

The Effect of Using Learning Methods on Learning Outcomes Front Roll Viewed from the Flexibility Factor in Class X Students of SMK Negeri Kademangan, 2021

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DOI: <https://doi.org/10.52403/ijrr.20230167>

ABSTRACT

The background of this research is the lack of teacher methods in giving instructions or lessons on floor gymnastics, especially the front roll. Many students experience difficulties and injuries when doing the front roll practice. Therefore we need a type of method that can be used to anticipate these problems. One method that can be used is to use video in the learning process of floor gymnastics. In addition, the level of flexibility of students also has an influence on success in doing the front roll. This study will discuss the effect of using the video method in learning floor gymnastics.

The problems of this research are (1) Can learning methods and flexibility factors affect the results of the front roll of floor exercise in class X SMKN 1 Kademangan? (2) How big is the influence of learning methods and flexibility factors on the front roll of floor gymnastics in class X SMKN 1 Kademangan? (3) Which is the better learning outcome through the demonstration method or the video method in learning the front roll of floor exercise?

The type of research used is experimental research. The subjects used were students of class X TKJ SMKN Kademangan. The research subjects will be divided into two class groups, namely groups that use video media and groups that use demonstration methods. Both groups will be given a pretest to determine the initial ability. Furthermore, all subjects will be measured the level of flexibility. Flexibility will be divided into two, namely high flexibility and

low flexibility. Determination of the level of flexibility of students based on the flexibility test. The analytical technique used for data analysis is one-way ANOVA, independent sample t test and linear regression.

The test results for the two groups found that there was an influence given by the learning method and the flexibility factor on the students' front roll results. The results of calculations using ANOVA found a significance value of 0.008. This value is smaller than 0.05 so it can be concluded that there is a significant effect of the use of learning methods and the level of student flexibility. Furthermore, based on regression analysis, it was found that the method used and the level of flexibility had an effect of 13.4% on the students' front roll results. Subsequent testing using the independent sample t test found that the video method was better than the demonstration method. The video method can significantly increase by 3.8 of students' front roll results. The conclusion in this study is that the use of the video method is better if it is used to improve students' front roll results.

Keywords: learning method, flexibility, front roll, floor exercise.

INTRODUCTION

Physical education, sports and health are basically an integral part of an education system which in this case aims to develop aspects of health, physical fitness, critical thinking skills, economic stability,

emotional, social skills, reasoning and also moral action through physical activity, sports and health. However, in its continuous implementation, it is a process of human development that lasts a lifetime. In the current era, education is an absolute thing that must be fulfilled by students. To get maximum results in the world of education, it is necessary to improve in related fields. In an effort to implement this education, it can be implemented in a curriculum prepared by the government or the education unit concerned. The purpose of physical education itself is to develop children's potential in having physical, cognitive and social skills so that student growth and development can increase according to student needs and in accordance with national education goals, namely educating the life of the nation and developing a complete Indonesian human being. Another aim of education is knowing, understanding, building, developing and cultivating self-management skills in movement skills, attitudes and knowledge. Based on the type of material in relation to Physical Education learning, it is grouped into two categories, namely subject matter and selected material.

In relation to Physical Education learning in schools, of course there are many factors that influence success in achieving learning goals. As described above, in learning motivation there are also several factors that influence it. The condition of students who come from various backgrounds also greatly influences the climate and learning situation. Physical Education learning activities have always been eagerly awaited by most students, because in Physical Education learning students feel free to carry out activities, but after the learning material has been delivered. The students do not fully like the physical education material which is part of the educational curriculum, especially physical education lessons. It can be taken as an example, in this Kademangan Vocational School alone, children are less enthusiastic about doing floor gymnastic movements, this could be caused by the

movements in gymnastics being difficult for students to do. The other possibility is the lack of precise methods chosen by the teacher in the learning process.

From the description above, the researcher is interested in conducting research by taking the title "The Influence of the Use of Learning Methods on Learning Outcomes Front Roll in View of the Flexibility Factor in Class X Students of TKJ SMK Negeri Kademangan in 2021"

LITERATURE REVIEW

1. Learning Physical Education

Learning is a process of effort that is carried out by a person to obtain a result of a change in new behavior as a whole, as a result of his own experience in interaction with his environment (Slameto, 2003).

