THE EFFECT OF TEACHING STYLES AND INITIAL ABILITY TOWARDS LEARNING OUTCOME OF BADMINTON SKILLS

Razali

Syiah Kuala University

razali.penjaskes@gmail.com

ABSTRACT

The purpose of this study is to determine the effect of teaching style, initial ability, and the interaction between two variables on the learning outcomes of badminton skills. This research uses experimental research method with 2 x 2 factorial design. The sampling technique used is cluster random sampling, the total sample size is 40 people divided into four groups, and each group consists of 10 people. Instruments used to collect data is a badminton test that consists of wall volley test, short service test, long service test, and clear test. Data analysis technique used is analysis of variance (Anava) and continued with Tukey test at significance level $\alpha = 0.05$. The results show that: First, overall, the result of learning badminton skills with inclusion teaching style gives a better effect than the teaching style of practice. Second, for students who have high initial ability, the result of learning badminton skills with teaching style of inclusion gives better influence compared to the style of teaching exercise. Third, for students who have low initial ability, between teaching style of practice and teaching style of inclusion do not give different effect to badminton learning outcomes. Fourthly, there is an interaction between the teaching style and the initial ability to the learning outcomes of badminton skills.

Keywords: badminton skills, inclusion teaching style, practice teaching style, initial ability

INTRODUCTION

One of the sports that has spread almost at all levels of society in the country is badminton. Therefore, it is common that the majority of Indonesians love and love the sport of this game. However, not everyone has mastered badminton skills well.
In addition to being trained in non-formal environments, for example through clubs in the community, badminton games are also taught in the formal education environment set out in the curriculum from elementary school to university. Program of Physical Education Education Health and Recreation (PJKR) Faculty of Teacher Training and Education (FKIP) Syiah Kuala University (Unsyiah) is one of the formal social agents that, among others, serve as a place for students to learn various motor skills, including learning badminton skills, one of their compulsory subjects, presented in 2 credits. In that course, every student is not only equipped with badminton theory, but more emphasized is badminton practice so they have good ability in that field when they become physical education teacher in the future.

The process of learning motor skills, especially badminton skills, is influenced by internal factors and external factors (Lutan, 1988:322). What is meant by internal factors is the inherent factor in the individual, or can be regarded as an attribute that distinguishes a person with others, both psychological and non-psychological. Psychological factors, among others, are interest, motivation, confidence, and attitude, while non-psychological factors, among others, are the initial ability, physical fitness, and motor skills possessed by a person. The external factors are factors outside the individual, including the socio-cultural environment, sports facilities and infrastructure, physical education curriculum, teachers, and teaching styles used. According to Mosston and Asworth (1986:3) the style of teaching is the spectrum of styles to bridge between subjects and learning.

Teaching style is one of the important elements that contribute to learning outcomes. This is in accordance with the opinion of Rahantoknam (1988:118) that one of the factors that affect learning motor skills is the method of teaching (teaching style) used. This indicates that the teaching style used is one of the determinants of the success of learning motor skills, including badminton skills.

For lecturers, setting teaching styles is often not an easy thing, sometimes an alternative that is considered most appropriate at a given moment, can actually lead to side effects that are not previously taken into account, which can lead to such boredom or saturation and unmotivated students in learning and ultimately established teaching objectives cannot be achieved. In order for students to master the skills of playing badminton well, lecturers must be able to choose and use the right style of teaching, in this case the role of lecturers is very important because if not right in establishing the style of teaching, learning outcomes will not be achieved. Therefore, the
ability and experience of a lecturer in determining the style of teaching is needed.

Qualified lecturers will be able to find various and appropriate alternative strategies or teaching styles and appropriate with the material taught, whenever students experience difficulties. At the same time, it is also encountered student complaints about the difficulty in mastering the skills of playing badminton. To solve this problem, the teaching style that can be taught is the style of inclusion teaching (inclusion style) and the style of practice teaching (practice style) that can be used as a solution to overcome students who have difficulty mastering badminton skills (Mosston and Asworth, 1986:25).

The inclusion teaching style is a teaching guide that presents the subject matter in detail about the level of difficulty with the purpose that students are creative and have ease in learning motion skills. The student is given the freedom to choose and determine the degree of difficulty in which he or she begins to study, and is also given the freedom to decide how many times he must repeat the movement in studying a movement technique at each meeting (Mosston and Asworth 1986:114). While the style of teaching exercise is a teaching guide by way of presenting the subject matter in the form of exercises part by part in sequence. In the practice teaching style, the lecturer provides demonstrations in teaching each section of the subject matter in a sequence and the students are given sufficient time to practice repetitively (Mosston and Asworth, 1986:25).

