

The Impact of Using Self-Questioning Strategies on the Achievement of Intermediate First-Grade Female Students in Al-Tafsir Curriculum

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This research is aimed to explore the impact of using self-questioning strategies on the achievement of the intermediate first-grade female students in in Al-Tafsir curriculum. To achieve the objective, the researchers used a quasi-experimental approach to determine the effect of the self-questioning strategy on the achievement. The researchers used a randomly selected sample consisting of 60 female students from the first-grade of middle school in Al-Kharj. The selected students were divided into experimental and control groups. Further, the researchers developed the achievement test and applied it to verify the difference between two groups. It was found that there were statistically significant differences between the pre- and post-measurements of the experimental group are found in achievement test and it is in favour of post-measurements. The significant differences are also found in the recall and understanding constructs but the results of applying and analysing constructs are found insignificant. Further, the researchers found statistically significant differences between the experimental and control groups in all the constructs.

Keywords: *Self-Questioning, Achievement, Al-Tafsir curriculum.*

Introduction

Educators have emphasised that the mind has the capacity to make the progress and development to face the challenges of the twenty-first century. Therefore, it is necessary to draw the culture of learning from receiving information to the culture of information-building, processing, and transferring the knowledge into metacognition. The term metacognition appeared in the 1970s in Falafel's research. This research focused on how the learner understood himself as a learner and the ability to plan, follow, and evaluate the learning (Fadl, 2012). Several strategies have emerged that rely metacognition such as the strategy of self-questioning (Abdulhamid, 2000). Coyne (2007) defined self-questioning as a set of questions that students ask before, during, or after the learning process. These questions call for the integration of information, students' thinking in the learning process, and the response of the students to these questions.

Self-questioning strategies aim to seek new ideas while processing information. These strategies also help the student to increase the awareness of the mental processes surrounding them and to make them more integrated to share the information he learns which can be applied in his own life (Al-Gendy and Sadiq, 2001). Al-Tafsir, as a subject, relies on the memorisation and the dictation is remained the basis for the delivery of scientific material. From this standpoint, there has been a need to experiment and to use the metacognitive strategies with an aim to teach students how to think and how to recognise what they are thinking to increase their awareness of what they are learning in certain situations.

Ashour and Miqdadi (2005) defined self-questioning as “the questions that readers ask before, during, or after reading and their try to answer these questions during reading”. The researchers defined it procedurally as “one of the metacognitive strategies based on questions developed by the female student to herself and she tries to answer before, during, and after reading of the Tongue Lesions and Success Causes unit”. This will find out its impact on the achievement of female students in the intermediate first-grade. On the other hand, Al-Lqany & Al-Gaml (2003) defined academic achievement as “the extent to which students have absorbed certain experiences through courses and academic achievement which is measured by the degree to which students receive their achievement tests”. The researchers define academic achievement procedurally as “the amount of intermediate first-grade female students gained from certain experiences by studying the Tongue Lesions and Success Causes unit according to cognitive levels (recall, understanding, application, analysis) and is represented by the grades obtained by female students in the achievement test”.

The researchers noted, in our field of work, during supervision of practicum female students that the Shari'ah sciences teaching environment is lacking in the intermediate stage to stimuli and reliance on the traditional method. It mostly relies on the preservation and memorisation

of information. Among the challenges faced by the teaching of Shari'ah sciences, it is necessary to focus on metacognitive strategies and to change the course of learning from dictation to positive participation. In this way, the learner may become effective in the learning process and may increase the capability of self-learning which has become an urgent requirement in this modern era. With reference to the Shari'ah sciences curriculum document for the intermediate stage, the researchers found one of the general objectives of teaching Shari'ah sciences subjects is to acquire the skills of sound thinking, self-education, and scientific research. These skills help the learner to be benefit from the sources of information in accordance with Shari'ah controls (Ministry of Education, 2006). A number of studies has confirmed the prevalence of traditional methods in the teaching of Shari'ah sciences (Al-Shammari, 2013; Al-Maliki, 2016; Abanmi, 2018; Al-Beshr and Al-Salie, 2018).

