

THE CONSTRUCTION OF NEW SKILL TEST FOR KABADDI PLAYERS

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Abstract

The purpose of this study was to construct new skill test battery for kabaddi players. Initially five test items were designed by the investigators, after analysing the various factors. A pilot study was conducted to fifty subjects and three test items were finalised by keen observation and consultation with the experts. The test items were side target kick, on the spot bonus and reach ability hand touch. These test items were administered to four hundred male kabaddi players from Coimbatore, Namakkal and Erode districts and their age ranged from 18 to 20 years. In order to find out the reliability, objectivity and validity, the statistical technique correlation coefficient was used. Based on the test-retest method, the reliability coefficient scores on side target kick, on the spot bonus and reach ability hand touch were 0.84, 0.85 and 0.81. It was acceptable according to arbitrary standards for the evaluation of physical performance tests. Based on the criterion score the validity of the side target kick, on the spot bonus and reach ability hand touch were 0.74, 0.80 and 0.59. According to arbitrary standards for the evaluation of performance tests, side target kick and on the spot bonus is an acceptable coefficient for validity. In case of reach ability hand touch, it was not acceptable coefficient for validity. Among the test items, side target kick and on the spot bonus touch was most appropriate to measure the playing ability of the kabaddi players.

Keywords: Reliability, Validity, Objectivity, Kabaddi.

INTRODUCTION

Evaluation is essential in the process of teaching and coaching. Through evaluation, a teacher/coach can know the extent to which learning has taken place. Hence, the teacher/coach must be aware of some evaluation techniques, which will enable him to measure the student's/player's skill objectively and classify them initially as well as by measuring the progress made by them. There is few skill tests in various physical activities, which help to measure the playing abilities of the students/players in different games and sports skill test are designed to measure the basic skills used in the playing of a specific sport. Because of the wide range of skills in most sports, a selection of the most important skill is invariably necessary. The selection is usually based keeping in mind the literature available, opinion of experts as well as by applying appropriate statistical techniques. The skill items collectively are called test battery. The skill test helps the students to evaluate their performance in the fundamental skills of the game and to provide an incentive for improvement. Kabaddi is aptly known as the "GAME OF THE MASSES" due to its popularity, simple, easy to comprehend rules, and public appeal. The game calls for no sophisticated equipment what so ever, which makes it a very popular sport in the developing countries. Though it is basically an out door sport played on clay court, of late the game is being played on synthetic surface indoors with great success. (Prasad & Rao, 2002).

Kabaddi is a combative team game, played with absolutely no equipment, in a rectangular court, either out-doors or indoors with seven players on the ground in each side. Each side takes alternate chances at offence and defense. The basic idea of the game is to score points by raiding into the opponents' court and touching as many defense players as possible without getting caught on a single breath. During play, the players on the defensive side are called "Antis" while the player of the offense is called the "Raider". Kabaddi is perhaps the only combative sport in which attack is an individual attempt while defense is a group effort. The attack in Kabaddi is known as a 'Raid'. There is a lack of standardized evaluative criteria in kabaddi game for assessing the ability, co-ordinative and the performance of kabaddi players, an effort was undertaken by the investigator to construct the new skill test battery for college kabaddi players.

MATERIALS AND METHODS

The purpose of this study was to construct new skill test battery for kabaddi players. Initially five test items were designed by the investigators, after analysing the various factors such as analyzing the literature, consultation with the experts and discussed with players. A pilot study was conducted to fifty subjects and three test items were finalised by keen observation and. The test items were side target kick, on the spot bonus and reach ability hand touch. These test items were administered to four hundred male kabaddi players from Coimbatore, Namakkal and Erode districts and their age ranged from 18 to 20 years.

RELIABILITY AND OBJECTIVITY

Correlation Co-efficient was employed to obtain reliability coefficients by the test-retest method. The score of trial 1 was correlated with the score of trial 2. The reliability coefficients of side target kick, on the spot bonus and reach ability hand touch were 0.84, 0.85 and 0.81 respectively. Objectivity is a measure of the worth of the scores and is inherent in the test. Since objectivity coefficients are normally high for scores which are precise and numerical, such as those which are timed by two timers, it is therefore assumed that this test has acceptable objectivity. Baumgartner et al. (2003) opined that it is possible to be reliable and objective, but not valid. However a test cannot be valid if it is either objectivity or reliability. According to Barrow & McGee (1979) arbitrary standards for the evaluation of performance tests, side target kick, on the spot bonus and reach ability hand touch were 0.84, 0.85 and 0.81 was an acceptable coefficient for reliability.

