

## Enhancing Quality of Experience (QoE) in IM-Tahfiz Framework for Predictive Acceptance Influence of User Screening Test

Meningkatkan Kualiti Pengalaman (QoE) dalam Rangka Kerja IM-Tahfiz untuk Pengaruh Penerimaan Ramalan Ujian Penapisan Pengguna

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### ABSTRACT

*Tahfiz teaching has become progressively more conventional and is growing as an essential educational course. This significance is in line with the prospect above that is placed on the ability of tahfiz schools to produce Quran-memorising students who can thrive and improve the nation's Islamic education. Due to this endeavour, the tahfiz learning management process must satisfy the user QoE related to the increasing student intake issues. These issues impact this education process due to insufficient tahfiz resources, infrastructure, and facilities. This paper proposes the Integrated Management Tahfiz (IM-Tahfiz) Framework's suitability for selected education satisfaction at the empirical level. The primary purpose of this framework is about the Quality of Experience (QoE) based on user satisfaction for the screening test of stakeholder decision in selecting tahfiz centre to educate students. This framework design was implemented in three phases; data selection, where instruments and experiment setup gather resources from the mobile to the server to finalize data; user QoE setup, where the users' data is obtained by using the Mean Opinion Score (MOS) to determine this matter's solution regarding the suitability of tahfiz students to tahfiz centers; and execution phase, where both phases combine to finalize the data output. The final result illustrates the initial research question (RQ) was the factor that had effects on the problem of the tahfiz center that can be solved accordingly.*

*Keywords: Quality of Experience (QoE); Mean Opinion Score (MOS); Integrated Management Tahfiz (IM-Tahfiz); Tahfiz Centre; Tahfiz Student*

### ABSTRAK

*Pengajaran tahfiz telah menjadi lebih konvensional dan berkembang sebagai kursus pendidikan yang penting. Kepentingan ini selaras dengan prospek di atas yang diletakkan kepada keupayaan sekolah tahfiz untuk melahirkan pelajar menghafaz al-Quran yang boleh berkembang maju dan meningkatkan pendidikan Islam negara. Disebabkan usaha ini, proses pengurusan pembelajaran tahfiz mesti memuaskan QoE pengguna berkaitan isu pengambilan pelajar yang semakin meningkat. Isu-isu ini memberi kesan kepada proses pendidikan ini kerana sumber yang tidak mencukupi, infrastruktur tahfiz, dan kemudahan yang mencukupi. Kertas kerja ini mencadangkan kesesuaian Rangka Kerja Tahfiz Pengurusan Bersepadu (IM-Tahfiz) untuk kepuasan pendidikan terpilih di peringkat empirikal. Tujuan utama rangka kerja ini adalah mengenai Kualiti Pengalaman (QoE) berdasarkan kepuasan pengguna untuk ujian saringan keputusan pihak berkepentingan memilih pusat tahfiz untuk mendidik pelajar. Reka bentuk rangka kerja ini dilaksanakan dalam*

tiga fasa; pemilihan data, di mana instrumen dan persediaan percubaan mengumpulkan sumber dari mudah alih ke pelayan untuk memuktamadkan data; setup QoE pengguna, di mana data jemaah pengguna diperoleh dengan menggunakan Min Skor Pendapat (MOS) untuk menentukan penyelesaian perkara ini berhubung kemungkinan pelajar tahfiz yang sesuai dengan pusat tahfiz; fasa pelaksanaan, di mana kedua-dua fasa bergabung untuk memuktamadkan hasil data. Keputusan akhir menggambarkan persoalan kajian awal (RQ) adalah faktor yang memberi kesan akibat masalah pusat tahfiz yang boleh diselesaikan dengan sewajarnya.

*Kata kunci:* Quality of Experience (QoE); Min Skor Pendapat (MOS); Rangka Kerja Tahfiz Pengurusan Bersepadu (IM-Tahfiz); Pelajar Tahfiz

## INTRODUCTION

Islamic Studies has been offered precedence at the elementary and secondary school levels to modernise the 21st century that follows the *sunnah* and Islamic education way. Moreover, in this endeavour taken by the Ministry of Education Malaysia (MOE) to strengthen Islamic education, the model of integration between the sciences with Islamic Studies was introduced (*Tahfiz Model Ulul Albab*). Al-Quran is the core area of Islamic education learning. Experience in the initial phases of al-Quran education is the central establishment that must be bolstered before delving into other al-Quran depth wisdom (Murihah et al. 2015). The most vital objective in al-Quran education is to teach individuals or people in a religious zeal to Allah SWT. The main aim of tahfiz learning is that al-Quran is *al-hifz*. It indicates that students can memorise the al-Quran very well, deprived of looking at the next *mushaf alwa'iy*, which means students can appreciate and understand the verses that are read and meditate in the soul. Finally, in *istirja'*, students can rephrase memorised al-Quran sentences smoothly corresponding to the step-by-step order without looking at the manuscript (Norazmi, A et al. 2018 & Ahmad. N. 2015). Consequently, students who grasp these skills expertly can memorise the al-Quran.

