Adolescent Metacognitive Knowledge during the Quran Memorization Process

Ragwan Alaydrus[1]

Abstract

There are number of researches have studied the experience on Quran memorization, but there are only small number of studies that have explored deeper, how *huffadhs* manage their cognition for the success in memorization. This current study aimed to investigate qualities of metacognitive knowledge in the proses of memorization of Quran using Flavell's components of metacognitive knowledge which are *task, strategy, and person.* This qualitative case study took place in one university in Malaysia used interview and think after journal to investigate the metacognitive knowledge of two young *huffazs* as they memorized and revised the Qur'an. As the result, the study identified the six attributes of metacognitive knowledge: understanding the nature of task, understanding the influence, applying memorization strategies, monitoring the process, utilizing resources, and practicing immediate coping. The results contribute to the understanding of adolescent *huffadhs* memorization technique and suggest the benefit of teaching metacognitive strategy in the Quran memorization.

Keyword: Quran memorization, adolescents, metacognition, metacognitive knowledge.

1. Introduction

Quran is a holy book of Muslim believers which is widely read and spread around the world. Unlike other books, Quran remains uncorrupted as God guaranteed its pureness as when it was revealed. In the Quran it was mentioned: "Indeed, it is We who sent down the Quran and indeed, We will be its guardian." (Quran 15:9). Apart from God's safeguard, the Muslim tradition of memorization also contributes to the originality of the Quran. Memorization which in Arabic is called *hifdh,* was actually derived from the *sunnah* of Prophet Muhammad (pbuh), it is known that Prophet Muhammad (pbuh) memorized and revised the entire Quran with Jibreel in the last year of his life. This *hifdh* tradition further followed by the companions as they also wrote the verses when they were confident of their perfect memorization (Ad-Dausaree, 2006).

Muslim people have been encouraged to memorize the Quran. Some *hadith* described the advantages that will be given to a *huffadh* (person who memorizes Qur'an) in the world and hereafter. One of the hadith stated about God's reward for the people of Quran and it is extended to their parents (Al-Qardhawi: 2001). Laylah (2005) highlighted how memorizing Quran can benefit someone on his development of intellect even for young children. He mentioned some scholars as role models in the Islamic history who became *huffadh* even though they were still children such as Imam Ash-Shafii and Abu Qatadah, whom later on, were acknowledged as having sharped intellect. In this modern era, memorizing the Quran was reported has positive effects to students' academic achievement and memorizing skills (Nawaz & Jahangir: 2015; Nastiti: 2015). Considering the benefits and virtues of memorizing Qur'an, some methods were developed to help the *huffadh* retain their memorization.

One of the developed methods is *taqriri,* which is a traditional strategy to gradually and repeatedly read the verses to achieve the maximum target. This method is commonly used by the *huffadh* with supervision from a *hifdh* teacher (Gade, 2014; Septiadi, 2012). Furthermore, if there is no *hifdh* teacher to learn with, the *huffadhs* may utilize digital tools to assist themselves revise the verses such as E-Hafiz (Muhammad, ul Qayyum, Tanveer, & Syed, 2012).

---

[1] Dept. of Educational Psychology & Counseling, International Islamic University Malaysia. E-mail: Gwan.aydruspro@gmail.com
Phone: (+62)81317972791

Beyond the traditional method, a study found that implementing a metacognitive strategy such as mind map can enhance the performance of memorization in terms of time and understanding (Al-Mosallam, 2013). Regardless of the varied technique of memorization, metacognitive strategy is required to help the *huffadh* approaches the most suitable technique. Whereas, metacognition refers to higher order thinking performed by a person which involves active control over his cognitive processes (Chauhan, A., & Singh, N, 2014). Metacognitive strategies are helpful to ensure that the memorization goal is being or has been reached. Examples of metacognitive activities in *hifdh* Quran may include the plans to approach the target by using appropriate skills and strategies for optimal memorization, and the process of facing the challenges by monitoring the used strategy and evaluating the memorization progress.

There are number of researches have studied the use of metacognitive strategy in learning activities and developing critical thinking (Vrugt and Oort, 2008; Hongxia and Zhibo, 2010; Magno, 2010; Ku and Ho, 2010; Doganay and Demir, 2011; Raoofi, et.al, 2013). Hence, it is significantly important to investigate the metacognitive use in memorization, particularly in *hifdh* Quran by exploring adolescents' metacognitive knowledge.

1.1 Statement of Problem

Memorizing Quran is a challenging task. Quran's unique style and structure demand cognition and affection of people who try to hold it in their memory. In a hadith prophet Muhammad (pbuh) stressed the difficulty. He said, "Guard this Quran, for, by He who has the soul of Muhammad in His hand, it is easier for it to escape from the mind than for a camel to escape" (Bukhari and Muslim). Even though God has ensured the easiness of Quran for those have open heart, the effort to retain the verses in memory requires high focus and effective strategy (Gade, 2014).

Putri and Uyun (2017) studied the adolescent *huffadhs* who find difficulty to manage themselves in memorizing Quran due to the number of activities they participated in. In fact, this divine task requires the cognitive ability to stay persevered, apart from the sincere intention (Chairani and Subandi, 2010). Other personal techniques have been explored by Yusuf (2010) from three male master students who used memorization as their learning styles. It was found that the participants applied unique memorization method which is generated from their general understanding of the target to be memorized, the emotional stability, their personal limit of ability, recognition of memory capacity, and how they select the needed material/verses to be memorized and what is unnecessary. Those methods basically reflect several forms of metacognitive knowledge, which is the learners' knowledge about their own cognitive abilities as well as how they learn, and metacognitive regulation which includes how the learner monitors and controls his cognitive processes to meet the goal. However, this particular previous study only investigated the methods or cognitive-based techniques in memorization of Qur'an. Here, the study regarding metacognitive awareness is presented to make it useful to figure out how the *huffadhs* manage their cognition for the success in memorization project.

