

Feedback and Motor Skills Provides a Good Effect on the Results of Learning Karate Stance (KATA)

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Abstract: This study aims to determine the effect of giving feedback and Motoric skills towards the result of learning result of learning karate stance (KATA). The population was 95 PKO students' of IV Semester FIK-Unimed. Quasi-experimental research method with 2x2 factorial design. The data analysis technique uses two-way ANAVA. Student Motoric skills was measured by using the Barrow Motoric Ability Test. The learning result test uses the KATA test that has an ability test 0.98 using the product moment correlation formula. The test validity of the test using face validity. The results of hypothesis testing indicate that the KATA learning result of students who are given direct feedback are higher than the KATA learning result of students who are given delayed feedback. This is indicated by $F_{count} = 6.39 > F_{table} = 4.02$ at the significance level $\alpha = 0.05$. The students who have higher Motoric skills have a higher of KATA learning result compared with students who have low Motoric skills. This was indicated by $F_{count} = 5.74 > F_{table} = 4.02$ at the significance level $\alpha = 0.05$, and with $dk (1.56)$ there was an interaction between giving feedback and students Motoric skills in improving KATA learning result. This was indicated by $F_{count} = 58.56 > F_{table} = 4.02$ at the significance level $\alpha = 0.05$. Further tests using the Tuckey Test.

Keywords: Feedback, Motoric Ability, Learning Result, Words

1. Introduction

From the fact that so far students cannot express good results in matches between dojos and also the value of karate courses is not satisfactory and only a few students can get an A score, if only around 10% are presented, it appears that students have difficulty run the techniques in carrying out moves (*words*).

If you want to get maximum results in learning skills (*words*), then you must go through a method that can stimulate student movement so that it is easy to learn and apply what exactly the meaning of the movement that has been taught. To get good results, you need to be taught the basic techniques of correct movement by using teaching strategies and appropriate feedback techniques.

According to that feedback is the behavior of teachers to help every child who has difficulty learning individually by way of responding to the learning result of children so that more mastered the material given and delivered by the teacher. Feedback is used to help students overcome difficulties both classically and individually tailored to the needs of each student [1].

Describes learning as follows: (1) accumulation of knowledge, (2) improvement of an activity, (3) problem solving and (4) adjusting a changing situation. The meaning of learning can also be interpreted as the ability to produce acting skills, because learning can be interpreted as an event, event or change that occurs when a person practices enables them to be skilled in carrying out an activity [2].

Learning can be described as a process of input (*input*) and results (*output*), which is gradually assessed as false or correct information, also known as feedback [3]. In the lecture process, feedback is based on observations about the appearance of students, which is about whether the learning process has reached the goal or not. Therefore, in each

teaching plan the lecturer must provide feedback, because ignoring feedback means negating one of the most important aspects of the learning process [4].

Feedback or feedback can be described as part of the output or response that is handed back to the actor as input. Thus psychological information can lead to stimulation and motivation for students or athletes. The presence of stimuli and motivation is expected to make students more trying to improve the wrong movements in order to produce good movements, thus students will experience progress if the lecturer or trainer provides the right feedback technique [5].

Giving direct feedback and delayed feedback can be in the form of improvements, changes, suggestions, true and false statements, comments in making a correction of movement, all of which are useful for improving the mastery of skills in doing the KATA movement.

Providing additional information after completion of one or one stage or phase per appearance phase can interfere with individual processing and block the benefits that can be absorbed from the informative intrinsic feedback provided by the skill [6].

The most important contribution to the discussion about feedback in this study is an analytical technique regarding the ability of a child to use feedback. This shows how feedback can also be used in analyzing Motoric skills in KATA. This analysis is a model that is very useful in analyzing the behavior of Motoric skills in KATA. Good results are expected to be achieved in the learning process using learning methods that are based on knowledge and methods of providing appropriate feedback. This feedback serves as a *reinforcement* to determine *performance* one's own.