There are 278 tahfiz educational institutions in Malaysia linking to 14 government-maintained and the residual 254 privately owned registered under JAKIM. These data were obtained by the Islamic Religious Department of Malaysia (JAKIM), and the number keeps rising yearly (JAKIM 2021). Upon increasing demand, a government-led tahfiz institution cannot cope with the growing demand from the community. As a result, it has opened space for private tahfiz institutions to assist the government in fulfilling many requests (Abd Razak 2020). Since the number of tahfiz centres is growing steadily, the stakeholder is interested in enrolling in tahfiz centres for their children. This study is to find the source of information

that drives the increasing number of tahfiz centres by screening tests from the stakeholder perspective. The emphasis will be on QoE based on user satisfaction for the stakeholder choice by selecting input for the tahfiz centre.

The rest of the paper is organised as follows. Section two presents the literature review or research background, and section three the method for the IM-Tahfiz Model that caters tahfiz integrated management model depending on the combined entity. In contrast, Section three provides information about the result and discusses the methodology for this research paper; Finally, conclusions are drawn in the last section.

## LITERATURE REVIEW

Tahfiz al-Quran is a subject of tradition that has been the pride of Muslims throughout the ages (Ismail et al. 2019). In Malaysia, the procedure of rearranging tahfiz institutions and schools lasted from 1966 until 1992. This arrangement is still evolving today, where Tahfiz al-Quran education and studies were placed under the management of numerous institutes such as the JAKIM, *Institut Dakwah dan Latihan Islam* (INDAH), Pusat Penyelidikan Islam, and other government departments and non-government departments (Hameed et al. 2003). To establish a standardised tahfiz Islamic studies and education system in Malaysia, tahfiz institutes under the Department of Islamic Development Malaysia (JAKIM) were formed.

In anticipation of establishing a private tahfiz centre, several qualities ought to be adopted and intensified to guarantee the strength of these centres, specifically in Malaysia. The cause of non-uniformity schemes of tahfiz learning is driven by a private tahfiz centre and the private sector (Sharini 2017). This causes the process of tahfiz learning to be handled only based on the teacher's experience without any particular technique that is detailed and coordinated. Recently, a trend depicts that most Islamic community believers know the benefit, effectiveness, and

reputation of memorising the al-Quran (Ismail 2018). To these stakeholders, memorising the al-Quran is associated with the worldwide market's demands. Therefore, the titles of 'al-hafiz' and 'al-hafiza' (male and female gender that memorised the Al-Quran) are highly valued in Islamic culture and the eyes of the Creator (Allah s.wt) (Ismail 2018). The former researcher mentioned by Mardhiah et al. (2018) underlines some characteristics that make this tahfiz centre not last as a centre that is as competitive as any conventional education centre in Malaysia. Quality of experience (QoE) is related to evaluating the quality of multimedia content utilising user perception. In general, QoE metrics can be classified as either subjective or objective. The former adopts user opinion (e.g., surveys) for assessing QoE, whereas the latter considers a model for estimating the desired parameter to indicate the user assessment (Bezerra et al. 2017).

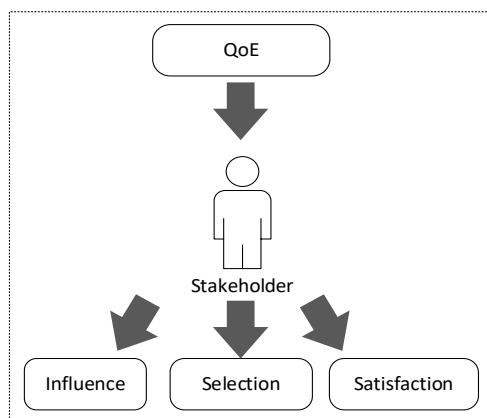


FIGURE 1. QoE Model on Tahfiz Stakeholder

Figure 1 shows the QoE Model on the tahfiz stakeholders in this research. Three main points based on tahfiz issues that cover the area such as influence, selection and satisfaction. This study describes QoE as the degree of user expectation regarding the acceptance of quality depending on how many issues are in the situation (RQ) research question. Also, QoE supports a quality level perceived by the user, which is vital to find a significant approval between users and a specific element constraint (e.g., user acceptance towards RQ, satisfaction level of services). The standard of QoE, according to the International Telecommunication Union (ITU-T), defines QoE as *The overall acceptability of an application or service, as perceived subjectively by the end-user* (ITU 2008). Naturally, QoE controls the significant factor of the user's acceptance depending on the strategy to obtain data that have the aspect regarding the tahfiz centre.