Learning is a process of change in human personality, and these changes are manifested in the form of increasing the quality and quantity of behavior such as increasing skills, knowledge, attitudes, habits, understanding, skills, thinking power, and other abilities (Hakim, 2002).

Physical education is a learning process designed to improve physical fitness, develop motor skills, knowledge and behavior of an active life, and sportsmanship through physical activity. The learning environment is carefully regulated to enhance the growth and development of all domains, physical, psychomotor, cognitive, and affective for each student. The learning experiences presented will help students to understand why humans move and how to make movements safely, efficiently and effectively.

This experience is carried out in a planned, gradual, and sustainable manner in order to increase a positive attitude for oneself as a performer, and appreciate the benefits of physical activity for improving one's quality of life, so that a positive spirit and an active lifestyle will be formed. Humans need to understand the nature of physical fitness and proper training prescriptions. Sport is an advanced form of play and is an integral

part of human daily life. So that humans can carry out sports activities properly, they need to be equipped with adequate sports knowledge and skills. Physical education is believed to provide adequate opportunities for students to participate in sports activities.

2. Floor Gymnastics

The term gymnastics comes from the English "Gymnastic" in the original language which is an absorption word from the Greek word "Gymnos" which means naked, while the aim of gymnastics is to increase endurance, strength, flexibility, agility, coordination and body control (Agus Mahendra, 2001: 9). According to Imam Hidayat (1981: 2), "gymnastics is a body exercise that is selected and created deliberately and planned, systematically arranged with the aim of forming and developing a person in harmony".

According to Wuryati Soekarno (1986: 4), gymnastics is a body exercise that is selected and created with a plan, systematically arranged with the aim of forming and developing the whole person in harmony. Meanwhile, according to Agus Mahendra (2004: 14), gymnastics is the main activity that is most useful in developing the physical component and motor ability. According to Imam Hidayat, Pieter Panggabean and Imam Soeyoedi quoted by Mahmudi Sholeh (1992: 8) gymnastics is a body exercise that is selected and created in a planned and systematic manner with the aim of forming and developing a person in harmony.

Based on some of the opinions of these experts about the nature of gymnastics, it can be concluded that gymnastics is a body exercise that is systematically arranged, planned and initiated by basic movements that build locomotor and manipulative movement patterns with the aim of forming and developing a person in harmony. In addition, gymnastics can also provide opportunities for students to develop knowledge and skills related to physical activity, aesthetic development and social

development. Develop self-confidence and the ability to master basic movement skills that will encourage participation in a variety of physical activities. Obtain and maintain an optimal degree of physical fitness to carry out daily tasks efficiently and under control.

Floor gymnastics is one part of artistic gymnastics. It is called floor gymnastics because all movement skills are carried out on the floor which is based on a mat without involving other tools. The floor area used in the gymnastics championship is 12 x 12 square meters with an additional 1 meter on each side as a safety measure. Floor gymnastics is a sport that carries out the activities of all limbs, both for sport itself and for other sports. Floor gymnastics refers to movements that are carried out in an integrated combination and are manifested from each part of the body from the ability of motor/movement components such as strength, speed, balance, flexibility, agility, and accuracy.

2.1. Candle Attitude

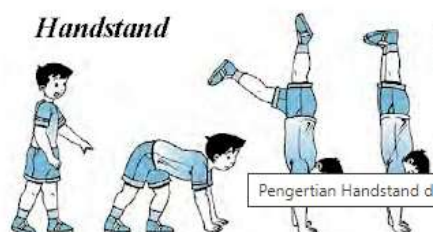
The candle attitude movement begins with a supine sleeping position followed by lifting both legs straight up (meeting). In this movement, the waist is supported by both hands, then the position of the shoulders stays on the floor. In this wax attitude movement, the strength of the abdominal muscles functions as a leg lifter. The flexibility of the muscles of the waist, back and neck makes it easier for both hands to support the waist.



