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LEARNING STRATEGIES: A PERSPECTIVE ON RESOURCE MANAGEMENT, COGNITIVE COMPONENTS AND METACOGNITIVE SELF-REGULATION IN ISLAMIC STUDIES

Khadijah Amira Abdul Rashid[i], Mohd Asyadi Redzuan[ii], Mohd Zainodin Mustaffa[iii] & Noor Hanim Rahmat[iv]

[i] (*Corresponding author*). Lecturer, Akademi Pengajian Islam Kontemporari, Universiti Teknologi MARA Cawangan Johor Kampus Segamat. amirarashid@uitm.edu.my
[ii] Lecturer, Akademi Pengajian Islam Kontemporari, Universiti Teknologi MARA Cawangan Johor Kampus Segamat. mohda131@uitm.edu.my
[iii] Lecturer, Akademi Pengajian Islam Kontemporari, Universiti Teknologi MARA Cawangan Johor Kampus Segamat. mohdz334@uitm.edu.my
[iv] Associate Professor, Akademi Pengajian Bahasa, Universiti Teknologi MARA Cawangan Johor, Kampus Pasir Gudang. noorh763@uitm.edu.my

Abstract

Higher education is a learning platform where students able to self-regulate their own learning strategies and apply them wisely. There are various learning strategies that help learners to understand what they learn at the university. However, students are still ambiguous in identifying the best learning strategies as they do not know which strategies are suitable for them. The purpose of this research is to study how the learners perceive in using resource management, cognitive components and metacognitive self-regulation in their learning especially in the Islamic studies. Besides, this study is conducted to discover relationship between resource management, cognitive components and metacognitive self-regulation in learning Islamic studies. This research uses quantitative method in the form of survey using the 5-likert scale through Google Form application. The result of the study shows that resource management, cognitive components and metacognitive self-regulation have the high mean value. This indicates that the learners apply the learning strategies in Islamic studies effectively. Besides, there are relationship between resource management, cognitive components and metacognitive self-regulation in learning Islamic studies. The implication of this study is learners can get a good grade by applying various learning strategies based on their ability and potential. Further research can be carried out to the other groups of learners from the other university to see the different result relating to the three learning strategies in Islamic studies. Besides, it is suggested that there are more researches on the other learning strategies that can be applied in the Islamic studies other than these three learning strategies.

Keywords: *Resource, Management, Cognitive, Self-Regulation, Islamic Studies.*

INTRODUCTION

Background of Study

An important topic in the realm of education for a long time has been learning strategies. Higher education is concerned about students' lack of preparation to meet the expectations of university. They exhibit significant gaps in terms of their learning strategies and control over the variables involved in learning (Rosário et al., 2007, 2015). According to Tay (2013), learning strategies are all the work students must undertake to

process, comprehend and apply the knowledge provided during learning-teaching processes or during individual preparation. Most of the people stated that learning strategies as conscious and deliberate mental processes for creating decisions. Through this approach, the student makes use of talents and abilities to learn and adopt information fast, readily, and effectively while also receiving an apprenticeship to learn specific competencies.

Ministry of Higher Education (2022) stated the vision which is High Quality Tertiary Education, Excellent Individual, Prosperous Nation. It shows that higher education is very important to produce people who can contribute good thing to the country. As people know, Islamic studies is one of the fields in the formal education system in Malaysia. In general, Islamic studies is not a foreign field for Muslim in Malaysia. It has been taught to students as early as elementary school. It continues up to the higher education level, which is at the university. However, to what extent the students use the best learning strategies in the Islamic studies? This is because some of the students still not perform in the subject of Islamic studies. They cannot get the best result in their cummulative grade pointer average (CGPA) due to the Islamic subjects.

This situation requires students use an extensive variety of strategies when learning. There are probably many strategies as the number of students. Due to instructional variables such as individual differences, different domains, teaching techniques, time constraints, learning technology, different types of feedback and measurement methods, each student can choose and use different strategies.

STATEMENT OF PROBLEM

Learning strategies play a significant role in the success of academic achievement in higher education. It is well acknowledged that educational practices should evaluate and take into account each student's unique learning strategies. However, some of the students still not perform in their studies. This is because they are still ambiguous in identifying the best learning strategies as they do not know which strategies are suitable for them. In fact, designing and implementing fully adaptable modes of instruction in public education is a difficult task. This is because learning processes greatly differ among students including learning Islamic studies.

The study by Noor et al. (2022) stated that even self-learning strategies were applied by the students to achieve the Outcome-Based Education (OBE) aims of Islamic studies, they have minimal contribution towards the achievement of good grades among students. This is because they could not identify and apply the best self-learning strategies among themselves.

Besides, according to the study by Adnan et al. (2014) stated that Islamic studies background students prefer using more strategies to score extrinsic goal orientation. It is different with the non-Islamic studies students practice more metacognitive self-regulation strategies and organization strategies. It showed that the students from Islamic studies background still lack in understanding and applying the best learning strategies.

Other research from Yusri et al. (2011) investigated the Universiti Teknologi MARA (UiTM) students that use cognitive and metacognitive strategies to learn oral Arabic. The findings showed that every UiTM student applied cognitive and metacognitive strategies to a minimal extent. Besides, in all five areas of cognitive and metacognitive strategies for learning Arabic as a foreign language, students with prior Arabic knowledge performed much better than beginners.

According to the past researches above, there are gaps that address this phenomenon where the students still ambiguous in identifying the best learning strategies. Therefore, this study is done to explore how the learners perceive in using resource management, cognitive components and metacognitive self-regulation in their learning especially in the Islamic studies. Other than that, this study is conducted to discover relationship between resource management, cognitive components and metacognitive self-regulation in learning Islamic studies.

RESEARCH OBJECTIVES AND RESEARCH QUESTIONS

This study is done to explore perception of learners on their use of learning strategies. Specifically, this study is done to answer the following questions;

- How do learners perceive their use resource management in their learning?
- How do learners perceive their use of cognitive components in their learning?
- How do learners perceive their use of Metacognitive self-regulation in their learning?
- Is there a relationship between resource management with cognitive components and metacognitive self-regulation?

LITERATURE REVIEW

Learning Strategies: Resource Management, Metacognitive Self-Regulation, Cognitive Components

According to Jamaluddin et al. (2021), successful learning and academic performance can be achieved through the usage of appropriate and effective learning strategies. Since an effective learning approach is always associated with producing successful learners, it can be as a factor towards learners' learning outcomes. Learners must identify the best learning approach for them to use without being affected by their peers, as different people learn in various ways.

