

The Effect of Giving Feedback and Motor Ability Toward Karate Stance (KATA) in Learning Outcomes of PKO Student FIK-UNIMED

Rahman Situmeang¹, M. Nustan Hasibuan²

Faculty of Sport Science, Medan State University

Abstract: *This study aims to know learning outcomes of KATA students who was taught by giving direct feedback is higher than learning outcomes of KATA student was taught by giving delayed feedback, determine whether learning outcome KATA student who had Motor ability is higher than learning outcome KATA student who had low motor ability, and to know the interaction between giving feedback and motor ability toward learning outcome of KATA. It was conducted by using experiment quasi. Technique of Data Analysis used by two ways ANAVA. Motoric abilities measured using by motor skills test called by Barrow Motor Ability Test. The results of hypothesis testing shows that students result was given direct feedback is higher than learning outcome of KATA was give delayed feedback. Meanwhile the student who has high motor ability has a higher learning outcome than the students with low of motor ability.*

Keywords: Feedback, Motor Ability, Karate Stance (KATA)

1. Introduction

Physical education is an integral part of the overall education, which aims to develop aspects of health, physical fitness, skills of critical thinking, reasoning and social skills through physical activity and sport. According to UU Number 3 in 2008 is about national sports system is said that physical education is physical sport education carried out as a part of educational process of regular and continuing to acquire knowledge, personality, skills, health and physical fitness.

One of the subjects in the curriculum of the Faculty of Sport science is sport of karate. A technique to defend himself with his bare hands or without weapons, karate also means soul empty, clean without a bad thoughts or self-interest, so less clean soul that allows one to study and understand Karate correctly.

From the Karate Curriculum, a trainer will teach three kinds of very basic in Karate namely KIHON (basic), KATA (stance) and KUMITE (fight). Especially at FIK UNIMED on department of sport coaching material KIHON & KATA taught in basic courses and advanced courses as choosing specialization karate will be taught special material for such karate kumite techniques and the types of kumite.

But the fact that there had been a student can't give good results in the matches between the dojo. Also in the course value of karate is not satisfactory, and only a few students are able to earn an A, if it were presented only about 10%. Students are seen having trouble running techniques KATA (stance). Those facts should be considered to make an innovation in learning karate.

If you want to get maximum results in learning the stance it must be adopted a method that can stimulate the movement of students to easily learn and apply what the meaning of the movement that has been taught. To obtain good results need to be taught the basic techniques right moves by using teaching strategies and techniques of proper feedback.

According to Nasution (1984) that feedback is the behavior of teachers to help every child with learning difficulties individually by means responding to the child's learning so that more control of the material provided and have been submitted by teachers. In other words, through teacher feedback can help any students who have learning difficulty individually by giving praise, criticism and guidance as well as responses to the work of the students during the learning process takes place. This is in line with the opinion of Laurence in Tabarani (1994: 81) states that teachers should put themselves side by side with the students as a senior who is always ready to be a speaker or consultant.

Motor skills can be grouped into two categories, namely: (1) high motor skills and (2) lower motor abilities. Motor skills between high and low motor skills have a distinct influence on learning outcomes. Giving feedback techniques to students whose motor skills tend to vary often an easy thing. Teachers often give direct feedback to the students, but not necessarily immediate feedback given is suitable or appropriate to all learners. Sometimes a technique that is considered most appropriate at a given moment, even can cause side effects that did not count in advance so that it can lead to boredom (saturation) and can cause a student to be motivated to follow the lessons given in the end the teaching objectives set can't be reached, In order to obtain the learning outcomes KATA (stance) is optimal, we need a provision of feedback techniques are appropriate and in accordance with the level of motor skills possessed learners.

Based on the description of the problems described above, the goal of researchers in this study is trying to investigate how the learning outcomes bring capabilities KATA consider factors owned motor skills of learners by providing feedback that is different, that immediate feedback and the feedback is delayed. Expected by providing immediate feedback and motor skills are delayed to different learners can provide alternative solutions to improve performance and achieve targets in learning Karate Kick (KATA) Student Semester IV PKO Nikken Unimed specialization onkarate.

