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## Learning Independence of Students through Learning Using the Savi Approach in MTSS Unggul Nura

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### Abstract

Learning independence is self-awareness, self-driven and learning ability to achieve its goals. The learning independence of students is still not optimal, shown by the fact that students very rarely ask questions to the teacher so that the teacher was absorbed in explaining what he or she has prepared and students only accept what is delivered by the teacher. Thus, learning tends to be one-way. Therefore, an innovation is needed in the learning process so that students can show optimal character of learning independence. The purpose of this study is to determine the learning independence of students through learning by using the SAVI approach. This type of research is experimental research with a quantitative approach. The sample in this study was class VIII A students as an experimental class taught by means of the SAVI approach and class VIII B as a control class taught by means of conventional learning. The instrument of this research is the learning independence questionnaire. While for learning activities, the Learning Implementation Plan and the Student Worksheet were made. The testing of hypotheses was analyzed using the testing statistic of two-sample average difference by means of SPSS. Based on the results of the study it can be concluded that the learning independence of students who learn with the SAVI approach is better than the learning independence of students who learn by using conventional learning. Through the learning using the SAVI approach, the teacher can assess the learning independence of students.

**Keywords:** Learning Independence; SAVI Approach.

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## **1. Introduction**

In addition to cognitive aspects, the 2013 curriculum also requires students to master the psychological character in learning mathematics [1]. One of the characters that students must have in order to be able to develop problem solving skills is learning independence. Learning independence is an effort made to carry out learning activities in an independent way on the basis of his or her own motivation to master a learning material so that it can be used to solve problems faced. With learning independence, students become proactive and not dependent on the teacher [2]. Learning independence requires great responsibility on students so students will try to do various activities to achieve learning goals. The same thing is also stated by [3] that learning independence needs to be given to students so that they have responsibility in regulating and disciplining themselves in developing learning abilities. This description indicates that individuals who implement learning independence will experience changes in learning habits, namely by managing and organizing themselves so that they can determine learning goals, learning needs and strategies used in learning that lead to the achievement of goals that have been formulated. With regard to current conditions in schools, mathematics teachers have not paid attention to increasing student activity in learning optimally [1]. This was revealed by Wahyuddin that while most students seemed to follow each explanation or information from the teacher well, they very rarely asked questions to the teacher so that the teacher was absorbed in explaining what he had prepared and the students only accepted what was delivered by the teacher. Thus, learning tends to be one-way; learning activities are more played by the teacher than interactions among students. This identifies that learning tends to be teacher-centered. To overcome problems in mathematics education that take place in schools, especially regarding student learning independence, approaches need to be applied that can emphasize various activities in the classroom process so that meaningful learning is created. One learning process that emphasizes various activities is by using a particular approach. The approach in learning is essentially a means to achieve learning goals. One approach which can be used by the teacher is the SAVI approach (Somatic, Auditory, Visual and Intellectual) which is a learning approach that emphasizes that learning must utilize all the sensory tools that students have so as to require students to actively solve various problems. Somatic means body movement (physical activity), that is, learning by experiencing and doing. Auditory means learning through hearing, listening, speaking, presentation, arguing, expressing opinions and responding. Visual means learning must use the eyes through observing, drawing, demonstrating, reading, using media and teaching aids [4]. While Intellectual means learning must use the ability to think, learning must be done with concentration of mind and it is practiced through reasoning, investigating, identifying, finding, creating, constructing, solving problems and applying. Reference [4] Mathematical learning becomes optimal if the four SAVI elements are present in one learning event. Students will learn a little about mathematical concepts by watching presentations (visual), but they can learn more if they can do something (somatically), talking about or discuss what they are learning (auditory) and think about and draw conclusions or information they get to be applied in solving problems (intellectual). Thus students can improve their learning independence and become more active in class. Based on the description above, as an effort to create interesting and meaningful mathematical learning, the researchers intended to conduct a research study entitled “**Learning Independence of Students through Learning Using the SAVI Approach in MTsS Unggul Nura**”.

## **2. Research and methods**

### **2.1 Research on place and time**

The population in this study was eighth grade students of MTsS Unggul Nura in Pidie Regency where the school had moderate ability students. This school was chosen as the population in this study because the school was one of the schools that is open to the latest innovations, making it easier for the researchers to conduct research. Sampling in this study was conducted by random sampling of all classes of grade VIII students. One class was chosen as the experimental class and the other class as the control class. The experimental class was class VIII-A whose learning was carried out by using the SAVI approach, while class VIII-B was as the control class whose learning was done by means of a conventional model.

### **2.2 Materials**

Learning independence requires great responsibility on students so students will try to do various activities to achieve learning goals. The same thing is also stated by Fadillah that learning independence needs to be given to students so that they have responsibility in regulating and disciplining themselves in developing learning abilities. This description indicates that individuals who implement learning independence will experience changes in learning habits, namely by managing and organizing themselves so that they can determine learning goals, learning needs and strategies used in learning that lead to the achievement of goals that have been formulated.

