



Application of Dominant Movement Patterns in Front Roll Learning

Diky Hadyansah¹, Mugi Wiguna², Ali Budiman³

^{1,2,3}*Physical Education, Health, and recreation Study Program, STKIP Pasundan, Cimahi, West Java 40512, Indonesia*

Abstract

The low skills of students in learning front roll floor gymnastics in class VI SDN Jaya Mekar are the focus of this research problem. This study aims to determine the effect of the dominant motion pattern approach on front roll floor exercise skills. The method used is experimental research design one group pretest posttest design. The population and sample of this study were all VI grade students of SDN JAYA MEKAR as many as 32 students, sampling using total sampling with a sample of 32 students. The instrument used in this study was a front roll skill test. Data analysis techniques using paired sample t-test. The results showed $t\text{-count } 48.481 > t\text{-table } 2.039$ which shows the dominant motion pattern approach has an effect on the front roll floor gymnastics skills of class VI SDN JAYA MEKAR students.

Keywords: Floor Gymnastics, Front Roll, Dominant Movement Patterns

INTRODUCTION

Gymnastics or self-test is one of the physical activities that are part of the physical education curriculum (Kowalski et al., 2004). Gymnastics learning in PE is known as educational gymnastics which aims to achieve educational goals (Mahendra, 2000). The definition implies that gymnastic activities become a tool to achieve aspects of child development (Purwanto, 2009). This is also in line with Suharjana (2006) who explains that gymnastics is an educational tool that aims to achieve comprehensive development including: physical, mental, social, emotional and moral.

Gymnastics activities in schools are divided into two parts, namely floor gymnastics and rhythm gymnastics. Floor gymnastics is one of the gymnastics families included in the artistic gymnastics number (Heny & Sari, 2016). There are 11 basic elements in floor gymnastics: "1. Forward Roll, 2. Backward Roll, 3. Split, 4. Dive Roll, 5. Handstand Roll, 6. Meroda, 7. Handspring, 8. Round Off, 9. Flik-flak, 10. Back Salto, 11. Front Salto" (Suwandar & Hambali, 2019). One that is given in elementary school is the front roll. Front roll is one type of basic floor gymnastics movement where someone will rotate their body forward (Sapto, 2018). Gymnastics learning in schools is different in nature from gymnastics training in gymnastics clubs. This difference is seen from the objectives to be achieved. Learning at school aims to enrich movement experience and improve students'

physical fitness (Syahara, 2005). While learning or training in the club aims to achieve the highest achievements of athletes so that the level of mastery of skills is more emphasized than learning materials at school.

Currently, the implementation of gymnastics learning in schools is still oriented towards mastery of skills. This has an impact on the low enthusiasm of students to be actively involved during learning. Whereas physical education should contain elements of play so that it will bring pleasure (Sulistiadinata et al., 2022). In addition, the different levels of movement ability, physicality and personality of each student have an impact on the increasingly complex designs that teachers need to prepare before implementing learning. Therefore, it is necessary to apply a special approach to be able to motivate students to be actively involved during gymnastics learning so as to improve front roll skills. One approach to teaching gymnastics that can be applied is a game-oriented approach (Rizal & Latuheru, 2021) and the Dominant Motion Pattern (PGD) approach.

The dominant movement pattern is the movement pattern that underlies the formation of a skill so that its role is considered dominant (Mahendra, 2000). Motor theory divides motion into three levels, namely motion, movement patterns, and skills. Motion is the actual movement of the body or limbs from one point to another. While motion patterns are a group or series of motion actions that have a broad function displayed with low demands for accuracy (Singer, 1980). Skill is the ability or an act of motion that produces results with high certainty and with minimal expenditure of energy and time (Schmidt, Richard A. and Wrisberg, 2000). Based on this definition, motion patterns have a lower level than motion skills so that student achievement in mastering gymnastic movements is more emphasized on the dominant motion patterns than the gymnastic motion skills themselves (Schembri, 1983). By mastering the dominant motion pattern, it is expected to be able to master the front roll skill. Therefore, this study will apply the dominant motion pattern approach as an effort to improve forward rolling skills in elementary school students.

METHOD

The method used in this research is the experimental method, which is a method that aims to examine the causal relationship by manipulating one or more variables or groups (A & Abdillah, 2019). The research method that the author uses is an experimental research design with a one group pretest-posttest type design. This research begins with a pretest before being given treatment, after being given treatment then gives a posttest (Arikunto, 2010). The treatment given to students was 4 meetings.