The usage of learning strategies can improve learning since they are tools that students employ to direct their learning and thinking processes. Learning disabilities can negatively affect learners and other aspects of the learning environment, including intellectual ability, physical and emotional health. Learning strategies can be categorized into two general divisions which are resource management strategies and also cognitive and metacognitive strategies.

For academic learning to be successful, effective management of learning resources is crucial. Pintrich et al. (1991) stated that resource management strategies referred as a regulating variety of resources, including time, place, force, study environment, peer and teacher assistance. There are several typical and popular learning resource management strategies. For instance, management of learning time, management of study environment, effort management, peer learning, seeking assistance from qualified person.

Other than that, Rubin (1987) divided learning strategies into two main categories and a number of subcategories. It consists of cognitive and metacognitive strategies which influence the learner's language system development. In the cognitive strategies, there are six direct learning strategies. First is clarification or verification where it includes requesting confirmation or verification of language rules. Secondly, guessing or inductive inferencing. It can be used to infer meaning depending on what students know about the language. Third is deductive reasoning where learners use language rules or knowledge to generate hypotheses about language forms. Fourthly is practice where it can be utilized in repetition, rule application, or emphasizing on the correct application of language rules. Fifth is memorization which refers to use techniques to store and retrieve new information. Finally is monitoring where it includes finding errors and fixing them. Meanwhile, metacognitive strategies consist of planning, prioritizing, setting goals, and self-management.

It can be concluded that resource management, cognitive and metacognitive strategies are the important elements in learning strategies. Learners can achieve success by applying all these three strategies wisely.

Strategies for Learning Islamic Studies

Salleh (2013) stated that the proper Islamic education teaching and learning methodology needs to be emphasized. The mind *('aql)* and the heart *(qalb)* are two crucial teaching-learning tools that Allah SWT has endowed humans with. `Mind-to mind' method means a teaching learning strategy that employs mental *('aql)* as its tool. As a result, the emphasis

is on logic and scientific reasoning. Besides, `heart-to heart' method refers to a teaching-learning strategy that employs the heart *(qalb)* as a tool. While there is a greater emphasis on the world of intuitions and intangibles, there is also a capacity for scientific knowledge accumulation and dissemination supported by al-Quran and al-Sunnah. These days, it appears that the Islamic educational system places a strong focus on using the mind. Meanwhile, the usage of the heart is ignored. However, among these two methods, `heart-to-heart' method is more effective as it is the platform of one's faith, not the mind. Furthermore, the 'mind-to-mind' method may be capable of producing intelligent individuals, but not to those who practice their knowledge. Its means that 'heart-to-heart' method is emphasized, with a balance of the 'mind-to-mind' way.

According to Ibrahim (2016), a list of self-regulation learning strategy used by the students in Islamic education is provided by Islamic Faith Education of Self-Regulation Learning Strategy. Self-regulated students are individuals that prioritize the major principles of Islamic education in their learning according to Islamic Education. According to Islamic Education, self-regulated students are those that prioritize the major principles of Islamic education in their learning. For instance, self-reflection, courtesy, piety, *itqan, takaffur*, obedience, devotion to worship, prioritizing the right intentions, perform *tadarus, uzlah, takhalli* and *tajalli, tadabbur, dhikr* and observe the greatness of God and be thankful as well as modeling goodness and listening to the advice of friends, teachers and parents. As a result, it may be inferred that students who exhibit systematic self-regulation will undoubtedly have significant and respectable views and morals. It is important for students to prepare themselves with knowledge and abilities related to explicit self-regulation learning strategies. This enables learners to adapt their use of learning strategies according to their requirements and the learning environment they are currently in.

As a conclusion, one may say that the "mind-to-mind" approach is balanced with an emphasis on the "heart-to-heart" approach and students that demonstrate systematic self-regulation will surely have respectable morals and values.

Past Studies on Learning Strategies: Resource Management, Metacognitive Self-Regulation, Cognitive Components

Many studies have been done to investigate the learning strategies especially in terms of resource management, metacognitive self-regulation and cognitive components. The study by Ahmed and Khanam (2014) is done to investigate the relationship between learning resources management strategies and academic achievement. Other than that, this study was also carried out to find out the differences between high and low achievers, gender differences, and differences between science and humanities students. 100 students from classes IX and X were purposefully chosen from both classes to participate in the study. The 'Motivated Strategies for Learning Questionnaire' (Pintrich et al., 1991) was used to gather data. Meanwhile, the previous academic results were used to assess students' academic performance. Findings showed that time and study environment management, effort management, and seeking help from qualified others were substantially connected with academic accomplishment. High achievers and low achievers were distinguished by their use of time and study environment management, effort management, peer learning, and seeking help from qualified others. There were no inequalities between the management of learning resources by gender. Other than that, when it came to time and study environment management as well as peer learning, students in the science group notably varied from the humanities' students.

Next, the study by Puteh et al. (2022) examines various learning strategies in terms of cognitive strategy, metacognitive self-regulation, and resource management among postgraduate students in one of the largest public universities in Malaysia. Utilizing survey instruments with a 5-likert scale that were adapted from Wenden and Rubin's (1987) research, this study uses a quantitative methodology. For all three of the components of learning strategies, survey results showed high mean values. This indicated

that postgraduate students are similar to undergraduates where they used learning strategies in their studies. More variables should be tested in future research to determine the relationship between learning strategies and other predictors. Other than that, further researcher could explore using qualitative data and socio-psychological research to maximize evidence-based implementation of the learning technique and increase understanding of the features researched.

Other than that, the findings from Biwer (2023) demonstrated that each student had acquired accurate metacognitive knowledge on both short and long-term learning strategies. Then it was revealed that the students used more interleaving, elaboration, and distributed practise instead of using highlighting and rereading. Thus, a learning strategy training programme that includes a remediation track for underachievers can assist students in studying more effectively and improve opportunities for all university students.

Based on the past researches, it can be said that academic achievement was significantly linked to time and study environment management, effort management, and seeking help from qualified individuals. Besides, postgraduate students also apply three learning strategies in their learning. Students also more interested in interleaving, elaboration, and distributed practise instead of using highlighting and rereading.

