

The Effectiveness of Reading Al-Qur'an Surah Al-A'la on Short Term Memory

Putri Anggraini^{1*}, Liza Apriliani², Pingkan Visionari Prasetyaningtyas³, Netty Merdiaty^{4*}

^{1,2,3,4} Fakultas Psikologi, Universitas Bhayangkara Jakarta Raya, Indonesia

e-mail: *202110515051@mhs.ubharajaya.ac.id

Abstract / Abstrak

The aim of this research is to find out whether reading the Al-Qur'an is effective on short-term memory. Using a quasi-experimental research method with one group pretest-posttest design. The subjects of this research were 16 female students at one of the SMP in Cibitung. The results of the research found that there is effectiveness in reading Al-Quran surah Al-A'la on short term memory, this can be seen in the results of the t test which obtained a t value of 2,739 with a t table of 2,119 which shows that t count > t table. By knowing the effectiveness of reading the Koran on short term memory, it is hoped that readers will be able to implement it in their daily lives.

Tujuan dari penelitian ini yaitu supaya mengetahui adakah efektivitas membaca Al-Qur'an pada short term memory. Memakai metode penelitian kuasi eksperimental melalui one group pretest-posttest design. Subjek penelitian ini merupakan 16 pelajar salah satu SMP di Cibitung. Hasil dari penelitian menemukan bahwa adanya efektivitas dalam membaca Al-Quran surah Al-A'la terhadap short term memory, hal ini terlihat pada hasil t test yang memperoleh nilai t hitung sebesar 2.739 melalui t tabel 2.119 yang menunjukkan bahwa t hitung > t tabel. Dengan mengetahui adanya efektivitas dari membaca Al-Qur'an pada short term memory diharap para pembaca mampu mengimplementasikannya pada kehidupan sehari-hari.

Keywords / Kata kunci

Short term memory;
Al-Quran;
Adolescence

*Short term memory;
Al-Qur'an;
Remaja*

DOI:

<https://doi.org/10.15575/jpib.v7i2.33272>

Article Info

Received: January 15, 2024

Accepted: December 23, 2024

Published: December 27, 2024

Copyright © 2024 The Author(s). Published by Fakultas Psikologi UIN SGD Bandung, Indonesia.

This is an Open Access article under the CC BY 4.0 license

Introduction

Adolescence is the period of transition to junior high school from primary school, a period that requires more focus and better memory than during primary school (Santrock, 2003). Therefore, a good memory is required during the learning process in adolescence. This is because memory allows humans to store and remember information, as well as re-discover that information when needed. Information that has been learnt is not completely lost and can be recalled if needed. However, not all information that has been acquired will be fully stored in memory or can be recalled. Sometimes there are things that can't be recalled, and that's what's called forgetting (Saputri, 2023).

Musdalifah (2019) explains that memory is the mental ability to store and recall sensations, ideas and also an impression. Saleh (2018) explains that memory is a psychic ability in terms

of entering, storing, and recalling past information.

Nofindra (2019) explains that memory has 3 models that can be distinguished, namely: 1. Sensory memory, which records information or stimuli that enter through one or a combination of the five senses, namely visually through the eyes, hearing through the ears, smell through the nose, taste through the tongue, and touch through the skin 2. Short-term memory is memory that can store data longer than sensory memory and faster than long-term memory. 3. Long-term memory is memory that can store data for a long period of time to be remembered in the future when the information is needed. To recall this information, humans conduct retrieval, which is in the form of recognition and recall. recognition recognises the stimulus with has been suffered in the past by the individual, while recall is to recall the data in the past stored. In the retrieval process, it can be done with the help of clues that are connected to the information in question.

Musdalifah (2019) explained, short term memory or short term memory has an important role in processing thinking. In addition, short-term memory also has limitations in its capacity, the average limit is 7 items or more, but at least people can store 5 items in their short-term memory. (Musdalifah, 2019).

In training memory, each person uses various methods. There are various ways or methods to improve short term memory, including through square stepping exercise. (Pramita, 2019), brain gym method (Sajodin et al., 2023), eating dates (Siregar & Kaban, 2020), watch Autonomous Sensory Meridian Response (ASMR) (Chandra et al., 2020), to reading and listening to the Qur'an (Nadimah, 2018).

