

## THE EFFECT OF LISTENING TO SURAH AR-RAHMAN AND READING THE MEANING TO IMPROVE THE SLEEP QUALITY AMONG GRADE 1 STUDENT OF A JUNIOR HIGH FEMALE BOARDING SCHOOL IN YOGYAKARTA

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### ABSTRACT

**Background:** Quality of sleep has been associated with optimum learning performance of students. Moreover, the quality of sleep was influenced by several factors, such as: physical health status, environment, diet, life style, medication, and psychological stress. While, studying in a boarding school might pose to psychological stresses, especially in the early age of adolescent, due to being separated from the parents and the requirement to be more independent. Listening to Qur'an has been implemented as a daily routine activity in Islamic boarding school. It was argued that understanding the meaning of Qur'an might influence the wellbeing of individual. The study aimed to shed some lights into how listening to surah Ar Rahman and understand the meaning might influence the quality of sleep, as one sign of psychological wellbeing.

**Methods:** The research design was an experiment with pre-and posttest group control approach. Sampling was carried out by a random sampling technique that involved 70 respondents, divided into 35 respondents each for treatment and control group. Treatment, listening to and reading the meaning of Ar Rahman, was delivered for 14 days consecutively, whereas, the control group was only listening to Qur'an as the daily routine activity. The sleep quality was measured by Pittsburgh Sleep Quality Index (PSQI) before and after the treatment. Data analysis was using paired sample t-test, Wilcoxon test, and Mann Whitney test.

**Results:** There were less than 40% students with bad quality of sleep. Furthermore, there was no significant difference in the respondents' sleep qualities before and after listening Ar Rahman along with reading the meaning between the intervention and control group ( $p > 0,05$ ). The limitation of the study was the lack of understanding of self-motivation among the students that might play into a role of dealing with daily difficulty in a boarding school, as well as prior individual practice of listening to Qur'an before entering the school.

**Conclusion:** The results of this study showed that listening Al-Quran (Ar-Rahman) along with reading the meaning had no significant effect on sleep quality among grade 1 student at a junior high boarding school in Yogyakarta.

**Keywords:** *Sleep Quality, listening and reading the meaning of Ar Rahman, Islamic boarding school*

## INTRODUCTION

Quality of sleep among students have been associated with learning performance (Nilifda, Nadjmir, & Hardisman, 2016; Ruhjana, 2012). There are several factors that might be influenced in the process of learning such as: work memory capacity (Pratiaksa, 2015), concentration (Masyeni, 2010), short term memory (Prastiti, 2011) and verbal creativity (Sudirman & Nashori, 2004), among others. On the other hand, there were several factors that influence quality of sleep, such as: physical health status, environment, diet, life style, medication, and psychological stress (Asmadi, 2008). Moreover, psychological stress can be triggered by several factors, among them, are: economic status, kinship/ family interrelationship, anxiety in dealing with daily life and depression (Robbins & Judge, 2015).

According to Allen *et al* (2010), children who were separated from the family or home, would develop anxiety since they felt abandoned. This feeling might lead to further psychological disorder, such as afraid of sleeping alone, or other behaviors related to separation-related emotions such as anger, crying and unwanted to be parted from the parents. Thus, a teenager with any psychological disorder, was argued, would likely to develop sleep disorder (Simola, *et al* 2012).

Mu'allimat Junior High School Yogyakarta is one of the leading Islamic Boarding school in Yogyakarta, Indonesia. Affiliated to one of the largest Islamic non-governmental organization in Indonesia, Muhammadiyah, it was established in 1932 (accessed from <http://www.muallimaat.sch.id/profil-9#sthash.dN4l72ex.dpbs>). As part of the Islamic norms and values in regards of how male and female should be separated in any direct relationship, Mu'allimat is designated for the female students, whereas, Mu'allimin is for the male students. Similar to other junior high school level, it was served as an alternative for the students from the elementary school to seek further level of education after students graduated, which represented children aged 12 to 15 years old.

As part of the general regulation, as in other boarding school (pesantren) in Indonesia, students are required to spent their learning time inside the school perimeter. The students were taught not only to understand Islamic teachings and values, and implemented them in daily life, but also to learn about leadership, independency, perseverance, being humble, equality and other Islamic virtues (Sa'adati, 2014). Nevertheless, those requirements would, to some extent, be acted as sources to any psychological stress due to the different circumstances and requirements from previous status as an elementary school students, as well as part of family living together in one home (Zakiyah *et al*, 2010).