TABLE – I

RELIABILITY COEFFICIENT FOR TEST-RETEST SCORES

Sl.No	Test item	Test-Retest (r)
1	Side Target Kick	0.84*
2	On the Spot Bonus	0.85*
3	Reach Ability Hand Touch	0.81*

* Significant at 0.05 level

Barrow & McGee, (1979) arbitrary standard for acceptable reliability was 0.80. Reliability coefficient for test retest scores on side target kick, on the spot bonus and reach ability hand touch were 0.84, 0.85 and 0.81. It was acceptable according to arbitrary standards for the evaluation of physical performance tests.

VALIDITY

The correlation method was also used in analysing the data to establish validity. The criterion for establishing test validity was a subjective ranking of the subjects according to playing ability. Ranking the players according to their playing ability was the criterion used for establishing the validity of the test. Antrim (1972) suggests that the subjective ratings were done (from one to ten, point scale with ten being the highest) by a jury of experts based on skill test performance and subjective observation. A correlation analysis was employed in obtaining coefficients for validity. Test scores were correlated with the criterion score of rank. After obtaining the subjective rankings, inter judge correlations indicated an acceptable agreement ($r = 0.72$) between two judges. The sum of the ratings of these judges was used in the overall ranking. The two judges whose ratings correlated highly were taken. Validity of the test items for side target kick, on the spot bonus and reach ability hand touch were 0.74, 0.80 and 0.59. According to Barrow & McGee (1979) arbitrary standards for the evaluation of performance tests, side target kick and on the spot bonus is an acceptable coefficient for validity.

TABLE – II

CORRELATION COEFFICIENTS FOR ALL THE TEST ITEMS

Tests	Criterion	Side Target Kick	On the Spot Bonus	Reach Ability Hand Touch
Side Target Kick	0.80*	--	--	--
On the Spot Bonus	0.74*	0.16	--	--
Reach Ability Hand Touch	0.59	0.15	0.37	--

* Significant at the .01 level.

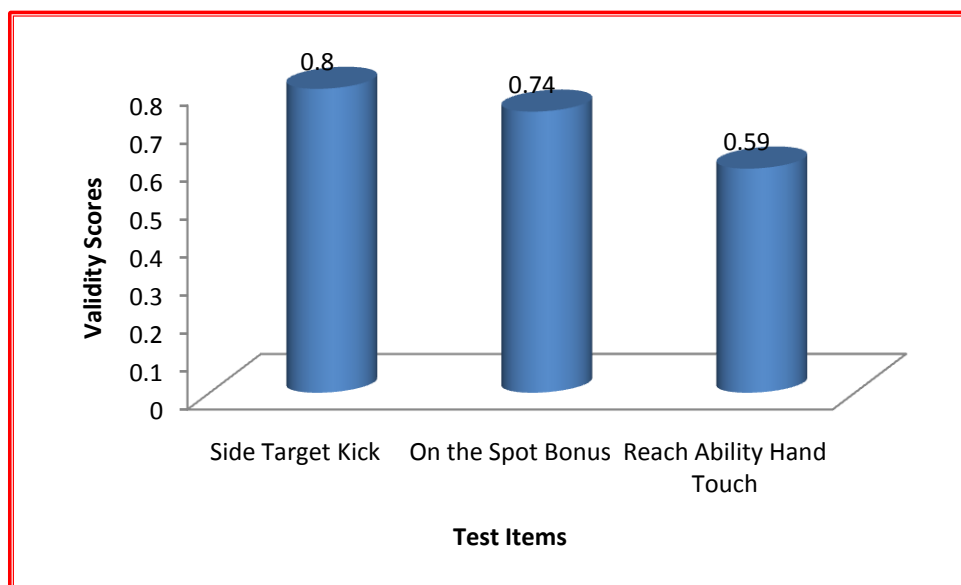
According to Barrow & McGee, (1979) arbitrary standard for acceptable validity was 0.70. Validity of the side target kick, on the spot bonus and reach ability hand touch were 0.74, 0.80 and 0.59. According to arbitrary standards for the evaluation of performance tests, side

target kick and on the spot bonus is an acceptable coefficient for validity. In case of reach ability hand touch it was not acceptable coefficient for validity.

CORRELATION OF TEST SCORES AND CRITERION SCORES

Table-2 reveals that correlation of the test scores and the criterion score of playing ability of kabaddi players. The test score on side target kick and on the spot bonus was more highly related to the criterion scores than reach ability hand touch. Side target kick ranked highest in the relationship with the criterion score with a relationship value of 0.80. On the spot bonus ranked second highest in the relationship with the criterion score with a correlation value of 0.74.