Based on the above explanations, it can be assumed that there is an interaction between giving feedback and Motoric skills to KATA learning result.

2. Objectives Of The Study

Based on the explanation of the theoretical study and frame of mind above, the hypothesis proposed in this study is as follows:

- 1) KATA learning result of students given direct feedback are higher than delayed feedback.
- 2) KATA learning result of students who have high Motoric skills are higher than students who have low Motoric skills.

There is an interaction between giving feedback and Motoric skills to KATA learning result.

3. Review of Literature

3.1 Differences in Learning Result Between Students Given Direct Feedback with Students Given Delayed Feedback

The difference between actual movements with motion patterns can be used as new inputs that require improvement in different parts to approach the motion pattern. The more precise the feedback used in the learning process, the easier it will be for students to master the subject matter [7].

Based on the above explanations, it is therefore assumed that giving direct feedback on KATA learning result will be better because by providing direct feedback students can quickly correct the movements that have been done correctly or not and can learn the actual motion, compared to baiting, back delayed.

3.2 Learning Result Differences Between Students Who Have High Motoric Ability and Students with Low Motoric Ability

One of the learning result is influenced by the level of Motoric skills of each student, in this case KATA learning result. Students who have a high level of Motoric skills means that the student has the potential to be able to move with good results when compared to students who have low Motoric skills, because students who have high Motoric skills will be able to learn the right and good movements with a relative time short, while students who have low Motoric skills will tend to have difficulty with the correct and good pattern of movement because it is influenced by low Motoric skills. Students who have low Motoric skills have limitations in doing Motoric activities, so they are slow to master a Motoric ability [8]. The student really needs guidance, both in the form of feedback and demonstrations of the movement carried out by the lecturer.

From the explanation above it can be assumed that students who have high Motoric skills have higher learning result compared to students with low Motoric skills.

3.3 The Interaction Between Giving Feedback and Motoric Capabilities to Learning Result Karate Stance (KATA)

The most important contribution to the discussion about feedback in this study is an analytical technique regarding the ability of a child to use feedback. This shows how feedback can also be used in analyzing Motoric skills in KATA. This analysis is a model that is very useful in analyzing the behavior of Motoric skills in KATA. Good results are expected to be achieved in the learning process using learning methods that are based on knowledge and methods of providing appropriate feedback. This feedback serves as a *reinforcement* to determine *performance* one's own [9].

Among the relevant research, namely the research conducted by Yudiana (1998) which is about the effect of exercise models and gender on the formation of Motoric skills, which states basic Motoric skills with ability activity training models higher than the activity training model physical education curriculum [10].

4. Materials and Methods

This study was conducted on the fourth semester students of PKO majors in Karate FIK specialization in Medan State University in the period from May to July 2010, while the treatment was given 16 (sixteen) meetings.

The population of this study was all of the 4th semester PKO specialization students in Karate in 2009, consisting of class A, B, C and D, the total population was 95 people. Based on the condition of the population, two study groups were taken into the study sample, this was in accordance with the chosen research design. Sample selection is done by *random technique sampling* with randomization, so that the study sample was group I as many as 30 people and Group II as many as 30 people.

The sample members were divided into two groups to get two different treatments, namely group I was given direct feedback and group II was given delayed feedback. Before the treatment was given, the two sample groups were first given a test of Motoric skills to measure the level of student Motoric skills. From the results of the scores obtained, each sample was ranked according to the scores of Motoric skills. Furthermore, each of the two groups of samples was determined by a group of students who had high Motoric skills and low Motoric skills.

The method that used in this study is the quasi-experimental method. For this reason the method is used to compare which is better between direct feedback and delayed feedback. Then this method is used because all variables cannot be controlled and existing samples are preformed, where the independent variables (experimental variables) which are the scope of the study are: (1) direct feedback (2) delayed feedback. Then one dependent variable is the karate skill learning result (KATA), while as the attribute variable is Motoric ability, which consists of: (1) high Motoric skills (2) low Motoric skills. The research design used was a 2 x 2 factorial design.

