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ORIGINAL ARTICLE

Effect of Verbal Feedback on Dribbling Skill in Basketball During The Eight Weeks Training

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ABSTRACT

Purpose of this study is to examine the impact of verbal feedbacks given to the player during trainings on the basketball dribbling. The study is performed with total 40 students in two groups having similarities in terms of various factors and having education in Toros University in 2016-2017 academic year. The average age of the research group is (20.87 ± 1.61) for the test group and (20.60 ± 1.09) for the control group. Dribbling Evaluation Form, whose validity and reliability study was conducted by Çamur[3] was used as data collection tool. In the data analysis, Shapiro-Wilk test was used to determine whether the scores show normal distribution or not. The Wilcoxon Signed Ranks Test was used to determine the difference between the pre-test and post-test scores of the groups. In the study, 0.05 was used in statistical processes as the level of significance. According to the research findings, there was a significant difference between the test group's pre-test and post-test dribbling values ($p < 0.05$). The Mann-Whitney U Test was used to determine the differences between test and control groups. According to the research findings, a significant difference was found between the test and control groups' post-test dribbling values ($p < 0.05$). As a result, it was observed that verbal feedback during eight weeks of training had a positive effect on dribbling.

Keywords: Dribbling, Skill Learning, Basketball, Feedback, Verbal Feedback.

INTRODUCTION

Feedback is considered to be any sensory information given to a practitioner about the skill he or she is practicing at the moment of the movement or at the end of the movement. According to Schmidt[13] feedback is when a person receives information about his / her performance during or after the performance. According to Singer[16] feedback is the information a person receives from sensory receptors about the result of self-movement. In general, feedback is seen as the comparison between the state of the skill applied and the target skill.

During the learning phase, feedback emerges in two ways. Internal feedback that the person practicing the skill can receive continuously from his / her senses without the need for external support, as information from the proprioceptive senses, namely body sensation, muscles, joints or tendons.[8] The other is that the information about the detail or quality of the movement, which is frequently used by the instructors during the teaching phase, about the movement of the person practicing the skill is not sufficient, is provided from external sources. The verbal and non-verbal form given by the coach or the teacher or giving feedback with devices such as stopwatches and videos are used as external feedback. External feedback, which is one of the most important aids of the learning phase, is shown as an important teaching aid in many studies.[20] External feedback is used very often in two categories. One of them is the result information about the movement, how much the person has achieved or failed to achieve the success of the skill he/she has applied, while the other is explained as the feedback given by all instructors and trainers about the kinematics of the movement, such as the technique, speed and flow of the movement.[12] When we look at the ways in which external feedback is given, it is stated in studies that the most used form is verbal expressions and visual presentations.[2] Verbal feedback varies according to the way it is given. According to Mosston and Ashworth[11] the ways of giving verbal feedback are grouped under four main headings: corrective expressions, value expressions, neutral expressions and ambiguous expressions. Performance information can provide information regarding the kinematics of the movement applied on the individual through use of various tools upon improvement of the current technology besides the verbal feedback given to the individual via video recordings to enable the individual to see how the performed movement can be more effective. It has been observed that giving external feedback both verbally and visually rather than verbally or visually alone is more effective for target movement.[8]

Feedback has an important place in controlling the player's performance. Verbal feedback is one of the most frequently used forms of feedback given by coaches. The types of feedback given in training should be programmed according to the level of the players and their personal characteristics. In case of having a broad technical knowledge about the applied subject, the expert knowledge of the trainers can affect the quality of the feedback they will give.

This study was conducted to reveal the effect of verbal feedback given in eight weeks of training on dribbling in basketball.

MATERIAL AND METHODS

Research Group: 40 male students studying at Toros University in Mersin province participated in the study voluntarily. 20 students who received training and verbal feedback for 8 weeks were in the test group and 20 students who did not receive training and verbal feedback for 8 weeks were in the control group.

In order to determine the 40-person research group to participate in the study, all students were given a chest number. In order to ensure the equivalence of the participants in the test and control groups in terms of dribbling skills in basketball, 100 students similar to the participants in the research group were reached before starting the study.100 students who did not have regular basketball training and did not have a basketball license in a sports club or school team were asked to practice dribbling skills with the dominant hand in basketball, and their performances were monitored by five basketball experts, and their dribbling skills in basketball were scored with an evaluation chart.The scores of the two experts with the highest and lowest scores from five experts were subtracted, and the average of the remaining three experts' scores was converted into a single score for each participant. These scores are listed at the lowest level and according to the chart, 50 students who have received the least score, which means that they have failed the dribbling skill in basketball. Considering the age of the selected 50 students, 20 students who will receive 8 weeks of training and verbal feedback were assigned to the test group, and 20 students who did not receive training and verbal feedback for 8 weeks were assigned to the control group. 10 students were taken as substitutes.