1.2 Research Question

There are two research questions to guide this current study:
1. Within the context of memorization Qur'an, what are the qualities of adolescent metacognitive knowledge?
2. How does the metacognitive knowledge benefit the students in memorization process?

2. Literature Review

2.1. Development of Metacognition

Most of the time, metacognition is simply defined as "thinking about thinking" (Chauhan & Singh 2014) even though the exact definition is debatable among the researchers (Shaughnessy, Shaughnessy, Veenman, & Kennedy, 2008). Schraw and Dennison (1994) defined metacognitive as an ability to reflect upon, understand, and control one's learning.

Development of metacognition is primarily traced at the age of three, when children acquire some awareness of themselves and others (Kuhn, 2000). Between the age of three and four, children are able to accept the perspective of another person. Whereas, children can notice at the age of four that someone's belief may not necessarily be true or may not match with their own believes (Schneider, 2008). The progressive changes of metacognition are related to functions of the prefrontal cortex and found as foundations for much of higher-order thinking which appears in later life (Kuhn, 2000; Schneider, 2008).

Kuhn developed a conceptual framework named as "meta-knowing" which encompasses two types of cognition: procedural knowledge or metacognitive knowing (knowing how) and declarative knowledge or metacognitive strategy (knowing that). Metacognitive knowing refers to young children with understanding of their mental states, and metacognitive strategy is what children know about their cognitive process and how it affects their performances (Perfect & Schwartz, 2002). Study conducted by Weil, et al. (2013) found that there is an interaction between age group and metacognitive ability; metacognitive ability increases with age during adolescence and remains stable in adulthood. By concerning the gender differences, metacognitive ability in adolescence and adulthood is varied across sex, with better metacognitive performance in females. A similar result found by Artelt and colleagues (Karlen, Merki, & Ramseier, 2014) which showed that the girls have higher level of domain specific metacognitive strategy knowledge in the context of text comprehension than the boys at the lower secondary education level. In the context of tackling larger essays or project, girls also showed higher metacognitive knowledge at the upper secondary level (Merki, Ramseier, & Karlen, 2013).
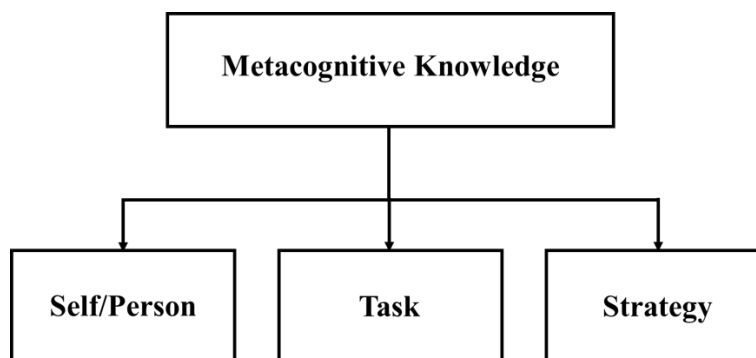
2.2. Metacognitive Knowledge

Flavell (1979) referred metacognition as the knowledge about and regulation of one's cognitive activities in learning processes. He noted that metacognition plays an important role in communication, reading comprehension, language acquisition, social cognition, attention, self-control, memory, self-instruction, writing, problem solving, and various types of self-instruction.

According to Flavell, metacognition consists of two facets; knowledge and metacognitive experience or regulation (Chauhan & Singh 2014). Metacognitive knowledge consists primarily of knowledge or beliefs about what factors or variables act and interact in what ways to affect the course and outcome of cognitive enterprises (Flavell, 1979). A study has been conducted by Bowler (2010) to explore the nature of adolescents' awareness of their own thoughts and feelings. The research identified thirteen categories of metacognitive knowledge related to the information search process which are balancing, building a base, changing course, communicating, connecting, knowing that we do not know, knowing our strengths and weaknesses, parallel thinking, pulling back and reflecting, scaffolding, understanding curiosity, understanding memory, understanding time and effort. The taxonomy further becomes a solution for students who need a roadmap in information search.

Flavell divided metacognitive knowledge into knowledge about the self and other learners (person dimension), knowledge about the tasks and what resources and information needed (task dimension), and knowledge about strategies which are likely to be effective in achieving goals (strategy dimension) (Flavell, 1979). To be noted, metacognitive knowledge categories refer only to knowledge of cognitive strategies, not the actual use of those strategies (Pintrich, 2002).

Figure 2.1. Three components of metacognitive knowledge (Flavell, 1979)

The following examples describes the existence of metacognitive knowledge in the context of Quran memorization:

Table 2.2. Example of metacognitive knowledge in the Quran memorization process (based on Pintrich, 2002).

Dimensions	Examples
Strategy	" I know that the effective strategy to retain my memorization is using repetition".
Task	"Some long verses are quite easy to remember. So the repetition can be done in ten times for one verse."
Self/Person	"I get confused with these similar verses, so I need to do repetition more than ten times for each verse"

Metacognitive strategy or strategic knowledge includes the knowledge of various strategy to complete a task. Individual can have various knowledge about metacognitive strategies such as planning, monitoring, and regulating the cognition which are useful to respond a challenge in a task. The knowledge about task allows individual to be aware of different challenges in task and know why and how to use different cognitive strategies as the suitable problem-solving technique. Lastly, knowledge about the self includes someone's self-awareness about his strengths and weaknesses and the breadth and depth of his own knowledge. The self-knowledge ensures someone to apply adaptive strategies for the task and understand the possibility of a change in strategy use (Pintrich, 2002).