Past Studies on Strategies for Learning Islamic Studies

Numerous studies have been done to investigate the strategies for learning Islamic studies. The study by Shukor and Noor (2014) is done to explains the concept of self-regulated learning strategies and the explanation of the concepts as exemplified in three models of self-regulation. The models consist of Pintrich's Four Phase Model, Winne and Hadwin's Information Processing Model and Zimmerman's Social Cognitive Model. Then, the models are then integrated with Islamic Education learning strategies and a set of self-regulated Islamic education learning strategies is created. According to the research, students who are greatly self-regulated in their learning will accomplish more and become proactive in their education. In order to gain greater success in both academics and religious practise, it is crucial for students of Islamic studies to be able to adopt and apply the strategies in their studies.

Besides, the study by Noor et al. (2022) aims to measure the contribution of self-regulated learning on the achievement of Outcome-Based Education (OBE) goals in Islamic Studies. In this study, participants included students who had taken Islamic Studies at a polytechnic. Data were evaluated using SPSS 25.0 after a questionnaire was given out. The results indicated that although self-regulated learning strategies are widely used (Mean=5.10, SD=0.89), students' grades were low (Mean=2.23, SD=1.77). Rehearsing, parsing, organizing, critical thinking, learning with friends, and asking for help from others are the six out of nine strategies that achieve a high mean score (Mean=5.00). Following a regression analysis, it was discovered that self-regulated learning strategies represent 13.9% of the overall Islamic Studies grade. Besides, the percentage of each strategy that goes into a student's Islamic Studies grade is less than 5%. It showed also that repetition technique contributed significantly to the grade because students memorized Quranic verses and repeated daily prayers as practical tests. It ranks third among the activities that students apply most frequently (Mean=5.70, SD=1.07), after organizing (Mean=5.73, SD=0.85) and studying with friends (Mean=5.94, SD=3.90). In conclusion, even though the students used self-learning strategies to accomplish the OBE goals of Islamic Studies, they made only a small impact to the achievement of good grades among students.

Based on the past researches, it can be said that students become more diligent according to the set of self-regulated Islamic education learning strategies created based on three models. Bseides, students also made a small impact to their grades after using self-learning strategies.

CONCEPTUAL FRAMEWORK

The conceptual framework of the study is presented in figure 1 below. This study is done to explore the relationship of resource management with cognitive components as well as metacognitive self-regulation in learning Islamic related courses. According to Rahmat (2019), among some of the factors that lead to successful learning besides the learners' traits are the learning environment and the learners. This study is rooted from learning strategies by Wenden and Rubin (1987). They reported that when learning, learners depended on resource management such as (i) environment management, (ii) effort management and (iii) help-seeking. Next, learners also use varying types of cognitive components such as (i) rehearsal, (ii) organization, (iii) elaboration and (iv) critical thinking. Besides that some type of learning also requires the learners to depend on their metacognitive self-regulation to make sense of what they are learning.

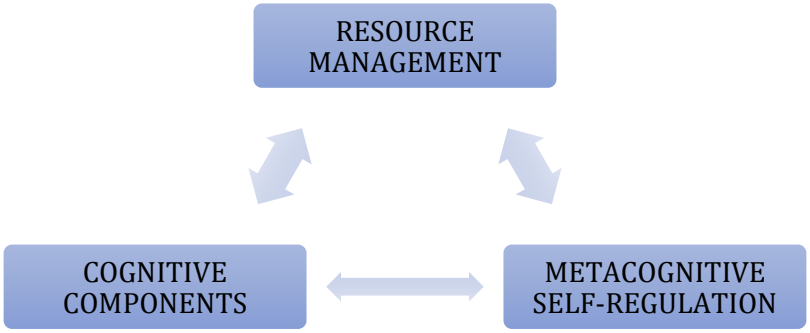


Figure 1-Conceptual Framework of the Study- Is there a relationship between Resource Management and Cognitive Components as well as Metacognitive Self-Regulation

METHODOLOGY

This quantitative study is done to explore motivation factors for learning among undergraduates. A purposive sample of 241 participants responded to the survey. The instrument used is a 5 Likert-scale survey and is rooted from Wenden and Rubin (1987) to reveal the variables in table 1 below. The survey has 4 sections. Section A has items on demographic profile. Section B has 19 items on cognitive components. Section C has 11 items on metacognitive self-regulation while section D has 11 items on resource management.

A	DEMOGRAPHIC PROFILE	Gender			
		Level of study			
		Semester			
		Faculty			
B	COGNITIVE COMPONENTS	(a)	Rehearsal	4	
		(b)	Organization	4	
		(c)	Elaboration	6	
		(d)	Critical Thinking	5	
					19
C	METACOGNITIVE SELF REGULATION				11
D	RESOURCE MANAGEMENT	(a)	Environment Management	5	
		(b)	Effort Management	4	
		(c)	Help-Seeking	2	
					11
NUMBER OF ITEMS					41

Table 1- Distribution of Items in the Survey

Reliability Statistics

Cronbach's Alpha	N of Items
.945	41

Table 2- Reliability of Survey

Table 2 shows the reliability of the survey. The analysis shows a Cronbach alpha of 945, thus, revealing a good reliability of the instrument chosen. Further analysis using SPSS is done to present findings to answer the research questions for this study.

FINDINGS AND DISCUSSIONS

Findings for Demographic Profile

Q1. Gender

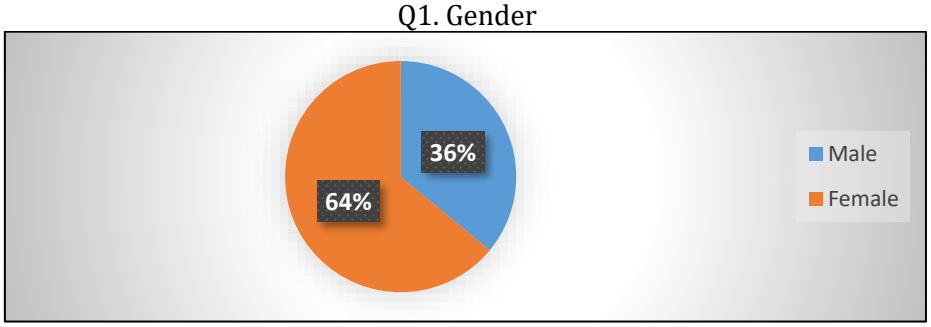


Figure 2- Percentage for Gender

According to the figure 2, the highest respondents are female which is 64% while the lowest respondents are male which is 36%.