2.2. Handstand

The handstand movement is standing with both hands. The movement begins with a standing attitude, then placing both palms on the mat. The next movement is to pull the leg back to the top in a swinging motion,

starting with the right foot then followed by the left foot or vice versa, then this movement is maintained for a few seconds. Handstand combines various elements of body fitness, such as balance, strength, endurance, and concentration. Before doing the correct handstand movement, it is necessary to support the movement so that the handstand movement can look perfect.



2.3. Body Facing the Wall Method

This method uses the basic kick-up movement to help lift your legs and lower body up. Position your body facing the wall and follow the steps below.

- Stand with your right foot in front of your left leg and raise both arms up. If you're unsure about doing a straight lunge, start with downward facing dog.
- Lift your right leg slightly and then lower it back to the floor while placing your palms on the floor. Then kick the left leg back followed by the right leg so that the body bounces forward. Use the help of a wall to maintain balance.
- Align your body so that your feet are no longer touching the wall. Also straighten the hips and shoulders then hold this position as long as possible.

2.4. Body Back Wall Method

This method uses the pike wall hold pose with your body facing the wall. The steps to do next are as follows.

- Start in downward facing dog pose. Then use your hands as a pedestal on the floor, while one or both legs are lifted against the wall.
- Lift your hips up and keep your feet against the wall with your body forming a 90 degree angle.

- Slowly lift the right leg followed by the left leg straight up.
- Align the position of the body so that it looks straight and hold this position as long as possible

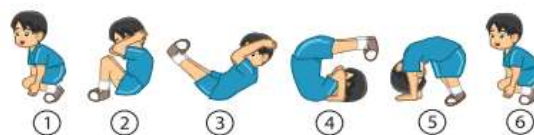
2.5. Roll Forward

This exercise movement is to roll forward with the sequence of motion starting from the back of the neck, back, waist and pelvis. How to do it begins with a squatting attitude and then bring your feet together. Then put your knees to your chest and both hands resting in front. Then proceed with a forward roll and when your pelvis touches the mat, hold onto your shins to get to a squat position.



2.6. Back Roll

Back roll is a group of floor exercises that move backwards (dynamic). Back roll is the movement of rolling or rolling the body backwards in a rounded shape like a wheel. The movement is carried out with the body position when rolling is rounded. Broadly speaking, there is no significant difference in technique between the front roll and the back roll. The difference is the position of the body. A forward roll requires the gymnast to face the mat. While back roll, the position of his body back to the mat.



2.7. Neck Spring

Resilient roll (neck spring) is a flexible movement of the body upwards and forwards caused by throwing both feet and repulsion of both hands, from a half-roll back or half-roll forward attitude with both feet together and knees straight (Syarifudin, 2014: 202). Landing on an elastic roll is

using both feet simultaneously. The position of the body is pushed forward, while both hands are lifted up. The rolling roll exercise is divided into two based on its foundation, namely neck roll roll and head roll roll.



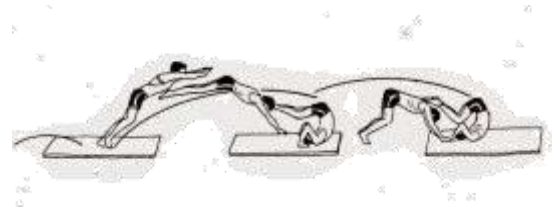
2.8. Bridging

Bridging (kayang) is a flexibility skill that is important and necessary before learning movements such as walkovers and back handspring according to John and Mary Jean Traetta (1987: 16). The definition of the attitude of kayang is a floor exercise movement with the position of both hands and feet resting on the mantras in an inverted position then stretching and lifting the pelvis and abdomen upwards.



