

CHAPTER VI

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

In this chapter, a brief summary on the prior chapters was deliberated, with the research conclusion and recommendations. In the first chapter, the problem related with the dilemma of applying multimedia approaches was explained. This was due to the fact that the cost of implementation was not compensated enough by the possible improvement of performance in memorizing the holy Quran, thus making the idea doubtful.

The second chapter thus explored the issues faced by children in memorizing the Quran from the perspective of learning. To resolve this issue, the notion of combining verbatim and semantic memory was explored. This was further confirmed by the cognitive theory of multimedia learning that recommended a set of effects or principles to improve learning and memory. Using instructional design, the ideas can be materialized into an actual e-learning application.

In the third chapter, the overview of the Quranic Multimedia Memory Model (QM3) was established to overcome the limitation of the traditional approach in memorizing the Quran. QM3 consisted of four main phases – acquisition, abstraction, absorption and assertion. The model offered improvement by layering the task of memorization in stages. This allowed the cognition of the learner to focus on one task at a time without being overwhelmed by the actual demand of memorization.

The methodology of the experimentation was elaborated in the third chapter, too. The data collections as well as the design that included the flowcharts of each pretest and posttest were given to enable a greater understanding of the process involved. Equations related to the measurement of the research were also explained more thoroughly here.

In the fourth chapter, the study was conducted via the pretest – posttest experimental design. For the sample, 35 participants from Libyan school students were selected. To perform the pretest, they were tested in terms of their performance in memorizing a series of ayat from the Quran using the traditional way. Subsequently, they were exposed to the QM3 through formal training in the classroom.

The aforementioned pretest was then followed by a posttest that demanded the memorization of a different set of ayat from the Quran. This was important to ensure the validity of the proposed approach. A comparison on their performance was analyzed from the perspective of memorization time and error propensity. Not just that, ANOVA was also performed to confirm the significance of the comparison.

Overall, the research was carefully implemented from the initial stage to the end. This can be seen from the systematic approach that was widely employed throughout the development of the thesis. In nearing the completion of the research, the recapitulation of the progression for the wide range of ideas from the first chapter to the fifth one was duly covered in this section.

6.2 Conclusion

The essential source of knowledge in Islam is the Holy Quran. It contains the essence of Islam besides a set of advises on how life should be lived in the eyes of Allah. Verses from the Quran are closely embedded in the life of a Moslem. From prayers to the everyday interaction with others, the purpose of the Quran as a platform of defining the best way for one to act in any circumstances remains prevalent. This is a realization that is accepted by practicing Moslems all over the world.

If the Quran is truly important, then the next question becomes - How do people memorize the Quran? The answer to this question lies rooted in tradition. It is almost customary for every Moslem to remember the holy verses by repeating them. This is done either within prayers or in a specific ritual that is frequently dedicated to remembering the Quran.

Notwithstanding the criticality of retaining Quran in memory, some students are struggling with the task. They may remember the verses that are compulsory, such as the ones that are needed in performing the daily prayers. However, it is difficult for them to remember other verses of equal importance. This is quite an alarming issue because forgetting the Quran is considered a rather serious offense. It is therefore the function of this study to find a viable solution to the predicament at hand.

The study spanned mostly on three main themes. They were Quranic memorization, memory and the utilization of multimedia in learning. Currently, the act of committing the Quran into memory is done traditionally. Its core strategy is repetition. The method is quite effective but it takes considerable time when there are many verses to be memorized.

Psychologically, the process of memorizing the Quran can be attributed to verbatim memory (Margulis, 2014). In its simplest sense, verbatim memory is any kind of memorization that involves a faithful retention of the subject under examination. This is vital in remembering the Quran because recitation must follow the holy book exactly. Any discrepancy could distort its original meaning.