Q2. Level of Study

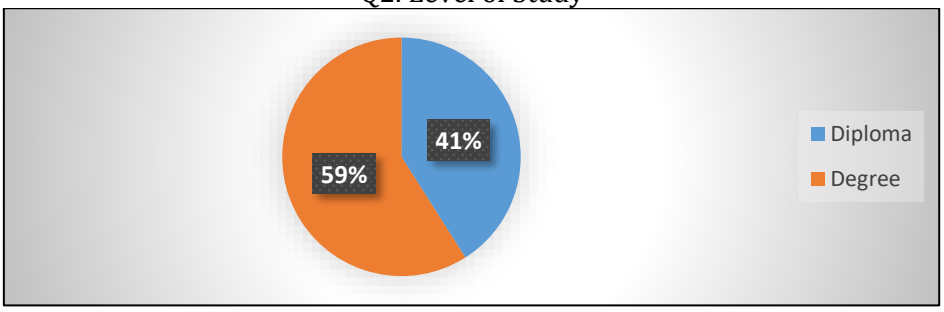


Figure 3- Percentage for Level of Study

In the figure 3, majority of the respondents are from Degree level which is 59% while 41% are from Diploma level. It shows that respondents from Degree level is higher than Diploma level.

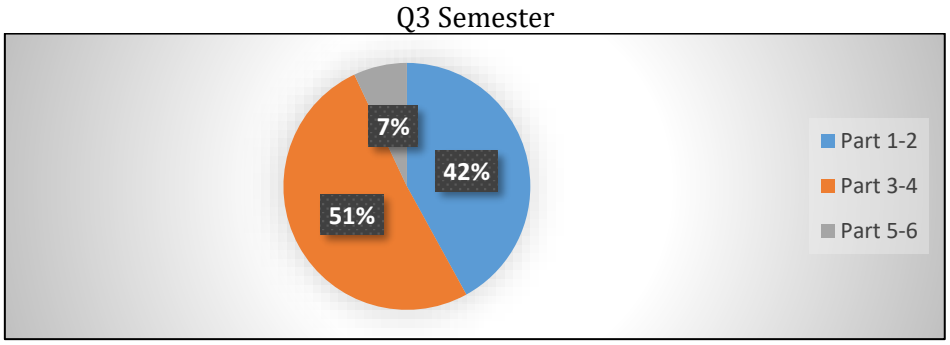


Figure 4- Percentage for Semester

Figure 4 shows that Part 3-4 has the highest percentage of the respondents which is 51%, followed by Part 1-2 which is 42%. Meanwhile, Part 5-6 has the lowest percentage which is 7% only.

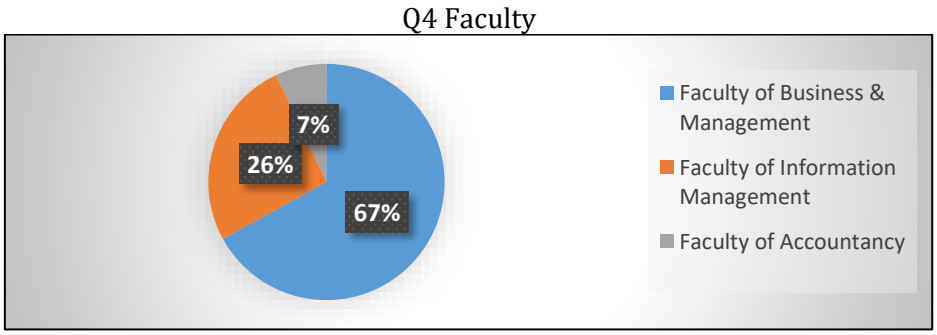


Figure 5- Percentage for Faculty

According to the figure 5, the highest respondents are from the Faculty of Business and Management which is 67%, followed by 26% from the Faculty of Information Management. Meanwhile, the lowest respondents are from the Faculty of Accountancy which is 7%.

Findings for Resource Management

This section presents data to answer research question 1: How do learners perceive their use resource management in their learning?

1. Resource Management Component (11 Items)

a. Environment Management (5 items)

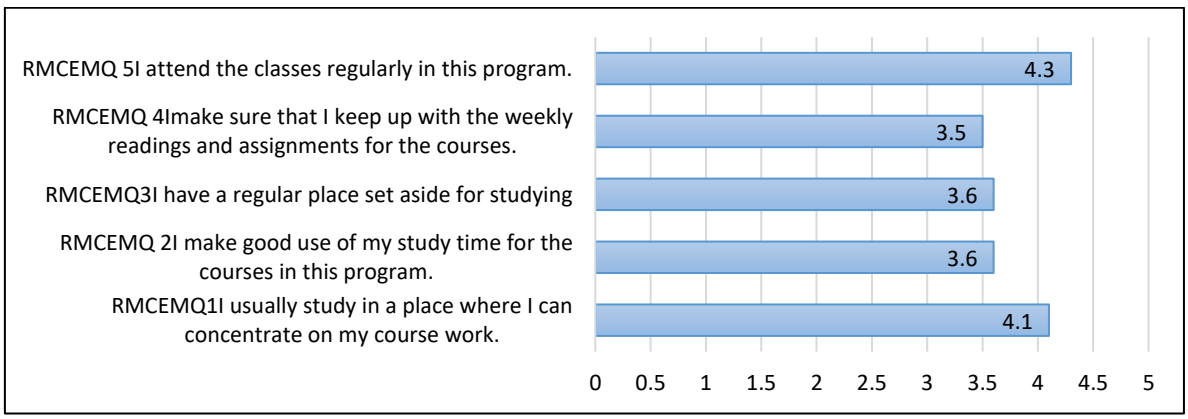


Figure 6- Mean for Environment Management

Figure 6 presents the mean score for environment management. The highest mean is 4.3 for the item "I attend the classes regularly in this program", Meanwhile, the item "I make sure that I keep up with the weekly readings and assignments for the courses" has the lowest mean which is 3.5. It can be said that the respondents do not apply this item regularly.

b. Effort Management (4 items)