For this research project, a survey study was conducted with the aim to identify the extent of the practice of Shari'ah sciences by the female teachers in the middle stage of the self-questioning strategy. Personal interviews with 9 Al-Tafsir female teachers, 3 female supervisors, and 4 middle school female principals were conducted. These interviews allowed the researchers to understand their opinions about Al-Tafsir female teachers while practicing the strategy of self-questioning and the reasons behinds practicing this strategy. The results of the interviews revealed that the middle school female teachers have a positive attitude towards the strategy of self-questioning in teaching, but their practices are weak. This is due to the lack of sufficient knowledge of the strategy of self-questioning, lack of guidance, and lack of encouragement to implement this strategy.

The present research is aimed at identifying the impact of the strategy of self-questioning on the achievement of intermediate first-grade female students in the Al-Tafsir curriculum. This research contributes to the growth of the side-thinking of students as a result of the application of self-questioning strategy. It may also increase the scientific knowledge of teachers to the use the self-questioning strategies and to draw their attention in general and Al-Tafsir teaching in particular. This research may contribute to the development of teaching of the Al-Tafsir course by providing a strategy that focuses on mental activities which may be reflected in the achievement of students in the curriculum. This research may also draw the attention of researchers to conduct further studies in the strategy of self-questioning.

Literature Review

The researchers reviewed a number of studies related to the application of the strategy of self-questioning in education. Al-Amoush (2009) searched the impact of the use of self-questioning strategy on the development of critical reading skills and its impact on the development of each skill separately. The critical-reading skills test was used as a study tool and it was concluded that there were differences between the two groups due to the positive

strategy of self-questioning in the development of critical-reading skills. Berkeley et al. (2011) also confirmed the effectiveness of the strategy of self-questioning in supporting the skills of students to think and to link the information positively. They found a positive impact of the strategy of self-questioning on the multiple-choice questions and on the open-ended text questions as well. Yassin (2013) explored the impact of the strategy of self-questioning on the acquisition and retention of historical concepts among the intermediate second-grade students. The results showed that the experimental group was superior to the control group in the acquisition and retention of historical concepts.

One of the factors contributing to the success of the self-questioning is students asking a series of questions before, during, and after reading. If students do not know the answer to the one of these self-questions, they can return to the paragraph again to find the answer. A self-questioning strategy is also used where students are asked to read a specific text in different subject areas. Wood et al. (2015) found that there was a positive relationship between the ability of students and intellectual disabilities on the one hand and the strategy of self-questioning in developing their abilities by setting points for their participation and asking questions on the other hand. Conversations, stories, and students' listening also had a positive impact on their analytical abilities in devising self-questioning questions related to the subject of the text. However, they recommended that a sufficient number of male and female students should be taken into account to ensure that the research has achieved its objectives.

Joseph et al. (2015) reviewed the literature regarding the effects of self-questioning in reading comprehension related to the subject of the study. In this study, Joseph et al. (2015) relied on a review of experimental research studies which examined the effects of using self-questioning methods on the reading comprehension on 12-year-old students through a review of 35 experimental research studies. They observed that literature showed that the self-questioning by students have significant relationship with the disabilities. However, the other students have a positive impact on their understanding of the text to be understood and to be interpreted. The process of motivation and encouragement of the students was discussed. This was in the form of generating ideas and questions on the subject and provide them with guidance and advice on how to arrange ideas and ask self-questions had the effective roles in raising their skills and abilities to understand and to analyse the subject being discussed. They also reported that the strategy of self-questioning was an effective application, but it needed to be precise in the development of its steps in sequence and to be organised to educate students about the strategy so they can read, understand, analyse, and connect relationships and information with each another.

Nguyen et al. (2016) conducted a study to identify the effects of self-questioning on the participation of students of English as a foreign language in literary reading. The results showed that the self-questioning questions posed by students through interaction with short

stories had have a positive impact on students' participation in learning English as a foreign language. The analysis also highlighted that the existence of oral and written interaction through group discussions using the method of self-questioning were better compared to traditional education. Mirghem and Jebali (2016) explored the impact of self-questioning strategy on the development of learning motivation among university students. The results showed the effectiveness of the strategy of self-questioning in developing the motivation of learning among university students.