3. Methodology

This study employed a case study approach on two individuals using think-after protocol through journal entry. The purpose is to gain as much as possible information about participants' impression, feeling, thoughts, and action regarding the strategy they used and how they respond challenges that may have emerged at the moment of Quran memorization. Researcher also used in-depth qualitative interview with semi-structured protocol to probe the additional information from the journal entry.

3.1. Participants

The study was conducted at one University in Malaysia. Participants of the study were one male (Y) and one female (R) undergraduate students. They were selected through purposeful sampling for which the male and female both are 20 years old. The participants of this study were the adolescent *huffadhs* who have completed memorization of more than ten *ajza* (sections) of the Quran.

3.2. Data Collection Protocols

To explore the use of metacognitive knowledge during the memorization process, researcher asked the participants to write down their feelings, thoughts, and action, including their impression about the memorization task on the think-after journal. After one week, researcher collected the journal and followed up the results through two sessions face-to-face interview. The interview was conducted with two participants at different time. The information of the interview emphasized on the experience of participants in the Quran memorization. The researcher has allowed the participants to choose a language which they feel the most comfortable with. Therefore, the conversation has been conducted by using Bahasa Indonesia.

The researcher attempted to understand the metacognitive knowledge of participants and tried to compare between male and female participants. Data analysis was involved with interpretation of raw data with the use of coding by separating the empirical data into meaningful parts. In this present study, researcher generated codes from the statements of participants in their journal entry. While coding, the researcher produced themes or categories by distinguishing the research data and given a code as the attribute (Boeije, 2009). After analyzing the journal entry, researcher created interview questions from what should be explored more to complete the information. As a further step, the researcher proceeded the recorder materials which have been gained through interview into transcription process. Transcription is the process of converting recorded material into text and it allows researchers to begin the interview data analysis (King and Horrocks, 2010).

4. Findings

Two participants in this study are adolescents who study in their first year of university. They have been involved in memorization of Quran for more than six years for the male, and three years for the female.

They both believed that memorization of Quran is a lifelong process which demands their dedication. The researcher found more similarities rather than differences of metacognitive awareness among the participants. Whereas, the emergence of metacognitive awareness in adolescents was mentioned by Weil, et al. (2013) where he stated that metacognitive ability increases with age. Furthermore, this current study found there are six attributes of metacognitive knowledge during the Quran memorization process which is gained from think-after protocol and interview. The elaboration of these attributes are given as follows:

Table 2. Attribues of adolescent metacognitive knowledge

No	Attributes	Components of the attributes
1	Understanding the nature of task	Understanding the easy task Understanding the difficult task
2	Understanding the influence	Understanding emotion and motivation Understanding challenges Understanding supported environment
3	Applying memorization strategies	Applying repetition Understanding the meaning Chunking the task
4	Monitoring the process	Setting a memorization target Applying memorization routine
5	Utilizing resources	Revising with Friends, Attending *Halaqah* (study group)/ *Hifdh teacher* Using Technology (Audio *Murattal or* YouTube Video) Using Quran with translation
6	Practicing Immediate coping	Avoiding distraction, Taking break, Reflecting, Adjusting the *hidfh* routine Learning from mistakes

4.1. Understanding the nature of task

Task in this part refers to *hifdh Quran* which is the activity of memorization and revision Quranic verses. Memorization is a process when the young *huffadhs* try to memorize some new verses, and the revision is occurring when *huffadhs* are recalling what they have memorized to streghten their memorization. The two participants, who have been involved in the memorization of Quran for a long time, have their own perception regarding the nature of the memorization task. Understanding the nature of task is important for the young *huffadhs* to choose the suitable memorization or revision strategy. The first impression that participants wrote in the daily journal reflects their perception about the nature of the task and its level of difficulty. Based on the information from the think-after journal and the interview, researcher identified two level of task participants perceived during the Quran memorization process: easy and difficult task.

4.1.1. Understanding the easy task

Both participants have similar experiences regarding challenges of the task. In doing the Quran revision, they perceived particular verses are easy to be revised due to their early experience of memorization. As the male *huffadhs* remembered the extra effort they put to memorize those early verses. He said in the interview:

"Because this was the first section that I memorized, so my memorization is quite strong. That time I applied the repetition method in which I recited one verse 10 to 20 times, so the memory is still there and easy to be revised."

The female participant supported the above statement. She wrote on the journal:

The chapter is easy to be revised because it is placed in the beginning of the Qur'an, it is in the early sections.

Apart from that, in doing the revision, participants identified the verses were easy due to the similar pattern of those verses and memorization proses which employed lot of repetitions. Male participant tend to aware of familiarity in some verses due to their similar patterns. He wrote in his journal:

In the second chapter, there are a lot of verses that are easy to memorize and revise due to their similar patterns, such as in verse number 159 and number 174.