### **2.3 Research methods**

This research is experimental research with a quantitative approach. Reference [5] experimental research is a study that seeks the influence of certain variables on other variables under controlled conditions. The experimental research used in this study was a quasi-experimental type. The quasi experiments was used because the research process did not allow the researchers to form new groups or classes whose students were randomly chosen as pure experiments so that the sample used was students from the available classes [6]. The experimental design used in this study was Pretest-Posttest Control Group Design This design was selected because the research sample involved two sample groups, namely the experimental group and the control group. This study used a type of non-test instrument in the form of an independence questionnaire to be given to students after the learning took place to express students' attitudes towards learning that had been experienced. This questionnaire was used as a measurement tool to determine whether the learning independence of students taught by using the SAVI approach was better than the learning independence of those taught by means of a conventional approach. The learning independence scale used in this study was the Likert Scale. The aspects of the indicator of learning independence as the benchmarks were non-dependence on others, confidence, discipline, responsibility, initiative and ability to control themselves. To test the hypothesis, a statistical analysis of the test of difference of test score average was carried out using the t-test, namely the Independent sample t-test.

## **3. Findings and discussion**

After the learning process using the SAVI learning model in the experimental class and conventional learning in

the control class, then each class was given a questionnaire with the aim of knowing the learning independence of students from each class. The student learning independence questionnaire was given a score following the score on a Likert scale, namely a score of 1 to 5. Independence data was obtained in the form of ordinal data and was then converted into interval data by means of Method of Successive Interval (MSI). This method can change the smallest scale value to be equal to one and transform each scale according to small-scale changes so that the transformed scale value was obtained in the form of quantitative data. Quantitative data processing was carried out using SPSS program assistance (Statistical Product and Service Solution) 16 for Windows. The results of the normality analysis of the Kolmogorov-Smirnov test for data on student learning independence in the experimental and control classes are presented in the following table.

**Table 1:** Normality Test of Data on Student Learning Independence

Tests of Normality		Kolmogorov-Smirnov		
		Kelas	Statistic	df
Learning Independence	Experiment	.155	22	.182
	Control	.182	20	.082

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

Student independence in the experimental and control classes has a sig value more than the value of  $\alpha = 0.05$  which is  $0.182 > 0.05$  and  $0.082 > 0.05$ . Thus, the data on learning independence of students in the experimental class and the control class came from populations that were normally distributed. The results of the analysis of homogeneity of variance for data on student learning independence in the experimental class and control class are presented in the following table.

**Table 2:** Homogeneity Test of Data Variances on Student Learning Independence

Test of Homogeneity of Variances			
Learning Independence			
Levene Statistic	df1	df2	Sig.
.478	1	40	.540

Based on table 2, it can be seen that the sig. value of student learning independence data in both classes is more than  $\alpha = 0.05$ , that is,  $0.540 > 0.05$ , so it can be said that the data of learning independence in both classes has a homogeneous variance. The analysis of the test result of average differences of data on student learning independence are presented in the following table [7]. The testing criterion at a significance level  $\alpha = 0.05$  is that  $H_0$  is accepted if  $\text{sig.} \geq 0.05$ .

**Table 3:** The Test of Average Differences of Data on Student Learning Independence

Independent Samples Test		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Learning independence	Equal variances assumed	4.673	40	.000

The testing hypotheses are as follows:

H0: The learning independence of students taught by means the SAVI approach is the same as the learning independence of students taught by means of conventional learning.

Ha: The learning independence of students taught by means the SAVI approach is better than the learning independence of students taught by means of conventional learning.

Table 3 shows that the sig. value (2-tailed) data on student learning independence is 0.000 which means less than  $\alpha = 0.05$  and  $t\text{-count} = 4.673 \geq 2.02$  ( $t\text{-table} = 2.02$ ). Thus, H0 is rejected and H1 is accepted. This shows that the learning independence of students who get learning through the application of the SAVI model is better than the learning independence of students who get conventional learning. The results of the above research are in line with the results of the research of Sumawardani and Chairil (2013) that revealed the independent character of students who were taught by using the SAVI learning model were from the level of the beginning-to-appear qualification to the developed qualification. Learning mathematics by using the SAVI learning model can motivate students to be more active, so that they can improve their knowledge skills, especially in the subject of mathematics.

Reference [8] Mentions the concept of learning and independent learning means not dependent on others, free and can do it alone. Independence in learning needs to be given to students so that they have responsibility and discipline themselves in developing learning abilities of their own volition. The most important thing in the independent learning process is to increase the abilities and skills of students in the learning process without the help of others, so that in the end students do not depend on the teacher, mentor, friend or other people in learning. In independent learning, students will try themselves first to understand the contents of the lesson that is read or seen through the media in a listening perspective. If the students have difficulties, then they will ask questions or discuss with friends, teachers or other people.

#### 4. Conclusions and suggestions

##### 4.1 Conclusions

SAVI learning is a learning model, where students are involved not only getting an explanation from the teacher

and solving the problem, but in the learning process students are active; students in each group are actively trained in solving problems given, listening to what the teacher or their friends explain, feeling confident to explain what they know. Students who learn actively are usually characterized by physical movements, while physical movements can improve mental processes [9]. The SAVI element can invite students to be involved in learning activities. Thus, the SAVI learning model can train student learning independence, increase student learning motivation and their attempts to learn actively, so that eventually it can achieve maximum learning outcomes.

## **5. Recommendation**

The SAVI approach can be used in school learning because it can improve student independence.

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