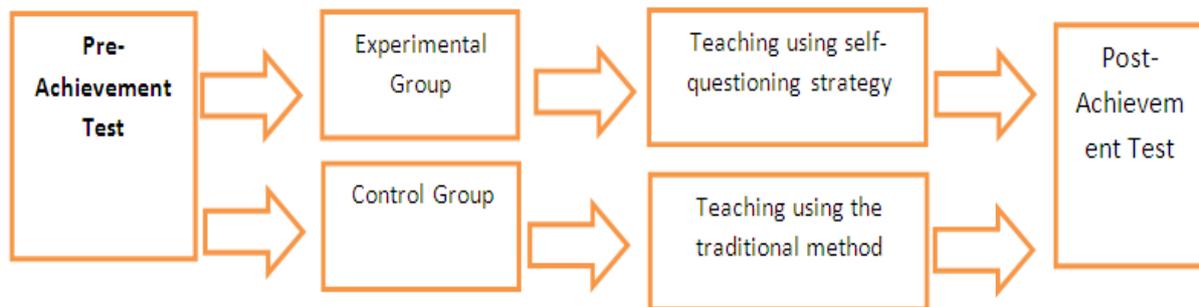
Al-Hawaslah (2017) revealed the effectiveness of the strategy of self-questioning in the development of the academic achievement in the mathematics curriculum of the intermediate stage. His results showed that the use of self-questioning strategy effectively contributed to the scientific level improvement for the development of the students' academic achievement in the curriculum of mathematics. Al-Zikri (2017) aimed to understand the effect of using self-questioning strategy on the achievement of fifth grade students in the mathematics. The results indicated that this strategy help to improve the learning and achievements. Al-Zikri (2017) recommended to use the strategy of self-questioning to improve the learners' achievements in learning the mathematics.

After reviewing the literature, it is evident that the self-questioning strategy has been a focus of attention in the current research . The literature has confirmed the importance of this type of learning and its positive impact on the students' participation and results. Working on the middle school students with this type of learning and forming positive attitudes towards its application, the present research is consistent with Berkeley et al. (2011), Yassin (2013) and Al-Hawaslah (2017). Following Al-Hawaslah (2017) and Al-Zikri, (2017), the present research considers the achievement as a dependent variable. The literature also recommended to apply the strategy of self-questioning in teaching the curriculums in all stages. No study, according to our knowledge, has examined the impact of the use of self-questioning strategy on the achievement of the intermediate first-grade Al-Tafsir curriculum students. Therefore, this study aims to fill the literature gap.

Methodology

The current research is dependent on the semi-experimental approach as per its relevance to the subject of the research. Its design is based on the existence of two groups. First is the experimental group which studied using the strategy of self-questioning and the other is the control group which studied using the traditional method. The application of pre and post tests on both groups is employed to determine the impact of the self-questioning strategy on the academic achievement. Figure 1 depicts the all procedure.

Figure 1. The steps to design a quasi-experimental approach for the research



The population consisted of all middle school first-grade female students in public schools during the second semester of the academic year 1440 Hijri in the Al-Kharj governorate. The total number is 4097 female students.

The research sample is consisted of 60 students, randomly selected, and is divided into two groups. First is an experimental group consisting of 30 students who studied the curriculum using the strategy of self-questioning. The second group is a control group of 30 students who studied the curriculum in the traditional method. The research sample is remained equivalent in pre-and post-measurements. Table 1 shows the results.

Table 1: Results of the pre-application of the achievement test of Al-Tafsir curriculum using the self-questioning strategy.

Sr.	Variables	No.	Experimental Group		Control Group		T-Value	Significant Level
			Arithmetic Mean	Standard Deviation	Arithmetic Mean	Standard Deviation		
1	Recall	30	3.067	1.015	3.167	0.913	-0.401	0.690
2	Understanding	30	4.933	1.202	5.067	0.097	-0.485	0.629
3	Application	30	2.833	0.0699	3.067	0.907	-1.116	0.269
4	Analysis	30	0.400	0.298	0.333	0.279	0.528	0.599
	Achievement Test	30	11.233	1.832	11.733	1.639	-1.114	0.270

* Significant at ($\alpha \leq 0.01$)

** Significant at ($\alpha \leq 0.05$)

Table 2 shows that there are no statistically significant differences between the experimental and control groups in the pre-measurements of the academic achievement test. It indicates that the two groups are equal in this measurement. To achieve the research objectives, we prepare the achievement test. The objective of the achievement test is to measure the achievement of the female students of the experimental and control groups of the scientific content of the unit (Tongue Lesions and Success Causes) in order to know the effect of using

the strategy of self-questioning on the achievement of female students of the intermediate first-grade in Al-Tafsir curriculum.