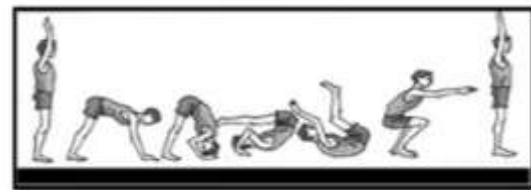
2.9. Jump Tiger

Theoretically, the tiger jump floor exercise technique is not too much different from the forward roll movement technique. So that in this technique it is necessary to master the forward roll movement so that no injury occurs and makes it easier to practice the tiger jump technique. The tiger jump begins with a squatting stance with your palms firmly resting on the mat. Next, the upward thrust along with the stepping motion. When your palms touch the mat, quickly bend your elbows and insert your head between your hands. This movement is continued with a rolling motion, starting from the shoulders, back, waist and back of the pelvis. The tiger jump movement ends by returning to the squatting position and then standing. If you are not able to do all the movements, you should be accompanied by a teacher or an expert.



2.10. Forward Roll

Forward roll is the movement of rolling or rolling forward like a round object (Muhajir and Sutrisno, 2014: 99-100). Apart from that, according to the Teacher Service Team (2009: 23) forward roll is often also referred to as rolling forward. The forward roll motion, namely the body must be rounded through the back of the body (nape), hips, waist and back of the pelvis (Nurrochmah, 2013: 21). The forward roll is divided into two parts, namely the forward roll with the squat prefix and the front roll with the initial standing attitude. According to Roji (2006: 152-153) describes the stages of movement in performing a forward roll as follows.



3. Teaching Methods

Method comes from the Greek. Etymologically the word method comes from two syllables, namely Meta and Hodos. Meta means through or passing, and hodos which means a path that is traversed to reach the goal (Arman Arif, 2002:20). The teaching method is the method used by the teacher to convey lessons to students, because the delivery takes place in educational interactions. The teaching method can be interpreted as the method used by the teacher in making contact with students during the lesson. Educative interaction is a two-way relationship between teachers and students with a number of norms as a medium for jointly achieving educational goals (Ministry of National Education, 2002: 12).

4. Flexibility

Body flexibility is very useful in everyday life. A flexible and well-trained body will reduce the risk of injury when carrying out a movement. This will be useful in mastering some of the physical skills you want to learn.

Based on the description above, it can also be explained that flexibility is the ability of the joints, ligaments and tendons around the joints to carry out the widest possible motion. Flexibility is also one of the components of physical fitness which is very important to be mastered by every student, with the characteristics of fast-paced, strong, flexible but powerful movements, the development of body flexibility must receive special attention. Flexibility also shows the maximum amount of joint movement in accordance with the possibility of movement. People who have good flexibility are people who have wide range of motion in their joints and have elastic muscles

5. Relevant Prior Research

1. Research by Sudarso (2018) with the title Effect of the Demonstration Method on Learning Outcomes of Forward Roll. Based on the results of this study, it shows that there is a significant effect of the demonstration method on backward roll learning because the Independent Samples Test shows $0.043 < 0.05$. In addition, it was also proven by the experimental group that there was an increase of (49.65%) with an average pretest (30.8083) and posttest (45.2083).
2. Research by Arifin and Febriyanti (2015) entitled The Influence of Audio Visual (Video) Learning Media on Learning Outcomes of Front Roll Gymnastics (Class V Mi Al-Azhar Modung Bangkalan). variable. From the research and data processing, the data obtained from the results of the front roll exercise pre-test obtained a total value of 3170, an average value of 75.47, the lowest value is 60, the highest value is 100, the deviation str is 14.003. While

the results of the front roll exercise post-test obtained a total value of 3420, an average value of 81.43, the lowest value was 60, the highest value was 100, the deviation str was 11.959. In the t test (Different Test) the results of learning the forward roll exercise obtained statistical test results with a value of 0.001, so based on the results it can be concluded that there is a significant difference between the learning outcomes of the front roll exercise pre-test and post-test. The conclusions from the study are that audio-visual learning media can improve learning outcomes for front roll floor gymnastics. The increase in learning outcomes of the front roll exercise was 7.8%.