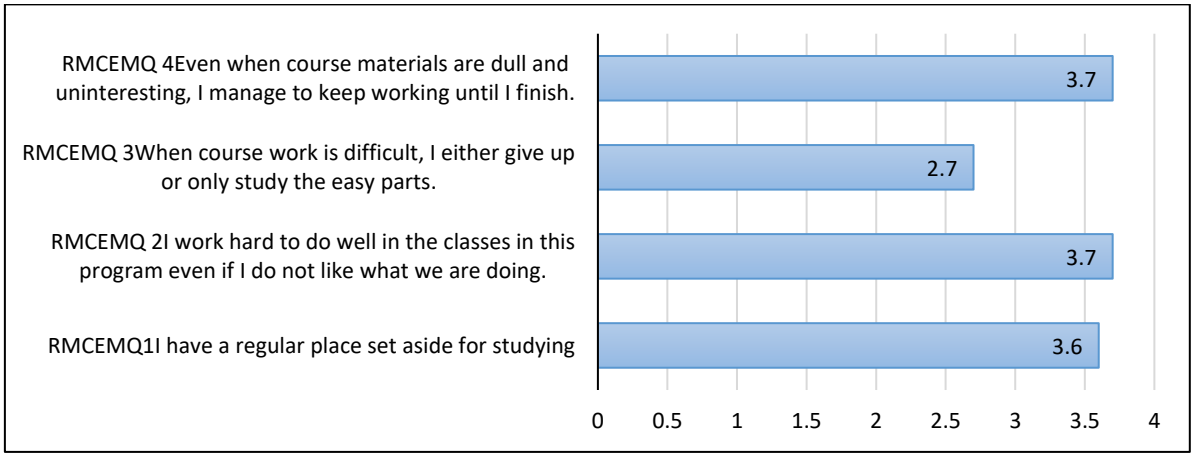


Figure 7- Mean for Effort Management

Figure 7 shows the mean for effort management. There are four questions given to the respondents. According to the result, two items indicates the highest mean of 3.7 which are "I work hard to do well in the classes in this program even if I do not like what we are doing" and "Even when the course materials are dull and uninteresting, I manage to keep working until I finish". It shows that the respondents still give the best even they face the difficulties to the materials or program. Besides, the lowest mean is the item "When course work is difficult, I either give up or only study the easy parts" which score only 2.7.

c. Help-Seeking (2 items)

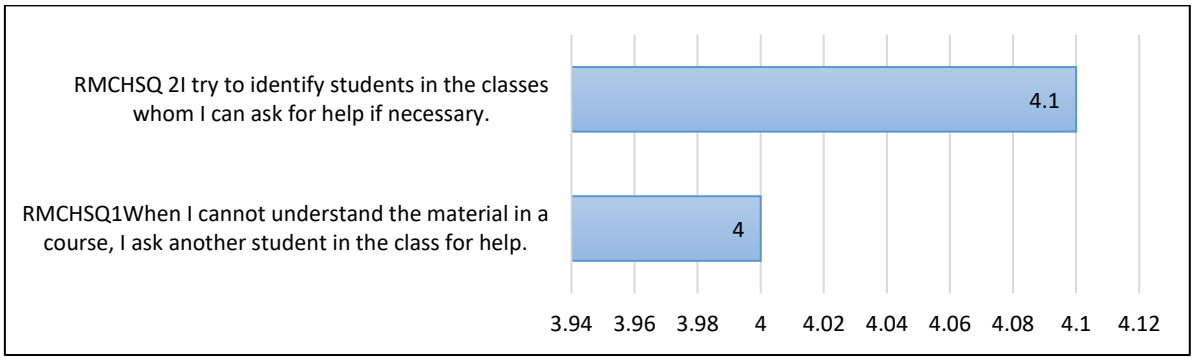


Figure 8- Mean for Help- Seeking

Furthermore, figure 8 presents the mean for help-seeking which consists of two questions. The highest mean score is 4.1 for the item "I try to identify students in the classes whom I can ask for help if necessary" meanwhile the lowest mean score is 4 for the item 'When I cannot understand the material in a course, I ask another student in the class for help". Based on the result shown above, it can be said that there is not much difference mean score between these two items.

Findings for Cognitive Components

This section presents data to answer research question 2: How do learners perceive their use of cognitive components in their learning?

2. Cognitive Components (19 Items)

a. Rehearsal (4 items)

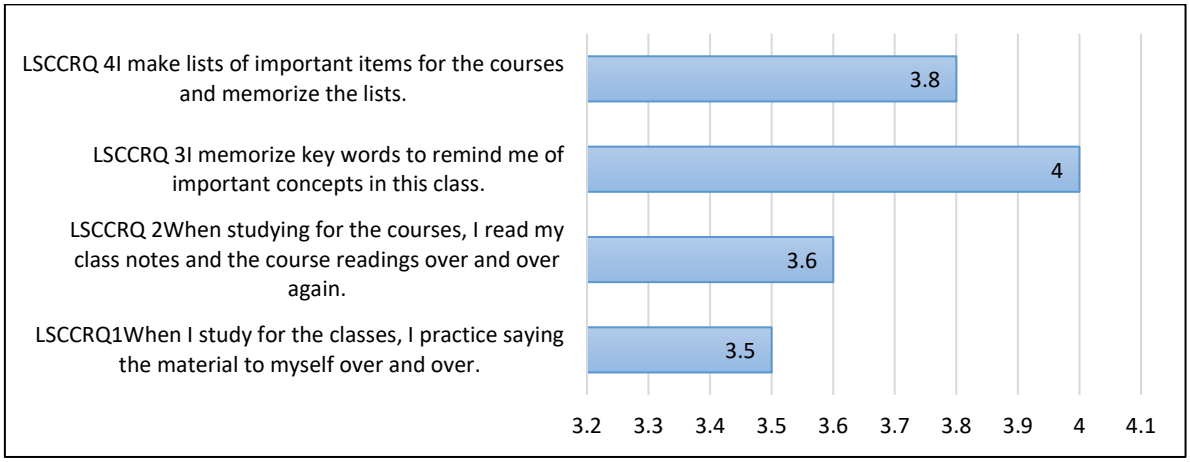


Figure 9- Mean for Rehearsal

Figure 9 presents the mean score for rehearsal. Based on the result above, the highest mean is 4 for the item "I memorize key words to remind me of important concepts in this class" and the lowest mean score is 3.5 for the item "When I study for the classes, I practice saying the material to myself over and over". It can be said that the respondents does not apply this item frequently.