The researchers apply the reliability test on our measurement scale. To verify the validity, the achievement test consists of 13 items to a group of specialists in the field of Al-Tafsir curriculum is presented in its initial form. Then, the opinions of the arbitrators are incorporated with the amendment of the wording of some questions and the changes of some repeated words. The statistical validity is confirmed by a pilot survey on the sample of 20 female students from our population but not on the targeted sample. The scores of the students are arranged in ascending order to determine the highest quartiles which are 5 female students and the lowest quartiles which are 5 female students. Table 2 shows the results of the pilot study.

Table 2: Mann-Whitney Test scores on the differences between the highest and lowest quartiles of the achievement test.

Sr.	Variables	Score	The highest quartiles (N= 5)		The lowest quartiles (N=5)		U-Value	Significant Level
			Arithmetic Mean	Standard Deviation	Arithmetic Mean	Standard Deviation		
1	Recall	9	7.70	38.50	3.30	16.50	1.50	0.016*
2	Understanding	12	7.50	37.50	3.50	17.50	2.50	0.032*
3	Application	8	8.00	40.00	3.00	15.00	0.00	0.008**
4	Analysis	1	7.60	38.00	3.40	17.00	2.00	0.032*
	Achievement Test	30	8.00	40.00	3.00	15.00	0.00	0.008**

** Significant at ($\alpha \leq 0.01$)

* Significant at ($\alpha \leq 0.05$)

Table 2 shows that there are statistically significant differences between the groups of the highest and lowest quartiles of the achievement test of Al-Tafsir curriculum using the strategy of self-questioning in the recall, understanding, application, and analysis constructs. The achievement test as a whole is in the favour of the highest quartiles group at 5% level of significance which indicates the validity of the test and its ability to distinguish between different groups.

The reliability is conducted which is intended to obtain approximately the same results when the measurement is repeated under the same conditions using the same scale. This is also verified using the retest method on the same pilot sample by re-applying the test with a time interval of 3 days between the first and second applications. Table 3 shows the correlation coefficients between the two applications.

Table 3: Results of correlation coefficients between the first and second applications of achievement test

Sr.	Variables	Score	The first application (N= 20)		The second application (N=20)		Correlation coefficient	Significant Level
			Arithmetic Mean	Standard Deviation	Arithmetic Mean	Standard Deviation		
1	Recall	9	5.000	0.795	5.050	0.945	0.701	0.001**
2	Understanding	12	3.200	0.768	3.150	0.813	0.877	0.000**
3	Application	8	3.050	0.826	3.150	0.814	0.851	0.000**
4	Analysis	1	3.00	0.270	0.350	0.289	0.663	0.001**
	Achievement Test	30	11.650	1.599	11.750	1.743	0.571	0.009**

** Significant at ($\alpha \leq 0.01$)

* Significant at ($\alpha \leq 0.05$)

Table 3 shows that there is a statistical significant correlation at 1% level between the first and second application of the achievement test of Al-Tafsir curriculum using the strategy of self-questioning in the recall, understanding, application, and analysis constructs and the achievement test as a whole. This indicates that reliability test confirms the validity. The scores of the students from the pilot sample are analysed to determine the coefficients of difficulty and discrimination for each item of achievement test. Difficulty coefficient is a percentage of female students who answered incorrect questions. It is calculated according to the following equation:

$$\text{Difficulty Coefficient} = \frac{\text{The number of those who answered the wrong question}}{\text{Number of wrong answers} + \text{number of correct answers to the question}} \times 100$$

Then, the researchers calculated the discrimination coefficient which is to distinguish between female students with lower and upper groups. The coefficient of discrimination is calculated as per following equation:

$$\text{Discrimination Coefficient} = \frac{\text{Correct answers No. in the highest group} - \text{correct answers No. in the lowest group}}{\text{Number of members of one group}} \times 100$$

The students' papers of the pilot sample are divided into highest and lowest groups as per the scores obtained by the students and are arranged in a descending order. Then, these were divided equally into two equal groups. The first is representing the highest group and the second is representing the lowest group. Table 4 shows the difficulty and discrimination factors in the achievement test as per discussed questions.

Table 4: Difficulty and discrimination coefficients of the achievement test questions of Al-Tafsir curriculum (N=20).