However, there are still few studies that examine the effectiveness of reading the Qur'an on short term memory. There are only a few researchers who do it, including (Julianto & Etsem, 2011) Using brain wave analysis and the results obtained in the form of the effectiveness of reading the Qur'an in the form of significant changes in the ability of short-term memory in female students. Fauzan dan Abidin (2017) with the result that there is a link between reciting or listening to the verse of kursi on memory skills. Septadina et al (2021) which showed results in the form of significant results from the murottal Al-Qur'an on working memory in female students.

Based on the previous research above, it can be concluded that there is an effectiveness of reading the Qur'an on memory, especially short term memory in early and elderly adults. Fauzan in Sugiyono (2013) explains, This is because reading Qur'anic verses can induce a relaxing effect, relaxation and stress release and also calm the mind which leads to memory improvement. Thus, based on the above background, a gap was found that highlighted the need for more comprehensive research to explain the relationship between religious practices, specifically reading the Quran, and memory in younger subjects, namely adolescents. By examining the effectiveness of reading the Quran on short term memory in early adolescents, this study aims to contribute to a deeper understanding of practices that can positively influence cognitive health. Contextualising the research in academic discourse serves to advance knowledge and facilitate evidence-based approaches to address cognitive challenges associated with aging.

Method

This type of research uses a pre-experimental design approach. Pre-experimental designs are a type of research where researchers intervene or provide treatment to only one group, namely the experimental group without a control group (Sugiyono, 2013). The design of the pre-experimental used is one-group pretest-posttest design. One-group pretest-posttest design is an experimental design where there is a pretest and posttest in one group that is given treatment or intervention to compare the results of the treatment (Sugiyono, 2013). The independent variable in this study is reading the Qur'an and the dependent variable in this study is short term memory.

The research sample is based on the opinion of Roscoe (1975) The study used 16 research samples selected through purposive sampling techniques, purposive sampling includes samples selected based on characteristics or characteristics that are appropriate for the research objectives. Purposive sampling was carried out by selecting students from one of the junior high schools in Cibitung District, Bekasi Regency, West Java Province, who had time to participate in the study and were in the early adolescent phase. According to (Santrock, 2003) early adolescence is in the age range of 12 - 15 years. So that the sample in this study were 16 female students from one of the junior high schools in Cibitung who were female (this was because at the time of data collection male students were performing Friday prayers and non-Muslim male students had gone home) and were in early adolescence, which is at the age of 12-15 years.

The research instrument to measure short term memory used the forward digit span subtests on the Wechsler Intelligence Scale For Children (WISC) test. This instrument was used in the pretest and posttest. Forward digit span was chosen as a medium for measuring memory in the pretest and posttest because forward digit span is one part of the Wechsler Intelligence Scale For Children (WISC) test. Where the forward digit span contains several series of numbers that are used to measure attention, concentration and short term memory (Pertiwi et al., 2023). In the WISC digit span, only the forward is used to facilitate the calculation of test results.

In addition, the tools used as a medium for intervention or treatment use the Holy Qur'an and

mobile phones that have digital Qur'an applications as an aid in reading surah Al-A'la. Surah Al-A'la was chosen in this study because Surah Al-A'la is one of the surahs favoured by Rasullullah SAW. Surah Al-A'la became the surah favoured by Rasullullah SAW because this surah purifies the name of Allah and tells of His favours and gifts, Ali bin Abi Talib explained that Rasullullah SAW liked this surah (Prasetia, 2023). Not only is surah Al-A'la a favourite surah of the Prophet Muhammad, but it is also believed to help improve memory. This is supported by the interpretation done by tafsiralquran.id, a website initiated by the Centre for Research and Islamic Studies (CRIS) Foundation in collaboration with el-Bukhari Institute. In the interpretation done by (Redaksi, 2021) The interpretation of one of the verses in Surah Al-A'la explains that Allah sent down the Qur'an to the Prophet Muhammad to read it and Allah will open the Prophet's heart and strengthen his memory. Based on the two things mentioned above, therefore the researcher chose Surah Al-A'la in this experimental research.

A valid and reliable instrument is an important prerequisite in ensuring valid and reliable research results (Sugiyono, 2013). The measurement tool used in the study did not undergo validity and reliability testing because it had already been proven valid and reliable in previous studies. The Digit Span of the Wechsler Intelligence Scale for Children- Fourth Edition (WISC IV) has been used by many people internationally to evaluate memory ability levels, and has high reliability based on previous research by Dison in Simon (2018). High reliability is spread across all ages, with an average VIQ coefficient of .94, PIQ of .90, and FSIQ of .96. When testing individual tests, reliability was most positive, with average coefficients ranging from .77-.86 on the verbal test and .70-.85 on the performance test.