Figure-I: Validity of the Test Items



FINAL TEST ITEMS

SIDE TARGET KICK

Purpose

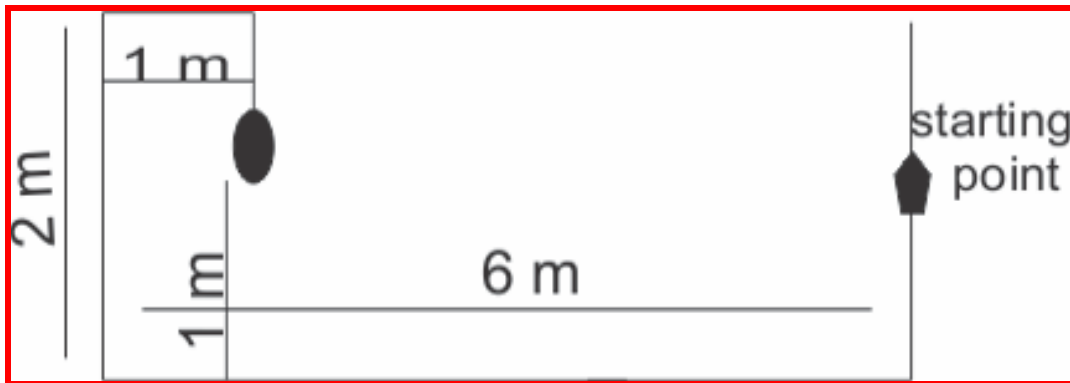
The purpose of the test was to measure the speed kicking ability of the kabaddi player.

Facility Required

A place with 10 X 5 meters.

Equipment

Measuring tape, a ball, marking powder, hanging device, stop watch and score sheet



Marking

The starting line was marked with the two meters width. Another two lines were marked from the starting with the distance of six and seven meters with two meters width. The hanging device was placed at the centre of the line which was marked with the seven meters distance from the starting line. The ball was kept as hanging position with height of one meter from the floor and one meter projected towards the starting line.

Procedure

The players were asked to stand in the starting line. When the signal given by the investigator the player asked to run side wards and kick the ball which hanged and return the starting line and repeat the same for three times.

Scoring

The nearest time was recorded in seconds as score from starting to finish. Three trials were given to all the players. The best score was recorded as final.

ON THE SPOT BONUS

Purpose

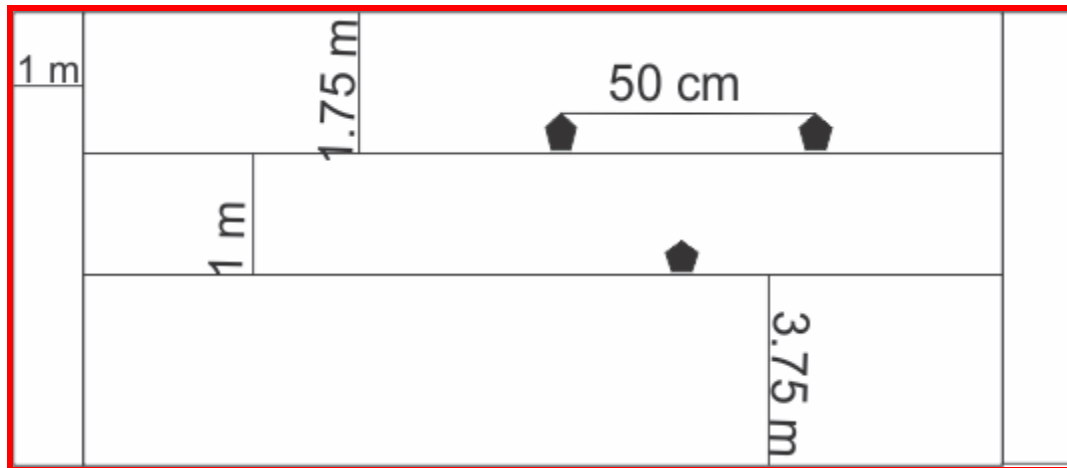
The purpose of the test was to measure the ability of spot bonus of the kabaddi player.

Facilities Required

A half Kabaddi court

Equipment

Measuring tape, stop watch, marking powder and score sheet



Marking

Lay out of half size Kabaddi court was essential. There was a foot marking in the bulk line. Another two foot marks were marked beyond and close to the bonus line with fifty centimeters gap between two marks and centered with the mark on the bulk line.

Procedure

The players were asked to stand on the marking on the bulk line. On the signal the player was asked to move the leg (right or left) and touch the marked area in the bonus line alternatively up to thirty seconds.

Scoring

The total number of touches by the player was considered as score. Three trials were given to all the players. The best score was considered as final score.

RESULTS

Results of the correlation analysis based on the test-retest method, the reliability coefficient scores on side target kick, on the spot bonus and reach ability hand touch were 0.84, 0.85 and 0.81. It was acceptable according to arbitrary standards for the evaluation of physical performance tests. Based on the criterion score the validity of the side target kick, on the spot bonus and reach ability hand touch were 0.74, 0.80 and 0.59. According to arbitrary standards for the evaluation of physical performance tests, side target kick and on the spot bonus is an acceptable coefficient for validity. In case of reach ability hand touch it was not acceptable coefficient for validity. Among the test items, side target kick and on the spot bonus was most appropriate to measure the playing ability of the kabaddi players.

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