إِنَّ ٱلَّذِينَ يَكْتُمُونَ مَآ أَنزَلْنَا مِنَ ٱلْبَيِّنَٰتِ وَٱلْهُدَىٰ مِنۢ بَعْدِ مَا بَيَّنَّٰهُ لِلنَّاسِ فِى ٱلْكِتَٰبِ أُو۟لَٰٓئِكَ يَلْعَنُهُمُ ٱللَّهُ وَيَلْعَنُهُمُ ٱللَّٰعِنُونَ
إِنَّ ٱلَّذِينَ يَكْتُمُونَ مَآ أَنزَلَ ٱللَّهُ مِنَ ٱلْكِتَٰبِ وَيَشْتَرُونَ بِهِۦ ثَمَنًا قَلِيلًا أُو۟لَٰٓئِكَ مَا يَأْكُلُونَ فِى بُطُونِهِمْ إِلَّا ٱلنَّارَ وَلَا يُكَلِّمُهُمُ ٱللَّهُ يَوْمَ ٱلْقِيَٰمَةِ وَلَا يُزَكِّيهِمْ وَلَهُمْ عَذَابٌ أَلِيمٌ

Female participant explained the same experience, she indicated two verses which contain repetition of meaning. She referred to verses 110 and 114 of Surah Ali-Imran below:

كُنتُمْ خَيْرَ أُمَّةٍ أُخْرِجَتْ لِلنَّاسِ تَأْمُرُونَ بِٱلْمَعْرُوفِ وَتَنْهَوْنَ عَنِ ٱلْمُنكَرِ وَتُؤْمِنُونَ بِٱللَّهِ وَلَوْ ءَامَنَ أَهْلُ ٱلْكِتَٰبِ لَكَانَ خَيْرًا لَّهُم مِّنْهُمُ ٱلْمُؤْمِنُونَ وَأَكْثَرُهُمُ ٱلْفَٰسِقُونَ

يُؤْمِنُونَ بِٱللَّهِ وَٱلْيَوْمِ ٱلْءَاخِرِ وَيَأْمُرُونَ بِٱلْمَعْرُوفِ وَيَنْهَوْنَ عَنِ ٱلْمُنكَرِ وَيُسَٰرِعُونَ فِى ٱلْخَيْرَٰتِ وَأُو۟لَٰٓئِكَ مِنَ ٱلصَّٰلِحِينَ

The attitude of both young *huffadhs* towards the task was also influenced by their perception about the verses/chapter. In the think-after journal participants expressed their interests on particular verses. As the male participant wrote:

I love this chapter number 5. Especially verses number 59 that tells about leadership. So revision along with reading the meaning is so fun

Experienced the same interest towards different verses, female participant wrote:

I love this chapter because it is easy to be repeated. It is also easy to be recited and understood

Lastly, male participant indicated that as much as he gets exposed to certain chapter, it will be easier for him to memorize it. He wrote this in the journal:

I found this chapter was frequently recited by Indonesian people so it is so familiar. Now I am staying overnight in a program, and the activity is studying surah As-Sajdah. So I feel the revision is more fun.

4.1.2.   Understanding the Harder Task

Eventhough some long verses are easy to be memorized as participants said in the previous section, but if the verses are too long, the participant may tend to feel less confident. Male participant explained this in the interview:

"If it (a verse) is long, really long just like Al-Baqarah verse 282, which is one verse in a full page, I take a lengthy process to memorize it. I usually complete more than one page a day. But for this particular verse, I only finished one page (for a day)…because I perceived this verse is so long, and it made me feel "oh..it's so difficult"

To cope with the difficult task, he tried to chunk the verses and repeat them several times. He described this during the interview:

"That time I memorized it based on waqf, at every stopping place. And to be honest.. I could not use translation. It should be repeated. That time..yes maybe I read the translation but because it was so long, so I only recited them repeatedly in every waqf, ten times..ten times..It took really long time. I only memorized one page for a day that time. But that's it..only that one"

Doing a regular revision is a commitment of both participants. For them, revising the memorized verses is harder than memorizing itself. They admitted that revision is more challenging when there was a long break happened before focusing on the verses again.

The female participant admitted this in her journal:

I feel it is more difficult because it has been so long I did not revise it. So firstly I read one page two or three times, then I started memorizing ayah by ayah and read the meaning.

The male participant documented the similar experience in his journal:

These two chapters is hard to memorize, because I was rushing in memorizing it and I did not repeat my recitation many times. So when I revised it, I forgot many words, It was like I got blank.

4.2. Understanding the Influence

Participants were aware of the internal and external influences that affected their routine of memorization. For example, participants' emotional state and motivation may affect their performance in memorization. Besides, they could also identify the things that become challenges in doing Quran memorization consistently.

4.2.1. Understand the emotion and motivation

Additionally, the participants have written about their feelings in the think-after journal while reading particular verses. Both participants have showed that how they could recognize their feeling toward some verses, whether they perceived them as easy or more challenging. They have written in the journals:

I am pleased because this verse is long, easy to recite and understand
(Female participant)

I feel sad and demotivated because I forgot many verses (Male participant)

Participants' emotional state further influence their attitude towards the memorization task. For example, if they did not feel motivated, they tend to not focus in doing the revision.

4.2.2. Understanding the challenges

In this study, it is found that participants are able to identify the challenges that may distract them from achieving their goals. Based on the participants notes from think-after journal, participants have recognized that the challenges are commonly originated from themselves, such as physical fatigue, laziness, sleepiness while reciting Quran, memory loss, and inaccurate self-confidence. Female participant mentioned sleepiness few times in her journal as one of the challenges. For example, she wrote:

As usual, memorizing in the morning is always making me sleepy

As one of common internal challenges, forgetfulness was experienced by the male participant. He said:

I could not easily recall some verses, so I should check in the Quran several times

Likewise, participants have also identified the external factors as challenges even though those are not necessarily negative, such as the use of smartphone and organizational activities. As the male participant said during the interview:

"It is difficult if I use smartphone. I mean, it is inevitable. Last time I spent my time for reading Quran, but now I am using social media, and even for reading Quran, I use smartphone"

4.2.3. Awareness of the supportive environment

The influence of environment is also noticed by the participants. Both participants were aware that they are very much influenced by their surroundings. Participants have identified the supportive and sound environment in where they were able to memorize well without distraction. Male participant said the early morning is the best time for Quran memorization. He said during the interview:

"My pesantren (Islamic boarding school) had a schedule for tahajud (midnight praying), so I used to utilize that opportunity to memorize the Qur'an. At that moment my mind was still fresh and empty (from distraction). I could memorize easier and faster"

4.3. Applying Memorization Strategy

The researcher has identified two categories that indicate the knowledge of strategy performed by the two participants. It is noted that the two participants have employed particular strategy to complete their memorization task. Generally, both male and female participants use multiple strategies interchangeably based on the nature of task they are facing. As an instance, sometimes for the revision of memorized verses, both participants tend to practice repetition, but when it comes to memorization of new verses, they also practice repetition while trying to learn the meaning.