This research procedure consists of a pretest-intervention-posttest process in which the entire process is carried out by participants and guided and tested by the researcher. In this case there is no definite time because there are differences in the time in the pretest and posttest for each participant because the length of the pretest and posttest depends on the number and number of sequences that the participant is able to memorise. While in the intervention there is also no set time because of differences in the speed of individuals in how to read the Qur'an.

So that the research process begins with participants being asked to enter the experimental room, then the researcher explains the research procedure and gives informed consent to participants as an explanation sheet related to the research and guarantees the confidentiality of the participants' identity. Furthermore, the researcher asked the participants one by one to go outside the room to conduct a pretest through the forward digit span test media to the participants and was tested by the researcher. After the pretest was carried out, the researcher who conducted the test immediately calculated the results of the number of sequences that could be memorised by the participants. Each participant who has completed the pretest is invited to enter the room to be given an intervention or treatment in the form of directing participants to read the Al-Quran surah Al-A'la 7 times (in reading surah Al-A'la is done with the Holy Qur'an or a cellphone that has the Al-Qur'an Application in it, in the use between these two is adjusted to the availability available), the surah read is the original Arabic verse (hijaiyah letters) not translation. In providing the intervention, participants were directed into a room to avoid any intervention from extraneous variables. Then after the participants read Surah Al-A'la 7 times, the researcher conducted a posttest by still using the forward digit span and counting the series of numbers that the participants could remember.

To analyse this data, researchers used normality test and hypothesis testing. In order to check whether the data is normally distributed, it will be checked through the normality test. According to Sugiyono (2013) or the analysis of validity, reliability, and t test, the first requirement is that the normality test must show that the data is normally distributed. The normality test is made through the help of the SPSS for Windows version 26 program. The data obtained through research will be analysed using the paired sample t test. The paired sample t test was used to test whether there was an inequality of means between pretest and posttest scores.

Results

Normality checks were conducted using SPSS for Windows software. A dataset is considered to have a normal distribution if the p value is $> .05$. Normality tests can be carried out descriptively or analytically, where analytical methods have a higher level of objectivity and sensitivity than descriptive methods. If the total sample is > 50 ,

the Kolmogorov-Smirnov test is used, but if the sample is < 50 , the Shapiro-Wilk test can be applied (Sugiyono, 2013). In this study, with a sample of 16 female students, the Shapiro-Wilk test was used. If the calculated significance value $> .05$, it can be concluded that the data is normally distributed; conversely, if the calculated significance value $< .05$, the data is considered not normally distributed. The results showed that the distribution of the pretest ($p = .110$) and posttest ($p = .221$) data were both normal, as the p value $> .05$.

From the results of the comparison of mean values, it can be explained that the results showed an increase in short-term memory after participants read Surah Al-A'la. This can be seen in the increase in the average value of pretest and posttest scores, namely the pretest value of 6.18 and posttest of 6.68.

Hypothesis testing was also carried out with the t test. It can be seen from table 3 that the results of the analysis received a calculated t value of -2.739. in order to find whether the calculated t value is significant through a confidence interval of 95% or .05 must be compared to the value for the t table. In order to pay attention to the t table, it must be based on (dk) or degree of freedom (df) whose size includes n , in this study it means = 16. after being consulted through the table of t values through df 16 and the 95% confidence interval, the t table value of 2.11991 was received. the analysis results received the calculated t value of $2.739 > 2.1199$, so H_0 is not approved. This means that there is a significant impact of reading Al-Qur'an surah Al-A'la on short term memory in female students of one of the junior high schools in Cibirung. Therefore, the research hypothesis states that there is an effectiveness of reading Al-Qur'an surah al-a'la on short term memory.

Discussions

The discussion section is a description of the researcher's analysis of the research results obtained, by linking them to the results of previous studies. The maximum number of pages of results is 30-40% of the entire manuscript. The description in this section focuses on a critical and substantial analysis of the research results and comparison with previous findings based on the results of a review of relevant, current and primary literature. Comparisons should lead to differences with previous research findings so as

to show the contribution of research to the development of science.