b. Organization (4 items)

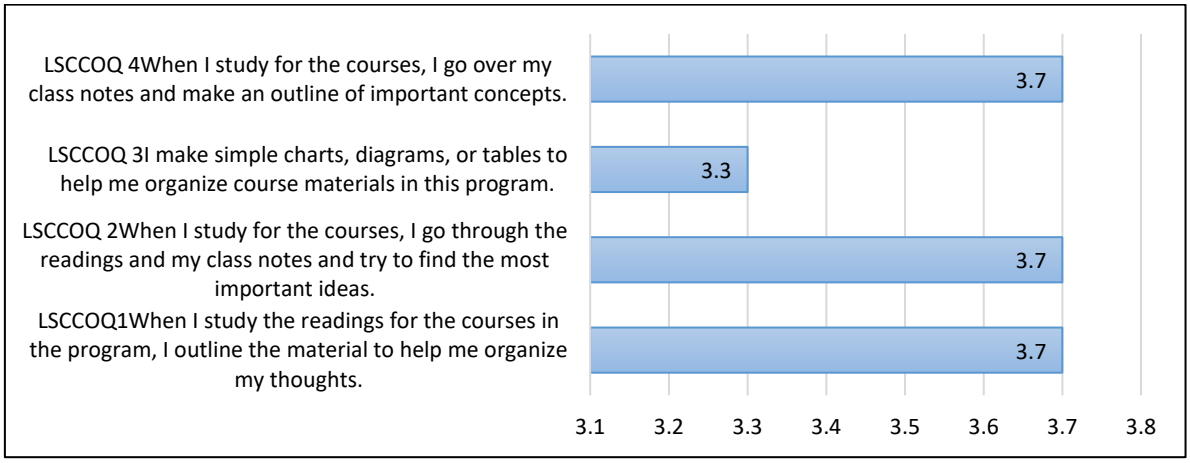


Figure 10- Mean for Organization

Figure 10 shows the mean for organization. There are four questions given to the respondents. According to the result, there are three items that indicates the same and highest mean score which is 3.7. The items are "When I study the readings for the courses in the program, I outline the material to help me organize my thoughts", "When I study for the courses, I go through the readings and my class notes and try to find the most important ideas" and "When I study for the courses, I go over my class notes and make an outline of important concepts". Other than that, item number three (I make simple charts,

diagrams, or tables to help me organize course materials in this program) has the lowest mean score among others which is 3.3.

c. Elaboration (6 items)

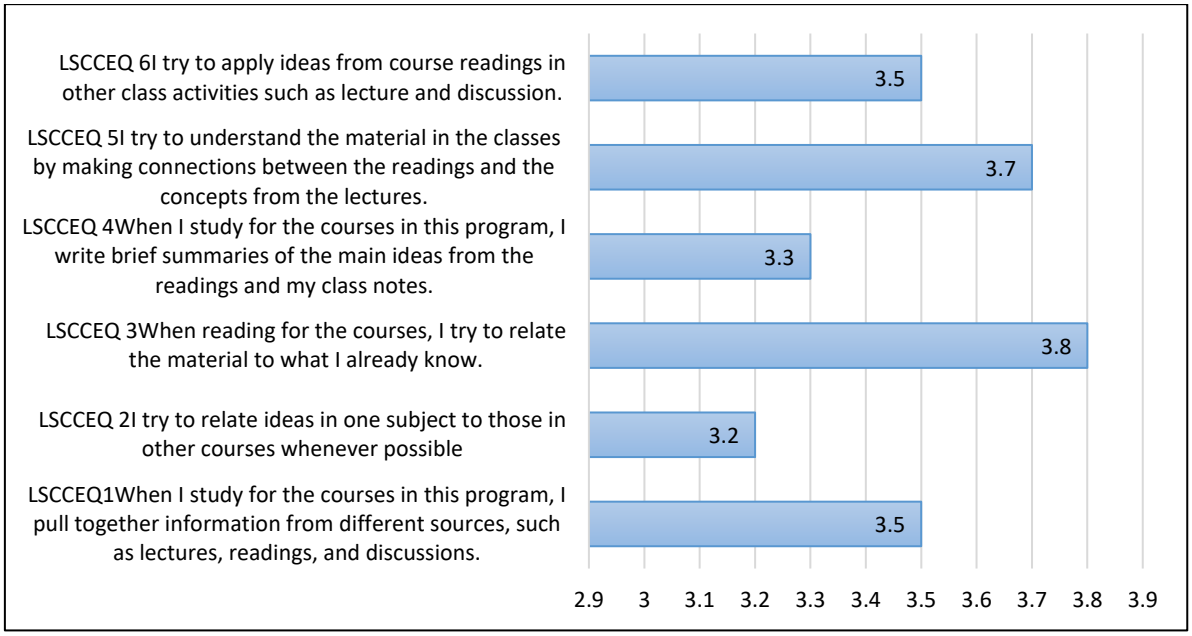


Figure 11- Mean for Elaboration

Moreover, there is a mean for elaboration in the figure 11. It consists of six items where there are not much difference in the mean score between them. The highest mean is 3.8 from the item "When reading for the courses, I try to relate the material to what I already know". Then, there are two items that have the lowest mean score which is 3.3 for the item "When I study for the courses in this program, I write brief summaries of the main ideas from the readings and my class notes" and 3.2 for the item "I try to relate ideas in one subject to those in other courses whenever possible".

d. Critical Thinking (5 items)

