



The Effect of Teaching Strategy and Kinesthetic Perception on The Smash Skills in Badminton

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Abstract. The aim of this experimental study was to compare two learning strategies on learning outcomes smah skill in the game of badminton. The learning strategy consists of a duty and play. This study also aims to determine the interaction between learning strategies and kinesthetic perception abilities toward the learning outcomes smash skill in badminton. Kinesthetic perception capability consists of high and low. This research was conducted at the Badminton House, Faculty of Sport and Health Sciences, Universitas Negeri Makassar, academic year 2017/2018. Experimental method using a 2x2 by level design. The sample consisted of 40 students were divided into four groups, each consisting of 10 students . Data analysis technique is a two -way analysis of variance (ANOVA) followed by Tukey test at a significance level of $\alpha = .05$. The results of this study indicate that. (1). The result of learning smash smash skills on badminton game learning strategy is better task than learning strategy of play. (2). There is an interaction between learning strategies and kinesthetic perception abilities against the learning outcomes blow skill smash in badminton game. (3). High kinesthetic perception ability, duty learning strategy is better than play learning strategy. (4). The ability of kinesthetic perception is low, there is no difference between learning strategy of playing with task learning strategy

Keywords: skills, smash stroke, badminton game, learning strategies, kinesthetic perception

1 Introduction

The movement pattern of smash skills in badminton is dominated by upper limbs or arms, so the ability of the arms and wrists is needed to produce smash skill movements in badminton to make it look more flexible and less stiff. Regarding the implementation of the smash in badminton, in terms of the movement pattern it can be seen from the starting attitude of hitting to the direction of the drop of the shuttlecock on the opponent's field. Where the body position or posture must remain flexible, and both knees are slightly bent, as well as the shuttlecock with the racket above the front of the body, straighten your arms to reach the shuttlecock as high as possible ending with a swing of the racket to the side of the body.

In order for a learning process to be successful, it must pay attention to several factors that support the learning process, one of which is the ability of kinesthetic perception. Kinesthetic perception is a factor that determines whether or not students can master movement techniques or sports skills in the learning process.

Smash skills are one of the basic techniques of hitting skills in badminton. Smash skills need to be considered about the speed and accuracy of directing the shuttlecock. Smash skills in badminton have the same purpose and function, namely turning off the opponent's defense or ending a set of rallies. This is reinforced by James Poole [1], arguing that: "The smash is the power of a player who can collect points for you in the match". This means that the smash has a central or main role in every match. However, this does not mean that other basic techniques of hitting are useless, but that they contribute a lot before making the smash. As stated by Kurniawan [2], that: "A blow that is directed downwards and carried out with full force. This punch is identical as an attacking punch, because its main purpose is to kill the opponent.

Linguistic verbal intelligence-based learning strategies aim to improve, improve, and change the state of lectures writing articles [3]. Kinesthetic perception or kinesthetic sense is a function of human body organs that are closely related to body movements or limbs, distinguishing positions and gestures of the body and limbs both passively and actively[4]. Kinesthetic perception is a feeling that arises when three stimulations of muscle receptors, muscle fascia, tendons, and joints give a response that gives a person awareness of the position of the body or body part in control of movement to be more accurate [5].

Of the types of punch techniques as mentioned above, smash punches are a "weapon" to kill opponents. In addition to mastery of technique, it is also necessary to have excellent physical condition, eye-hand coordination, arm muscle strength, and wrist flexibility that are used in playing badminton [6]. Exercise Variation is an exercise whose methods and training materials / content are not always the same at each meeting but still for one purpose of developing techniques, the purpose of which is so that students / trainees are not bored or bored and instead interested in the exercises that have been carried out because the exercises are varied.[7]

2 . Reserch Methods

The method used in this study is an experimental method with the Design of Treatment by Level 2 x 2, where the independent variable (treatment) consists of 2 group cells and the attribute variable (moderate) consists of 2 group cells.

3 . Reserch Methods

Two-way analysis of variance is used to test the main effect (main effect) and interaction (Interaction effect) of the independent variable learning strategy and kinesthetic perception of the dependent variable, namely the results of learning smash skills in badminton.

Table 1. Summary of ANOVA Results

Source of Variation	DB	JK	Average	Fo	Ft
Average	1	48,2	148,2	23,07	7,71
Line	1	99,2	99,2	15,44	7,71
Average Column	1	112,22	112,2	17,47	7,71
Interaction	36	31,3	6,4		
Error					
Total	39	590,9			

Impormation:

Fh: The price of F count

Ft : F table price

#: Significant at the real level $\alpha = 0.05$,

Based on Table 2, it was tested that there was an interaction between learning strategies and kinesthetic perception, the result was $F_{hit} = 17.47 > F_{tab 0.05} = 7.71$, so there was an interaction between learning strategies and kinesthetic perception. Because there is an interaction between the learning strategy and kinesthetic perception, it is then continued to determine the level of difference between the research variables using tests.

31. Sub Section 1

Group	Qhit	Dk	Q _{tab(0,05)}	Impormation
A ₁ and A ₂	5,53	4;20	4,33	Significan
A ₁ B ₁ and A ₂ B ₁	8,12	4;10	5,22	Significan
A ₂ B ₂ and A ₁ B ₂	0,25	4;10	5,22	Non Significan

Based on the results of further tests, it can be explained that:

- a. There is a significant difference in the results of learning smash skills in badminton games between the task learning strategy group and the playing learning strategy group. $Q_{count} = 5.53 > Q_{tab} (0.05) = 4.33$.
- b. There are differences in learning outcomes of smash skills in badminton between task learning strategies and playing learning strategies in terms of high kinesthetic perception abilities. Where $Q_{count} = 8.12 > Q_{tab} (0.05) = 5.22$.
- c. There is no significant difference in learning outcomes of smash skills in badminton between task learning strategies and playing learning strategies in terms of low kinesthetic perception abilities. Where $Q_{count} = 0.25 > Q_{tab} (0.05) = 5.22$.

CONCLUSION

Based on the results of data analysis, the results of hypothesis testing and the results of the research discussion that have been obtained, some conclusions and suggestions are described as follows:

- a. Overall, the results of learning badminton smash skills with task learning strategies were better than playing learning strategies.
- b. There is an interaction between learning strategies and kinesthetic perceptions of the learning outcomes of badminton smash skills.
- c. For students who have high kinesthetic perceptions, the learning outcomes of learning strategies for learning smash skill badminton tasks are better than playing learning strategies.
- d. For students who have low kinesthetic perceptions, the learning outcomes of badminton smash skills are not different between task learning strategies and playing learning strategies.

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