Reading Al Qur'an is one of the regular daily activity in any Islamic boarding school, so is within Mu'allimat Junior High School. The requirement to memorize few parts of Al Qur'an (juz) was also obligated to all students, not the least understanding the meaning. Nevertheless, reading Al Qur'an has been implemented as one of the main religious activity among the students.

Al Qur'an has mentioned the advantages of reading it in several surah which was, one of them, as to "give assurance", as can be seen in Surah Ar Ra'd (13) verse 28: "Those who have believed and whose hearts are assured by the remembrance of Allah. Unquestionably, by the remembrance of Allah hearts are assured".

Another explanation come from Surah Yunus (10) verse 57 “O mankind, there has come to you instruction from your Lord and healing for what is in the breasts and guidance and mercy for the believers” (The Qur’an, 2012).

Thus, this study was aimed to discover the influence of listening to Al Qur’an, especially Surah Ar Rahman, and reading the meaning to the quality of sleep among the female students of Mu’allimat Junior High Female boarding school in Yogyakarta.

## RESEARCH METHODS

This was a quantitative study with a pre-and posttest control group design. The intervention group was listening to and reading the meaning of Al Qur’an surah Ar Rahman, while control group was only listening to the surah without reading the meaning. The study was conducted in 14 days with the intervention and control was done every day after the students finish their isya sholat or at 19.30 approximately. The intervention was running for 8 minutes 30 second through the public announcement speakers where the intervention and control group could listen together.

The quality of sleep was determined by using the Pittsburgh Sleep Quality Index (PSQI), which was already translated and adapted in Bahasa Indonesia with specificity of 86,5%, sensitifity of 89,6%, and cronbach alpha of 0,83 (Angkat, 2010). PSQI consisted of 9 items with rating scale 0 to 3 for each item.

PSQI was consisted of several elements, such as subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbance, using medication, daytime disfunction (Majid , 2014). The higher the score the worst the quality of sleep was. A good quality of sleep has a score of 1 – 5, mild was from 6 – 7, moderate from 8 – 14 and bad was 15 – 21.

The population of the study were 225 first year female student to Mualimmat junior high school. The sample was calculated by sampling size calculation (Imron, 2014), and collected 70 students, which were divided randomly into intervention and control group, evenly. The criteria for the sampel were first year female students and did not have a good quality of sleep.

## ETHICAL APPROVAL

The study has accepted an ethical clearance from the committee of ethic of the Faculty of Medicine and Health Sciences, Universitas Muhammadiyah Yogyakarta, prior to conduct data collection.

## RESULTS

Among 70 participants in this study, there were no one with a good quality of sleep. There were 12 participants with mild quality of sleep, 56 with moderate, and 2 with bad quality of sleep. Current study was conducted among female students. Evidences were varied on the relationship between gender and sleep disturbance among teenagers. Patten, et al. (2000), that utilized Teenage Attitudes and Practices Survey, showed female was more vulnerable to sleep disorder compared to male teenager. While, Haryono, et al. (2009) showed gender was not correlated to the quality of sleep among teenager 12 – 15 years old.

In general, the study showed there was a decreasing trend of PSQI score among the intervention and control groups after the treatment (Table 1). It meant there was a better quality of sleep among the participants from both groups, whether only listening to the recitation or reading the meaning while listening.

Muslim believes that by reading Al Qur'an might give assurance to whoever listen to it. Al Qur'an has mentioned in Surah Ar Ra'd (13) verse 28, among others, that by remembering Allah (for example, by listening to the Al Qur'an) they will have a better piece of mind. "Those who have believed and whose hearts are assured by the remembrance of Allah. Unquestionably, by the remembrance of Allah hearts are assured" (The Quran, 2012).

**Table 1. The difference average score of sleep quality between control and intervention groups**

Quality of sleep score	Control	Intervention
Before	9,14	10,14
After	8,74	9,63
Decreasing	0,4	0,51

Below were discussions in regards of the difference of sleep quality among the control and intervention groups before and after the treatment. Table 2 shows the result from the Wilcoxon test in the control group, whereas table 3 is the intervention group.