2. Research Method

This study was conducted by using experiment quasi. This method can compare which is better between direct feedback and feedback is delayed. The design as in the following table

Motoric ability (B)	feedbackA)	
	Direct (A ₁)	Delayed A ₂)
High (B ₁)	A ₁ B ₁	A ₂ B ₂
Low (B ₂)	A ₁ B ₂	A ₂ B ₂

Preparation Procedure

Forming a group to be treated immediate feedback and the feedback is delayed with the draw, each group will be taught by two trainers from FORKI, determine the sample by first issuing student athletes and then to determine the sample who have motor skills of high and low is to provide a test of motor skills to each of the groups that have been defined to be a group of samples, compiling learning scenarios for each group, making initial tests the ability to bring karate stance (KATA) and prepare equipment and materials as well as training hours.

Implementation of Treatment

Implementation of treatment for granting direct feedback is to formulate learning objectives, provide an example and show the whole of the motion that will be studied, students are given the freedom to study teaching materials, and then the students were given the freedom to repeat the movement as a whole until the student is able to master the movements, providing immediate feedback to students.

Implementation of the treatment for providing feedback is delayed is to formulate learning objectives, provide an example and demonstration of the Courant-portion of the motion that will be studied, students are given the freedom to study teaching materials, pay attention to the repetition of the movement part done by the students and give feedback to the student pending.

3. Discussion

Description of Data Research

The research sample is spread in two treatment classes with 30 detailed data is obtained from the class by learning with immediate feedback and the data obtained from the 30 class by learning with delayed feedback. Each treatment classes are further divided into two groups, which have a high motor skills and groups that have a low motor skills. Detailed data about the conversion of learning outcomes dribble can be seen in Table.

Motorix ability (B)	feedback (A)		Total
	Direct feedback (A ₁)	Delayed feedback A ₂)	
High B ₁)	$n_{11} = 15$ $\bar{x}_{11} = 74,20$ $\sum x_{11} = 1113$	$n_{12} = 15$ $\bar{x}_{12} = 64$ $\sum x_{11} = 960$	$n_{bt} = 30$ $\bar{x}_{bt} = 69,10$ $\sum x_{11} = 2073$
Low (B ₂)	$n_{21} = 15$ $\bar{x}_{21} = 64,13$ $\sum x_{21} = 962$	$n_{22} = 15$ $\bar{x}_{22} = 69,27$ $\sum x_{22} = 1039$	$n_{bt} = 30$ $\bar{x}_{bt} = 66,70$ $\sum x_{bt} = 2001$
Total	$n_{tk} = 30$ $\bar{x}_{tk} = 69,17$ $\sum x_{tk} = 2075$	$n_{tk} = 30$ $\bar{x}_{tk} = 66,63$ $\sum x_{tk} = 1999$	$n_{tt} = 60$ $\bar{x}_{tt} = 67,90$ $\sum x_{tt} = 4074$

KATA learning outcomes data on students who have a high motor skills giving direct feedback, obtained a range between 70 to 80 with an average of 74.20 and a standard deviation of 3.23 obtained 20% (3) obtain a score on the learning outcomes of KATA grade average and 40% (6) obtain a score of learning outcomes of KATA below average and 40% (6) obtain a score of learning outcomes of KATA above average.

KATA learning outcomes data on students who have a high motor ability by giving a delayed feedback, obtained a range between 56 to 70 with an average of 64 and a standard deviation of 4.44 obtained 13.33% (2) obtain a score on the learning outcomes KATA grade average and 33.33% (5) obtain a score of learning outcomes KATA below average and 53.34% (8) obtained a score of learning outcomes KATA above average.

KATA learning outcomes data on students who have a low motor skills by being given direct feedback, obtained a range between 58 to 70 with an average of 64.13 and a standard deviation of 4,05 obtained 20% (3) obtain a score on the learning outcomes of KATA grade average and 40% (6) obtain a score of learning outcomes of KATA below average and 40% (6) obtain a score of learning outcomes OF KATA above average.

KATA learning outcomes data on students who have poor motor skills by giving feedback is delayed, obtained a range between 62 to 75 with an average of 69.27 and a standard deviation of 3.69 obtained 33.33% (5) obtain a score of learning outcomes of KATA on the class average and 26.67% (4) obtain a score of learning outcomes of KATA below average and 53.33% (6) obtain a score of learning outcomes of KATA above average.

Hypothesis testing

To test the hypothesis used techniques of analysis of variance (ANOVA) two ways. Summary of ANOVA calculation shown in the following table.