The difference between this research and the previous research is the research that has been made from Julianto dan Etsem (2011) yang entitled The Effect of Reciting Holy Qur'an towards Short-term Memory Ability Analyzed Through the Changing Brain Wave. where they use brain wave analysis and use other letters of the Qur'an to see memory ability. while this study uses the WISC test to see memory comparisons. the consideration is to find out whether reading the Qur'an can affect short term memory.

Then there is another study that has been made by Nasution dan Sutysna (2022) entitled "The Effect of Memorizing the Qur'an with the One Day One Verse Method on Intellectual Intelligence in Medical Faculty Students of Muhammadiyah University of North Sumatra". They used the One Day One Verse method to see the effect on intellectual intelligence.

Another recent study is from Rizqiyah et al. (2024) entitled The Effect of Memorization Method on Students' Cognitive Intelligence in Islamic Religious Education (PAI) Subjects at Takhassus Al-Qur'an Wonosobo Junior High School. They concluded that the level of memorization and cognitive intelligence of students was in the good category.

In addition, there is also research conducted by Pramita (2019) on short term memory and found results in the form of the effectiveness of the square stepping method on short term memory. Research on short term memory was also conducted with the brain gym method by Sajodin et al. (2023) and found the results of the effectiveness of the brain gym method on short term memory. Research on short term memory was also conducted by Siregar with the method of eating dates Siregar dan Kaban (2020) found that there was an increase in short term memory.

In addition, research on short term memory was also conducted by Chandra et al. (2020) through the Autonomous Sensory Meridian Response (ASMR) viewing method and found an increase in short term memory. This study provides evidence that reading Surah Al-A'la can improve short-term memory in students of one junior high school in Cibirung. Despite some obstacles, the results of this study contribute to the understanding of the potential benefits of spiritual activities on cognitive function. Further research is needed to explore more detailed aspects related to the relationship between Qur'an recitation activities and cognitive abilities.

The results showed that the activity of reading surah Al-A'la has a positive effect on short-term memory in students of one junior high school in Cibitung. The results of this study indicate an increase in short-term memory ability after treatment in the form of reading the Qur'an, namely Surah Al-A'la. The results of this study are also in line with research conducted by Fauzan dan Abidin (2017) which found results in the form of an increase in memory in individuals after being given treatment in the form of reading the Koran, namely the Ayat kursi.

It should be noted that participants were treated by an outside party before the study began. The outside party asked participants to provide satisfactory results. This may be a factor that influences participants' anxiety. Although calming efforts were made by the researcher, the influence of the external treatment on the participant may provide variation in responses and should be noted in the interpretation of the results.

The results of this study contribute to the understanding that reading the Qur'an, one of which is Surah Al-A'la, can improve short-term memory in students of one junior high school in Cibitung. Although a positive effect was found, it should be recognized that external factors, such as pre-study treatment, may have influenced the participants' responses. Comparison with previous studies provides a basis for developing further understanding of the effect of reciting various surahs of the Qur'an on cognitive function. Further research with more rigorous experimental designs and further consideration of external factors is needed to validate these findings and identify the underlying mechanisms.

Conclusion

The results of this study indicate that the hypothesis is accepted because this study provides evidence that the activity of reading the Qur'an, namely Surah Al-A'la, has a positive impact on improving short term memory in students of one of the junior high schools in Cibitung. This conclusion confirms that involvement in religious activities, especially reading certain verses, can be one of the factors that support the development of cognitive functions, especially in terms of short term memory ability. This finding is expected to encourage readers to do Qur'an reading activities more often, because it is in accordance with the results of this experimental research which shows

that Qur'an reading activities have a positive effectiveness on short term memory. The limitation of this study is that there are parties outside the study who ask participants to provide satisfactory results, thus affecting the results of this study.

