

## **DEEP BREATHING EXERCISE MANAGEMENT IN ARCHERY TO MEMORIZING AL-QUR'AN TO STUDENT OF TAHFIDZ QUR'AN AT SMP AD-DHUHA JEMBER**

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### **ABSTRACT**

Memorizing Al-Qur'an is an effort to maintain the purity of the Al-Qur'an. The Qur'an tahfidz program is one of the activities intended to prevent the Qur'an from changing and falsifying either partially or completely. As the name implies, this program is applied to tahfidz Qur'an student to memorize Al-Qur'an under the guidance of their teacher. Memorization ability is determined by memory capacity which indicates brain health, one of which is influenced by the supply of oxygen to the brain. One way to maintain brain oxygenation is the management of deep breathing exercises combined with archery. The purpose of this study was to determine the effect of deep breathing exercises management in archery to achievement of memorizing the Qur'an. This research was held at SMP Ad-Dhuha Jember with a quasi-experimental one group pretest-posttest design method and was conducted in April-June 2019. The type of sample used was a total sampling of 34 respondents. Data analysis used the Wilcoxon Signed-Rank Test. The results showed an increase in the achievement of memorizing Al-Qur'an among students of the tahfidz Qur'an after managing deep breathing exercises with archery. Data analysis with alpha ( $\alpha$ ) <0.05 indicates a p value of 0.000 so that  $H_0$  is rejected. Thus there is an effect of deep breathing exercises management in archery on the achievement of memorizing the Al-Qur'an. A strong memory is needed to keep memorizing Al-Qur'an. To help increase the memory capacity of the brain, it requires an adequate supply of oxygen. Deep breathing exercises management combined with archery can be a way to maintain brain oxygenation. This exercise focuses on fulfilling oxygen needs, which in the process of memorizing the brain's memory functions are widely used.

**Key words: deep breathing, archery, memorizing Al-Qur'an.**

## 1. INTRODUCTION

The Tahfidz Qur'an program is the process of maintaining or preserving the purity of the Al-Quran by memorizing it as the main activity to avoid changes and falsification of the Al-Qur'an (Rosihan Anwar, 2004). Recitation targets are made based on the time it takes to memorize the Mushaf. The memorization ability of each student varies, depending on their concentration ability and memory or memory capacity in recording the Al-Qur'an recitation that has been done (Ayuningtyas, 2017 and Cece Abdulway, 2018).

A person's memory is influenced by the condition of the body, especially brain health, the better the condition, the better the memory ability. One thing that determines brain health is oxygen intake to maintain metabolism, including maintaining memory capacity. Oxygen intake to the brain can be maximized with aerobic exercise combined with deep breathing (Rizki, 2011, Tedi Eka, 2017 and Sarensriswati, 2015, Aliya, 2018). This technique is done by inhaling slowly through the nose as deep as possible then holding it for a while then exhaling slowly through the mouth. The benefits of this exercise include increasing oxygenation and blood circulation to the brain, reducing brain tension and maintaining memory capacity by maintaining the brain's metabolic rate (Harianti, 2008, Smeltzer & Bare, 2002, Aliya, 2018).

Management of deep breathing is one of the nursing actions, apart from being a relaxation measure, it is also useful for increasing oxygenation to the brain. Under normal physiological conditions, this exercise can be applied to archery. In archery, there are several techniques starting from how to stand, put on an arrow, a half-pull position, draw the bowstring, anchor, hold an archery stance, aim, shoot an arrow, and continue moving. Especially when pulling the bowstring, it is also accompanied by deep breathing through the nose to increase oxygenation to the brain, then the breath is exhaled through the mouth after shooting an arrow (Damiri, 1990, Tedi Eka, 2017).

## 2. METHODS

The research method used was a quasi-experimental one group pretest-posttest design with deep breathing management of archery as a treatment. The population in this study were santri tahfidz Qur'an SMP Ad-Dhuha Jember and the sampling technique used was a total sampling of 34 respondents. The activity was held at SMP Ad-Dhuha Jember for two months. Analysis of data using the Wilcoxon Signed-Rank Test with value alpha ( $\alpha$ ) = 0.0.

### 3. RESULTS

An overview of the achievements of memorizing the Qur'an before and after deep breathing exercise in archery.

**Table 1 An overview of the achievement of Qur'an memorization before deep breathing exercise in archery**

Memorization achievement	Frequency	Percentage
Very High	-	-
High	1	2,9%
Moderate	5	14,7%
Low	24	70,6%
Very Low	4	11,8%
<b>Total</b>	<b>34</b>	<b>100%</b>

The data shows that the majority of respondents' achievement of memorizing the Qur'an before deep breathing practice archery is low, as many as 24 respondents (70.6%).