Basketball training (dribbling) was given to the test group within a program of 45 minutes two days a week and 8 weeks in total. Verbal feedback was given to the individuals in the test group during training. The control group was also given a basketball training (dribbling) for 45 minutes two days a week and 8 weeks in total. No feedback was given to the individuals in the control group during training.

As a pre-test, the dribbling skill scale in basketball was applied and the scales were re-applied as a post-test 8 weeks later and the effects of verbal feedback were examined.

Process: The points to be considered in the application of

dribbling skills were explained to the test group, who received verbal feedback, and indicated by the trainer. The number of repetitions and durations of the application were kept the same as the control group. At most 2 verbal feedback was given to the athletes in the 4th application after every 3rd set. All players were given 20 verbal feedback x 1 training equally for dribbling at each training session. Verbal feedback was determined according to the steps of the dribbling evaluation form.

Data Collection Tools: **Dribbling Assessment Form**: The Dribbling Evaluation Form, the validity and reliability of which was made by Çamur[3] was used to evaluate the competencies of the participants in dribbling skills. The form is a measurement tool that evaluates how much the parameters specified below are fulfilled between 0-5. These parameters are;

A The behavior to be observed for ball control; The ball is dribbling in front, not looking at the ball, dribbling with the tip of the finger before the ball touches the palm, pushing the ball at an angle to the ground, first through the elbow and then from the wrist.

B The behavior to be observed for stepping; Stepping with bent knees, feet not too wide, toes facing forward, making an angle from the knees to the front.

C The behavior to be observed for body position; keeps the center of gravity at the hip, the body moves leaning forward, the head and shoulder are facing upwards.

D Behavior to be observed for coordination; The whole body springs slightly from the knees, the body moves freely.

Data Analysis: Descriptive statistics were used to determine the age and number of subjects values of the groups participating in the study. Since the group size was 20 in the study, the Shapiro-Wilk test was interpreted for normality. The Wilcoxon Signed Ranks test, which is the non-parametric of the t test, was used. The Mann-Whitney U test was used to evaluate the development of the test and control groups in terms of pre-test and post-test scores. In addition, Cronbach Alpha reliability analysis was performed for the scales used in the study. In the study, 0.05 was used in statistical processes as the level of significance. SPSS 22 statistical package program was used to analyse the data obtained in the study.

RESULTS

Table 1.Wilcoxon Signed Rank Test Findings Regarding the Comparison of Test Group Pre-test-Post-test Dribbling Values

Test Group Pre-Test – Post Test Dribbling	n	Rank Average	Rank Total Z P
Negative Rank	0[a]	0,00	0,00 3,934 0,00
Positive Rank	20[b]	10,50	210,00
Equal	0[c]		

A post test dribbling<pre-test dribbling
B post test dribbling>pre-test dribbling
C post test dribbling= pre-test dribbling
D test control = 1,00

Table 2. Wilcoxon Signed Rank Test for The Comparison of The Control Group Pretest-Posttest Dribbling Values

Control Group Pre-Test – Post Test Dribbling	n	Rank Average	Rank Total Z P
Negative Rank	0[a]	0,00	0,00 3,838 0,00
Positive Rank	19[b]	10,00	190,00
Equal	1[c]		

A post test dribbling<pre-test dribbling
B post test dribbling>pre-test dribbling
C post test dribbling= pre-test dribbling
D test control = 2,00

According to Table 1, it was observed that there was a statistically significant difference between the test group's pre-test and post-test dribbling scores, and the post-test dribbling score of 20 people was higher than the pre-test dribbling score (Z = 3.934, p <.00). Considering the findings, it is seen that the observed difference is in favour of the positive ranks, that is, the post-test score.

According to Table 2, it was observed that there was a statistically significant difference between the control group pre-test and post-test dribbling values, and the post-test dribbling score of 19 people was higher than the pre-test dribbling score (Z = 3,838, p <.00). The dribbling score of 1 person was equal to the pre-test dribbling score. Considering the findings, it is seen that the observed difference is in favour of the positive ranks, that is, the post-test score.

Table 3. Mann-Whitney U Test Findings for Comparison of Test and Control Groups Post-Test Dribbling Scores

Group	n	Rank average	Rank total	U	p
Test	20	29	580	30	0,000
Control	20	12	240		

According to the findings of the Mann-Whitney U Test used to compare the dribbling skill scores of the control and test groups, a significant difference was found between the dribbling skills of the students who were given verbal feedback and those who did not receive verbal feedback at the end of the eight-week training (U = 30, p <.05).Considering the rank averages, it is understood that the students who received verbal feedback had higher dribbling skills than the students who did not receive verbal feedback.