**Table 2. Sleep Quality among the Control Group before and After the Treatment**

Sleep Quality	Variable		Z	p
	<i>Pre</i>	<i>Post</i>		
Good	0	2		
Mild	7	9		
Moderat	27	24		
Severe	1	0	-1,505	0,132

Furthermore, the table shows that there is no significant difference of sleep quality between before and after the treatment in the control group ( $p = 0,132$ ,  $p > 0.05$ ). The result revealed, even though there was an improved sleep quality among the students in the control group, the difference level was regarded as insignificant; whether it was caused by chance or other determinant factor, yet were not included in the study. Thus, this was not in accordance to the study by Fatimah (2012) which has found a significant improvement to the quality of sleep among elderly people. Yet, current study was not intended to put into account the history of prior practice of Al Qur'an recitation among the students before they entered the school. Thus, it can be served as an entry point for further similar studies.

Moreover, table 3 shows the sleep quality among students after reading the meaning of Surah Ar Rahman while listening to the recitation.

**Tabel 3. Sleep Quality among Students in the Intervention Group**

Sleep Quality	Variable		p
	<i>Pre</i>	<i>Post</i>	
Good	0	2	0,230
Mild	4	3	
Moderate	30	29	
Severe	1	1	

In general, there were several students who has improved their level of sleep quality after reading the meaning and listering to Surah Ar Rahman. Nevertheless, the paired sample T test showed there was no significant difference, whatsoever, with  $p = 0,230 (> 0.05)$ . Similar to the control group, it might mean that the improvement may be accounted to the others determinant factors such as prior practice of reading the Qur'an, or pure chance.

Another factor that might play into role was the psychological state of the students. A consideration has to be put in mind, the participants of the study was a first-year female students in a boarding school who were to some extent still trying to adjust their daily lifestyle. They were separated from the family and expected to be more independent in caring their own life. Thus, this circumstances might lead to any psychological difficulties, to some extent.

The practice of reading Al Qur'an has been strongly suggested by Islam to all Muslim to be their regular daily practice (Turner, 2006). Moreover, by reading was also meant understanding the meaning, since Al Qur'an is regarded the guidance in life for those who believe, as mentioned in Surah Al Baqarah (2) verse 2: "This is the book about which there is no doubt, a guidance for those conscious of Allah" (The Qur'an, 2012). As an Islamic boarding school, which implemented the teaching of Islam, Mu'allimat has also been envisioned to implement the values and practices of Islam, such as listening to Al Qur'an.

To discover the difference of sleep quality between the control and intervention group, Mann Whitney u-test was utilized. Table 4 shows the results.

**Tabel 4. Mann Whitney U-Test to Compare the Sleep Quality Between the Control and Intervention Groups**

Groups	N	Mean Rank	P	z
Control	35	35,73	0,924	-0,095
Intervention	35	35,27		
Total	70			

The test shows that there was no difference in the level of sleep quality between control and intervention group with p value of 0,924 ( $>0.05$ ). There was lack of studies in regards of listening to Al Qur'an and quality of sleep among teenager. However, many studies have revealed a positive effect of listening to Al Qur'an in managing insomnia among the elderly (Fatimah, 2012; Solikhah, 2014; Juliana, 2014). This difference might also be influenced by the maturity of the participants; elderly might have a more mature attitude and thought in comprehending any psychological stressor, whereas, teenager tended to be more emotional. Furthermore, similar to the previous discussion, this study did not strive to seek further into several determinant factors, such as prior practice of listening Al Qur'an before entering the school, or other compensatory action that the participants have already tried to deal with their daily psychological distress.

## CONCLUSION

Current study has revealed several results. Firstly, there were sleep disorder among the participants. Furthermore, there was no significant different of sleep quality among control or intervention group, between before and after the treatment.

Furthermore, there was no significant different between the level of sleep quality between control and intervention groups before and after the treatment.

The study also revealed the limitation of the absence of several determinant factors such as the psychological status of the participants (as they have been, to some extent, still adjusting their daily life), prior practices of reading the meaning of the Al Qur'an before entering the school.

Therefore, the study also suggests for further studies to include aforementioned factors into account and conducting a more interpretative studies to reveal the subjective experience and feeling of practicing particular practice of reading the meaning of Al Qur'an.

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