3. Research conducted by Wahyudi (2015) with the title Improving Rhythmic Activity Learning Through Audio Visual (Video) Media for Class II Students of MI Islamiah Somakaton, Somagede District, Banyumas Regency. Based on the results of the study, it showed an increase in learning, because the final result of the learning value of rhythmic gymnastics by students had reached a score exceeding the KKM, which was 85.2. In addition, based on the results obtained through observations on students' attitudes during Physical Education learning, rhythmic activity material using audio-visual media (video) shows a good and enthusiastic attitude.
4. Research by Esmi (2014) entitled Improving Student Basic Gymnastics Learning Outcomes Using Demonstration Methods in Class 2 SDN 16 Bermani Ilir Kepahiang District 2013/2014 Academic Year. Based on the data analysis, it shows that the results of teacher observations amounted to 19 less criteria and in the second cycle of observations there were 29 with good criteria. Data from class action research in the pre-cycle average value of 56.3 percentage 26.6%, cycle one the average student value was 65.8

percentage classically 43.3% and in cycle II the average student value increased to 72.2 percentage is classically 90%. Based on these results, it shows that learning using the demonstration method can improve student learning outcomes in class II of SD Negeri 16 Bermani Ilir, Kepahiang Regency.

6.Hypothesis

The hypothesis is a temporary allegation of the research problem formulation, where the research problem formulation has been stated in the form of a question sentence (Sugiyono, 2013: 96). After explaining related to the existing theory both on learning methods and also on floor gymnastics material and the factors that influence floor gymnastics, the hypotheses that emerge in this study are as follows.

- A. There are differences in the effect of the use of the demonstration method and the video method on the forward roll ability of floor exercises for class X students of SMKN 1 Kademangan.
- B. There is an influence of the factor of flexibility on the ability of the front roll in floor gymnastics for class X students of SMKN 1 Kademangan.
- C. There is an interaction between the learning method and the flexibility factor on the forward roll ability of floor exercises for class X students of SMKN 1 Kademangan.

MATERIALS & METHODS

1. Research Type and Design

This study aims to determine the effect of learning methods on the results of the front roll in terms of flexibility. The type of research used is experimental research. Experimental research is a research method conducted to find the effect of certain treatments on others under controlled conditions (Sugiyono, 2009: 107). The experimental design used in this study was a 2x2 factorial design with a pre-experimental design.

The study began with measuring students' initial ability to do a forward roll. Furthermore, the level of flexibility of each student is measured to classify the high and low flexibility of the students they have. The test used to measure flexibility is the sit and reach test. Then each group will be given treatment according to the method used. Next, the measurement of the final front roll ability was carried out.

The stages in this research were as follows: a) conducting a pre-survey and applying for permits to schools; b) manufacture of instruments and testing of instruments; c) holding coordination meetings with school principals and teachers followed by debriefing on demonstration methods and video media; d) developing a learning approach together with the teacher in the first experimental group and the second experimental group; e) carry out a pretest which is then followed by experiments; f) carry out the posttest after the experiment; and then g) data analysis.

2. Population and Sample

A. Population

The population comes from the English word population, which means the number of inhabitants. However, in the research method the word population is used to mention a family or a group of objects that are the target of research (Bungin, 2013: 109). According to Arikunto (2013: 173) the population is the entire research subject, while Sugiyono (2010: 117) suggests that the population is a generalized area consisting of objects/subjects that have certain qualities and characteristics set by researchers to study and then draw conclusions. The population in this study were students of class X, SMKN 1 Kademangan, Blitar Regency, with a total of 30 students.

B. Sample

The research sample according to Arikunto (2013: 174) is part or representative of the population studied. Furthermore, Sugiyono (2012: 81) explains that the sample is part of

the number and characteristics of the population. Requirements that must be met in sampling, namely the number of samples that cover and the selected sample profile must represent all members of the population.

Given that the population is not too large, the sample used is the total sample (saturated sample). Furthermore, each of these samples will be made into a group to facilitate researchers in the observation process. Thus the researcher believes that the samples taken are the best people or groups by using their judgment or intuition in providing accurate information. The sample in this study were 30 students.

3. Research Variables and Variable Operational Definitions

- A. The independent variables in this study are demonstration methods and video media. Demonstration media is a method of learning by demonstrating a forward roll motion. Video media is a type of media that contains elements of moving images (video recordings).
- B. The dependent variable in this study is the ability to roll forward. Forward roll ability was measured using a squat prefix forward roll test and standing prefix forward roll test.
- C. The moderator variable in this study is the level of flexibility. The level of flexibility is divided into two, namely the high level of flexibility and the low level of flexibility. The sample is said to have high flexibility if the results of the flexibility test get a score above 12. Low flexibility if it gets a score below 12.
- D. The variables that were controlled in this study included the teaching teacher, the time of data collection, the material provided, and the location of the research.