5. Result and Discussion

5.1. KATA Learning Result toward Students that who Given Overall Direct Feedback

KATA learning result data for students given direct feedback as a whole, obtained a range between 56 to 80 with an average of 69.10 and standard deviation of 6.44 and frequency as shown in Table 7.

Table 7: Distribution of KATA Learning Result toward Students' that who Given Overall Direct Feedback

No	Interval Class	Absolute	Frequency	Relative Frequency
1	56 – 60	4		13.33
2	61 – 65	4		13.33
3	66 – 70	11		36.67
4	71 – 75	6		20.00
5	76 – 80	5		16.67
TOTAL		30		100

Based on Table 7, it was found that 36.67% (11 people) obtained a KATA learning result score on the average class and 26.66% (8 people) obtained a KATA learning result score below the average and 26.66% (11 people). obtain an above average KATA learning result score.

5.2. KATA Learning Result toward Students that who Given Overall Delayed Feedback

KATA learning result data for students given overall delayed feedback, obtained a range between 58 to 75 with an average of 66.70 and standard deviation of 4.62 and frequency as shown in Table 8.

Table 8: Distribution of KATA Learning Results toward students that who Given Overall Delayed Feedback

No	Interval Class	Absolute	Frequency	Relative Frequency
1	58 - 60	4		13.33
2	61 - 63	3		10.00
3	64 - 66	5		16.67
4	67 - 69	8		26.67
5	70 - 72	7		23.33
6	73 - 75	3		10.00
AMOUNT		30		100

Based on Table 8, it was found that 26.67% (8 people) obtained a KATA learning result score on the average class and 40% (12 people) obtained a score of results KATA learning is below the average and 43.33% (10 people) get a KATA learning result score above the average

5.3. KATA Learning Result toward Students Who Have Overall High Motoric Ability

KATA learning result data for students who have KATA high Motoric capabilities, obtained ranges from 58 to 80 with an average of 69.17 and standard deviation of 6.26 and frequency as shown in Table 9.

Table 9: Distribution of KATA Learning Result toward Students Who Have Overall High Motoric Capability

No	Class Interval	Frequency Absolute	Relative Frequency
1	58 - 61	4	13.33
2	62 - 65	4	13.33
3	66 - 69	6	20.00
4	70 - 73	8	26.67
5	74 - 77	5	16.67
6	78 - 81	3	10.00
AMOUNT		30	100

5.4. KATA Learning Result Data for Students who Have Overall Low Motoric Ability

KATA learning result data for students who have low Motoric skills, ranges from 56 to 75 with an average of 66.63 and standard deviation of 4.82 and frequency as shown in Table 10.

Table 10: KATA Learning Result of Students Who Have Overall Low Motoric Ability

No	Interval Class	Absolute	Frequency	Relative Frequency
1	56 - 59	2		6.67
2	60 - 63	6		20.00
3	64 - 67	7		23.33
4	68 - 71	11		36.67
5	72 - 75	4		13.33
AMOUNT		30		100

Based on Table 10, it was found that 23.33% (7 people) obtained a KATA learning result score on the average class and 26.67% (8 people) obtained a lower average KATA learning result score. -rata and 50% (15 people) obtained above-average KATA learning result scores.

5.5. KATA Learning Result for Students Who Have High Motoric Abilities Given Direct Feedback

KATA learning result data for students who have high Motoric skills with direct feedback, obtained ranges from 70 to 80 with an average of 74.20 and standard deviation of 3 , 23 and frequency as shown in Table 11.

