

APPLICATION OF THE SINGING METHOD TO IMPROVE COGNITIVE ABILITIES IN CHILDREN AT MDTA

Azzahra Aulia Muharram¹*, Yusrifa Meila Elfanadi¹, Muhammad Fadhil Irvansyah
Antero Persada¹, Very Julianto¹

¹ Sunan Kalijaga State Islamic University, Yogyakarta

*20102020018@student.uin-suka.ac.id

Abstract - *Good cognitive ability is a requirement for graduation at MDTA, and therefore an important aspect that requires development. This study aims to investigate the efficacy of utilizing the singing method as a means to improve cognitive abilities in children at MDTA. A quantitative approach utilizing pre-experimental design research was employed to conduct this study. The research design included pretests and posttests administered both prior to and after treatment. This study was conducted over one month with a research sample of 17 fourth-grade students from Madrasah Diniyah Takmilyah Awaliyah. Data was collected through observation and analyzed using a non-parametric test, specifically the Wilcoxon Signed Ranks Test in SPSS 18. Data was collected through observation and analyzed using a non-parametric test, specifically the Wilcoxon Signed Ranks Test in SPSS 18. Technical term abbreviations are defined upon first use. The study revealed a significance value below 0.05, indicating that implementing the singing method improves cognitive abilities among children in Madrasah Diniyah Takmilyah Awaliyah when studying religion-oriented subjects.*

Keywords: *Cognitive Abilities, Singing Method, Madrasah Diniyah Takmilyah Awaliyah.*

1. INTRODUCTION

Madrasah Diniyah Takmiliyah Awaliyah (MDTA) is a non-formal educational institution that provides Islamic religious education as a complement to elementary and middle school education for students and children. Technical term abbreviations are introduced when first used. The basic level program takes 4 years and includes a minimum of 18 hours of weekly lessons (Ministry of Religious Affairs, 2014). The curriculum covers subjects such as Islamic religion, Arabic language, Al-Qur'an, Hadith, Islamic history, Aqidah, Akhlak, and Fiqh.

Good cognitive ability is a graduation requirement at MDTA and a crucial aspect that requires development. Cognitive abilities include problem-solving, logical and mathematical thinking, knowledge assimilation, and literacy demonstration (Yaswinda, 2019). Furthermore, Chandrawaty defines cognitive ability as the capacity to think, encompassing processes such as capturing, connecting, assessing, and considering an issue (in Heni Herlina, 2020).

Piaget proposed that cognitive development involves how children observe and comprehend objects and events in their surroundings. According to Piaget, cognitive development encompasses four stages: sensorimotor (birth to 2 years), preoperational (2 to 7 years), concrete operational (7 to 15 years), and formal operational (11 to 15 years). The cognitive development stage for each child describes their ability to reason and conceptualize (Chandrawaty et al., 2020).

Piaget disclosed that humans undergo changes in the structure of their thinking during their development, resulting in an increasingly organized thinking structure, which is always built on the structure of the preceding stage. The development is propelled by four factors, namely physical maturity, experience with physical objects, social experience, and equilibration (Khiyarusoleh, 2016).

Researchers utilize indicators of cognitive abilities by referencing the obligatory and impossible properties attributed to Allah and the Apostle, detailing the genealogy of the prophet from both his father and mother, and providing the total number of his children. The meaning of each trait, whether impossible or obligatory, is thoroughly understood based on the theory of Anderson and Krathwohl. Anderson and Krathwohl posit that a person's cognitive domain can be said to have learned something if a change has occurred, but not all changes correspond to learning outcomes. Learning outcomes are the achievements of learning objectives and are a product of the learning process. Six indicators, including remembering, understanding, applying, analyzing, evaluating, and creating, have been conveyed (Laksana et al., 2021).

The initial observations indicate that children face difficulty and lack interest in memorizing and comprehending *aqoidul iman* and the genealogy of Prophet Muhammad SAW due to the complexity of sentences that cannot be memorized through mere reading. Nonetheless, this is essential knowledge for every Muslim to acquire. So few children are able to effectively recall the *aqoidul iman*, the genealogy of Prophet Muhammad, and his descendants due to the monotonous memorization technique used in teaching.

At MDTA, several methods are employed to facilitate comprehensible learning, including the Singing method. The singing method is a pedagogical technique that utilizes sung verses, which are often customized to convey course material to students. Advocates contend that singing can foster an engaging and passionate learning environment, which can optimize children's development (Fadlillah, 2012).

Through the use of singing as a teaching method, the learning atmosphere for children can become more engaging, enjoyable, and less tedious. Moreover, singing can create an environment where children feel entertained and joyful. Singing can enhance the potential of the right hemisphere of the brain, allowing information to be retained in long-term memory. This ensures that the words conveyed are more easily remembered by the children. The aforementioned benefits have been noted by Herlina in Wicaksono et al (2022).

Therefore, this study aims to examine the effectiveness of the singing method in enhancing children's cognitive aptitudes at MDTA, specifically their ability to comprehend the presented material and their enthusiasm for learning.

2. METHOD

This research employs a quantitative approach utilizing the Pre-Experimental Research Design. The research design involves administering pretests before treatment and posttests after treatment. The study was conducted over the course of one month with 17 fourth-grade students from Madrasah Diniyah Takmiliyah Awaliyah as research subjects. The technique used for data collection was observation.

Observation is a method of gathering data through direct observation in data collection (Abdullah et al., 2016). A checklist and rating scale is employed as the measuring tool to document research observations and their outcomes. Checklist and rating scales are observation tools used to assess aspects of a subject. A checklist provides a comprehensive set of items to be observed while a rating scale categorizes the observed aspects into a useful range. These tools assist observers in identifying and distinguishing differences in several observed aspects (Hipi et al., 2022).

The data analysis technique utilized a non-parametric test, specifically the Wilcoxon Signed Ranks Test, via SPSS 18. The Wilcoxon Signed Ranks Test assesses the impact of the independent variable, namely the singing method (X), on the dependent variable, cognitive ability (Y), by comparing pre and post-treatment conditions to determine treatment efficacy (Nuryadi et al., 2017). Its purpose is to either confirm or reject the hypothesis at hand.

3. RESULTS AND DISCUSSION

The study took place at Madrasah Diniyah Takmiliyah Awaliyah Nurul Hasanah in Dusun Satu RW 04 Margamukti Village. The class included nine boys and eight girls. It observed the 17 pupils in grade 4 MDTA by completing a checklist covering predetermined aspects. The study involved an observation of children's

cognitive abilities in memorizing, understanding, and analyzing Aqidul Iman and the genealogy of Prophet Muhammad from both parents. Prior to treatment, an assessment was conducted and the results of cognitive abilities among children are presented below.

Table 1. Cognitive Ability of 4th Grade Children MDTA Nurul Hasanah Before Treatment

Criteria for Children's Skills	Percent	
	Number of Kids	%
Undeveloped	3	18
Starting to Develop	14	82
Developing as Expected	0	0
Developing Very Wel	0	0
Number of Kids	17	100

Based to Table 1, the pre-test results indicate that among 17 children, 3 or 18% fall under the category of undeveloped cognitive skills, while 14 or 82% fall under the category of those who are just beginning to develop cognitive skills. None of the children exhibit exceptional skills in memorizing and comprehending the Aqidul Iman and the lineage of Prophet Muhammad SAW.

Table 2. Cognitive Ability of 4th Grade Children of MDTA Nurul Hasanah After Giving Treatment

Criteria for Children's Skills	Percent	
	Number of Kids	%
Undeveloped	0	0
Starting to Develop	1	6
Developing as Expected	11	65
Developing Very Wel	5	29
Number of Kids	17	100

Based on Table 2, the post-treatment test results indicate that out of 17 children, 1 child falls into the category of beginning to develop at a rate of 6%, 11 children fall into the category of developing as expected at a rate of 65%, and 5 children fall into the category of developing very well at a rate of 29%.

Observation data, collected using a checklist and rating scale, was analyzed with SPSS version 18 using non-parametric tests due to the non-normal distribution of the data. The results were obtained using the Wilcoxon Signed Ranks Test.

Table 3. Wilcoxon Ranks Test Results

	N	Mean Rank	Sum of Ranks
POST_TES - PRE_TES	Negative Ranks	0 ^a	,00
	Positive Ranks	17 ^b	153,00
	Ties	0 ^c	
	Total	17	

Test Statistics ^b	
	POST_TES - PRE_TES
Z	-3,630 ^a
Asymp. Sig. (2-tailed)	,000

Based on the above results, it is evident that the wilcoxon test yielded significant outcomes with a P-value <0.05, which translates to 0.000. This demonstrates rejection of H_0 , indicating a difference in the cognitive abilities of children after learning with the singing method, both before and after treatment, at MDTA Nurul Hasanah.

The singing method was employed in teaching at MDTA Nurul Hasanah from July 13th to August 15th, 2023. The material covered the aqidul iman and genealogy of Prophet Muhammad SAW from both the father and mother lines. The material was taught through the singing method and consisted of subjects customary to Madrasah Diniyah Takmiliah Awaliyah. The learning was carried out for one hour, five days a week. The distribution of materials occurs after the children recite the Qur'an and follow the lesson schedule.

MDTA students were presented with materials discussing aqidul iman and the genealogy of the Prophet Muhammad in the form of a poem. The implementation of singing techniques in each child's education can stimulate their development (Fadlillah, 2012). One of the cognitive development benefits for children, according to Syamsuri Juri, is the use of songs in learning. This method has advantages as a tool for children to recall the learning material taught by their teacher in class (Fadlillah, 2012).

Utilizing the singing method is highly effective in enhancing cognitive abilities, and it can create a joyful and enthusiastic atmosphere for learning, thus optimizing children's memory. The singing method can enhance children's cognitive abilities, as it does not necessitate rigorous training and is naturally enjoyable for kids (Darmayanti et al., 2022). By employing this method, MDTA can pique the students' curiosity and make their learning process more efficient. Furthermore, singing aids in material retention. Providing material paired with songs can enhance children's memory as interesting and enjoyable content aids in better retention (Imron & Fajriyah, 2021).

Following this approach, the children demonstrated an improvement in recalling mandatory and impossible attributes of Allah and the genealogy of Prophet Muhammad's lineage, including both paternal and maternal connections. After implementing the singing method, the children appeared more enthusiastic and engaged in the lesson, and responded enthusiastically when asked about the material presented. Utilizing engaging and enjoyable teaching methods helps prevent feelings of boredom and disinterest while learning in the classroom, ultimately preventing monotony (Murni et al., 2020). In addition, this approach is preferred by children as it has been ingrained in them since birth, allowing for easy

pronunciation and enjoyment of each word sung. Consequently, children's cognitive skills are nurtured, preventing boredom during learning activities (Mardiah & Ismet, 2021).

The results of this study are in accordance with the results of research conducted (Ambarwati, 2023) which states that the implementation of the singing method to improve children's cognitive abilities can run quite well. This is also supported by the results of research from (Hidayatul Masruroh, 2021) which shows that the singing method can improve student learning outcomes in aqidah akhlak subjects with asma'ul husna material at Madrasah Ibtidaiyah. Based on this, the results of the study show a significance value of less than 0.05, which means that the singing method can improve cognitive abilities in children in Madrasah Diniyah Takmiliah Awaliyah in the provision of religion-based subjects. This can also be seen from the percentage increase from the stage before the action and after the action in the classroom.

4. CONCLUSION

According to the research conducted, the effectiveness of the singing method for enhancing cognitive abilities in children at MDTA Nurul Hasanah has been determined. The results show that utilizing the singing method is successful in improving the memorization and comprehension of *aqoidul iman* and the genealogy of the Prophet Muhammad. This is indicated by a statistically significant difference ($p < 0.05$) before and after treatment, suggesting an improvement in the cognitive abilities of children at MDTA Nurul Hasanah.

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