**Table 2 An overview of the achievement of Qur'an memorization after deep breathing exercise in archery**

Memorization achievement	Frequency	Percentage
Very High	1	2,9%
High	4	11,8%
Moderate	25	73,8%
Low	4	11,8%
Very Low	-	-
<b>Total</b>	<b>34</b>	<b>100%</b>

The data shows that the majority of respondents' achievement of memorizing the Qur'an after deep breathing training for archery is moderate as many as 25 respondents (73.5%).

**Table 3 Cross tabulation of the achievements of memorizing the Qur'an before and after deep breathing exercise in archery**

Memorization achievement		Post-Test				Total
		Low	Moderate	High	Very High	
Pre-Test	Very Low	4	0	0	0	4
	Low	0	24	0	0	24
	Moderate	0	1	4	0	5
	High	0	0	0	1	1
<b>Total</b>		4	25	4	1	34

The data shows that there is an increase in memorizing the Qur'an in students.

**Table 4 Effect of deep breathing exercise in archery on the level of recitation of the Qur'an**

Pretest - Posttest	
Z	-5.745 <sup>b</sup>
Asymp. Sig. (2-tailed)	,000

The data analyze shows that the achievement of memorizing the Qur'an before and after being given deep breathing exercises through archery experienced significant changes. The results of the analysis of this study using the Wilcoxon signed rank test at alpha ( $\alpha$ ) = 0.05, the p-value = 0.000. Thus  $H_0$  is rejected and  $H_a$  is accepted, which means that there is an effect of deep breathing training in archery on the achievement of recitation of the Qur'an.

#### 4. DISCUSSION

The Qur'an tahfidz program sets the goal of memorizing the Al-Qur'an, starting at the time the students enter and ending before graduation. This memorization activity is carried out every day after dawn prayers until before breakfast, then continued in the afternoon or evening until before the agreed bedtime. The Al-Qur'an memorization program includes 3 main activities, namely (1) the Ziyadah method or the method of rote deposit, (2) the Muroja'ah method or the method of rote repetition, and (3) the Qiro'ah method or memorization by reading. The assessment was carried out on the number of achievements of the Qur'an memorization which was calculated based on the number of lines of verses that were memorized (Puspitasari, 2014 and Az-Zamawi, 2010). The memorization activity begins with reading the verses of the Al-Qur'an, read it

over and over again until the process of recording the reading occurs in the brain. After the brain records, the next process is that the brain will store the information on the recitation of the Al-Qur'an, so that this information is properly recorded so the students will always repeat the recitation of the Al-Qur'an verse over and over. After it has been recorded properly, the students will continue to recite the Al-Qur'an in the next verse and start the memorization process as before.

Memorization activities spur the brain to record the recitation of the verses of the Al-Quran. The first stage of the brain will use the sensory memory function as the beginning of the memory process, the second stage will read the verses of the Qur'an for several times so that these readings become stored information in the short term, the final stage of the brain will store all the readings that have been recorded. Human memory is located in the pre-frontal lobe, this area is the highest intellectual place to store information. Meanwhile, the process of forming memory/memory is in the hippocampus area of the thalamus, which plays a very vital role in the compilation, storage, repetition and recall of memories. In the process of memorizing, the brain works stronger and requires oxygen as a component in its metabolism (Guyton, 1995). To help fulfill oxygen, it is necessary to manage deep breathing exercise.

Deep breathing is a relaxation technique that is very useful for supporting brain function. In archery, deep breathing is carried out together when the arms pull the bowstring (drawing), then they are held for about 5 seconds and then exhaled after releasing the arrow (Husni, Hakim, Gayo, 1990: 294, Smeltzer & Bare, 2002 ). This exercise is an aerobic exercise, if done correctly it can provide quite a lot of benefits, physiologically it can increase the ventilation of the alveoli to increase oxygenation to body tissues, especially the brain by approximately 20-40%, thus helping to optimize the work of the brain as a function of memory or memory. (Harianti, 2008, Rizki 2011, Priharjo, 2003, Smeltzer & Bare, 2002).

For Tahfidz Qur'an students, deep breathing exercises that are applied to archery are very helpful in supporting Al-Qur'an memorization activities. This exercise focuses on tissue oxygen demand which is physiologically closely related to oxygen fulfillment, especially the brain. In memorizing situations, the brain will work harder to increase its memory capacity so that it requires good oxygenation as well. With deep breathing exercises through archery, it is hoped that the oxygen needs of the brain can be met so that memory function can be improved.

## **5. CONCLUSION**

Management of deep breathing exercises in archery can help meet the oxygen needs of tissues, especially the brain. In the Tahfidz Qur'an activity, this exercise can be applied to improve the level of recitation of the Qur'an. For schools and students alike, this activity

can be applied as an extra-curricular activity in creating a generation of Al-Qur'an memorizers.

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