This study aims to apply the dominant motion pattern approach in front roll floor gymnastics skills. The results of treatment on the independent variable can be seen in the results on the dependent variable (Sugiyono, 2016). This means that the results of the application of PGD will be seen in the results of the front roll gymnastics skills. The dominant gymnastic motion patterns that exist in the front roll movement are in the form of front pedestal movements, rear pedestals, upper arm pedestals, forearm pedestals, side pedestals and long pedestals; two-legged repulsion movements with height settings, Log roll, side roll and circle roll movements; and landing movements such as sitting in a chair and landing with the feet starting from the egg roll attitude)

The population used was class VI students of SD Negeri Jaya Mekar, totaling 35 people. The sampling technique in this study was purposive sampling. used in this study were 32 people. The instrument used to measure the level of front roll skills refers to the instrument made by Suwandar & Hambali (2019). The data obtained were then statistically tested using SPSS Version 24 with a significance level of $\alpha = 0.05$ using a paired sample t-test.

RESULTS AND DISCUSSION

Results

After the normality test is carried out, the hypothesis test can be used, namely the t-test which is used to determine the success rate of the dominant motion pattern approach in learning front roll floor gymnastics Based on the discussion of the paired sample t-test output above the table with df 31 at the 5% level or 0.050, namely 2.039, then $t_{count} 48.481 > t_{table} 2.039$, it can be concluded that H_0 is accepted and H_a is rejected, meaning that there is an increase in the success of ball mastery through the dominant motion pattern approach in learning front roll floor gymnastics.

Tabel 1 Test Results *Paired sample T Test*

	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Pretest Front Roll Floor Gymnastics	32,080	31	,000	34,750	32,54	36,96
Posttest Front Roll Floor Gymnastics	48,481	31	,000	66,594	63,79	69,40

Discussion

Based on the results of hypothesis testing, there is a significant change in students'

front roll skills after being treated through the dominant motion approach. The acquisition of the post-test results also corroborates the increase in mastery of front roll skills with the average student getting a B + score of 31.3%, students who get B and A- scores of 18.8%, students who get A scores of 15.6%, students who get C + scores of 9.4%, and students who get B- scores of 6.3% all of these results are obtained after all students do the post-test after treatment or treatment of the dominant motion pattern approach. Thus it can be concluded that overall there is a significant change in the movement skills of front rolling floor gymnastics after going through the treatment process using the dominant motion pattern approach.

The implementation of this dominant motion pattern supports and encourages students to actively move and feel happy so that students continue to try movements that they have not mastered (Haikal, 2014). Through the dominant motion pattern approach, each student is required to learn simple movements which are part of the front roll movement. With the elements above, students can take part in gymnastics learning to the fullest so that it has an impact on mastery of the gymnastics skills taught. The results of this study are also supported by previous research where the dominant motion pattern approach is able to improve tiger sprong skills in class VII SMPN Lembang (Haikal, 2014). The dominant motion pattern approach provides a fun, meaningful and challenging learning experience, so that learning becomes quality (Hadyansah & Supriadi, 2022). This gymnastics dominant motion pattern approach is one alternative that can be done because the teaching approach emphasizes the development of PGD rather than the skill itself (Schembri, 1983). It can be interpreted that the dominant motion pattern approach emphasizes learning from the basics so that it can create or build good student basic movements in performing front roll movements. In addition, gymnastics is a self-testing activity that is useful for achieving certain goals, including courage, fun, concentration, and self-confidence (Ariana & Suparman, 2021). This provides an opportunity for students who have difficulty in performing forward rolls because these students can only perform dominant movement patterns.

The application of dominant movement patterns in learning gymnastics has advantages such as: teacher concentration will be focused, PGD can be adjusted to the level of growth and development of children, PGD has a connection between various skills, and mastery of PGD has prerequisites for physical abilities that need to be possessed (Mahendra, 2001). This PGD approach is the foundation for the formation of simpler skills. For example, the rotation in the front roll is the same PGD as the rotation for the front somersault. The achievement of increased learning outcomes is inseparable

from the application of the dominant motion pattern approach which has elements of play as part of the treatment process (Hadyansah, 2021) and from the teacher's design in presenting varied learning scenarios.

CONCLUSION

Gymnastics learning in schools aims to achieve aspects of children's growth and development as a whole. Therefore, skill mastery is not the main focus in learning. However, the optimization of skill mastery must also be maximized by making learning modifications. The application of the dominant movement pattern approach in gymnastics is proven to have an effect on improving front roll skills. The results of this study concluded that there was a significant increase in the front roll floor gymnastics skills through the dominant motion pattern approach and there was an increase in the pre-test average score from 34.75 to the post-test average score of 66.59.

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