CONSTRUCTION OF REVERSE WRIST PASS TEST IN HANDBALL

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Abstract:

The purpose of the study was to construct Reverse Wrist Pass Test in Handball. One hundred male handball players from South-West Zone and North-East Zone Universities (four University teams from each Zone) who qualified for the All India Inter Zonal Varsity Handball Tournament held at Banaras Hindu University, Varanasi, Uttar Pradesh from 25th to 29th October 2002, were selected to serve as subjects for this study. The criterion measure was the average of the playing ability scores of the handball players assigned independently by three handball experts. It was concluded that the newly developed Reverse Wrist Pass Test in handball meet the criterion of scientific authenticity i.e. the test was reliable, objective and valid.

Introduction:

In any game, be it indoor or outdoor, to have complete command, perfection is needed. Game of handball is no exception. This perfection comes through certain skills and techniques. It is apparently clear that if a sportsman wants to declare his mastery over any game, he will have to be well equipped with the skills and strategy of that particular game.

Since very limited research in the area of skills in handball has been done, the researcher felt the need to take up this study.

The purpose of the study was to construct Reverse Wrist Pass Test in Handball.

Methodology:

One hundred male handball players from South-West Zone and North-East Zone Universities (four University teams from each Zone) who qualified for the All India Inter Zonal Varsity Handball Tournament held at Banaras Hindu University, Varanasi, Uttar Pradesh from 25th to 29th October 2002, were selected to serve as subjects for this study. The age of the subjects ranged between 17 to 25 years.

The criterion measure was the average of the playing ability scores of the handball players assigned independently by three handball experts.

The reverse wrist pass test was developed through objective methods. The data for this was collected by administering the test on one hundred handball players who participated in the All India Inter-Zonal Inter-Varsity Handball Tournament.

The coaches and managers of the teams were consulted at personal level to conduct the test on handball players, and a rapport was established with them for the testing programme. All those incharge of teams, coaches and managers were made fully conversant with the study. Tentative times were finalized with them. The researcher approached each player after giving proper and timely information before the test was conducted.

Before administering the test, the subjects were briefed about the purpose of the study and details of the test were explained to them. The subjects were given a demonstration of the test by a trained helper. They were also given sufficient number of trials to enable them to become absolutely familiar with the test. To ensure uniform testing conditions, the subjects were tested in the morning and evening sessions after warming-up during practice sessions. The duration of test administration was set in a manner so that fatigue may not occur. Though no special technique was used to motivate the subjects, the subjects were very co-operative throughout the test. The test was administered on handball courts and stadium at the competition site.

The purpose of the test was to test a player's ability to pass the handball sideways quickly and successfully using reverse wrist pass. Test may be used with male college players.

A line at a distance of six-meter from the floor of the wall was marked to provide both right and left handed players to attempt at the target sideways using reverse wrist pass. Three rectangular targets one inside the other measuring 120 x 60 cm., 80 x 40 cm. and 40 x 20 cm. were marked on the cloth. Target was hanged on the wall with the length of the rectangles parallel to the floor and the bottom of the rectangles 60 cm. from the floor.

The subject with a ball in hand, stood behind the six-meter line in the areas as provided and on blowing the whistle the subject moved paralleled to the line and passed the ball towards the target using reverse wrist pass, from behind the line. Three trials, each of five attempts was given.

The points values allotted were 10 for center, 6 for the middle and 2 for outer rectangular target, determined on the basis of successful hitting of the ball in the respective areas. However, no point was awarded when ball did not hit the target area. Balls hitting on the line were given the higher point values. The score was the total points made in five attempts in each trial and the best of the three trials was the score of the subject. A maximum score of 50 was possible on this test.

Findings:

Test-retest method was used to establish the reliability of the Reverse Wrist Pass Test. All the subjects were given three trials administered by the same tester and inter-class correlation coefficients by analysis of variance method was employed to compute the reliability of the test. Analysis of variance for reliability estimate and the obtained reliability coefficient (R) value for the Reverse Wrist Pass Test have been presented in Table-1.

TABLE - 1
ANALYSIS OF VARIANCE FOR RELIABILITY ESTIMATE
OF REVERSE WRIST PASS TEST

Source of Variance	Sum of Squares	Degree of Freedom	Mean Squares	F - Ratio	tab F	Inter - Class Correlation (R)
Subjects	18348.41	99	185.34			
Trials	2.96	2	1.48	0.447*	3.04	0.982**
Interaction	655.71	198	3.31			
Total	19007.08	299				

*Insignificant at 0.05 level   tab F 0.05(198,2) = 3.04

** Significant at 0.05 level $R_{0.05}(98) = 0.195$ N = 100

The data obtained as a result of the administration of reverse wrist pass test and judged by three different handball experts who recorded the performance of the subjects independently was correlated in order to obtain objectivity coefficient. Analysis of variance for objectivity estimate and the objectivity coefficient (R) value for the Reverse Wrist Pass Test have been presented in Table - 2.

TABLE - 2
ANALYSIS OF VARIANCE FOR OBJECTIVITY ESTIMATE
OF REVERSE WRIST PASS TEST

Source of Variance	Sum of Squares	Degree of Freedom	Mean Squares	F - Ratio	tab F	Inter - Class Correlation (R)
Subjects	18317.55	99	185.03			
Trials	8.03	2	4.01	1.142*	3.04	0.981**
Interaction	695.97	198	3.52			
Total	19021.55	299				

*Insignificant at 0.05 level   tab F 0.05(198,2) = 3.04

** Significant at 0.05 level $R_{0.05}(98) = 0.195$ N = 100

Correlation of reverse wrist pass test and the criterion variable has been presented in Table - 3.

TABLE - 3
RELATIONSHIP OF REVERSE WRIST PASS TEST TO THE CRITERION
(PLAYING ABILITY SCORES)

S. No.	Test	Coefficient of Correlation
1.	Reverse Wrist Pass Test	0.748*

* Significant at 0.05 level $r_{0.05}(98) = 0.195$ N = 100

Discussion of Findings:

Analysis of data on Reverse Wrist Pass Test indicated that the constructed test in handball was found to be reliable. The findings of the study further reveal that the Reverse Wrist Pass Test in handball was found to be objective. The significant values showed that the directions for administration of the test were specific and clear for performance as well as evaluation.

Conclusions:

Within the limitations of the present study, the following conclusions were drawn: -

1. The Reverse Wrist Pass Test showed significant relationship with handball playing ability.
2. The newly developed Reverse Wrist Pass Test in handball meet the criterion of scientific authenticity i.e. the test was reliable, objective and valid.

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