Many factors contribute to the influence of the selection of tahfiz as the choice of education standard for the future of Malaysian students. According to Yusoff et al. (2018), interest in studying religion and the Qur'an, the desire to become huffaz, parents' educational background, financial ability, career prospects, the opportunity to continue their studies to a higher level, as well as excelling in the world and the hereafter are internal factors that encourage them to obtain tahfiz education. In addition, a few communities make tahfiz education an alternative to the academic, social and disciplinary problems faced. On the part of tahfiz institutions, the factors of location and environment, facilities, security, tuition fees, reputation, curriculum and co-curriculum, as well as the quality of teachers and teaching are seen as external factors that attract people to get tahfiz education at the institution in question. However, the element in tahfiz choice of education standard depends on several issues. First, the government is already funding the tahfiz centre for the Islamic student to continue this path for their future.

Another example is the selection based on the stakeholder involved (e.g., parent, teacher, tahfiz provider). Then it is also related to the financial strength of the tahfiz centre. Another factor that affects user acceptance is the popularity of the tahfiz centre (e.g., student number). The tahfiz centre facility also plays a leading role in user acceptance and attract student and parent as a stakeholder to continue studying at particular tahfiz centre. This study also acknowledged that many factors could frequently impact change throughout the analysis course, meaning that a tahfiz model capable of delivering prediction results would be ideal.

As distinguished in the previous section, this paper's research intended to answer three key questions.

1. Which factors can influence the stakeholder selection for the tahfiz centre?  
Imply the Research Question 1 ( $RQ_1$ ) aspect of the vital problem 1.
2. How can the tahfiz centre utilise those factors in predictive models to forecast student outcomes?  
Imply the Research Question 2 ( $RQ_2$ ) aspect of the vital problem 2.  $RQ_2$  implication from the  $RQ_1$ .
3. How can the tahfiz centre utilise projecting models to effectively sustain student success rates within the tahfiz learning population?

Imply the Research Question 3 ( $RQ_3$ ) aspect of the vital problem 3.  $RQ_3$  is related to  $RQ_2$  and  $RQ_1$ .

## METHODS

### IM-TAHFIZ INFLUENCE PREDICTIVE FRAMEWORK (IM-TAHFIZ-IPF)

There are three stages set in the model formation for this proposed paper, which is the vital constraint on several entities regarding the influence of the selective tahfiz adaptation and all concerned participants. The first stage of IM-Tahfiz-IPF is the data selection, and this stage goes simultaneously with the second stage, user QoE setup. The final stage is the experiment phase which combines both stages. Fig. 1 shows the whole framework of IM-Tahfiz-IPF.

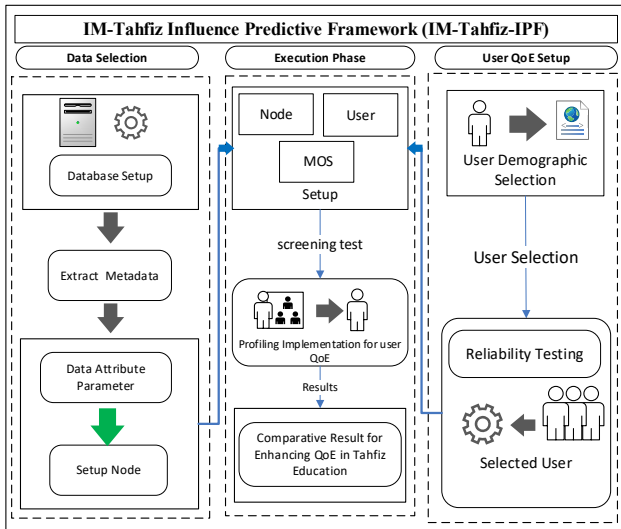


FIGURE 2. *IM-Tahfiz Influence Predictive Framework (IM-Tahfiz-IPF)*

Figure 2-age. The selection of user data will be run on the reliability testing first. The Alpha Cronbach reliability testing will be performed to verify the reliable initial result for the next phase.