4. Place and Time of Research

- A. Research Place

This research was conducted on students of class X, SMKN 1 Kademangan, Blitar Regency.

- B. Research Time

The research plan table is as follows. Floor exercise lessons for class X students, SMKN 1 Kademangan, Blitar Regency, for the 2020-2021 Academic Year.

5. Research Instruments and Data Collection Techniques

In this research, a research instrument grid will be made, namely practical tests, field observations and documentation, in detail the data collection techniques are as follows:

6. Data Analysis Techniques

Data from the test results to find out whether there was a difference between the posttest-pretest results (gain score) in each group were analyzed through 3 stages, namely the analysis prerequisite test stage, the data description stage and the hypothesis testing stage.

- A. Prerequisite Analysis Test

- Normality test

For this study, the normality test was used, namely the Kolmogorof Smirnov (K-S) test. This test was used to determine whether the sample used for this study came from a normally distributed population or not. The test will use the 5% level with the help of SPSS Version 22 for windows.

- Homogeneity Test

In the case of this study, the homogeneity of variance test was carried out using the Levene Test. The homogeneity test used aims to determine the homogeneity of variance for each class compared to both the experimental and control classes. The test will use the 5% level with the help of SPSS Version 22 for windows.

- B. Data Description Stage

The steps taken at the data description stage are to tabulate the data for each variable, sort the data at intervals and arrange them in the form of a frequency distribution table, find the mode, median, mean, and standard

deviation. In the description of this data using the SPSS Version 22 for windows computer program.

C. Hypothesis Testing

To test the hypothesis using two-way analysis of variance (Two Way Anova). Analysis of variance is used to determine the effect of a variable (independent variable) on other variables (not independent) and these variables are measured at the appropriate level. Two-way analysis of variance to analyze the influence of the two independent variables, namely demonstration methods and video media. Through two-way analysis of variance, it is expected to be able to find differences in the results of forward roll movements with squats and standing with the use of demonstration methods and video media. The conclusion of whether H is accepted or rejected is obtained by interpreting the significance value in the table of the test of between subject effects from the results of the analysis of variance through the SPSS 22 for windows program. The criterion used in drawing conclusions is if the probability of error $p < 0.05$ then H_0 is rejected H_a is accepted.

RESULTS AND DISCUSSION

This chapter will discuss the results of the research, from the data of research

participants that have been conducted. The following will describe the Effect of Demonstration Methods and Video Media on the Forward Roll of Floor Exercises at SMK N 1 Kademangan. This study used 1 flexibility skill test, namely the sit and reach test. The things that will be presented in this discussion include:

1. Description of Research Subjects

The sample in this study were TKJ 1 and 2 classes with a total of 30 male students. Furthermore, the subject was divided into two groups, each consisting of 15 students in the experimental group and 15 students in the control group. All research samples were given a pre-test and post-test about forward roll skills, and a flexibility test in the form of a sit and reach test.

2. Description of Research Data

The description of the research data discusses the average, minimum, maximum, deviation str, and variance of the data on the results of the flexibility test, pre-test and post-test of SMK N 1 Kademangan students. Based on the results of data analysis calculations using the Statistical Package for The Social Science (SPSS) computer program, the research results are described as follows.