Question No.	Difficulty coefficient	Discrimination coefficient	Question No.	Difficulty coefficient	Discrimination coefficient
1	0.65	0.50	8	0.50	0.40
2	0.45	0.40	9	0.45	0.30
3	0.80	0.70	10	0.50	0.40
4	0.75	0.60	11	0.40	0.60
5	0.45	0.40	12	0.35	0.30
6	0.40	0.30	13	0.50	0.40
7	0.30	0.30			
Mean difficulty coefficient		50.80%			
Mean discrimination coefficient		43.10%			

The results in Table 4 indicate that difficulty coefficients for the unit of “Tongue Lesions and Success Causes” are ranged between 0.30-0.80 with a general mean of the difficulty coefficient at 50.80%. All test questions are accepting a reasonable level of difficulty. Discrimination coefficients for the test items are ranged between 0.30-0.70 with a general mean of the discrimination coefficient of 43.10%. All test questions are accepting that there is a reasonable level in terms of the degree of discrimination.

To calculate the appropriate time for the achievement test, the time taken by the first student was 25 minutes and the time taken by the last student was 35 minutes. The researchers calculated the average in the following way:

$$\text{Average test time} = (25 + 35) \div 2 = 30 \text{ minutes}$$

Average test time is 30 minutes which is a reasonable time for this test. This time is considered as enough time for the student to answer the test questions. After testing the readiness of the test, it is applied on the research sample.

Results and Discussions

To achieve the research objectives and to analyse the collected data, a paired samples t-test is used to find the statistically significant difference between the pre- and post-measurements and the Eta-squared “ η^2 ” test is used to determine the size of effect. The percentages are used to identify the magnitude of improvement between the two measurements, and independent samples t-test is also used. Table 5 presents the answer to the research question "What is the impact of the use of self-questioning strategy on the achievement of female students of intermediate first-grade in Al-Tafsir curriculum?".

Table 5: Results of the T-Test and the size effect of the Eta Squared “ η^2 ” test to indicate the differences between the pre- and post-measurements of the experimental group.

Sr.	Variables	No.	Pre-measurements		Post-measurements		T-Value	Significant Level	Significant direction	Eta Squared “ η^2 ”
			Arithmetic Mean	Standard Deviation	Arithmetic Mean	Standard Deviation				
1	Recall	30	3.067	1.015	6.833	1.117	-30.377	0.000**	Post	0.873
2	Understanding	30	4.933	1.202	11.067	1.172	-12.471	0.000**	Post	0.763
3	Application	30	2.833	0.699	6.300	0.877	-23.175	0.000**	Post	0.832
4	Analysis	30	0.400	0.298	0.867	0.346	-3.500	0.000**	Post	0.234
	Achievement Test	30	11.233	1.832	25.267	2.196	-34.712	0.000**	Post	0.924

** Significant at ($\alpha \leq 0.01$)

* Significant at ($\alpha \leq 0.05$)

Table 5 shows the existence of statistically significant differences between the pre and post measurements of the experimental group of the achievement test including the constructs recall, understanding, application and analysis. The total levels of "achievement test as a whole" in the curriculum of Al-Tafsir for the intermediate first-grade female students is found significant at the 1% level of significance for the post measurements. The values of the Eta-squared “ η^2 ” indicates that the size of the very large effect is between the pre and post measurements. Its range is between 0.873-0.234 for the four constructs of recall, understanding, application, and analysis. The size of the achievement test is 0.924 which is a great value. It is also indicating that a very large percentage of the differences are due to the effect of using the self-questioning strategy on the achievement of the curriculum for the intermediate first-grade female students.

Table 6: The improvement rates between the pre- and post-measurements of the experimental group in the achievement test.

Sr.	Variables	No.	Pre-measurements		Post-measurements		Improvement percentage (%)	Improvement direction
			Arithmetic Mean	Standard Deviation	Arithmetic Mean	Standard Deviation		
1	Recall	30	3.067	1.015	6.833	1.117	55.115%	Post
2	Understanding	30	4.933	1.202	11.067	1.172	55.426%	Post
3	Application	30	2.833	0.699	6.300	0.877	55.032%	Post
4	Analysis	30	0.400	0.298	0.867	0.346	53.864%	Post
	Achievement Test	30	11.233	1.832	25.267	2.196	55.543%	Post

Table 6 shows the improvement rates between the pre and post measurements of the experimental group in the four levels of achievement test in the curriculum for the intermediate first-grade female students using the self-questioning strategy. The improvement rates are ranged between 53.864-55.426% while the improvement rate for the achievement

test as a whole is 55.543% which is in favour of the post-measurements. It shows an improvement which is attributed to the effect of using self-questioning strategy on the achievement of the curriculum for the intermediate first-grade female students.

