ultimately causes them to choose to memorize without deeply understanding the Quranic verses. Therefore, the researcher presents five tadabbur methods, namely practicing makhraj and sifah, understanding the words and the entire verse, examining waqaf and ibtida, practicing with verses while memorizing, and selecting tadabbur aids. These methods can be used as a guide by the public, especially Quran memorizers, in using the tadabbur method during the process of reading or memorizing the Quran. For teachers, they can apply these methods during the teaching and learning process of tahfiz al-Quran. In conclusion, mastery of tilawah, tajwid, tahfiz, and tadabbur are important foundations in al-Quran education. An effective and comprehensive teaching approach in these four areas has great potential in ensuring that students of Islamic studies in higher education institutions can understand and practice the teachings of the al-Quran in their lives and then teach them to the community after graduation.

### **Methodology**

This study is a quantitative study with a descriptive approach to assess the level of mastery of the Quran in terms of recitation, tajwid, tahfiz, and tadabbur among students of Islamic studies in higher education institutions. The test question instrument in this study was built by the researcher himself. This set of test questions was then validated by Quran experts and Malay language experts to assess the suitability of the content and language used in the test questions. After that, a pilot study was conducted to see the reliability of the test question instrument and identify the extent to which the stated question items could be understood and interpreted correctly by the respondents before being used in the actual study.

These test questions are in the form of multiple-choice objectives because they are efficient, reliable, and easy to standardize; in addition, their quality can affect the overall level of student competence during the assessment. Well-designed multiple-choice questions allow for the assessment of high-level cognitive skills such as interpretation, analysis and critical thinking, application, or synthesis within the framework of Bloom's Taxonomy and Miller's pyramid (McCoubrie, 2004). Therefore, this test question is divided into five main parts, namely the demographics of the respondents, as well as questions related to recitation, tajwid, memorization, and tadabbur al-Quran.

Purposive sampling was used in this pilot study, involving 30 respondents from the Faculty of Contemporary Islamic Studies, Sultan Zainal Abidin University. The respondents selected were a group that met the characteristics of the respondents for the actual study, namely students in Islamic studies at IPT. The total of 30 people was considered sufficient for the pilot study based on the views of Hair et al. (2003) and Johanson and Brook (2010). The data were analyzed using SPSS version 27 software to obtain Cronbach's alpha value to assess the internal consistency of the instrument (Cronbach, 1951).

## Findings

This section is divided into two, namely instrument validity and instrument co-reliability. Both subsections are important to see the consistency of the test questions before they are distributed to the actual respondents later.

### *Instrument Validity*

In ensuring that the instrument measures what it is supposed to measure, the involvement of experts in this study was carried out (Lily et al., 2018). The researcher developed the test questions himself based on systematic review analysis to identify the measurements needed to assess the level of achievement of recitation, tajwid, tahfiz, and tadabbur al-Quran among Islamic studies students in institutions of higher learning. This instrument was then distributed to 10 experts consisting of five al-Quran experts and five Malay language experts to ensure the suitability of the content and language used in the test questions.

Each expert was given the questionnaire instrument that had been developed, and they were asked to comment on the aspects of word selection, sentence and language, and confirm the content of each construct. Content validity is needed to assess the extent to which the instrument has information related to the field of study (Creswell, 2008). Based on the expert comments and suggestions, a total of 25 items were evaluated and improved in terms of appropriate word selection and use of phrases, changes in sentence structure, and suitability of items with the constructed construct. The results of the expert evaluation showed that all items were accepted. The following Table 1 displays the constructs and the number of items found in this test question.

Table 1

*Constructs and Items in Test Questions*

Part		Total Item
A	Respondent demographics	5
B	Tilawah al-Quran	5
C	Tajwid al-Quran	5
D	Tahfiz al-Quran	5
E	Tadabbur al-Quran	5

### *Instrument Reliability*

A Cronbach's alpha analysis was conducted to see the validity and reliability of the test question items. A high Cronbach's alpha value indicates a quality instrument and is suitable for use in real research (Nunnally & Bernstein, 1994). Therefore, to obtain the reliability of the constructed items, a pilot study was conducted on 30 Islamic studies students at the Faculty of Contemporary Islamic Studies, Sultan Zainal Abidin University via Google Form.

The researcher used the Statistical Package for Social Science (SPSS) version 27.0 software to analyze each item in the questionnaire to find the Cronbach's alpha coefficient. Bond and Fox (2007) set the acceptable Cronbach's alpha value to be between 0.61 – 0.99. This is supported by Konting (2009) and Nidzam (2016). The Cronbach's alpha score interpretation table is as shown in Table 2 below.

Table 2

*Interpretation of Cronbach's alpha score (Bond & Fox 2007)*

Alpha Value	Cronbach's Justification
0.9 – 1.	Very good, effective, high level of consistency
0.7 – 0.8	Good and acceptable
0.6 – 0.7	Acceptable
< 0.6	Items need improvement
< 0.5	Items need to be dropped

This test question contains four constructs that are tested for item validity and reliability, with each construct containing five items. Therefore, this test question contains 20 items that need to be tested for item validity and reliability. Analysis to determine item validity and reliability found that the construct Part B: Tilawah al-Quran obtained  $\alpha = 0.916$ . Next, the construct Part C: Tajwid al-Quran obtained  $\alpha = 0.934$ . Then, the construct Part D: Tahfiz al-Quran obtained  $\alpha = 0.861$ . Meanwhile, the construct Part E: Tadabbur al-Quran obtained  $\alpha = 0.87$ . Table 3 below displays the Cronbach's alpha value for each item in this test question except Part A: Respondent demographics. The assessment of this construct was excluded because the respondent's demographics were not included in the items evaluated for Cronbach's alpha because demographics do not measure constructs that require internal consistency.

Table 3

*Results of item Reliability Analysis Reliability Statistics*

Construct	Total Item	Cronbach Alpha
Bahagian B: Tilawah al-Quran	5	.916
Bahagian C: Tajwid al-Quran	5	.934
BahagianD: Tahfiz al-Quran	5	.861
Bahagian E: Tadabbur al-Quran	5	.887
<b>Overall Value</b>	<b>20</b>	<b>.972</b>

Cronbach's Alpha for the entire construct of this test question is  $\alpha = 0.972$ . Thus, this shows that the items in the test question have high validity and reliability. Based on this, this shows that all constructs have high reliability consistency values. Therefore, all items in the test question can be used in real analytical studies.

## Conclusion

This study aims to measure the validity and reliability of the items developed in the test question instrument to see the level of mastery of tilwah, tajwid, tahfiz, and tadabur al-Quran among students of Islamic studies in higher education institutions. Understanding the validity of the instrument is important to ensure that the measurement tool is suitable for use in obtaining accurate data (Chua, 2016). The content validity process involves experts in the relevant fields who provide suggestions and feedback on the test question instrument developed based on literature analysis. The researcher has made modifications to the sentence structure and the use of appropriate phrases based on the feedback from the expert panel. This step was taken to ensure that the developed instrument is defensive, accurate, appropriate, meaningful, and usable (Fraenkel et al., 2012). The reliability test conducted in the pilot study obtained a Cronbach's alpha coefficient of 0.972, which is at an excellent level. This indicates that the instrument can measure effectively and is suitable for use in real studies.



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