



The Effect of Problem Based Learning Model on Front Kick Mastery in Pencak Silat Learning at SMA Negeri 2 Karawang

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Abstract

The purpose of this study, among others, is to determine the effect of the problem based learning on the mastery of the front kick movement in learning pencak silat at SMA Negeri 2 Karawang. This study uses an experimental quantitative approach. This study was made using a pre-experimental form of a one group pretest-posttest design. The place of this research is in SMA Negeri 2 Karawang. This research was conducted in July – August 2022 with 8 meetings. The population in this study was class XI students at SMA Negeri 2 Karawang. Sampling using the technique of "purposive sampling". The author took samples based on certain criteria so that the sample in this study amounted to 33 people. This research instrument uses a test instrument to collect research data. based on the results of the calculation data that has been carried out, it is obtained that the pretest has an average calculation result of 27.27 and the posttest with an average of 36.06 indicate that the pretest has a smaller calculation result than the results calculation posttest. The data analysis technique in this study uses statistical , including: normality test, it is known that the statistical test value in the pretest is 0.933 and the posttest 0.941. The homogeneity test of the pretest-posttest obtained a significance value of 0.567 because the sig value of 0.567 > of 0.05. The t-test table paired sample test output are known to have the Sig value. (two tailed) of 0.000 < 0.05, then Ho is rejected and Ha is accepted. So it can be concluded that there is a difference between pretest and posttest and means that there is an effect of the problem based learning on the mastery of front kicks in learning pencak silat at SMA Negeri 2 Karawang.

Keywords: Problem Based Learning; Front Kick Mastery; Pencak Silat

Introduction

Education is a process of human activity that takes place in human life, be it obtained from both parents, family, surrounding environment, formal education and non-formal education because in essence education occurs

anywhere and at any time there is an educational process in it. Education is now starting to innovate to make education superior with existing updates that can adapt the 2013 curriculum, emergency curriculum and prototype curriculum. The application of the 2013 curriculum is

expected to be able to produce students who are productive, creative, innovative and active through three domains, namely affective, cognitive and psychomotor (Agustin et al. 2021). Physical education is one of the subjects in Education. According to (Ramdhani 2016) physical education is basically an educational process that utilizes physical activity in its learning to improve the quality of individuals, both physically, mentally and emotionally. Thus Physical education aims to develop the individual both in affective, cognitive and psychomotor aspects.

Therefore, the importance of teachers in choosing a learning model before teaching is very important in the teaching and learning process. Because using the right learning model can make students more active, understand and can attract students' attention so that learning can take place properly. As stated by (Ramdhani 2016) in the teaching and learning process a teacher must be able to adjust the learning model to the learning material to be discussed. According to (Rahmayanti, Gustiawati, and Afrinaldi 2020) problem-based learning is a model that emphasizes problems to students, and those problems are the main material in the learning process where the problem-based learning model is expected to develop students' mindsets, knowledge and skills. It can be concluded that problem-based learning is learning with an approach to problems whose problems are used as the main thing in the learning process so that students are more active in participating in learning.

The learning model must also match the material presented, the martial arts learning material is one of the materials contained in the physical education learning syllabus that must be learned by students. In line with the expression by (Sumarsono, Khoirul-Hidayat, and S.R.L. 2019) the subject of learning in physical education for sports and health in

junior high schools until one of the materials that has been taught is martial arts material, namely martial arts learning. Therefore, by using a problem-based learning learning model, the main focus is the mastery of student movements in martial arts learning activities in physical education, it is hoped that students can develop their knowledge independently.

When researchers made preliminary observations that had been made on the martial arts learning material, especially in the front kick sub-material, students still seemed to not understand the basic movement stages of the front kick, such as lack of balance, legs that were not straight kicking forward and many more student mistakes related to the position in making the front kick in martial arts learning.

Therefore, the problem-based learning learning model is one of the models that is assumed to help students in mastering motion effectively in martial arts learning. On this basis, researchers conducted a study to see "the influence of problem-based learning models on mastery of the front kick in martial arts learning".

Method

This research uses an experimental quantitative approach. This research was made using a design in the form of a pre-experiment in the form of a one-group pretest-posttest design. The place where this research was conducted at SMA Negeri 2 Karawang. This research was carried out in July 2022 with 8 meetings. The population in this study was class XI students at SMA Negeri 2 Karawang. The overall population of class XI amounts to 290 students. Sampling using the "Purposive sampling" Technique. The authors took a sample based on certain criteria as a sample from this study. So the sample obtained in this study amounted to 33 people.

This research instrument uses a test instrument for research data

collection. Data analysis was carried out to determine the results of the research that had been carried out in the form of using the problem-based learning mode as a treatment to determine the increase or influence through the mastery test of the martial arts front kick. The systematics of data analysis include: 1) conducting a data normality test with the Shapiro-Wilk test to find out whether or not the pretest and post-test data that have been given, 2) conducting a data homogeneity test to determine the variance of the data that has been collected, and to find out whether the data is homogeneous or not, 3) paired sample t-test to find out the effect of the treatment given. The entire data analysis process is carried out with SPSS 25 software.