Alpha Cronbach assessments perceive if survey questions using a MOS survey are reliable (Som et al. 2017). If the results of testing less than 0.6, then the reliability is insignificant. In this preliminary testing, the gender for the subjective method testing purpose is equal in male and female respondent quantities. Both genders are given the ten samples, and the Alpha Cronbach result is 0.72. After both stages are completed, the final step is the execution phase, where both data are analysed, and the profiling method is done. A list of possible predictive variations does the

user QoE profiling implementation. The analysis will not cover other in-depth tahfiz issues related to the other tahfiz education qualities. the following aspect of the framework procedure is the data collection in the first phase.

### DATA SELECTION AND USER QoE SETUP

Before running a QoE screen test to measure the selection of the raw data, a method with a particular characteristic is required. The first element is the server setup run for the data storage. Then the metadata from the server is uploaded to the testing devices. The device runs on the Android operating system platform, and experimentation execution will be tested on the basic setting (stable processor speed, stable network capability, and “always on” screen capability). Fig.3 shows the testing environment for the *IM-Tahfiz-IPF* testing.

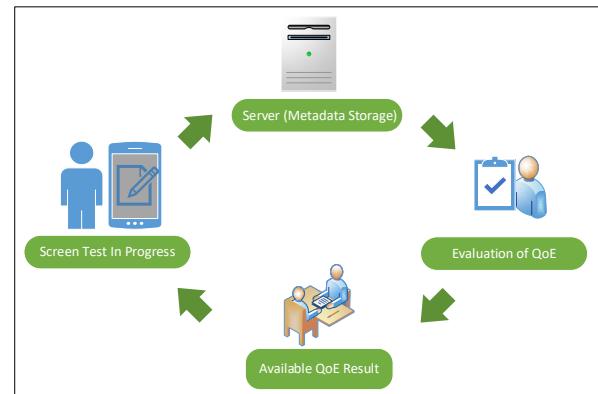


FIGURE 3. *IM-Tahfiz-IPF* testing environment.

After integrating both elements (*Data Selection and User QoE Setup*), the next step is understanding the experimentation execution process. First, the data from the server is uploaded to the selected server. The Wowza server and Microsoft Azure will be used for the repository since the subscription is free for testing and reliable. Then the evaluation of the QoE data is explicitly assessed by the instructor or developer for the setup. Then the following process is to set the availability of the QoE data result. Finally, the screen testing is executed for the final result, and the screening test questionnaire is converted for node profiling.

### QoE SUBJECTIVE SCREENING TEST

In this experiment, this study chose the subjective approach for QoE measurement. ITU’s (2008) research indicated that most objective quality models

rely on subjective test results to work out model parameters. Therefore, these representations cannot be extensively valuable due to the limits of the subjective test. The demographic of respondents of QoE users for the screening test and the study was conducted six consecutive weeks from January until February 2022. To accomplish reliable outcomes for the respondent's standard for the subjective method, the average age is mandatory to be in a minimal set in the age range of 20 to 50 years old (Peltonen et al. 2015). For this research, the average (mean) respondent age is around 15 to 55. The respondents for the survey test were chosen randomly among the stakeholder (e.g. tahfiz students, tahfiz staff, and parents).

TABLE 1. Mean Opinion Score (MOS)

MOS	Quality	Impairment
5	Excellent	Imperceptible
4	Good	Perceptible but not annoying
3	Fair	Slightly annoying
2	Poor	Annoying
1	Bad	Very Annoying

This study goes along with the standardisation bodies (e.g. ITU) reference Mean Opinion Score (MOS) for determining the user's QoE. The MOS scored 1 (Imperceptible), 2 (Perceptible but not annoying), 3 (Slightly Annoying), 4 (Annoying), and 5 (Very Annoying) 6. The survey setup for verifying the respondent's outcome was based on the final QoE result. The testing was performed within the Malaysian region. The screening test was separated into several parts for the vast data collection; the north, central, and southern region of the tahfiz centre. 10 Tahfiz centres are involved in every tested area. There are 30 tahfiz centres in the total selected centres in the tested sampling. In one tahfiz centre, every department, as the teacher, student, and staff, participates in the test sampling. All available figure from tahfiz centres was called for this screening test. Consequently, achieving a respondent with a dependable inclination and conforming to the testing environment is quite demanding (Ghadiyaram et al. 2019).

USER QoE PROFILING FOR IM-TAHFIZ-IPF

To cope with the sampling method in predictive tahfiz  $RQ$ , three fundamental parameters have been decided for modelling data sampling based on the  $RQ1$ ,  $RQ2$  and  $RQ3$ : This modelling data component can be represented as follow:

$$(m) = I^{m_l} \times \dots \times (n - I)^{m^{n-l}} \times n^{mn}$$

The decision-making QoE subjective analysis used a list of possible influence predictive solutions. The whole set of potential influence predictive solutions can be produced. To utilise the proposition, the following steps must be followed: The maximum number of available paths  $P(m)$  to be generated is restricted by the calculation above, where  $n$  is considered as the number of possible influence predictive solutions available for a specific characteristic, and  $m$  is several attributes that have particular  $n$ .