4.3.1. Applying Repetition

Repetition is the common strategy to memorize new verses, the more individuals repeat a verse, the more they will remember the verse. Repetition in memorization is when the *huffadh* recites the Quranic verses many times while looking at the Mushaf, for example, ten times. Then he may recite the Quran in another ten times without looking at the Mushaf. The *huffadh* move to another verse when he is confident that he has memorized the current verses well. Whereas if it is repetition in revision, the *huffadhs* will recite the memorized verses several times in any time they want. The male participant further revealed the situation where he needs to apply repetition technique. He said during the interview:

> *"My technique is to divide the verses. If the verses are too long, just like a verse in Al-Baqarah which is located in a full page. In that case I memorize by following the waqaf. Honestly, I couldn't use the translation. I need to use repetition that time. Maybe I just read the translation, because if the verses are too long, it is a risk to easily forget them. So I just repeat every waqaf ten times..ten times.. It took long time, and I could memorize one page only, though in usually, in normal case I could memorize more verses."*

The practice of multiple strategies is considered as favorable because the participants have been aware of its effectiveness. As an evidence, female participant wrote in the journal:

> *I read one page for two times, then I repeated once for each verse. After that I accumulated the verses from the beginning until the end of the page. I was reading together with understanding the meaning of those verses. It made me more fluent in revising session"*

4.3.2. Understanding the meaning

In the interview the male participant explained how understanding the meaning of Quranic verses helps him in memorization. He usually read the verses with the translation to comprehend what those verses talk about. He said:

> *"Why does using translation (for Quran memorization) help me? because if I memorize and understand the meaning, understand the storyline, I notice that when I revise a verse, I can recall the next verses. However, there is a risk for this technique, that if we forget the meaning, we'll forget the story, it means we forget the verses as well. But still, now my focus is finishing revision using repetition technique."*

Female participant support the effectiveness of this strategy because once she forgets the verses during recitation, she can refer to the translation. She shared her technique during interview:

> *"So I did repetition for the early Juz because I have strong memory in those parts, I just recite repeatedly...But when I need to memorize the new verses, I should read with the meaning, so it can retain longer in my memory"*

4.3.3. Chunking the task

Participants were aware of their capacity in learning new verses or revising the memorized verses. In doing the revision, participants would identify some places that seems hard and they would start to revise those places at first. For example, male participant chunked some sections and revised the verses from the most challenging section. He said when the researcher asked about his revision system:

> *"Everything is started from Al-Baqarah. But I devided them in this way: one to five (section), which section I was not so good at. So I divided every five sections. 1-5, 5-6-10, 11-15. Then I chose which part I was not so confident, so I started from that part"*

In memorizing new verses, participants also tried to chunk the verses into some parts. For example, male participant chunked one long verse into some parts based on the *waqf*. He did that because that particular verse was too long. As the male participant said:

> *"That time I memorized it based on waqf, at every stopping place. And to be honest.. I could not use translation. It should be repeated. That time..yes maybe I read the translation but because it was so long, so I only recited them repeatedly in every waqf, ten times..ten times..It really took long time. I only memorized one page for a day that time. But that's it..only that one"*

4.4. Monitoring the process

Memorization of Quran requires self-discipline thoughout the process. Participants admitted that they need to build their own system to support them engage in Quran memorization. For this, both of participants have set their own target and routine based on their different condition.

4.4.1. Setting A Memorization Target

Both male and female participant have their own target in memorization or revision. The target is a standard to be followed as their routine. The female participant determined different targets for easier and harder memorization task. She said in the interview:

> *"My daily target for the fluent memorization is five to ten pages. But for I said it is like the first time memorization, it is only two pages".*

On the other hand, male participant set one section of Quran for his personal minimum target. He said:

> *"If I revised by myself, my target is one section for one day. I do that after maghrib until isha. Though sometimes it does not reach one section. But it is my daily target"*

4.4.2. Applying Memorization Routine.

Participants set different schedules for their memorization routine. Setting the spesific time to do revision, for example, as part of self-disicpline. Basically they tried to follow their set routine, but there are some cases when they have to adjust the plan. In daily basis, the male participant allocated his time for revision in the morning and evening. He said:

> *"For me, I joined a tahfidh program in campus apart from my personal revision. So I actually have my own schedule, after magrib or in other time. But for the tahfidh program, it is conducted every morning around 7 or 8 am"*

As university students, participants need to manage their time as they usually have to attend classes even until the evening time. Female participant told that she used the free time after class to cover the morning routine. She told how she managed to do the revision to prepare the *hifdh* program.

> *"Hmm..for example, that day is more to prepare the last sections, because it is hard as if the first time I memorized it. So it only gets two (sections). But for the first sections, for example I had evening class, like tonight I have evening class. At 5 pm the class is done. So after that class I will do the revision until the magrib prayer"*

4.5. Utilizing resources

To monitor the memorization, the young *huffadhs* are utilizing various recourses to help them in memorizing new verses or revising their recitation. Participants also agreed that they need other people's help to evaluate the progress of their memorization.