Results and Discussion

Based on the systematics of data analysis carried out, the results of statistical descriptive data from pretest and posttest calculations are obtained as follows:

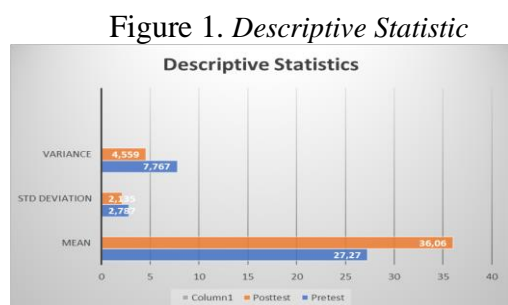


Figure 1. Descriptive Statistic

Tabel 1. Normality test results

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.146	33	.070	.933	33	.041
Posttest	.175	33	.012	.941	33	.071

Based on the results of the data obtained from the calculation of the normality test in the following table, it can be seen that the statistical test value on the pretest is 0.933 and the posttest is 0.941. The significance value of the overall

data in the table is greater than 0.05 (significant > 0.05) meaning that the overall data is normally distributed.

Tabel 2. Data homogeneity test results

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Pretest	Based on Mean	.332	1	64	.567
	Based on Median	.284	1	64	.596
	Based on Median and with adjusted df	.284	1	52.322	.596
	Based on trimmed mean	.288	1	64	.593

Based on the following table from the calculation of the pretest-posttest, a significance value of 0.567 is obtained because the sig value of 0.567 > of 0.05, the decision in the homogeneity test can be stated that the pretest-posttest data is normally distributed.

Gambar 2. T Test results

Paired Samples Test									
Pair	Pretest - Posttest	Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
1		-8.788	3.110	.541	-9.891	-7.685	16.232	32	.000

Based on the results of the paired sample test output table, it is known that the value of Sig. (two tailed) is 0.000 < 0.05, then Ho is rejected and Ha is accepted. So it can be concluded that there is a difference between pretest and posttest

and means that there is an influence of the problem-based learning learning model on mastery of the front kick in martial arts learning at SMA Negeri 2 Karawang.

From the results of the data analysis above, it was obtained that there was an influence of the problem-based learning model. Problem-based learning is student-centered learning that allows students to conduct research, practice and apply their knowledge and skills to find solutions to problems given by teachers (Walker, Leary, and Hmelo-Silver 2015). From this explanation, five characteristics of problem-based learning as stated by (Abdul-Muiz-Lidinillah 2013) are obtained, namely: 1) student-centered learning, 2) Authentic problems form a focus and organization for learning, 3) New information is obtained through self-learning, 4) Learning occurs in small groups, 5) The teacher acts as a facilitator. Through the characteristics of the problem-based learning model, steps can be known in the application of the model as stated by (Atminingsih 2019) namely: 1) Student orientation to problems, 2) Organizing students to learn, 3) Guiding individual and group investigations, 4) Developing and presenting work results, 5) Analyzing and evaluating the problem-solving process. Based on the steps of the problem-based learning model in its implementation, researchers apply it in martial arts learning.

Learning is an effort made by teachers deliberately with the aim of conveying knowledge, by organizing and creating a learning environment system with various methods so that students can optimally learn and teach activities (Kirom 2017). Pencak silat is a martial arts created to defend oneself from dangers that can threaten safety and survival (Ariani-Kurnia 2014). From the understanding of learning and martial arts, researchers concluded that martial arts learning is a learning process that improves body fitness through martial arts

movements. There are several elements of motion including: ease, tide attitude, step pattern, defense, attack and catch.

Of the elements above, the problem that often occurs is in the attack element, especially in the front kick, which lacks mastery of the front kick. Mastery is a person's ability to do something, be it theory or practice. A front kick or straight kick in martial arts is a kick that is done in a forward direction, namely straightening the legs to the toe. The basic movement stages of the front kick according to (Ginanjari and Ramadhan 2021) are: (1) The position of the tide attitude and straight forward view, (2) The knee is raised first in front of the shoulder, (3) The position of the body when the right foot or left foot is in a balanced state, (4) Releasing the right foot or left foot with a straight forward state, (5) The position of the body when releasing the right foot or left foot in a balanced state, (6) The position of the two hands docked with the body, (7) Pulling the right leg or left foot with the knees docked to all positions, (8) The position of the body when the knees are docked is balanced, (9) The position of the two hands in front of the chest and (10) Returning to the pair in a balanced state. Therefore, considering that the importance of martial arts in daily life needs to be learned through the learning process as a basis for knowledge about martial arts, especially in learning martial arts.

Conclusion

From the results and discussions that have been presented, the researcher concluded that the problem-based learning model can affect the mastery of the front kick in martial arts learning at SMA Negeri 2 Karawang, based on the results of the calculation data that has been carried out, namely obtained pretest result data has an average calculation result of 27.27 and also obtained posttest calculation results with an average of

36.06 shows that the pretest data has results a smaller calculation than the result of the posttest calculation.

Likewise, the results of the calculations obtained through the pretest-posttest data stated that the t-test calculation data obtained by the Sig. (two-tailed) value of $0.000 < 0.05$ showed a significant difference between the results before and after treatment. So, it can be concluded from the results of the research conducted, it can be stated that there is an influence of the problem-based learning model on mastery of the front kick in martial arts learning at SMA Negeri 2 Karawang.

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