Description of Pretest and Posttest Results Data

	Eksperimental Pretest	Eksperimental Post	Control Pretest	Control Post
N	15	15	15	15
Mean	63,66	78,06	63,00	78,00
Median	65,00	79,00	70,00	78,00
Mode	50,00	79,00	80,00	78,00
Std. Deviation	17,87	1,57	20,51	1,55
Variance	319,52	2,49	420,71	2,42
Minimum	20,00	75,00	30,00	75,00
Maximum	85,00	81,00	85,00	81,00

Description of the Level of Flexibility of Research Subjects

experimental flexibility					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	10	33,3	66,7	66,7
	low	5	16,7	33,3	100,0
	Total	15	100	100,0	
Missing	System	0	0		
Total		15	100,0		
flexibility control					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	8	26,7	53,3	53,3
	Low	7	23,3	46,7	100,0
	Total	15	100	100,0	
Missing	System	0	0		
Total		15	100,0		

3. Prerequisite Test

Data analysis was carried out with the aim of answering the hypotheses that have been proposed. Previously the data analysis was carried out, it was necessary to calculate the normality test, homogeneity test and hypothesis test. Under the calculation of normality test and hypothesis test:

A. Normality Test

The normality test is a test that is carried out with the aim of assessing the distribution of data in a group of data or variables, whether the distribution of the data is normal or not normal. The calculation of this normality test uses the SPSS version 22 computer program with the Shapiro-Wilk Test of Normality and Kolmogorov Smirnov sample formula. The following is a table of normality test results:

	Group	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Pretes	Eksperiment	,137	15	,200*	,924	15	,220
	Control	,234	15	,072	,840	15	,113
Postes	Eksperiment	,256	15	,091	,900	15	,096
	Control	,233	15	,072	,893	15	,075

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Based on table it shows that all pretest and poster results have p (Sig) > 0.05, so the data is categorized as normally distributed.

B. Homogeneity Test

This homogeneity test is used to prove the homogeneity of variance. This homogeneity calculation uses the Levene's Test of Equality of Error Variances using the SPSS version 22 computer program presented in the following table.

	Levene Statistic	df1	df2	Sig.
Pretes	1,045	1	28	,315
Postes	,287	1	28	,596

Based on the table shows that having p (Sig) > 0.05, then the categorized population data from the data variant is homogeneous.

4. Hypothesis Testing

Hypothesis testing can be used to prove whether there is an effect of demonstration methods and video media on floor gymnastic forward roll at SMK N 1 Kademangan. The data is normally distributed and homogeneous so that the data analysis used to test this hypothesis uses parametric statistics. The results of hypothesis testing and students' initial abilities are described as follows.

A. Initial Ability Test

The initial abilities of all research subjects were identified using a pre-test. To ensure that all research subjects have the same abilities, initial ability testing is carried out using the t test. The test results using the t test are shown in Table

		F	Sig.	t	df
Pretes	Equal variances assumed	1,045	0,315	0,095	28
	Equal variances not assumed			0,095	27,486

Based on the test results in Table it is known that the significance value is more than 0.05. So it was concluded that the initial abilities of all research subjects were homogeneous or the same.

The first hypothesis states that there are differences in the influence exerted by the learning methods and the flexibility factor used in the research. Hypothesis 1 testing uses 1-way ANOVA. The test results are shown as follows.

B. Hypothesis Testing 1

Hypothesis Testing Results 1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,033	1	,033	,014	,008
Within Groups	68,933	28	2,462		
Total	68,967	29			

The test results using one-way show that there are differences in the influence exerted by the methods used in learning and the flexibility factor. This result can be seen that the sig value is smaller than 0.05.

C. Hypothesis Testing 2

Testing the second hypothesis will see whether there is an influence exerted by the flexibility factor on the ability to roll forward. Hypothesis 2 testing uses 1-way anava. The test results are shown as follows.

Hypothesis Testing Results 2

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,606	1	1,606	,667	,021
Within Groups	67,361	28	2,406		
Total	68,967	29			

The test results using one-way Anova show that there is an influence exerted by the level of student flexibility. This result can be seen that the sig value is smaller than 0.05.

the type of method used and flexibility in the results of students' front rolls. Linear regression testing will be carried out twice to find out the interactions that occur. The first test will look at the effect of the method used on the results of the student's front roll. The test results are shown in Table

D. Hypothesis Testing 3

The fourth hypothesis in this study states that there is an interaction between

The Result Of The First Regression Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,022 ^a	,000	-,035	1,56905

a. Predictors: (Constant), Kelompok

The results of the first regression test show that the R Square value is 0.00. Then a second regression was carried out by including the level of student flexibility. The test results are shown in Table.