Semantic memory (Brockmole & Vo, 2010) can support verbatim memory for a successful retention. Although it is not as accurate, semantic memory is stronger than verbatim memory. It lasts longer and suffers less decay. Both semantic and verbatim memory can be integrated better through the strategic activation of prior knowledge. This way, memory can be accurate and stable at the same time.

To ensure that verbatim and semantic memory to be synergized as planned, it is important to understand the concept of working memory (Baddeley, 2003). It is the memory that is active during Quranic recitation. In other words, when a person retrieves a particular verse from memory and vocalizes it, working memory is basically in charge.

In order to exploit the various psychological findings on memory for the purpose of improving the process of memorization, the cognitive theory of multimedia learning (Khan & Masood, 2015) can be very useful. It contains a set of principles or effects that offer guidance to the design of learning. For instance, it recommends the clustering of similar items to enhance understanding.

However, using cognitive theory of multimedia to develop an actual e-learning application can sometimes be a complicated task. This is often true when a variety of

ideas are combined together. To make it more manageable, it is important to employ an instructional design (Sangsawang, 2015). Here, the ADDIE model helped in the integration of many different elements into a cohesive whole for lesson design.

Having the lesson design, it was now feasible to develop an e-learning application (Bhuasiri et al., 2012) to facilitate the process of Quranic memorization. A pedagogical framework (Granic, Mifsud & Ukusic, 2009) can be consulted at this juncture to guarantee effectiveness. Implementation wise, it was advisable to utilize common e-learning platforms such as moodle (Barge & Londhe, 2014) to speed up development.

With the e-learning application at their disposal, the students can practice the technique on their own, without any kind of supervision from the teacher. This can promote a higher level of motivation whereby students are no longer hampered by the constraint of time or space. In addition, they can control learning to suit their own pace without the fear of social humiliation.

The traditional approach of memorizing the Quran among school students does not harness the potential of multimedia learning (Ariffin et al., 2013). Although online applications related to the Quran provide digitization, they do not really utilize technology in aiding the process of learning.

On a different note, it can be said that Quranic digitization does promote e-learning to a certain extent. Students can now refer to the Quran from anywhere at any time. They can search for a certain word exhaustively throughout the verses, which serves significantly in resolving certain qualms with regard to the Quran, especially when

there is an urgent need to consult the Quran on issues that are pervasive in the conflict of real life. In this sense, availability is greatly improved.

Specifically, in memorization, the sites that offer a reference to the Quran do not really optimize the retention of the students. The verses are presented as they are, without any facilitation that may encourage learning. As such, memorization remains a feat when students try to memorize the Quran via rote learning and repetition. Even though it can be effective when given sufficient time, in reality, the approach challenges the motivation and concentration of the students. Repeating something again and again can eventually causes boredom and deters memory.

In order to conduct the study, the objectives must be clearly established along with its questions. This allowed an execution of a better research management practice in solving the problem of Quranic memorization within the stipulated timeline. Generally, the study needed to unveil the constraint of the current approach and devised a quantifiable improvement.

More specifically, the research objectives were as such that the analyses of the current approach of Quranic memorization in Libyan schools in Malaysia to develop a new memorization model that integrates the psychological and technological components of multimedia learning.

Furthermore, transforming the objectives into questions can identify the current approach and its constraint in memorizing the Quran in Libyan schools in Malaysia. Hence, by understanding the current approach, the base mechanism of memorizing the Quran can be properly defined. Besides, there must be a connection

between the mechanism and the inherent limitation. In addition, it clarified how the new model improved of the current approach, where the new model aimed to incorporate multimedia learning to realize improvement.

In order to achieve these goals and answer its questions towards overcoming the limitation of the traditional approach of memorizing the Quran, the new approach was established, which was the Quranic Multimedia Memory Model (QM3), to pose a constraint to the memory of the learner. QM3 consisted of four main phases – acquisition, abstraction, absorption and assertion.

The model offered improvement by layering the task of memorization in stages. This allowed the cognition of the learner to focus on one task at a time without being overwhelmed by the actual demand of memorization. As such, it may also promote motivation when the process of memorization was portrayed as a feasible repertoire.