Varians source	JK	Dk	RJK	Ftes	Ftable	Conclusion
Between Colomn	96,27	1	96,27	6,39	4,02	Significance
Between rows	86,40	1	86,40	5,74	4,02	Significance
Between group	1064,33	3	-	-		
In group	843,07	56	15.05			
Total	1907,40	62				

From the calculation of ANOVA showed that of $F = 6.39$ and F table = 4.02 at significance level $\alpha = 0.05$. This means that $F_{\text{count}} > F_{\text{table}}$, indicates that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted. Thus the research hypothesis which states that the learning outcomes on student of KATA provided with immediate feedback higher than KATA student learning outcomes that are given feedback delayed verified. Based on data obtained also show that the average yield KATA student learning given immediate feedback (69.17) was higher than KATA student learning outcomes that are given feedback delay (66.63). From the comparison of average yields and testing ANOVA obtained can be concluded KATA on student learning outcomes are given immediate feedback higher than students given feedback is delayed.

To test whether learning outcomes of KATA students who have a high motor skill is better than learning outcomes of KATA students with low motor skill; the techniques used analysis of variance (ANOVA). From the calculation that of $F = 5.74$ and F table = 4.02 at significance level $\alpha = 0.05$. This means that $F_{\text{count}} > F_{\text{table}}$, indicates that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted. Thus the research hypothesis which states that the learning outcomes of KATA on students who have a high motor skills are higher than on student learning outcomes of KATA which have a low motor skills verified.

Based on data obtained also show that the average yield learning KATA students who have a high motor skills (69.10) was higher than the results of student learning of KATA that have a low motor skills (66.70). From the comparison of average results and ANOVA test results obtained can be concluded that KATA learning in students who have a high motor skill is higher than on student learning outcomes KATA who has motor skill is low

4. Discussion of the Results

Based on the calculation results obtained in the study, it appears that KATA on student learning outcomes are given immediate feedback is higher when compared with the results of student learning KATA given feedback is delayed. This is possible because by giving immediate feedback the students feel too overwhelmed to perform movements in learning KATA and if the period between the executions of the movement with the time of receipt of the feedback was immediate, self-motivation to improve them will soon appear. By giving immediate feedback, difficulties encountered when doing the movements in KATA be resolved soon. This is consistent with the purpose of giving immediate feedback, namely that students can get the ease of learning a movement.

So basically learning given immediate feedback is believed to lead in improving student learning outcomes of KATA. For students who receive learning by giving immediate feedback, feel the freedom and ease in learning a movement. In other words, students are given immediate feedback will soon find the answer to the difficulties that would be encountered in the learning KATA. In giving immediate feedback, students are expected to soon make improvements after being given information by the lecturer. This is in line

with the opinion of Magill (1988) direct feedback it needs to be given to students in order to take into account the achievements or the next result. When the time period between the executions of the movement by the time of receipt of feedback was quite long, self-motivation to improve will be lost. Giving an understanding quickly or immediately after the appearance will give a positive effect on skills.

Based on data obtained have shown that the average student learning outcomes of KATA given immediate feedback (69.10) was higher than that given learning outcomes of KATA delayed feedback (66.70). From the comparison of the average earned draws conclusions that the comparison of the average student learning outcomes KATA given direct feedback higher than KATA student learning outcomes that are given feedback is delayed. This is consistent with previous allegations that favor giving immediate feedback in learning KATA. The advantage of direct feedback was presented in the framework of empirically proven in the field, so that these result has been corroborated that by giving immediate feedback of KATA better learning outcome.

The learning result is influenced by the level of motor skills possessed by each student. For students who have high levels of motor skills is high, means that these students have the potential to be able to do the movements better results when compared with students who has motor ability is low, so that the expected learning outcomes of students who have motor skills high will be better than the students who have the motor skills are low. It is empirically proven in court that the learning outcomes of students who have the ability of KATA is high motor higher learning outcomes KATA students who have motor skills are low.

The results showed the average student learning outcomes WORD that has high motor skills (69.17) is higher than student learning outcomes WORD that have low motor skills (66.63). This is consistent with previous allegations that favor students who have high motor skills in learning KATA.

5. Conclusion

Based on the results of research and discussion, it is concluded that the learning outcomes OF KATA majors PKO who had given direct feedback higher than the students who had given feedback is delayed, and the learning outcomes of KATA majors PKO who have motor skills high is higher than the students who have the ability low motor. For students who have a high motor skills is more effective in improving learning outcomes of KATA if in given immediate feedback, while the students who with low motor ability delayed feedback turned out to be more effective in improving learning outcomes of KATA

6. Suggestion

To determine the motor skills of students, it is recommended to lecturers to conduct tests of motor skills in students, should provide direct feedback in a lecture to the students who have a high level of motor skills and provide feedback for students who have delayed motor skills levels are low.