Basis: The resulting rule asserts that if two tasks do a procedure (let us say there are  $n_1$  and  $n_2$  ways to do tasks 1 and 2, in that order), there are  $n_1 \times n_2$  ways to do the procedure.

Initial step: For any positive integer  $m$ , let  $P(m)$  be the product rule for  $m = RQ$  attributes. For the basic case, take  $m = 2$  (this refers to the resulting rule for two tasks =  $RQ$ ). Now assume that  $P(m)$  is true. Consequently,  $P(0) = 0$  is true.

Inductive step: Consider  $(m+1)$   $RQ$  attributes.  $t_1, t_2, \dots, t_m, t_{m+1}$ , which can have  $n_1, n_2, \dots, n_m, n_{m+1}$  ways, respectively. By the resulting rule of two  $RQ$  attributes, the number of ways to do this is the resulting (multiplicity) of the number of ways to do  $m$  tasks, including  $n_{m+1}$ . By the inductive hypothesis, this is  $n_1 \times n_2 \times \dots \times n_m \times n_{m+1}$ , as desired.

Associate basis: If  $n1 = n_2, n_1 \times n_2 = n_2$  (this way, group the  $RQ$  attributes with the same number of  $RQ$  together). Similarly, if  $n_1 = n_2, n_1 \times n_2 \times n_m \times n_{m+1} = n_2 \times n_m \times n_{m+1}$  is true. From the experiments, the final possible influence of predictive solutions can be defined as follow:

$$\begin{aligned} RQ_1 &= \{RQ_{1(a)}, RQ_{1(b)}, RQ_{1(c)}\} \\ RQ_2 &= \{RQ_{2(a)}, RQ_{2(b)}\} \\ RQ_3 &= \{RQ_{3(a)}, RQ_{3(b)}\} \end{aligned}$$

The next step is establishing the list of possible influence predictive solutions ( $PIPS$ ) attributes. There are three possible solutions for  $RQ_1$ , two for  $RQ2$ , and two for  $RQ_3$ . It can be calculated using the equation below as follow:

$$P(0) = 1^0 \times \dots \times (3-1)^0_{(3-1)} \times 3^0 \times 1$$

$$P(0) = 1 \times (2)^2 \times 3^1$$

$$P(0) = 12$$

From the calculation, there are 12 possible influence predictive solutions variations. The parameters  $RQ_1$ ,  $RQ_2$ , and  $RQ_3$  can be mapped into a scoring path. The mapped result is as follows:

$$\text{Mapping} = \{ \text{PIPS}_1: RQ_{1(a)}, RQ_{2(a)}, RQ_{3(a)}; \text{PIPS}_2: RQ_{1(a)}, RQ_{2(a)}, RQ_{3(b)}; \text{PIPS}_3: RQ_{1(b)}, RQ_{2(b)}, RQ_{3(a)}; \text{PIPS}_4: RQ_{1(c)}, RQ_{2(a)}, RQ_{3(b)}; \text{PIPS}_5: RQ_{2(a)}, RQ_{1(a)}, RQ_{3(a)}; \text{PIPS}_6: RQ_{2(a)}, RQ_{1(b)}, RQ_{3(b)}; \text{PIPS}_7: RQ_{2(b)}, RQ_{1(c)}, RQ_{3(b)}; \text{PIPS}_8: RQ_{2(b)}, RQ_{1(b)}, RQ_{3(b)}; \text{PIPS}_9: RQ_{3(a)}, RQ_{1(a)}, RQ_{3(a)}; \text{PIPS}_{10}: RQ_{3(a)}, RQ_{1(b)}, RQ_{3(b)}; \text{PIPS}_{11}: RQ_{3(b)}, RQ_{1(b)}, RQ_{3(a)}; \text{PIPS}_{11}: RQ_{3(b)}, RQ_{1(c)}, RQ_{3(b)} \}$$

## RESULT AND DISCUSSION

### POSSIBLE INFLUENCE PREDICTIVE SOLUTIONS (PIPS) VS MOS ANALYSIS

The result from  $RQ_1$ , which has three solution variations, two possible explanations for  $RQ_2$ , and two possible solutions for  $RQ_3$ , can be derived for the percentage analysis versus the MOS result from the subjective screen test. Figure 3 is the *PIPS* versus MOS result based on the percentage of acceptable user QoE.