Table 7: Results of test to indicate the differences between the pre- and post-measurements of the control group of the achievement test.

Sr.	Variables	No.	Pre-measurements		Post-measurements		T-Value	Significant Level	Significant direction	Eta Squared “ η^2 ”
			Arithmetic Mean	Standard Deviation	Arithmetic Mean	Standard Deviation				
1	Recall	30	3.167	0.913	3.667	0.802	-2.169	0.038*	Post	0.090
2	Understanding	30	5.067	0.097	5.633	0.928	-2.289	0.030*	Post	0.081
3	Application	30	3.067	0.907	3.133	0.629	-0.360	0.722	N/A	0.002
4	Analysis	30	0.333	0.279	0.367	0.290	-0.254	0.801	N/A	0.001
	Achievement Test	30	11.733	1.639	12.800	1.690	-2.660	0.013*	Post	0.096

** Significant at ($\alpha \leq 0.01$)

* Significant at ($\alpha \leq 0.05$)

Table 7 shows that there are statistically significant differences between the pre- and post-measurements of the control group with the constructs of recall and understanding and also with the total levels of “achievement test as a whole” in the curriculum of Al-Tafsir for the intermediate first-grade female students at 5% level of significance for the post-measurements. There are no statistically significant differences in the application and analysis. The values of the Eta Squared “ η^2 ” indicates the small and medium size effects of the pre- and post-measurements ranging between 0.090-0.001 for the four constructs of recall, understanding, application, and analysis. The achievement test is reached at a size of 0.096 which is an average value. It indicates that an average percentage of the differences is due to the traditional method which does not make the female students of this group unresponsive to the strategy of self-questioning in the achievement of Al-Tafsir curriculum for the intermediate first-grade female students.

Table 8: The improvement rates between the pre- and post-measurements of the control group in the achievement test.

Sr.	Variables	No.	Pre-measurements		Post-measurements		Improvement percentage (%)	Improvement direction
			Arithmetic Mean	Standard Deviation	Arithmetic Mean	Standard Deviation		
1	Recall	30	3.167	0.913	3.667	0.802	13.635%	Post
2	Understanding	30	5.067	0.097	5.633	0.928	10.048%	Post
3	Application	30	3.067	0.907	3.133	0.629	2.107%	Post
4	Analysis	30	0.333	0.279	0.367	0.290	9.264%	Post
	Achievement Test	30	11.733	1.639	12.800	1.690	8.336%	Post

Table 8 shows the improvement rates between the pre- and post-measurements of the control group in the achievement test with its four constructs in the curriculum of Al-Tafsir for the intermediate first-grade female students using the self-questioning strategy. Achievement as a whole is reached to 8.336% for the post-measurements which is a low improvement rate.

Table 9: Results of test to indicate the differences between the experimental and control groups in the post-test measurements of the achievement test.

Sr	Variables	No	Experimental group		Control group		T-Value	Significant Level	Significant direction	Eta Squared “ η^2 ”
			Arithmetic Mean	Standard Deviation	Arithmetic Mean	Standard Deviation				
1	Recall	30	6.833	1.117	3.667	0.802	19.903	0.000**	Experimental	0.872
2	Understanding	30	11.067	1.172	5.633	0.928	12.614	0.000**	Experimental	0.733
3	Application	30	6.300	0.877	3.133	0.629	16.074	0.000**	Experimental	0.817
4	Analysis	30	0.867	0.346	0.367	0.290	4.566	0.000**	Experimental	0.264
	Achievement Test	30	25.267	2.196	12.800	1.690	24.247	0.000**	Experimental	0.910

** Significant at ($\alpha \leq 0.01$)

* Significant at ($\alpha \leq 0.05$)