DISCUSSION

When the pre-test-post-test dribbling values of the test group were examined, the post-test dribbling score of the experiment group of 20 people was higher than the pre-test dribbling score. This finding shows that the dribbling skills of the test group have improved. The findings supporting our study have been observed in the conducted studies. As a result of the research conducted on how the different feedback methods of Akıncı[1] affect the learning of dribbling skills in basketball; In the recall test, the permanence in the visual + verbal feedback group was significantly higher in the groups that received only visual and only verbal feedback and the verbal feedback group was significantly higher than the groups that received visual feedback and the group with only visual feedback showed the least improvement. The fact that the beginner level dribbling skills were more permanent with verbal feedback supports our study. In the study in which Hebert[5] examined the effect of learning through observation and verbal feedback on tennis skill, four groups were formed to which female students studying at university were randomly assigned. The fact that the average values of the test group, who received verbal feedback, were significantly higher than the control group supports our study. Kangalgil[7] explained that using feedback is definitely effective than not using feedback, but giving verbal + visual feedback together is more effective in difficult skills. However, he stated that visual feedback alone is not effective in difficult skills, and verbal feedback together with visual feedback is the most effective form of feedback. In Taylor's[18] research, it is seen that there is no significant difference in football foot deceit skills in groups formed with and without visual and verbal feedback. The findings of the study were interpreted as the fact that the students were not able to focus on the actual mistake and got bored with the complexity of the movement due to the fact that they saw the various aspects of the movement they made while receiving feedback with video, which would reduce the effect of feedback. Taylor's[18] findings do not support our study. It can be said that verbal feedback has a positive effect on dribbling skill at the stage of teaching dribbling in basketball during training for eight weeks.

When the pre-test-post-test dribbling values of the control group were examined, the post-test dribbling score of the 19-person control group was higher than the pre-test dribbling score.

The dribbling score of 1 person was equal to the pre-test dribbling score.

According to the control group dribbling findings, it can be said that the difference between the pre-test scores and post-test scores of 19 people was formed as a result of the contribution of eight weeks of training. It is thought that the training person can improve the dribbling skill without verbal feedback. It is thought that the fact that the pre-test dribbling score of 1 person and the post-test dribbling scores did not change was due to the lack of verbal feedback. When the studies conducted were examined, research findings supporting our study were seen. Kangalgil[7] found a significant difference between the retention scores of the control groups in shooting skill by jumping from primary school 8th grade physical training lesson, basketball unit subjects. This research is in line with our findings. Various studies have shown that giving visual feedback is more effective than verbal feedback in studies on feedback in order to reveal its effect on learning.[5-9-14-15-17] These studies show similar relationships with our findings. In the studies of İlker and Koruç[6] which included visual feedback and verbal feedback, it was determined that the difference between the level of access for teaching the dunk technique in volleyball between the test group and the control group originated from the control group. These findings support our research findings. Uzun and Pulur's[19,21,22,23,24] study investigating the effect of ten-week free throw training on players' shooting technique and successful shot rate, showed that there was a 3.31% increase as a result of weekly general basketball training according to the control group free throw pre-test and post-test scores. The fact that this situation was stated by the researcher that there was no statistically significant difference supports our study. Fredenburg, Lee and Solmon[4] investigated the effect of verbal feedback on mug stacking (the ability to make a tower with cups in a certain period of time). According to the findings, there was no significant difference between the groups in simple mug stacking skill. In addition, the fact that verbal feedback has little effect on simple skills supports our study. In the comparison of the dribbling skill scores of the control and test groups, it was found that there was a significant difference between the dribbling skills of the students who were given verbal feedback and the students who were not given verbal feedback as a result of the eight-weeks training. Considering the mean rank, it is seen that the average rank of the students in the test group is higher than the control group. According to these findings, it is thought that verbal feedback affects students' dribbling skills during eight weeks of training. According to the research findings of Çamur[3] a significant difference was found between the cognitive field achievement levels in teaching dribbling skills and the statement that this difference originates from the group who received video and live + video feedback supports our research.

CONCLUSION

There was a significant difference between the test group's pre-test and post-test dribbling values. Considering the average rank and total of the difference scores, it is seen that the observed difference is in favour of the positive ranks, that is, the post-test score. There was a significant difference between the control group pre-test and post-test dribbling values. Considering the average rank and total of the difference scores, it is seen that the observed difference is in favour of the positive ranks, that is, the post-test score. There was a significant difference between the test group and the control group post-test dribbling values. Considering the average rank and total, it is seen that the observed difference is in favour of the test group.

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