4.5.1. Attending *Halaqah* (*hifdh* program)

Asking Quran teacher (*Ustadh*) and friends is mostly done by the participants to evaluate their fluency and correctness in reciting the verses. Quran teachers are very helpful in giving correction to their recitation. As male participant recalled his experience:

> *"Maybe I used to think that the important thing is just memorizing. I did not really pay attention to the waqf (the rules and signs of stopping). So, when I revised my recitation to a Quran teacher in this campus, Subhanallah (God is perfect) he monitored every error in my waqf. He said, my recitation is wrong if I make errors in stopping"*

4.5.2. Revising with friends

The both participants have found that some friends who have the similar activity of Quran memorization are good at giving support to maintain motivation and doing peer-evaluation. As the female participant admitted in the interview:

> *"My surroundings very much influence me. So, I should really find some friends who are also actively involving in Quran memorization. Because if my close friends are not doing the same thing, I am worried that I will not improve in my memorization"*

The male participant was also aware of the benefit of finding support from other people in Quran memorization process.

"I always try to find any resources that can help me in monitoring my recitation. I have joined this and that, I have searched for partner to listen to my recitation. Because I know if we are alone, nobody could monitor or control us. But if we engage in any group, we will be aware of our responsibility and be more focus.".

4.5.3. Using Technology (Audio *Murattal or* YouTube Video)

Apart from the significant people to monitor the quality of recitation, the male participant is using technology to help himself improving his Quran recital. He said during the interview:

"Now I start listening to the murattal (Quran recitation), just like from YouTube I will find Misyary Al-Rasyid or anyone, but I just listening to only one reciter. So, I mean I want to follow the way they recite. Because I think it is not enough if my recitation does not sound beautiful"

However, for the female participant, listening to Quran recitation (*murattal)* from YouTube was done to replace the regular revision during her menstrual period, when reciting the Quran is considered as forbidden.

"Maybe just listening to the murattal, when I am in period and I do not feel to recite for revision, so I just listen to the murattal and follow the recitation"

4.5.4. Using Quran translation

The male participant told about his early experience of memorizing the Qur'an. It was very difficult for him to memorize faster until his Quran teacher at high school suggested him to use Quran with translation so he could understand the verses that he recited. Since he have learned Arabic, his teacher hoped that when he is reciting the verses and remembering the meaning, he can predict what will be the next verses.

"So I tried to used the Quran translation, that big one, that one was Quran with word to word translation. The memorization process was a bit longer, but because I was also studying Arabic, so I knew the meaning. The memorization was like reading a story.. and alhamdulillah when I was in class two junior high school, my progress was good as my other friends"

4.6. Practicing Immediate Coping

The knowledge about strategy also includes how the participants cope with the challenges they faced during the memorization of Quran. Since memorizing activity requires conducive environment, both participants need to cope whenever the distraction comes and interrupt their plan or ongoing activity.

4.6.1. Avoiding distraction

Both male and female participants were practicing immediate coping to stay focus when they were in public place if there is a need to recite the Quran for *Hifdh*. If they find any distraction, the will move to quiter place. The female participant also did the similar action, she documented in the journal:

I memorized in the masjid when there were so many people. It distracted my focus. So I moved to the corner to avoid the crowd.

4.6.2. Taking break

Participants were also aware of the challenges, while they reacted with different responses in different situations. As an evidence, the participants sometimes choose to take a break in one moment for rest or sleeping, depends on their physical needs. As the female documented in her journal different responses when she was sleepy:

Because it was in the morning and the weather was so cold, I easily felt sleepy. But then I used my phone, after that I continued my revision.

Unlike abovementioned reaction whereby she was trying to push herself to keep doing the revision, at other time she chose to sleep:

As usual, memorizing the Quran in the morning always makes me feel sleepy, now I decided to sleep.

4.6.3. Reflecting

In another circumstance, the participants were likely to push themselves to be more persistent if they realized that they were not supposed to leave the responsibility. Female participant said in the interview:

"Sometimes if I feel lazy, I just follow my laziness, but when I realize that I should push myself, then I talk to myself 'no, I cannot be like this!" at least I have recited some verses"

Being consistent was not easy for the participants, especially when there are other activities and entertainments that took their attention. So when it comes to memorizing, they tried to motivate themselves to overcome laziness. Female participant even tried to do self-talk when she was facing a difficult memorization task. She wrote in the journal:

In the beginning, I felt quite lazy when I saw the verses. But then I realize I should preserve my hifdh. Then I tried to believe that the verses are easy.

4.6.4. Adjusting the hifdh routine

To balance the study and *hifdh* schedule, the male participant tried to manage the portion of his memorization task. In the situation when he could not finish the *hifdh* at one time, he will continue the revision at another time. He admitted this in his journal:

I could not do revision simultaneously due to an agenda that I could not leave, so I divide the revision for two times.

4.6.5. Learning from mistake

Male articipants realized that rushing in Quran memorization is not good to maintain the *hifdh,* because he might miss the details, for example, in following the proper *waqf.* He wrote in the journal:

I already did the revision incoherently at the waqf so it is difficult to fix it. Then I recited it repeatedly until I feel that I made the proper recitation as before.

5. Discussion

It is interesting to figure out the significance of metacognitive knowledge in memorization process since there are number of studies have noted the metacognitive use within different cognitive tasks such as reading, information search, and writing (Raoofi, et al, 2013; Hongxia & Zhibo, 2010; Huff, &Nietfeld, 2009; Dabarera, Renandya, & Zhang, 2014; Bowler, 2010). In this current study, researcher highlighted the use of metacognitive knowledge by the participants contributes to students' performance in Quran memorization in two ways: 1) with the metacognition awareness the participants could identify and adjust the suitable memorization strategy in accordance with their personal condition within various circumstances. 2) The participants may also maintain their consistency in memorization by recognizing the internal and external influences to give their proper response.