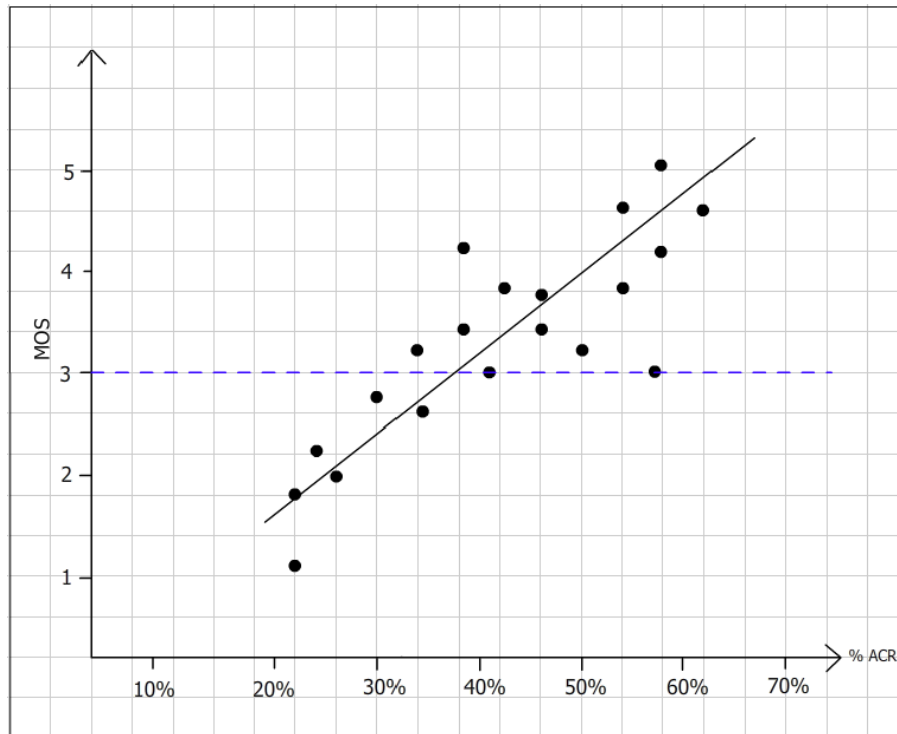


FIGURE 3. MOS vs ACR (%) in  $RQ_1$

The first result of MOS vs ACR (accuracy) in  $RQ_1$  can be seen in Figure 3. Twenty respondent results from the fig depict the acceptable  $MOS_{(a)} = 3$ .  $MOS_{(a)}$  is determined as the baseline of the sufficient value for MOS.

There are ten results above of  $MOS_{(a)}$  with the ACR of  $65\% > RQ_1$ . The six results below have an ACR of  $35\% < RQ_1$ . From the experiment, most respondents agree with  $RQ_1$  regarding the influence of tahfiz stakeholders to enter this field. Fig.4 is the *PIPS* versus MOS result in  $RQ_2$ .

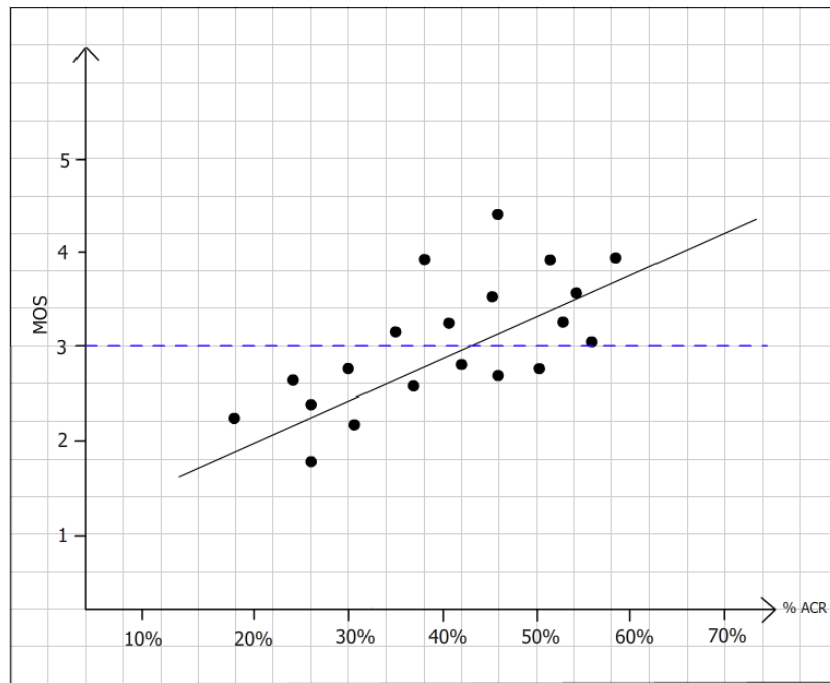


FIGURE 4. MOS vs ACR (%) in  $RQ_2$

The second result is the MOS vs ACR percentage in  $RQ_2$ . The result of  $RQ_2$  shows the 20 respondent result from the experimentation of the subjective survey. There are 11 MOS(a)