In addition to the style of teaching used, the result of learning badminton skills is also influenced by the contribution of internal factors; one of those is the level of initial ability possessed by someone. The level of students' initial ability as one of the determinants of badminton learning outcomes should be a consideration in establishing teaching styles, since students who follow the lesson do not depart from scratch, but they already have the initial ability to support the skills they will learn.

Recently, the lecturers who teach the badminton game course does not take into account the level of initial ability of students. This way can lead to students having difficulty in learning badminton skills because each student has different levels of initial ability. Joyce and Well (1996:385) state that individual differences should be taken into consideration as this will express the unique things of a person's personality. This explanation is in line with the principle of individualization learning, namely the provision of materials in accordance with the ability of each child. Similarly, in the process of learning
to teach badminton, the treatment should vary according to the level of initial ability possessed. If all students are given the same treatment, it is difficult to expect to develop their maximum potential. Thus, it is necessary to design a teaching style by considering the student's initial ability level which is one way to improve the learning outcomes of badminton skills.

Based on the above explanation, it is interesting to examine the influence of teaching style of inclusion and teaching style of exercise by involving the level of students' initial ability to the learning outcome of badminton skills.

Referring to the background of the above problem, the problems in this study can be formulated as follows: (1) in whole, is there any difference in the learning outcome of badminton skills between the teaching style of inclusion and the style of teaching practice? (2) Is there any difference in the learning outcome of badminton skills between the teaching style of inclusion and the practice teaching style for the students who have high initial ability? (3) Is there any difference in the learning outcome of badminton skills between the teaching style of inclusion and the practice teaching style for the students who have low initial ability? And (4) is there an interaction between teaching style and initial ability to badminton learning outcomes?

In line with the formulation of the above problem, the purpose of the research is to know: (1) the difference of learning outcome of badminton skills between teaching style of inclusion and teaching style of practice, (2) difference of learning outcome of badminton skill between teaching style of inclusion with teaching style of training for (3) differences in learning outcomes of badminton skills between teaching styles of inclusion and teaching style of training for students with low initial skills, and (4) interaction between teaching styles with initial ability to learn badminton skills.

In accordance with the above research objectives, the research hypothesis is defined as follows: (1) overall, the learning outcome of badminton skills with inclusion teaching style is better than the teaching practice style, (2) for students who have high initial ability, learning outcomes of Badminton skill with inclusion teaching style is better than practice teaching style, (3) for students who have low initial ability, badminton learning outcomes with practice teaching style is better than inclusion teaching style, and (4) there is interaction between teaching style with Initial ability to learn badminton skills.
METHOD

This research uses experimental method with 2 x 2 factorial design as shown in Figure 1. This research was conducted in PJKR FKIP Unsyiah, Banda Aceh, 2015 which lasted for three months. Target population in this study was students of PJKR Program FKIP Unsyiah. Because of the limitations of the researcher, the selected population is the students of PJKR FKIP Unsyiah class of 2014. The sampling technique with cluster random sampling, the total sample is 40 people divided into four groups, each group consists of 10 people.

<table>
<thead>
<tr>
<th>Teaching Style (A)</th>
<th>Inclusion (A₁)</th>
<th>Practice (A₂)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial ability (B)</td>
<td>High (B₁)</td>
<td>A₁B₁</td>
</tr>
<tr>
<td></td>
<td>Low (B₂)</td>
<td>A₂B₁</td>
</tr>
<tr>
<td></td>
<td>A₁B₂</td>
<td>A₂B₂</td>
</tr>
</tbody>
</table>

Figure 1. 2 x 2 factorial design

Information:
A₁B₁: Average learning outcomes of badminton skills with inclusion teaching styles for students with high initial ability.
A₂B₁: Average learning outcome of badminton skills with practice teaching style for students with high initial ability.
A₁B₂: Average learning outcomes of badminton skills with inclusion teaching styles for students with low initial ability.
A₂B₂: Average learning outcome of badminton skills with practice teaching style for students with low initial ability.

The data needed in this research are the data about: (1) initial ability of badminton skills and (2) learning outcomes of badminton skill. The measuring instrument used to obtain both data is taken with the same test type and implementation procedure. The measurement tool used to obtain the data is badminton test from French, Lockhart, Scott consisting of: (1) wall volley test to measure the skill of the drive, (2) short service test to measure the skill of short service, (3) long Service test to measure long service skills, and (4) clear test to measure lob skills. Before the instrument is used either during the
initial test or the final test, first it is tested the feasibility of both reliability and validity. Test reliability is sought by test and retest techniques, and reliability $\chi^2$ is obtained at 0.69. While the validity sought by correlation with criterion techniques, and obtained the level of validity of 0.71.