The knowledge of participants about the effectiveness of particular method leads them to better understanding of the suitable strategy to be employed. Through their experiences, participants have managed to recognize which are the memorization strategies that work effectively in a challenging task and which method can be employed in a simple task. Studies revealed that with metacognitive knowledge, learners can adjust their approaches in different tasks by utilizing different strategies, they may also plan a strategy based on the understanding of their own abilities (Pintrich, 2002).

Maintaining consistency is very challenging in the memorization of Quran. The *Huffadhs* need to be consistent to retain the recitation by continually doing revision with or without guidance from *hifdh* teacher. This fact is realized by the two participants whereby they consciously seek for supportive environment, motivation, and helpful resources to create the support system throughout the process. This is in line with what other studies suggested in terms of the supportive condition for the young *Huffadhs,* Rosidi (2016) included the importance of conducive environment and the personal approach such as listening to the Quran reciter, read the Quran in prayers, and engage in in-pair repetition.

How can we apply these attributes of metacognitive knowledge in memorization process? There are some suggestions as follows:

Understanding the nature of task: Participants in this study were able to identify the less challenging or more challenging task since they already involved in Quran memorization for years. They were memorizing Quranic verses in different lengths, and interestingly, prefer quite longer verses than shorter, but not so long. This preference comes through experience. How about the beginner *huffadh?* they may start with the smaller task to give them sense of competence. It will also be beneficial to inform suggested strategies for different types of task.

Understanding the influence: Being a *huffadh* is not two or three years task, rather, it is a life-long responsibility since the *huffadh* have to preserve the Quran in their memory for the whole life. There must be challenges, from both internal and external self.

For being consistent in this journey, acknowledging strenghts and weaknesses are the first step for self-regulation. Knowing the nature of self helps the *huffadh* to find suitable resources, avoid the distraction, even search for emotional support during the process. Planning a memorization routine is one of the example in this study.

One participant preferred the morning time, and another chose to memorize in the evening time. This different preference was due to their understanding of their own mood and physical condition.

Applying memorization strategies: This knowledge of strategy also comes with experience. So evaluating what memorization strategy that works and does not work is important to find the most suitable one. Besides, strategy follows the person, means the *huffadh's* own ability. For example, one *huffadh* may practice repetition ten times and feel confident that he has memorized the verses. However, another *huffadh* may do twenty times until he is sure with his memorization. Stretegies also depend on the task challenges. As one participant experienced in this study, it was not efficient if he start learning the meaning of a very long verse before memorizing it, like what he usually does. So he practiced repetition since it is a faster way to memorize that particular long verse.

Monitoring the process: Setting a target and stick to the routine are important to maintain consistency. Participants' awareness of their performance and quality of their memorization are translated into targets that they want to achieve. They were also aware that following a routine kept them engaged in Quran memorization. So to be in control of Quran memorization process, start with making long and shorterm goals. Then execute the goals through daily routine. This routine includes when will the *huffadh* revise or memorize the Qur'an, and how much the memorization task they will focus on a day.

Utilizing the resources: Resources are very much related to the *huffadhs'* needs. Based on the experience of the young *huffadhs* in this study, there should be other people that may help the *huffadhs* by listening or correcting their recitation. So it is suggested for those who want to involve in Quran memorization to join *madrasa* (Islamic school) or searching for *hifdh* teacher. Choosing a suitable Quran mushaf and listening to a good Quran recitation are the additional things that can ease the *huffadhs* in memorization or revision.

Practicing Immediate Coping: Participants' immediate coping indicates their commitment and persistence. This also shows that Quran memorization is not always a perfect journey. At the situation where revising the Quran is too hard, a *huffadh* need to reflect to the intention and his noble vision. As what participants experience, this reflection includes the awareness of how to balance things; make a priority, decide when to continue and when to stop, and negotiate when two activities seem equally important. This also needs honest evaluation to ownself whether a *huffadh* already did his best in a task or not. Otherwise, a *huffadh* may tend to search for excuses rather than immediately cope with the situation.

6. Conclusion and Implication

The qualities of two young *huffadhs* in terms of metacognitive knowledge within the memorization of Quran have been demonstrated in this study. Both participants are aware of their performances in memorizing and revising their recitation. This metacognitive awareness helps the participants to adjust their memorization strategy based on the nature of task, instead of memorizing without planning. Metacognition is also significant to maintain the consistency by understanding the internal and external challenges and the way to overcome them. In addition, this finding may suggest the importance of improving metacognitive awareness for the success in memorization of Qur'an. This awareness may help the young *huffadh* to find suitable resources that fit to their needs. For the *hifdh* teacher or senior *huffadh*, not only teaching young *huffadh*s about tajweed (set of rules for the correct recitation of the Qur'an), they also need to share their experiences regarding effective strategies of memorization/revision. This may support young *huffadhs* emotionally and help them to follow the strategies that match with their unique characteristics.

References

Abu Laylah, Muhammed. (2005). The Quran and The Gospels. Egypt: Al-Falah Foundation

Ad-Dausaree, Maḥmūd ibn Aḥmad ibn Ṣāliḥ. (2006). The Magnificence of the Qur'an. Riyadh: Maktaba Dar-Us-Salam.

Al-Mosallam, E. A. (2013, December). Towards improving Quran memorization using mind maps. In *Advances in Information Technology for the Holy Quran and Its Sciences (32519), 2013 Taibah University International Conference on* (pp. 128-132). IEEE.