Table 11

No	Interval Class	Absolute	Frequency	Relative Frequency
1	70 - 72	6		40.00
2	73 - 75	3		20.00
3	76 - 78	5		33.33
4	79 - 81	1		6.67
TOTAL		15		100.00

Based on Table 11, 20 % (3 people) obtained a KATA learning result score in the average class and 40% (6 people) obtained a KATA learning result score below the average and 40% (6 people) obtained a KATA learning result score above the average. Histogram of data Table 11 is shown in Figure 5 below.

5.6. KATA Learning Result for Students Who Have High Motoric Ability Given Delayed Feedback

KATA learning result data for students who have high Motoric skills with delayed feedback are obtained from a

range of 56 to 70 with an average of 64 and a standard deviation of 4.44 and frequency as shown in Table 12.

Table 12: KATA Distribution of Skills Students Who Have Given High Motoric Ability Delayed Feedback

No	Interval Class	Absolute	Frequency Relative Frequency
1	56 - 58	2	13.33
2	59 - 61	3	20.00
3	62 - 64	2	13.33
4	65 - 67	4	26.67
5	68 - 70	4	26.67
TOTAL		15	100.00

Based on Table 12, it was found that 13.33% (2 people) obtained a KATA learning result score on the average class and 33.33% (5 people) obtained a score of results KATA learning was below average and 53.34% (8 people) obtained above average KATA learning result scores.

5.7. KATA Learning Result for Students Who Have Low Motoric Capability Given Direct Feedback

KATA learning result data for students who have low Motoric skills with direct feedback are obtained between 58 to 70 with an average of 64.13 and standard deviation amounting to 4.05 and frequency as shown in Table 13.

Table 13: Distribution of KATA Skills of Students Who Have Low Motoric Ability Given Direct Feedback

No	Interval Class	Absolute	Frequency Relative Frequency
1	58 - 60	4	26.67
2	61 - 63	2	13.33
3	64 - 66	3	20.00
4	67 - 69	5	33.33
5	70 - 72	1	6.67
AMOUNT		15	100.00

Based on Table 13, 20% (3 people) obtained a KATA learning result score on the average class and 40% (6 people) obtained a score of results KATA learning is below average and 40% (6 people) get above-average KATA learning result scores.

5.8. KATA Learning Result Data for Students Who Have Low Motoric Ability with Delayed Feedback Giving

KATA learning result data to students who have low Motoric skills with delayed feedback, a range of 62 to 75 is obtained with an average of 69.27 and deviation default is 3.69 and frequency as shown in Table 14.

Table 14: KATA Learning Result Distribution for Students Who Have Low Motoric Capability with Delayed Feedback

No	Class Interval	Absolute	Frequency Relative Frequency
1	62 - 64	3	20.00
2	65 - 67	1	6.67
3	68 - 70	5	33.33
4	71 - 73	5	33.33
5	74 - 76	1	6.67
TOTAL		15	100.00

Based on Table 14, 33.33% (5 people) obtained a KATA learning result score on the average class and 26.67% (4 people) obtained a KATA learning result score below the

average and 53.33% (6 people) obtained a above average KATA learning result score.

6. Conclusions and Suggestions

6.1 Conclusions

Based on the results of the research and discussion described in the previous chapter, the following conclusions were taken:

- 1) KATA learning result of PKO students who were given higher direct feedback from students who were given delayed feedback.
- 2) KATA learning result of PKO students who have high Motoric skills are higher than students who have low Motoric skills.

There is an interaction between feedback and Motoric skills on KATA learning result of PKO Unimed students. For students who have high Motoric skills more effective in improving KATA learning result if given direct feedback, while for students who have low Motoric skills it turns out that delayed feedback is more effective in improving KATA learning result.

6.2 Suggetions

- 1) To find out the level of student Motoric skills, it is recommended to the lecturer to test the Motoric skills in students.
- 2) Students who have high Motoric skills should be given direct feedback in lectures.
- 3) Students who have low Motoric skills should be given delayed feedback in lectures.
- 4) It is recommended that lecturers of this course be able to apply the technique of providing direct feedback and delayed feedback.

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