On the other hand, to achieve the goal of evaluating the effectiveness of the new memorization model in terms of time and accuracy, there was a need to answer the question about the improvement of the proposed model in terms of time and accuracy. Thus, the development of the new model might include psychological, educational and technological findings. It was therefore imperative that all of them conceded to the rules, regulations and principles of Islam.

In order to do so, the study was conducted via the pretest – posttest experimental design. For the sample, 35 participants from a Libyan school were selected. To perform the pretest, they were tested in terms of their performance in memorizing a series of ayat from the Quran using the traditional way. Subsequently, they were

exposed to the Quranic Multimedia Memory Model through a formal training in the classroom. This was followed by a posttest that demanded the memorization of a different set of ayat from the Quran. A comparison on their performance was analyzed from the perspective of memorization time (Time) and error propensity (accuracy).

The hypotheses of the study were the participants who employed the Quranic Multimedia Memory Model exhibited a significantly reduced time needed to memorize a certain ayat as compared to students who used the traditional approach of memorizing Al-Quran. Also, the finding showed that there was a significant difference between the mean of the memorization time for the two groups - traditional method (μ_1) and QM3 (μ_2). Besides that, the finding implied that the null hypothesis H_0 can be rejected and the alternative hypothesis H_a should be taken instead.

In addition, the participants who employed the Quranic Multimedia Memory Model would exhibit a significantly reduced possibility to make mistakes or conduct an error during memorization as compared to those who utilized the traditional approach of memorizing the Holy-Quran. In addition to that, the findings illustrated that there was a significant difference between the mean of the error propensity for the traditional method (μ_1) and QM3 (μ_2). Also, the findings implied that the null hypothesis (H_0) was rejected and the alternative hypothesis (H_a) that supported the significance of this particular result will be accepted instead.

In conclusion, it was quite clear that QM3 performed better than the traditional method in terms of memorization time and error propensity. QM3 reduced the time required for memorization by approximately 30% when compared to the traditional method. Moreover, QM3 lowered down the propensity of error for the traditional method by

more than 80%. ANOVA confirmed the significance of both results. The improvement of performance displayed by QM3 can be associated to the employment of decomposition, cueing and schematization that offset the innate drawback of repetition, which was used heavily in the traditional method which concluded the overall effectiveness of QM3.

Table 6.1: Overall comparison of the average summary between traditional method and proposed model QM3

	Traditional	QM3	Reduction
Memorization Time	1.73s	1.17s	32.33 %
Error Propensity	0.15	0.03	83.26 %

Figure 6.1: Overall comparison of the average summary between traditional method and proposed model QM3



6.3 Recommendations and limitation for future work

Given that the research was a seminal attempt of introducing a new model of memorizing the Quran for Libyan school students, there were many other venues for future exploration. To begin, it would be interesting to incorporate visualization into the model. The potential of using visual elements in learning was recommended in the

Multimedia Learning Theory. Visualization (Borkin et al., 2013) enabled a stronger impression of memory by connecting the diverse manifestation of varying modalities. Instead of relying solely on text without the assistance of any imagery construct, it would be beneficial for the student to experience a series of visual stimulation Figure 5.14 that can improve their retention entirely.

Figure 6.2: Possible employment of visualization from surah 66, verse 6 in proposed model QM3

O you who have believed, protect yourselves and your families from a Fire whose fuel is people and stones, over which are [appointed] angels, harsh and severe; they do not disobey Allah in what He commands them but do what they are commanded. (Al-Quran, Surat At-Tahrim 66:6)



Perhaps visualization can be implemented by identifying the main theme for the collection of ayat to be memorized. A pictorial representation of the theme was then devised to reflect the general semantics of the memorization. Strategically, the visual cue can be placed within the learning repertoire. This way, the textual and visual input can synergize for the betterment of memory. Despite the potential of visualization in