Bacon, L., & MacKinnon, L. (2014). A flexible framework for metacognitive modelling and development. *Proceedings of ICEL*, 7-14.

Boeije, H. (2009). *Analysis in qualitative research.* London: Sage publications.

Bowler, L. (2010). A Taxonomy of Adolescent Metacognitive Knowledge During the Information search process. *Library & Information Science Research*, *32*(1), 27-42

Chairani, L. & Subandi, M. A. (2010). Psikologi santri penghafal al-Qur'an: Peranan regulasi diri. Yogyakarta: Pustaka Pelajar

Chauhan, A., & Singh, N. (2014). Metacognition: A conceptual framework. *International Journal of Education and Psychological Research*, *3*, 21-22.

Doganay, A., & Demir, O. (2011). Comparison of the Level of Using Metacognitive Strategies during Study between High Achieving and Low Achieving Prospective Teachers. *Educational Sciences: Theory and Practice*, *11*(4), 2036-2043.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American psychologist*, *34*(10), 906.

Gade, A. M. (2004). *Perfection Makes Practice: Learning, Emotion, and the Recited Qur'an n in Indonesia*. USA: University of Hawaii Press

Gade, F. (2014). Implementasi metode takrar dalam pembelajaran menghafal Al-Qur'an. *Jurnal Ilmiah Didaktika*, *14*(2).

Hongxia, Y., & Zhibo, H. (2010). A review of the empirical research on metacognition in ESL/EFL writing. In *International Forum of Teaching and Studies* (Vol. 6, No. 2, p. 34). American Scholars Pres Inc.

Karlen, Y., Merki, K. M., &Ramseier, E. (2014). The effect of individual differences in the development of metacognitive strategy knowledge. *Instructional Science*, *42*(5), 777-794.

King, N., &Horrocks, C. (2010). *Interviews in qualitative research*. London: Sage.

Ku, K. Y., & Ho, I. T. (2010). Metacognitive strategies that enhance critical thinking. *Metacognition and learning*, *5*(3), 251-267.

Kuhn, D. (2000). Metacognitive development. *Current directions in psychological science*, *9*(5), 178-181.

Magno, C. (2010). The role of metacognitive skills in developing critical thinking. *Metacognition and learning*, *5*(2), 137-156.

Merki, K. M., Ramseier, E., &Karlen, Y. (2013). Reliability and validity analyses of a newly developed test to assess learning strategy knowledge. *Journal of cognitive education and psychology*, *12*(3), 391.

Muhammad, A., ul Qayyum, Z., Tanveer, S., & Syed, A. Z. (2012). E-hafiz: Intelligent system to help Muslims in recitation and memorization of Quran. *Life Science Journal*, *9*(1), 534-541.

Nastiti, N. A. (2015). *Pengaruh Tahfidz Al-Qur'an Terhadap Daya Ingat Anak Di Tk Islam Mardisiwi Pajang Laweyan Surakarta Tahun Ajaran 2014/2015* (Doctoral dissertation, Universitas Muhammadiyah Surakarta).

Nawaz, N., & Jahangir, S. F. (2015). Effects of memorizing Quran by heart (hifz) on later academic achievement. *Journal of Islamic Studies and Culture*, *3*(1), 58-64.

Perfect, T. J., & Schwartz, B. L. (Eds.). (2002). *Applied metacognition*. USA: Cambridge University Press.

Pintrich, P. R. (2002). The role of metacognitive knowledge in learning, teaching, and assessing. *Theory into practice*, *41*(4), 219-225.

Raoofi, S., Chan, S. H., Mukundan, J., & Rashid, S. M. (2013). Metacognition and second/foreign language learning. *English Language Teaching*, *7*(1), 36.

Rosidi, A. (2016). Motivasi Santri dalam Menghafal Al-Qur'an (Studi Multi Kasus di Pondok Pesantren Ilmu Al-Qur'an (PPIQ) PP. Nurul Jadid Paiton Probolinggo, dan Pondok Pesantren Tahfizhul Al-Qur'an Raudhatusshalihin Wetan Pasar Besar Malang). *Al Qodiri: Jurnal Pendidikan, Sosial dan Keagamaan*, *10*(1), 53-82.

Saptadi, H. (2012). Faktor-faktor Pendukung Kemampuan Menghafal Al-Quran dan Implikasinya dalam Bimbingan dan Konseling. *Jurnal Bimbingan Konseling*, *1*(2).

Schneider, W. (2008). The development of metacognitive knowledge in children and adolescents: Major trends and implications for education. *Mind, Brain, and Education*, *2*(3), 114-121.

Schraw, G. (1998). Promoting general metacognitive awareness. *Instructional science*, *26*(1), 113-125.

Shaughnessy, M. F., Veenman, M., & Kennedy, C. K. (2008). *Meta-cognition: A recent review of research, theory, and perspectives*. New York: Nova Publishers.

Vrugt, A., & Oort, F. J. (2008). Metacognition, Achievement Goals, Study Strategies and Academic Achievement: Pathways to Achievement. *Metacognition and Learning*, *3*(2), 123-146.

Weil, L. G., Fleming, S. M., Dumontheil, I., Kilford, E. J., Weil, R. S., Rees, G., ... & Blakemore, S. J. (2013). The development of metacognitive ability in adolescence. *Consciousness and Cognition*, *22*(1), 264-271.

Yusuf, M. (2010). Memorization as A Learning style: A Balance Approach to Academic Excellence. *OIDA International Journal of Sustainable Development, Vol. 1, No. 6, pp. 49-58, 2010.*