results with an ACR of  $50\% > RQ_2$ . The rest of the nine results below with an ACR of  $50\% < RQ_2$ . This  $RQ_2$  result shows that the respondent has 50% agree with this issue. Figure 4 is the PIPS versus MOS result in  $RQ_3$ .

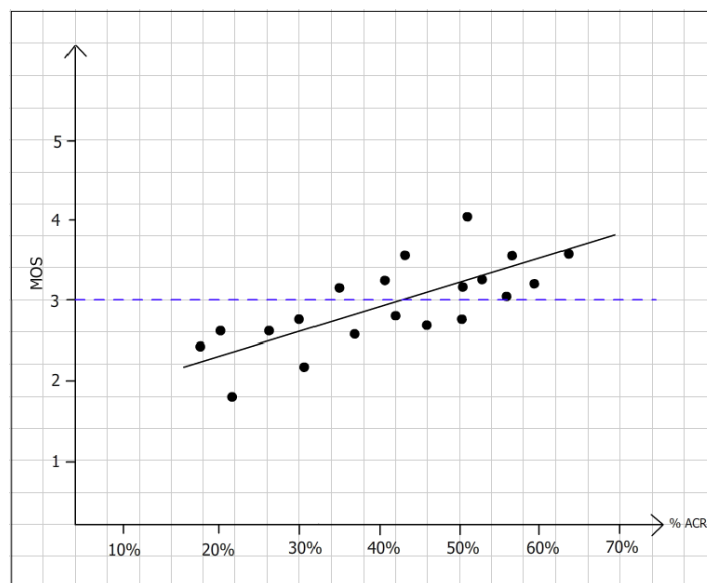


FIGURE 5. MOS vs. ACR (%) in  $RQ_3$

The final result is the MOS vs ACR percentage in  $RQ_3$  can be seen in Figure 5.  $RQ_3$  indicates the 20 respondents taking the subjective survey, and the result shows nine

results above of  $MOS_{(a)}$  with the ACR of  $45\% > RQ_2$ . The rest of the 11 results below with an ACR of  $55\% < RQ_3$ . This  $RQ_2$  result shows that the respondent has 45% agree with this concern.

After the outcome of ACR and MOS of  $RQ_1$ ,  $RQ_2$  and  $RQ_3$  is achieved, the next step is to establish the analysis of *QoE* and *MOS* based on the final result of  $RQ$ .

#### ANALYSIS SPECTRUM ON IM-TAHFIZ-IPF BASED ON PIPS

The result from  $RQ_1$  (*Which factors can influence the stakeholder of the selection for the tahfiz centre?*) correlates to balanced academic and religious knowledge among the tahfiz student. This definition has the highest impact since the stakeholder play a significant role in their children's lives as they are responsible for defining their personalities. Parents also significantly influence their children's rudimentary and religious values. Some parents are eager to send their children to tahfiz institutions for their betterment. High-level moral values and spiritual conformity are part of why the tahfiz students decide that tahfiz institutions for their place of study. This perception is common among parents; thus, they possess a sense of responsibility to properly shape their child's future, leading them to 'encourage' their children to attend their tahfiz school of choice (Yusoff et al. 2018). Most stakeholders agree with this ( $RQ_1$ ) justification because the ACR of 65% >  $RQ_1$  significantly impacts what influences on tahfiz centre in this country.

The second result from  $RQ_1$  (*How can the tahfiz centre utilise those factors in predictive models to forecast student outcomes?*) this factor leads to the hope and aspirations among all the stakeholders. This growing understanding is recognised as the belief that tahfiz students need balanced feedback between *naqli* (revealed knowledge) and *'aqli* (conventional wisdom). Integrating *naqli* and *'aqli* knowledge generally means the generation of new knowledge based on the sources and methodologies of knowledge that align with the framework of Islamic teachings. This approach is essential to produce people with high and noble characters and keep a balance between worldly achievement and deeds for the afterlife.