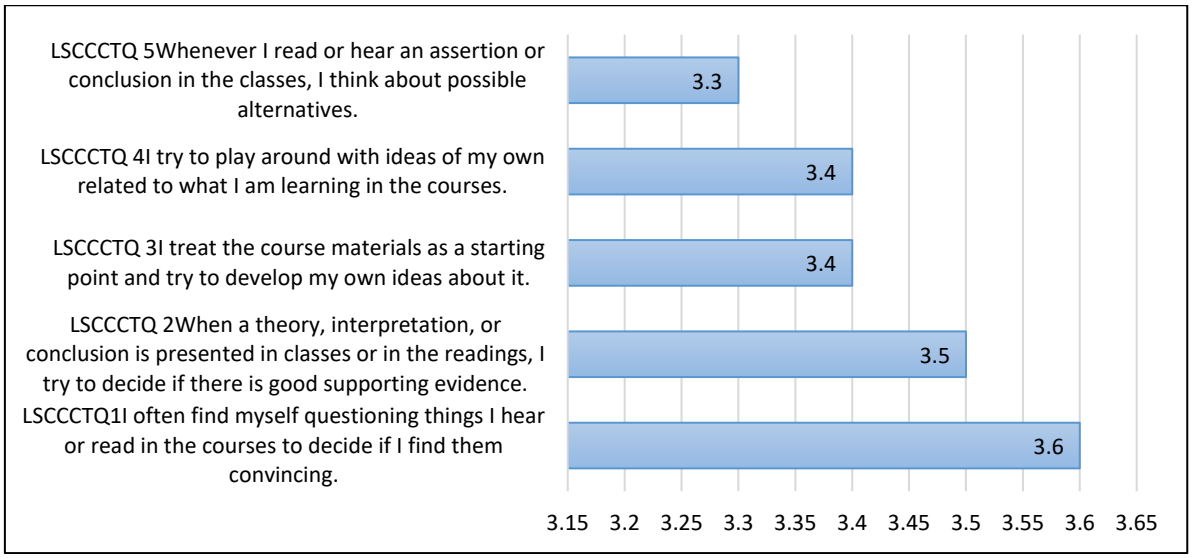


Figure 12- Mean for Critical Thinking

In the figure 12, there is a mean for critical thinking. Based on the result above, it can be said that the order of the mean score is parallel to the number of the items. The highest mean score is 3.6 for the item "I often find myself questioning things I hear or read in the courses to decide if I find them convincing". It shows that most of the respondents pay attention to the course learnt. Meanwhile, the lowest mean score is 3.3 for the item "Whenever I read or hear an assertion or conclusion in the classes, I think about possible alternatives".

Findings for Metacognitive Self-Regulation

This section presents data to answer research question 3: How do learners perceive their use of Metacognitive self-regulation in their learning?

a. Metacognitive Self-Regulation (11 items)

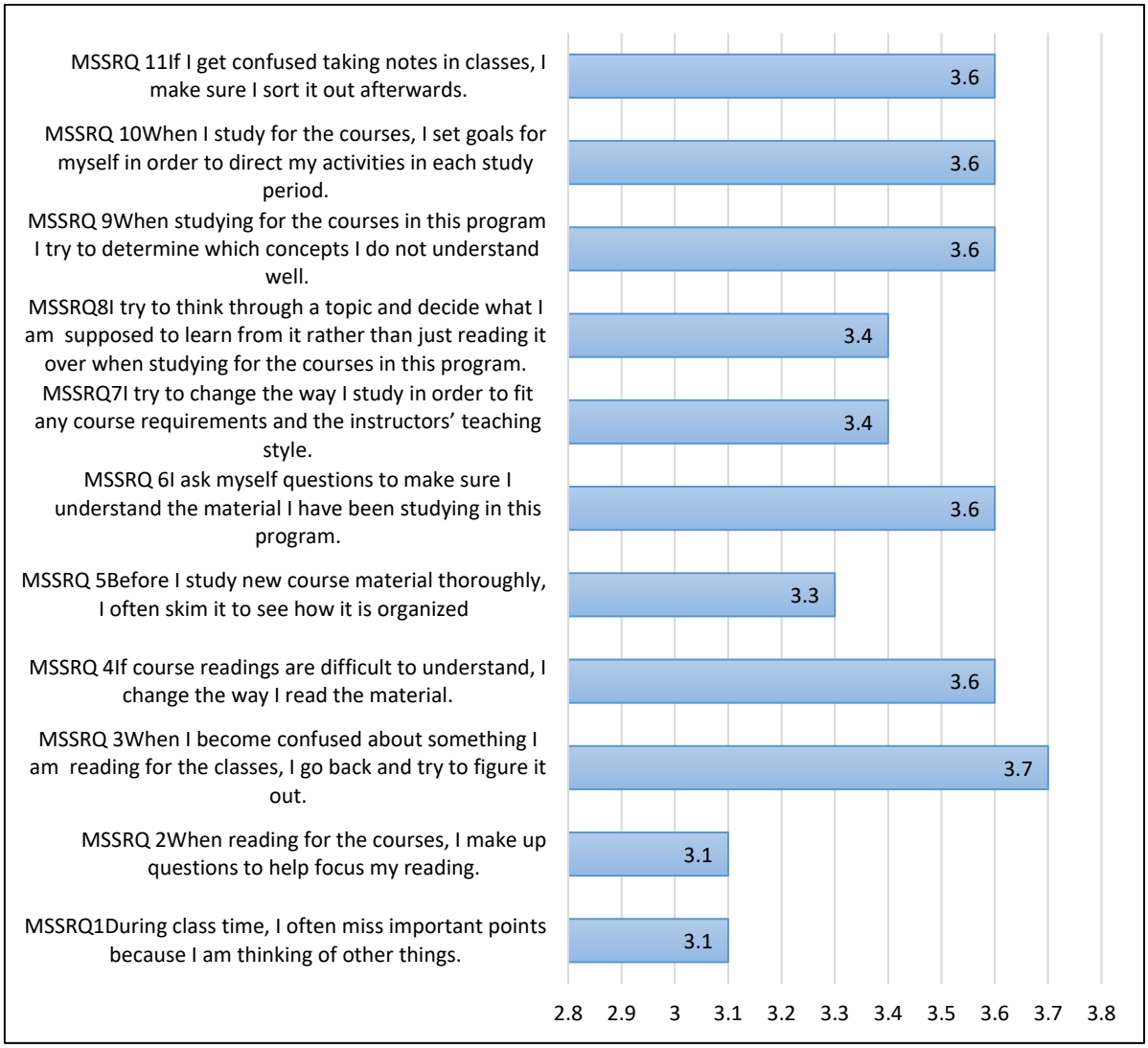


Figure 13- Mean for Metacognitive Self-Regulation

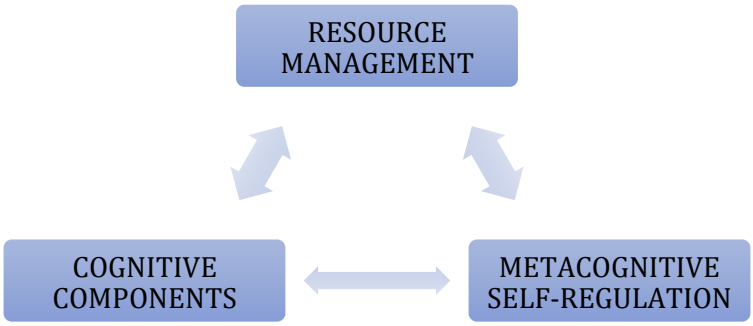
Figure 13 shows the mean for metacognitive self-regulation. There are 11 items given to the respondents where there are only slightest difference in the mean score. Among all these items, the highest mean score is 3.7 for the item "When I become confused about something I am reading for the classes, I go back and try to figure it out". It shows that the respondents always try their best to understand the things that they learn.