The Result of The Second Regression Test

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,366 ^a	,134	,034	1,51559

a. Predictors: (Constant), Flexibility_group, Group, Flexibility

The results of the second regression test show that the R Square value is 0.134. From this value it is known that there is an increase in the R Square score in the first and second regressions. So it can be concluded that there is an interaction between the methods used in learning and the level of flexibility of students on the ability to roll forward. It is known that the level of flexibility can help improve students' ability to do a forward roll. This

result can be seen from the increase in the value of the second R Square from the first R Square. Based on these findings, it can be concluded that the use of the method and flexibility factors can increase the front roll ability by 13.4%.

DISCUSSION

This research was conducted with the aim of knowing the effect of demonstration methods and video media on floor

gymnastic forward roll at SMK N 1 Kademangan. Analysis of the data can be carried out using the Two Way Anova Test to determine the effect of the Demonstration Method and Video Media on the Forward Roll of Floor Exercise at SMKN 1 Kademangan.

In this study, the students were given treatment or treatment four times in a meeting and once a week, after conducting a pre-test. Based on the data analysis, it shows that there is no significant effect of flexibility on the learning outcomes of floor gymnastic forward roll. Data analysis explained that the results of the Two Way Anova Test showed a value of $p = 0.597$. This shows that $p > 0.05$, the hypothesis which states that there is an effect of flexibility on the results of the forward roll in floor exercise is rejected. Furthermore, on the learning method, based on data analysis, it shows that there is a significant influence of the learning method on the learning outcomes of floor exercise forward roll. Data analysis explained that the results of the Two Way Anova test showed a value of $p = 0.000$. This shows that $p < 0.05$, the hypothesis which states that there is an effect of the learning method on the results of the forward roll in floor exercise is accepted. Based on the data analysis, it shows that there is a significant influence of flexibility and learning methods on the learning outcomes of floor exercise forward roll. Data analysis explained that the results of the Two Way Anova Test showed a value of $p = 0.239$. This shows that $p > 0.05$, the hypothesis which states that there is an effect of flexibility and learning methods on the results of a forward roll in floor exercises is rejected.

Based on this research conducted on students of SMK N 1 Kademangan, that through different learning methods, namely demonstrations and audio media can affect the ability to roll forward in students. The demonstration learning method makes students understand more about the forward roll movement of floor exercises. In addition, students can immediately ask

questions when a demonstration is held, and can immediately observe the demonstration being carried out. Whereas in the video method students can observe the video of the floor exercise forward roll given, but by looking at the interaction video it is not optimal, so that students do not understand.

CONCLUSIONS AND SUGGESTIONS

1. Conclusion

Based on the formulation of the problem and the research objectives of the research results that have been carried out with data analysis and hypothesis testing, it can be concluded that:

- A. There is an influence of learning methods and flexibility on the forward roll ability of floor exercise students at SMK N 1 Kademangan.
- B. There is a significant effect of flexibility on the forward roll ability of floor exercise students at SMKN 1 Kademangan.
- C. There is an interaction between the method used and the flexibility of the students on the forward roll ability of floor exercise students at SMKN 1 Kademangan.

2. Suggestions

Referring to the research results and the limitations of the problems in the research, it is suggested:

- A. Teachers should be able to provide teaching methods, both demonstrations and video media. This is because the learning method can affect the forward roll ability of floor exercise students at SMK N 1 Kademangan.
- B. For students it can be used as a method to improve the ability to roll forward in floor exercises. This is because, through demonstration learning methods and video media, they affect the ability to roll over students' results.
- C. For researchers who wish to conduct similar research, they must pay more attention to the several tests used, and distinguish between young and old age subjects.

Declaration by Authors

Acknowledgement: None

Source of Funding: None

Conflict of Interest: The authors declare no conflict of interest.

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- How to cite this article: Danti Fitriastuti, Wasis Himawanto, Zainal Afandi. The effect of using learning methods on learning outcomes front roll viewed from the flexibility factor in class X students of SMK Negeri Kademangan, 2021. *International Journal of Research and Review*. 2023; 10(1): 599-612.
DOI: <https://doi.org/10.52403/ijrr.20230167>