The Analysis of the data is done as follows: (1) raw data obtained from measurement of badminton learning outcome first converted into standard score (T-score), (2) test analysis requirement, that is normality test by using Liliefors test and homogeneity test by using the Barlett test (Sudjana, 1994: 261-264), and (3) to test hypotheses 1 and 4 Anava technique was used with significance level = 0.05. Because of the interaction, further tests were performed using the Tukey test (Ferguson and Takane, 1989:335).

**RESULT AND DISCUSSION**

**Testing Analysis Requirements**

Testing analysis requirements includes test of normality and homogeneity. Normality test used Lilifors test at significant level = 0.05, Lilifors score ($L_o$) obtained for all treatment group is smaller than Lilifors table ($L_t$) score. Thus it can be concluded that the sample comes from a normally distributed population. The homogeneity test using Barlett test at significant level = 0.05, obtained the score of $\chi^2_{\text{counts}}$ was $1.41 < \chi^2_{\text{tables}}$ of 7.81, so the null hypothesis accepted. Thus, it can be concluded that the population has a homogeneous variance.

**Hypothesis testing**

The data result of badminton skills is analyzed by using two way of Anava technique. The summary of the calculation results can be seen in Table 1 below.

<table>
<thead>
<tr>
<th>Variant source</th>
<th>JK</th>
<th>dk</th>
<th>RJK</th>
<th>$F_o$</th>
<th>$F_t \alpha=0.05$</th>
</tr>
</thead>
<tbody>
<tr>
<td>JK A</td>
<td>12312.13</td>
<td>1</td>
<td>12312.13</td>
<td>17.50*</td>
<td>4.11</td>
</tr>
<tr>
<td>JK B</td>
<td>23712.02</td>
<td>1</td>
<td>23712.02</td>
<td>33.71*</td>
<td>4.11</td>
</tr>
<tr>
<td>JK AB</td>
<td>5044.23</td>
<td>1</td>
<td>5044.23</td>
<td>7.17*</td>
<td>4.11</td>
</tr>
<tr>
<td>JK D</td>
<td>25326.51</td>
<td>36</td>
<td>703.51</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>JK T</td>
<td>66394.89</td>
<td>39</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 1. Summary of Anava Calculation Results
The Effect of Teaching Styles and Initial Ability towards Learning Outcomes of Badminton Skills (Razali)

Information:
JK : The sum of squares
dk : Degree of freedom
JK_A : The sum of squares of variables A
RJK : Average number of squares
JK_B : The sum of squares of variables B
F_o : Price \( F_{\text{arithmetic}} \)
JK_AB : The Number of interaction squares AB
F_t : Price \( F_{\text{table}} \)
JK_D : The Number of Inner squares
* : Significant
JK_T : The Number of Total Squares

1. Overall Differences in Learning Outcomes of Badminton Skills between Inclusion Teaching Style and Practice Teaching Style

The result of Anava's calculation of the difference of learning result of badminton skill between inclusion style compared to Practice style as shown in Table 1, obtained Fcount score 17.50, while Ftable score is 4.11, thus the score of \( F_{\text{count}} > F_{\text{table}} \) price, so \( H_0 \) rejected. In conclusion, overall there is a difference in the learning outcome of badminton skills between the inclusion teaching style with the practice style.

Furthermore, to know which groups have better badminton learning outcomes, then further test is done by using Tukey test. Further test results obtained \( q_{\text{hitung}} \) score was at 4.55, while the score of \( q_{\text{table}} \) of 2.86, thus the score of \( q_{\text{hitung}} > q_{\text{table}} \). Thus, it can be concluded that the research hypothesis that states overall, the learning outcome of badminton skills with the style of inclusion is better than the practice-teaching style was true.

Learning badminton skills with inclusion teaching styles gives students more opportunities to develop their own abilities. With the style of inclusion teaching can generate motivation and stimulate student creativity better so as to provide better results than the style of practice teaching. Initial ability as a factor supporting the success of learning badminton skills contributed greatly.

2. Differences in Learning Outcomes of Badminton Skills between Inclusion Teaching Style and Practice Teaching Styles for High Initial Ability Students

The calculation result with Tukey test at significance level \( \alpha = 0.05 \), the score of \( q_{\text{count}} \) obtained was equal to 5.19 and the score of \( q_{\text{table}} \) was equal to 3.79, thus the score of \( q_{\text{count}} > q_{\text{table}} \), so \( H_0 \) rejected. Thus, it can be concluded that the research hypothesis for students who have high initial
ability, the result of learning badminton skills with the style of teaching inclusion is better than the style of teaching practice was true.

Students with high initial ability are more successful at learning badminton skills with inclusion styles than in practice style. This suggests that an improved initial ability supported by an inclusion teaching style which in practice requires the ability to think quickly to decide where students start learning can produce satisfactory learning outcomes. Learning badminton skills with inclusion teaching styles will be good, if it is supported by high initial ability. Having a high initial ability level can perform motion or skill tasks and without experiencing significant difficulties.