Sharini (2017) contends that distinction in only one attribute but neglect in other features does not bring any benefit. The past few years predicted contributions from individuals, organisations, and businesses to the national growth of tahfiz institutions. These attempts are driven by the desire and objective to uplift Islamic religious education, particularly in the tahfiz al-Quran and as-Sunnah discipline among Muslim students. Non-government organisations (NGOs) and state and

federal authorities have portrayed their corresponding roles in improving tahfiz institutions in this country. These factions have constructed and founded their particular tahfiz structure while trying to become an essential governmental body to enhance the quality of al-Quran and hadith memorisation at all levels of education: primary, secondary, and tertiary. The factor leads to the hope and aspirations among all the stakeholders to have a fifty-fifty acceptance of user *QoE* from  $RQ_2$  since the ACR of 45% >  $RQ_1$  on this level. However, it still counts as the relevant result for this matter.

The final result of  $RQ_3$  (*How can the tahfiz centre utilise projecting models to effectively and sustain student success rates within the tahfiz learning population?*) led to Islamic literacy among the tahfiz student. Numerous organisations have begun to understand and acknowledge the potential of tahfiz education in developing a generation that collectively understands, appreciates, and practices the teachings of Islam holistically. The government and private organisations or sectors have acted to inspire and enliven Islamic glory. Furthermore, the tahfiz centre must have strategies and religious guidelines to influence students to enrol. Also, many mosques have been established that symbolise Islamic distinctiveness as the country's religion and have also been well-used. The issue leads to the Islamic literacy for tahfiz students having an effect on lower success rate since the ACR of 55% >  $RQ_3$  on this level. This is because youngsters and adolescents nowadays choose to have conventional education rather than Islamic and conventional education.

#### CONCLUSION

This study provides an obvious consequence: attempting to produce generations of al-Quran that parents influence and want through tahfiz education. The framework model shows the result based on the factor affecting the user acceptance of the tahfiz centre. First is the highest impact for the parents as the primary stakeholder as they need to be educated as a role models in their teenagers' lives. Therefore, it is essential for parents to always find a way to increase knowledge and wisdom in going through this crisis. Secondly, the results data provide the critical issues for the acceptance as a user is the effective communication between parents and children is low for every level of sampling testing. Communication between parents and children is often like a daily



conversation, but this kind of communication does not have an optimal effect.

In the context of the role of parents in ensuring the continuity of children's tahfiz education, the communication required is positive and effective communication toward children. Thirdly this framework results depict the secondary issue of the research question of the intellectual level of children's minds. Parents' demands beyond the children's ability cause them to face severe mental stress in their phase. Most parents cannot accept that their child's development pattern differs from other children's. Acceptance in the family context shows a positive relationship between parents and children. Parents' acceptance of children's abilities and willingness to help and discuss efforts to improve children's excellence shows parents' concern for the importance of children's education. This kind of family context reflects that parents agree on their responsibilities and try to involve themselves consistently in their children's education regardless of the level at which the children learn.

Another result shows that it is vital for parents to invest in their children's education because education and the core of schooling can change the life patterns of generations. School selection is important because what happens to children, especially young ones, will profoundly affect their achievements later in life. Among the factors that parents must consider in selecting a tahfiz school is the tahfiz curriculum offered, operating hours, location, teacher's background, and instincts. In addition, it requires a long journey but is a long way from unreasonable learning methods. The current procedures of development of the scheme or the model of the tahfiz education implemented by schools and institutions in Malaysia necessitate the participation of an apparent ethical devising characteristic, objectives, task, and idea as the founding and the advance of tahfiz institutions in Malaysia are accomplishment more support from the community. This education has a more significant responsibility in creating dignified groups because they are learned to go through the way of Islam in their lives. Education given to children must be based on the teachings of Islam that emphasise various aspects of life for success in this world and the hereafter. The need for parents' role in children's education is interpreted as one responsibility that is a demand in the family. There are no denying that mother and fathers play an essential role in moulding and educating children, especially in tahfiz education. Therefore, to lead towards the children's success in memorising the

Quran, parents need to take a more holistic strategy to strengthen family institutions and build healthy family relationships. Children are too important for society and country because without knowledge and holding good religion, and they will not be the next generation to contribute towards National development.

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#### AUTHOR'S CONTRIBUTIONS

Mohammad Fahmi Abdul Hamid and Muhamad Hanif Jofri; Writing original draft preparation and conducting data analysis, Khairul Azhar Meerengani and S Salahuddin Suyurno; Provides main supervision, conceptualization and writing- review, Nor Adina Abdul Kadir; Provides co-supervision, methodology guidelines and writing review, Muhammad Taufik Md Sharipp; Writing –review. All authors have read and agreed to the published version of the manuscript.

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