Reference

- Chandra, E. A., Sumekar, T. A., Muniroh, M., & Hardian, H. (2020). The effect of autonomous sensory meridian response to short-term memory function among young adult population in Indonesia. *Malaysian Journal of Medicine and Health Sciences*, 16(4), 6-11. https://medic.upm.edu.my/upload/dokumen/2020122114534702_2020_0170.pdf
- Fauzan, N., & Abidin, N. A. (2017). The Effects of Neurotherapy (Nft) using ayatul kursi as stimulus on memory performance. *Journal of Islamic, Social, Economics and Development*, 2(4), 22-31. www.jised.com
- Julianto, V., & Etsem, M. B. (2011). The effect of reciting holy qur'an toward short-term memory ability analysed trough the changing brain Wave. *Jurnal Psikologi*, 38(1), 17-29. <https://doi.org/https://doi.org/10.22146/jpsi.7661>
- Musdalifah, R. (2019). Pemrosesan dan penyimpanan informasi pada otak anak dalam belajar: Short term and long term memory. *AL-ISHLAH: Jurnal Pendidikan Islam*, 17(2), 217-235. <https://doi.org/10.35905/alishlah.v17i2.1163>
- Nadimah, N. A. (2018). Study on the effect of reading activities and listening to al-quran on human mental health. *Journal Intellectual Sufism Research (JISR)*, 1(1), 19-23. <https://doi.org/10.52032/jisr.v1i1.17>
- Nasution, A., & Sutysna, H. (2022). Pengaruh menghafal al-qur'an dengan metode one day one ayat terhadap kecerdasan intelektual pada mahasiswa Fakultas Kedokteran Universitas Muhammadiyah Sumatera Utara. *Scientific Proceedings of Islamic and Complementary Medicine*, 1(1), 9-14. <https://doi.org/10.55116/SPICM.V1I1.2>
- Nofindra, R. (2019). Ingatan, lupa dan transfer dalam belajar dan pembelajaran. *Jurnal Pendidikan Rokania*, 4(1), 21-34. <https://e-jurnal.stkiprokania.ac.id/index.php/jpr/artic/e/view/188>

- Pertiwi, Y., Arumi, M., Nasir, N., Gina, F., Adetya, S., & Muzzamil, F. (2023). *Buku Ajar Pemeriksaan Psikologi Tes Minat, Bakat, dan Intelegensi*. Program Studi Psikologi Universitas Bhayangkara Jakarta Raya.
- Pramita, I. (2019). Square Stepping Exercise Improve Short Term Memory in Elderly. *Proceedings ICFAR*. <https://doi.org/https://doi.org/10.36002/icfar.v0i0.985>
- Redaksi. (2021, March 4). Tafsir Surah Al-A'la Ayat 1-12. *Tafsiralquran.Id*. <https://tafsiralquran.id/tafsir-surah-al-ala-ayat-1-12/>
- Rizqiyah, F., Syam, R., & Farida, N. (2024). Pengaruh metode hafalan terhadap kecerdasan kognitif siswa pada mata pelajaran Pendidikan Agama Islam (PAI) di SMP Takhassus Al-Qur'an Wonosobo. *Jurnal Manajemen Dan Pendidikan Agama Islam*, 2(4), 249–261. <https://doi.org/10.61132/jmpai.v2i4.405>
- Roscoe, J.T. (1975) *Fundamental Research Statistics for the Behavioral Science, International Series in Decision Process*, (2nd Edition), Holt, Rinehart and Winston, Inc., New York
- Sajodin, Alfin, R., & Yualita, P. (2023). Improving short term memory through the brain gym method. *ABDIMAS: Jurnal Pengabdian Masyarakat*, 6(3), 4188–4193. <https://doi.org/10.35568/abdimas.v6i3.3299>
- Saleh, A. (2018). *Pengantar Psikologi*. Aksara Timur.
- Santrock. (2003). *Perkembangan Remaja* (Ed. 6). Erlangga.
- Saputri, S. N. (2023). Fenomena lupa dalam hafalan kitab santriwati (Berdasarkan tinjauan teori decay dan teori interferensi). *Jurnal Studia Insania, Mei, 1*, 1–15. <https://doi.org/10.18592/jsi.v11i1.8604>
- Septadina, I. S., Jannah, E. M., & Suryani, P. R. (2021). The effect of reciting holy qur'an toward short-term memory. *Jurnal Aisyah : Jurnal Ilmu Kesehatan*, 6(3), 565–568. <https://doi.org/10.30604/jika.v6i3.515>
- Simon, V. P. (2018). *Gambaran context blindness pada profil kognisi anak dengan autism spectrum disorder* (Thesis tidak dipublikasikan). <https://repository.unika.ac.id/16470/>
- Siregar, F. L. S., & Kaban, F. O. (2020). The Effect of the Date Palm on the Increase of Short-term Memory and Concentration of Learning. *Proceedings of the International Conference of Science, Technology, Engineering, Environmental and Ramification Researches ICOSTEERR*. Medan, Indonesia. 829–832. <https://doi.org/10.5220/0010092708290832>
- Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta