

The Effectiveness of Scaffolding Method to Increase Daily Prayer Ability of Mentally Retarded Student in Muhammadiyah Extraordinary High School

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Abstract: This research aims to examine the effectiveness of scaffolding methods on the daily prayer ability of mentally retarded student of the Muhammadiyah extraordinary high school. Which means is the scaffolding method can increase daily prayer ability of mentally retarded student. The research approach used is quantitative with experimental type with Single Subject Research (SSR) approach, with A-B design. The subjects of this study were two mentally retarded students of the Muhammadiyah extraordinary high school. The object of this research is daily prayer ability. Data collection techniques used in this study are tests, observations, interviews, and documentation. Data analysis technique used in this research is descriptive statistical data analysis technique with data analysis in condition and between condition. The results of this research indicate that the scaffolding method is effective in increase the daily prayer ability of mentally retarded students of the Muhammadiyah extraordinary high school.

Keywords: scaffolding method, daily prayer ability, mentally retarded student

I. INTRODUCTION

Islamic education is a conscious and deliberate effort in preparing learners to know, understand, appreciate till believe in religious teachings of Islam in conjunction with the guidance to respect other religions in relation to inter-religious harmony to manifest the unity and integrity of the nation [1]–[3]. While regarding the matter of Islamic religious education is divided into three principal problem, namely *aqidah* (*faith*), *Shari'a*, and morality [4], [5].

One of the Islamic *Shari'a* is the command to run the prayer, especially the five daily prayers. Pray is obligatory for people who believe, so this also applies to mental retarded students which are moslem, especially those who had been sitting in high schools. Although in reality it is still difficult to apply to mentally retarded students, remembering the characteristics of students with impaired mental retardation in cognitive development and personality [6], [7].

Islamic education learning in the form of pray for medium mentally retarded students still need guidance or directives from the Islamic education teachers so that students can be independent [8]. Of course, teachers are also required to present a creative and innovative learning for mental retarded students. In addition, teachers also served to instill the values and attitudes to the students to have a good personality [9].

In order to balance the ideality that pray is an obligatory for every Muslim who believe, with the reality that mental retarded students who has intelligence below average would be difficult if he must pray in perfect accordance with the Islam's rule. Nevertheless of course there is still a way to achieve this aim, one of them by applying Scaffolding methods in students' learning in the classroom [10], [11].

Scaffolding in practice is the provision of assistance to students during the early stages of

learning, then reduce aid, and provide an opportunity to take over greater responsibility as students can do [12]. In this context, the researchers used this method to help mentally retarded students to improve prayers ability. Based on the background above problem formulation in this research as follows: "Is the scaffolding method effective in increasing medium mentally retarded students of the Muhammadiyah extraordinary high school Jombang daily prayers ability?"

The ability of prayer is proficiency in utter and perform pray movement that started from takbir and quits with regards [13], [14]. Daily prayer (pray which should be done by Muslims) there are five, that are; *Dhuhur* pray, 4 *raka'at*, and the time since the sun inclines towards the west until the shadow of the same length as the object. *Ashr* pray, 4 *raka'at*, and the time since the shadow is longer than the object up to 2 times longer shadow of the object, about nearly sundown. *Maghrib* pray, 3 *raka'at*, and the time since the setting of the sun until the yellow mega missing. *Isha* pray, 4 *raka'at*, and the time since the loss of the true mega yellow until dawn (almost) rises. *Fajr* (*Shubuh*) Pray, two *raka'at*, and time is at the dawn of the true (almost) rises. The indicators that can be measure here are pillars and conditions prayer, time and place, reading prayer, and prayer movement.

Depth of knowledge or knowledge tiered referred as scaffolding. Scaffolding means giving individuals a number of great assistances during the early stages of phased-learning and then reduce the effort and provide the opportunity for students to take greater responsibility, as soon as capable of doing their self. Assistance provided by the learner (teacher) can be instructions, warnings, encouragement, describes the problem into another form that allows students to be independent. Operationally, Scaffolding learning strategies can be reached through the following stages [15]:

1. Assessment ability and level of development of each student to determine the Zone of Proximal Development (ZPD).
2. Describe the problem-solving task into stages detailed so that it can help students see the zone that will be scaffold.
3. Serve learning task in stages corresponding level of development of students. This can be done in various ways such as through the explanation, warning, encouragement (motivation), the decomposition of the problem into solving steps, and giving examples (modeling).
4. Push students to complete the learning task independently.
5. Give in the form of signaling, keyword, keepsakes (minders), encouragement, example or other things that can provoke students learn moves toward independence in self-direction.

Mental retardation is a term used to describe children who have the intellectual capacity below the average [7]. In the foreign language literature used terms mental retardation, mentally retarded, mental deficiency, mental defective, and others. The term actually has the same meanings that explain the child's condition intelligence far below average and are characterized by limited intelligence and incompetence in social interaction.

Retarded child is being referred to as imbeciles. This group has an IQ in the 51-36 and 54-40 according to Binet Scale Weschler Scale (WISC). Children's mental retardation was able to achieve the development of MA until approximately 7 years. This group of approximately 12% of all people with mental retardation, they are able to train but cannot afford learners. Level of intellectual ability can only be up to grade 2 elementary school only. They also need to be trained how to take care of yourself, protect yourself from hazards such as avoiding fire, walking on the highway, shelter from the rain [16], [17].

The five daily prayers is one of the five pillars of Islam, which means that such worship must be carried out by Muslims retarded students were no exception [13], [14]. However, the problem is that students are experiencing delays retarded intellectual development and social interaction skills when compared with normal students his age. They are less able to adapt to the social environment and poor in vocabulary.

Application of scaffolding teaching method is one alternative to help students with intellectual challenges in enhancing the ability of pray. Where scaffolding learning methods in the chapter's ability to pray briefly divided into three phases that are initial activities, core activities, and closing activities [10], [11].

The effectiveness of learning has the following aspects of improving knowledge, skills enhancement, improved attitudes, increased student achievement and behavior. The measurement accurately is very important, because teachers cannot help students effectively if you do not know the skills and knowledge held by students and what lessons can be a problem for

students [18]. Achievement of students was intended that knowledge and skills can be mastered by students as a result of experience.

Effective learning is determined by usefulness. Therefore, the learning process showed high percentage of student engagement in a timely manner, so that the achievement of goals obtained by the attitude of a good student. Thus, we can say that the effectiveness of the process of learning goals appropriate targets in accordance with the objectives set.

II. METHODS

Include a general description research locations namely in of the Muhammadiyah extraordinary high school Jombang, approaches and types of research used the quantitative approach to the type of quasi-experimental, research variables, there are two variables in this study the methods of scaffolding as independent variables and the ability to pray as the dependent variable, the research subjects in this study that have two subjects I with the initials AY and subject II with the initials BM, data used in this study is a qualitative and quantitative data, sources of primary data in this study is the principal, teachers, and students in of the Muhammadiyah extraordinary high school Jombang, while the source secondary data in this study is the result of the documentation and testing, instrument used in this study is the observation guide, test the ability of prayer, and interview guides, data collection techniques in this study was the observation, tests, interviews, and documentation, test content validity in research performed on the test instrument and instrument observation guide, for reliability testing of instruments the researchers used the formula spearman brown, data analysis techniques used in this research is data analysis descriptive statistics, research procedures in this study consisted of the initial stage and the stage of treatment.

A. Description of Research Location

The school was used as a place of research is Of the Muhammadiyah extraordinary high school Jombang addressed at Jalan Brigjen Katamso 20A Pulo Lor subdistrict of Jombang Regency. Of the Muhammadiyah extraordinary high school Jombang has 8 teachers (beware and blind), 1 administrative officer and 1 janitor while school security. Description of Research Subject:

1. First Subject

Name	: Ahmad Ali Yafi
Gender	: Male
Place & date of birth	: Jombang, August 18th 1996
Age	: 20 years old
Address	: Pakubuwono Street 99 A Mojongapit-Jombang

The first subject is a child's medium mental retardation of the Muhammadiyah extraordinary high school Jombang. Physically, the subject has a height around 160 cm with a weight less than 50 kg. The subject experiencing obstacles and mental development retardation-intellectuals under the average, and had

difficulty in completing the task and requires special education services. The first subject is likely to be slow in learning new things and new things difficult to generalize, the difficulty of learning the concepts that are abstract, and always quick to forget what was learned in an unrehearsed continuously, the ability of speech pretty well.

2. Second Subject

Name : Berliana Masnita
 Gender : Female
 Place & date of birth : Jombang, January, 8th 1999
 Age : 18 years old
 Address : Dsn. Juwet Glagahan perak Jombang

The second subject is a child’s medium mental retardation, BM are of the Muhammadiyah extraordinary high school Jombang. Physically, the subject has a height of about 150 cm long with a weight of approximately 45kg. The subject experiencing obstacles and mental development retardation-intellectuals under the average, and had difficulty in completing the task and requires special education services. Slow in doing a very simple task, difficult to reach something, and cock one’s head, less in terms of taking care of herself, the less reasonable behavior that continuously without a clear purpose.

B. Description of Analysis Data

Data analysis in this study uses descriptive statistics with graphs and data analysis based on the data subject. Statistical analysis the data analysis that is used in conditions and analysis between the conditions. The data were analyzed in a percentage success and duration of time that a second test on the subject gained the ability to pray on the baseline and intervention phase.

III. RESULTS AND DISCUSSION

1. Baseline Phase

The results of the measurement capabilities of the second subject of the prayer on the baseline phase are explained through the table below (Table 1). Based on the data above, difficulties or errors that plagued both the subject when answering test questions tend to be the same i.e. both subject in addition to still not be able to read fluently both often forget prayer readings and will get along well. This is due to the lack of conditioning and learning to pray for them. How to know the percentage of success is the number of scores earned the maximum number of shared subject score is then multiplied by 100%.

When the entire question is answered correctly then the maximum score is 100. Based on the way the judgment obtained score on each session for AY was 55 in the first session with a time of 20 minutes duration and outcome percentage 55%, while the BM obtained a score of 50 on the first session with a time of 20 minutes duration with a percentage of 50%. At the second session AY obtain score 58 with percentage 58%, while the BM gain score 54 with the percentage 54%.

Table 1
Baseline Phase

The Treatment to Subject	Subject	Baseline	Score	Time (minute)	Percentage (%)	Criteria
Daily Prayer Ability Test	AY	1	55	20	55	Unfavorable
	BM	1	50	20	50	Unfavorable
	AY	2	58	20	58	Enough
	BM	2	54	20	54	Unfavorable

2. Intervention Phase

Here are presented the data table and chart success percentage of percentage of the success of the subject in the live test the ability to pray on the first intervention phase up to fourth (Table 2). Based on the graph the percentage success of prayer ability test on phase intervention seen that percentage of the success of the second subject in the live test. The highest percentage of the value obtained at the fourth intervention phase, i.e. 78 (AY), while the lowest percentage of success obtained in the baseline phase, i.e. 50 (BM). The duration of time that is required to tackle the subject of the second tests the ability of prayer experienced a decline in some sessions, indicating that the subject is capable of working on tests the ability to pray more quickly.

Table 2
Intervention Phase

Behavior Target	Subject	Percentage of Success (%)	
		Baseline Phase	Intervention Phase
Daily Prayer Ability Test	AY	55	62
		58	65
			70
			78
	BM	50	60
		54	62
		68	
		76	

The data showed an increase in the percentage of success and decrease the time it takes the subject in doing questions test the ability of the five daily prayers in each phase indicates that the application of scaffolding effective methods in improving the ability of students to pray mental retardation are class X in Muhammadiyah Extraordinary school of Jombang. Scaffolding is a support given by teachers to students to help complete the process of learning that cannot be solved by itself [11], [15]. So, by using scaffolding teachers provide assistance to students so that students can finish their works easier.

By applying the method of scaffolding students are given the opportunity to integrate the declarative knowledge he had learned with procedural knowledge that can be made to the practice of prayer. Besides, teaching and learning process is not transferal but rather a co-construction, the process of constructing new meaning knowledge or jointly between all the parties involved in it [11], [18]. Based on the understanding of teachers on student ability, students are encouraged and assigned to the task a little more difficult and a step higher than the capabilities currently owned by diminishing the intensity guidance [19].

IV. CONCLUSION

Based on the results of the research have been obtained regarding the application of the method of scaffolding in learning the five daily prayers for the students are mental retardation X classes Of the Muhammadiyah extraordinary high school Jombang, then a conclusion can be drawn as; An increase in the percentage of subjects already above 65%, which means that the subject has been able to surpass the targets that have been determined. Obtaining a percentage of success increased to 12.55% to 14.5% and AY for BM shows an improvement in the ability of the subject is obtained the five daily prayers. At each phase of the percentage of success increased, on baseline 56.55 be 68.75 for AY, and 52% to 66.5% for BM, in one to four sessions of intervention from 62% to 78% for AY, and from 60% to 76% for BM.

The duration of time required by the subject in doing the test the ability of the five daily prayers has decreased in each phase, which demonstrates that a given intervention give influence on the second subject in doing the test the ability of the five daily prayers. The time it takes the second subject in the work on the question of tests the ability of the five daily prayers on the baseline phase is 20 minutes in session 1 and 2. The time it takes the subject in question tests the ability of the five daily prayers on the intervention phase is 20 minutes on session 1 and 2, 16 minutes in session 3, and 15 minutes in session 4. The data showed an increase in the percentage of success and decrease the time it takes the subject in doing questions test the ability of the five daily prayers in each phase indicates that the application of scaffolding effective methods in improving the ability of students to pray mental retardation are class X in Of the Muhammadiyah extraordinary high school Jombang.

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