3. Differences in Learning Outcomes of Badminton Skills between Inclusion Teaching Style and Practice Teaching Style for Low Initial Ability Students

The calculation result of Tukey test at significance level $\alpha = 0.05$ the score of $q_{\text{count}}$ was 2.11 and the score of $q_{\text{table}}$ was 3.79, thus the score of $q_{\text{count}} <$ the score of $q_{\text{table}}$, so $H_0$ accepted. Thus, it can be concluded that the research hypothesis that states for students who have low initial ability, the learning outcome of badminton skills with teaching practice style is better than with the style of teaching inclusion is untested. In other words, the learning outcome of badminton skills for students who have low initial ability, there is no significant difference between those taught with the style of practice teaching and the style of inclusion teaching.

Referring to the average score of students' badminton learning outcomes, low initial ability with higher training style than students who were taught with inclusion teaching style, the test results were not statistically significant. Thus it can be concluded that the two teaching styles do not give significant difference to the learning outcomes of badminton skills for students who have low initial ability or in other words, students who have low initial ability, both teaching styles have the same effect or balanced against the learning outcome of badminton skills. By not testing the third hypothesis, it needs to be analyzed further about the various possible causes. There are several possible causes for the unsuccessful hypothesis: (1) differences in the ability of the instructor in applying the teaching style, although the instructors who assist the implementation of research are relatively the same, but each person has their own weaknesses and strength, 2) it is necessary to review the low initial ability research variables by refining the research design and more
strict control over internal and external variables that are suspected to influence the results of this study.

Table 2. Summary of Test Results with Tukey Test

<table>
<thead>
<tr>
<th>Groups</th>
<th>$Q_{count}$</th>
<th>$Q_{table}$</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 with A2</td>
<td>4.55</td>
<td>2.86</td>
<td>Significant</td>
</tr>
<tr>
<td>$A_1B_1$ with $A_2B_1$</td>
<td>5.19</td>
<td>3.79</td>
<td>Significant</td>
</tr>
<tr>
<td>$A_1B_2$ with $A_2B_2$</td>
<td>2.11</td>
<td>3.79</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Information:
A1 : Group of inclusion teaching style  
A2 : Group of Practice teaching style  
$A_1B_1$: High initial ability group with inclusion teaching style  
$A_2B_1$: High initial ability group with practice teaching style  
$A_1B_2$: Low initial ability group with inclusion teaching style  
$A_2B_2$: Low initial ability group with practice teaching style

4. The Effect of Interaction between Teaching Style and Initial ability to Learning Outcomes of Badminton skills

Based on the result of the Analysis of Variance at significant level $\alpha = 0.05$ as shown in Table 1, the calculation result of interaction $F_{count}$ is 7.17 and $F_{table}$ is 4.11, thus the $F_{count}$ score > $F_{table}$ score, so Ho is rejected. Thus, the hypothesis that there is an interaction between the styles of teaching with the initial ability to the results of learning badminton skills tested was true.

Thus it can be explained that the learning outcome of badminton skills of students besides it is influenced by the style of teaching, it is also influenced by the contribution of internal factors namely the initial ability of students. From the results of the study it can be concluded that there is no proper teaching style for various situations and conditions in improving students’ badminton learning outcomes.

CONCLUSION

First, overall, the learning outcome of badminton skills with inclusion teaching styles gives better influence compared to the practice teaching style. Second, for students who have high initial ability, the learning outcome of badminton skills with inclusion teaching style gives better influence compared
to the style of Practice teaching. Third, for students who have low initial ability, between teaching style of practice and teaching style of inclusion does not give different effect to badminton learning outcomes. Fourthly, there is an interaction between the teaching style and the initial ability to the learning outcomes of badminton skills.

**SUGGESTIONS**

First, based on the research findings, it is proved that the learning outcome of badminton skills with the inclusion teaching style gives better effect compared to the style of practice teaching. It is suggested that teachers use the inclusion style as an alternative to badminton learning. Second, it is desirable for parents to consider the level of initial ability of the students before determining the teaching style used, this is in accordance with the findings that the students' learning outcomes of high skill badminton skills with inclusion teaching style have a better effect than the practice teaching style. Third, to those interested, it is advisable to conduct a research on the results of this research that has not been tested correctly by adding other variables, longer research time, broader research objects, and considering various psychological factors such as motivation, interest, and intelligence levels that can affect the style of teaching used, so that it will be obtained a new information as a comparison.

**REFERENCES**


The Effect of Teaching Styles and Initial Ability towards Learning Outcomes of Badminton Skills (Razali)