References

- [1] Abdul, Wahid., (2007). *Shotokan*. Jakarta: Raja Grafindo Persada.
- [2] Arikunto, Suharsimi., (2002). *Dasar-dasar Evaluasi Pendidikan*. Jakarta: Bumi Aksara.
- [3] Cronbach, L. J. (1985). *Beyond the Two Disciplines of Scientific Psychology: A Review of Instructional Design Research Literature*. Review Of Educational Research.
- [4] Dadang, Sulaiman. (1988). *Teknologi Metodologi Pengajaran*. Jakarta: Rineka Cipta.
- [5] Dahar, R.W., (1989). *Teori-Teori Belajar*. Jakarta: Bumi Aksara.
- [6] Drowatzky, (1975). *Motor Learning Principles and Practice*. Burgess Publishing Company.
- [7] Daulay, B. (2006). *Pengaruh Gaya Mengajaran Keterampilan Motorik Terhadap Hasil Belajar Bola Voli*. Medan: *Penelitian Lemlit Unimed*.
- [8] Fleishman, E. (1992). *A Factorial Study of Psychomotor Abilities*. Lackland: Air Force Personnel and Training Research Center.
- [9] Gagne, Robert M., (1977). *The Conditions Of Learning*. New York: Holt, Rinehart and Winston.
- [10] Hamid, Abdul., (2007). *Teori Belajar dan Pembelajaran*. Medan: Unimed.
- [11] Harrow, Anita. J., (1977). *A Taxonomy of the Psychomotor Domain: A Guide for Developing Behavioral Objectives*. New York: David McKay.
- [12] Hurlock, B. Elizabeth., (1980). *Perkembangan Anak*. Jakarta: Rineka Cipta.
- [13] Karwono. (2008). *Pengaruh Pemberian Umpan Balik Dan Locus of Control Terhadap Kemampuan Mahasiswa Dalam Mengelola Pembelajaran Mikro*. *Jurnal Pendidikan*.
- [14] Kram, Phil Yanuar., (1992). *Belajar Motorik*. Jakarta: Bumi Aksara.
- [15] Lutan, Rusli., (1990). *Belajar Keterampilan Motorik Pengantar Teori dan Metode*. Jakarta: Departemen Pendidikan.
- [16] Magill, Richard. (1998). *A Motor Learning, Concept and Applications*. Singapore: McGraw Hill.
- [17] Merrill, P. F. (1978). *Hierarchical and Information Processing Task Analysis, A Comparison Journal of Instructional Development*.
- [18] Murray, R. (2002). *Overcoming Inertia in School Reform*. California: Corwin Press.
- [19] Nasution, S. (1992). *Berbagai Pendekatan dalam Proses Belajar dan Mengajar*. Jakarta: Bumi Aksara.
- [20] Oxendine. (1992). *Psychology of Motor Learning*. New Jersey: Englewood.
- [21] Rohadi., Ahmadi. (1995). *Pengelolaan Pembelajaran*. Jakarta: Rineka Cipta.
- [22] Roijakkers, Ad., (1991). *Mengajar Dengan Sukses, Petunjuk Untuk Merencanakan dan Menyampaikan Pengajaran*. Jakarta: Gramedia Widiasarana Indonesia.
- [23] Raka, Joni., (1983). *Strategi Belajar Mengajar*. Jakarta: Pustaka Belajar.
- [24] Schmidt, R. A., (1988). *Motor Control and Learning*. Los Angeles: Human Kinetics Publisher.
- [25] Silverius, Suke. (1991). *Evaluasi Hasil Belajar dan Umpan Balik*. Jakarta: Grasindo.
- [26] Singer, R. A., (1980). *Motor Learning and Performance*. New York: Macmillan Publishing
- [27] Siregar, Yan. (2008). *Pengaruh Umpan Balik dan Kemampuan Motorik Terhadap Hasil Belajar Lompat Jauh Siswa Putra MAN*. Medan: *Tesis UNIMED*.
- [28] Sujoto, J.B., (2002). *Oyama Karate*. Jakarta: Elex Media Computindo Gramedia.
- [29] Surakhmad., Winarno, (1990). *Didaktik Metodik dalam Mengajar*. Bandung: Tarsito.
- [30] Yudianta. (1998). *Pengaruh Model Latihan dan Jenis Kelamin Terhadap Pembentukan Kemampuan Motorik*. Bandung: *Tesis*. UPI.