Table 9 shows the existence of statistically significant differences between the experimental and control groups in the measurements of the achievement test with its constructs of recall, understanding, application, and analysis. It also includes the total level of "achievement test as a whole" in the curriculum of Al-Tafsir for the intermediate first-grade female students at 1% significant level which is in favour of the experimental group. The values of the Eta-squared “ η^2 ” indicate the huge size of the very large effect between the experimental and control groups in the pre-measurements ranging between 0.264-0.872 for the constructs of recall, understanding, application, and analysis. The achievement test is reached at a size of 0.910 which is a huge rate. This is a very large value and is indicated that a very large percentage of the differences are due to the effect of using the self-questioning strategy on the achievement of the curriculum of Al-Tafsir for the intermediate first-grade female students. It also indicates that a very large percentage of the differences are attributed to the effect of using the self-questioning strategy on the achievement of the curriculum of Al-Tafsir for the intermediate first-grade female students.

Table 10: The improvement rates between the two groups of the experimental and control group in the achievement test.

Sr.	Variables	No.	Experimental group		Control -measurements		Improvement percentage (%)	Improvement direction
			Arithmetic Mean	Standard Deviation	Arithmetic Mean	Standard Deviation		
1	Recall	30	6.833	1.117	3.667	0.802	46.334%	Experimental
2	Understanding	30	11.067	1.172	5.633	0.928	49.101%	Experimental
3	Application	30	6.300	.0.877	3.133	0.629	50.270%	Experimental
4	Analysis	30	0.867	0.346	0.367	0.290	57.670%	Experimental
	Achievement Test	30	25.267	2.196	12.8000	1.690	49.341%	Experimental

Table 10 shows the improvement rates between the experimental and control groups in post measurement of the achievement test in the curriculum of Al-Tafsir for the intermediate first-grade female students using the self-questioning strategy. The improvement rates are ranged between 57.670%-46.334%. The improvement rate for the achievement test as a whole is 49.341% for the post-measurements of the experimental group which is a good improvement rate.

Conclusions

The results show the impact of using the strategy of self-questioning on the achievement of intermediate first-grade female students in Al-Tafsir curriculum. The results confirm that the experimental group is superior to the control group. The researchers conclude that teaching using a self-questioning strategy is supported the female students' skills to think, to link information and to perceive the relationships positively. Teaching using the strategy of self-questioning has an effective role in the ability to discuss and to understand the content of the subject. Teaching using the self-questioning strategy has a clear impact on the female students' mental and emotional interaction which has increased their self-confidence. It has also helped to learn while making decisions and doing self-assessment. Teaching using the self-questioning strategy has helped to increase the activity of female students and consequently has increased the academic achievement and the motivation towards learning Al-Tafsir. These finding are consistent with the several previous studies which have showed the impact of a self-questioning strategy on the dependent variable (Abdul Hafez, 2007; Manna'a, 2008; Al-Amoush, 2009; Al-Ghamdi, 2010; Berkeley et al., 2011; Lifta and Abdullah, 2013; Al-Shehri, 2013; Yassin, 2013; Joseph and Ross, 2016; Wood et al., 2015; Joseph et al., 2015; Al-Otaibi, 2016; Mirgham, 2016; Nam et al., 2016; Al-Hawaslah, 2017; Al-Zikri, 2017).



Recommendations

In the light of the research results, the researchers recommend the inclusion of teacher preparation programs education faculty including the curricula of teaching methods and self-questioning strategy. So The female teacher could prepare the student while applying this strategy during the teaching. The use of self-questioning strategy in teaching Al-Tafsir is found supportive and effective in the development of students' achievement. Inclusion of intermediate curriculum of Al-Tafsir should be ensured with the strategy of self-questioning as it makes the students active and effective. Working on follow-up procedures may determine whether students have retained the knowledge gained by applying the self-questioning strategy over the time or not.

Future Directions

In the light of the results, the researchers propose to conduct the similar studies at various levels of public education and in other curriculum which are aimed at knowing the impact of the strategy of self-questioning on other variables such as: critical thinking, creative thinking, deductive thinking, or others. The future studies may also investigate the evaluation of teachers' performance in using the self-questioning strategy. A training program should be arranged for teachers, before and during their service, to train the way to use the strategy of self-questioning in teaching.

Acknowledgement

This project was supported by Deanship of Scientific Research at Prince Sattam bin Abdulaziz University Alkharj under the project No. 2019/02/10921.

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