Besides, there are five items that have similar mean score which are 3.6. The items are "If course readings are difficult to understand, I change the way I read the material", "I ask myself questions to make sure I understand the material I have been studying in this program", "When studying for the courses in this program I try to determine which concepts I do not understand well", "When I study for the courses, I set goals for myself in order to direct my activities in each study period" and "If I get confused taking notes in classes, I make sure I sort it out afterwards". Then, there are also two similar mean score which are 3.4. The items are "I try to change the way I study in order to fit any course requirements and the instructors' teaching style" and "I try to think through a topic and decide what I am supposed to learn from it rather than just reading it over when studying for the courses in this program". In addition, the item "Before I study new course material thoroughly, I often skim it to see how it is organized" has a mean score of 3.3.

Lastly, there are two lowest mean score which are 3.1. The items are "During class time, I often miss important points because I am thinking of other things" and "When reading for the courses, I make up questions to help focus my reading".

Findings for Relationship between Resource management with Cognitive Components and Metacognitive Self-Regulation.

This section presents data to answer research question 4: Is there a relationship between resource management with cognitive components and metacognitive self-regulation?



To determine if there is a significant association in the mean scores between metacognitive, effort regulation, cognitive, social and affective strategies data is anlaysed using SPSS for correlations. Results are presented separately in table 3, 4, 5 and 6 below.

Correlations

		TOTALRESOURCE	TOTALMETACOGNITIVE
TOTALRESOURCE	Pearson Correlation	1	.602**
	Sig. (2-tailed)		.000
	N	241	241
TOTALMETACOGNITIVE	Pearson Correlation	.602**	1
	Sig. (2-tailed)	.000	
	N	241	241

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3- Correlation between Resource Management and Metacognitive Slef-Regulation

Table 3 shows there is an association between resource management and metacognitive self-regulation. Correlation analysis shows that there is a high significant association between resource management and metacognitive self-regulation (r=.602**) and (p=.000). According to Jackson (2015), coefficient is significant at the .05 level and

positive correlation is measured on a 0.1 to 1.0 scale. Weak positive correlation would be in the range of 0.1 to 0.3, moderate positive correlation from 0.3 to 0.5, and strong positive correlation from 0.5 to 1.0. This means that there is also a strong positive relationship between resource management and metacognitive self-regulation.

Correlations

		TOTALRESOURCE	TOTALCOGNITIVE
TOTALRESOURCE	Pearson Correlation	1	.606**
	Sig. (2-tailed)		.000
	N	241	241
TOTALCOGNITIVE	Pearson Correlation	.606**	1
	Sig. (2-tailed)	.000	
	N	241	241

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4- Correlation between Resource Management and Cognitive Components

Table 4 shows there is an association between resource management and cognitive components. Correlation analysis shows that there is a high significant association between resource management and cognitive components (r=.606**) and (p=.000). According to Jackson (2015), coefficient is significant at the .05 level and positive correlation is measured on a 0.1 to 1.0 scale. Weak positive correlation would be in the range of 0.1 to 0.3, moderate positive correlation from 0.3 to 0.5, and strong positive correlation from 0.5 to 1.0. This means that there is also a strong positive relationship between resource management and cognitive components.

Correlations

		TOTALMETACOGNITIVE	TOTALCOGNITIVE
TOTALMETACOGNITIVE	Pearson Correlation	1	.706**
	Sig. (2-tailed)		.000
	N	241	241
TOTALCOGNITIVE	Pearson Correlation	.706**	1
	Sig. (2-tailed)	.000	
	N	241	241

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5- Correlation between Metacognitive Self-Regulation and Cognitive Components

Table 5 shows there is an association between metacognitive self-regulation and cognitive components. Correlation analysis shows that there is a high significant association between metacognitive self-regulation and cognitive components (r=.706**) and (p=.000). According to Jackson (2015), coefficient is significant at the .05 level and positive correlation is measured on a 0.1 to 1.0 scale. Weak positive correlation would be in the range of 0.1 to 0.3, moderate positive correlation from 0.3 to 0.5, and strong positive correlation from 0.5 to 1.0. This means that there is also a strong positive relationship between metacognitive self-regulation and cognitive components.

CONCLUSION

According to the findings, it showed that learners perceive their use resource management, cognitive components and metacognitive self-regulation in their learning. Furthermore, there is a relationship between resource management with cognitive components and metacognitive self-regulation in the Islamic studies among the students.

The result for the resource management revealed that environment management, effort management and help-seeking help the learners in understanding Islamic studies significantly. Learners also apply cognitive components in terms of rehearsal, organization, elaboration and critical thinking in Islamic studies. Meanwhile, most of the learners implements the metacognitive self-regulation wisely to make sure they acknowledge Islamic studies very well. Due to that, these three learning strategies are very closely related in learning Islamic studies.

The findings of this study is quite similar with the previous study like Shukor and Noor (2014) and Puteh et al. (2022) where students who are greatly self-regulated in their learning will accomplish more and become proactive in their education. Other than that, three of the components of learning strategies showed high mean values where it showed that postgraduate students are similar to undergraduates where they used learning strategies in their studies.

Implications and Suggestions for Future Research

Every learners should discover and apply learning strategies to make sure that they can understand and score good grade in Islamic studies. Three learning strategies discussed above are very useful as they give good impacts to the students who apply them. These strategies have significantly contribute towards the achievement of good grades among students.

Further research can be carried out to the other groups of learners from the other university to see the different result relating to the three learning strategies in Islamic studies. Besides, it is suggested that there are more researches on the other learning strategies that can be applied in the Islamic studies other than these three learning strategies. It can be also considered as an important element to be studied.

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