



## Construction of Floating Serve Test in Volleyball

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### Abstract

*The purpose of the study was to construct floating serve test in Volleyball. Forty male volleyball players from the teams reaching In semi finals of the Inter Collegiate Volleyball Tournament of DAVV, Indore in session 2011-12 were selected to serve as Subjects for this study. The criterion measure was the scores obtained in the Russell and Lange Service Test. It was concluded that the newly developed floating serve test in volleyball meet the criterion of scientific authenticity i.e. the test was reliable, objective and valid.*

**Keywords:** Floating serve, volleyball, reliability, objectivity, validity.

### Introduction

A beginner volleyball player needs to learn the basic skills. These skills represent a collection of specific actions that may be identified as techniques used to obtain maximum efficiency of play. These technical procedures are involved with the manipulation of the ball and the movements of the players. Since very limited research in the area of the skills in the volleyball has been done that's why the researcher felt the need to take up this study. The purpose of the study was to construct the floating service test in volleyball.

### Methodology

Forty male players of the teams reaching semifinals of Inter Collegiate Volleyball Tournament of Devi Ahilya University, Indore in the session 2011-12 were selected to serve as subject for this study. The Tournament was organized by Govt. Arts and Commerce College, Indore (M.P.) on 13<sup>th</sup> and 14<sup>th</sup> Dec. 2011. The age of the subjects ranged from 18 to 28 years. The criterion measure was the average scores of the volleyball players through Russell and Lange Service Test<sup>3</sup>.

Floating serve test was developed through objective methods. The data for this study was collected through administering the floating serve test on forty male players of the teams reaching semifinals of Inter Collegiate Volleyball tournament of DAVV, Indore. Ley studied on high level of achievement as ability to make application and interpretation of skills, techniques, and strategies of play. The test consists of 36 to 55 relevant multiple choice items for archery, badminton, bowling, golf, soccer etc. The coaches and managers of the teams were consulted at personal level to conduct the test on volleyball players, and a rapport was established with them for the testing programme. All those 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 administrating 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 skill test by a trained helper. The subjects were given sufficient number of trails to enable them to become familiar with the test, to ensure uniform testing condition; the subjects were tested in the morning and evening sessions. Sufficient time was given in between the test, so that the subjects could show their best performance. Cummsky<sup>2</sup> also made a test for boys aged 11 to 14 years. A fifteen seconds practice trial is allowed before the test begun. The test consists of two volleying sessions, one for thirty seconds and the other for forty five seconds. The test-retest reliability coefficient was 0.86.

Katherine<sup>3</sup> also Construction of Objective Test Items to Measure High School Level of Achievement in Selected Physical Education Activities". Relevant 36 to 55 multiple choice items were contracted for archery Badminton bowling golf soccer, softball, volleyball and Basketball.

The purpose of the test was to measure a player's ability to check the floating service in volleyball successfully the multi coloured Cosco Super Volley, Volleyball approved by the Volleyball Federation of India, measuring tape, marble powder for marking and rope in good conditions utilized in the test.

A court with special marking as shown in figure–1 was marked; each of the marked area was numbered to indicate the score value of the restricted areas. The subject with a ball in hand stood behind the end line and executed the floating services into the targets across the net. On blowing the whistle the subject attempted the floating serve. No point was awarded either when service goes out or foot faults occurred. Three trails of 10 floating services were attempted by each subject. The best total

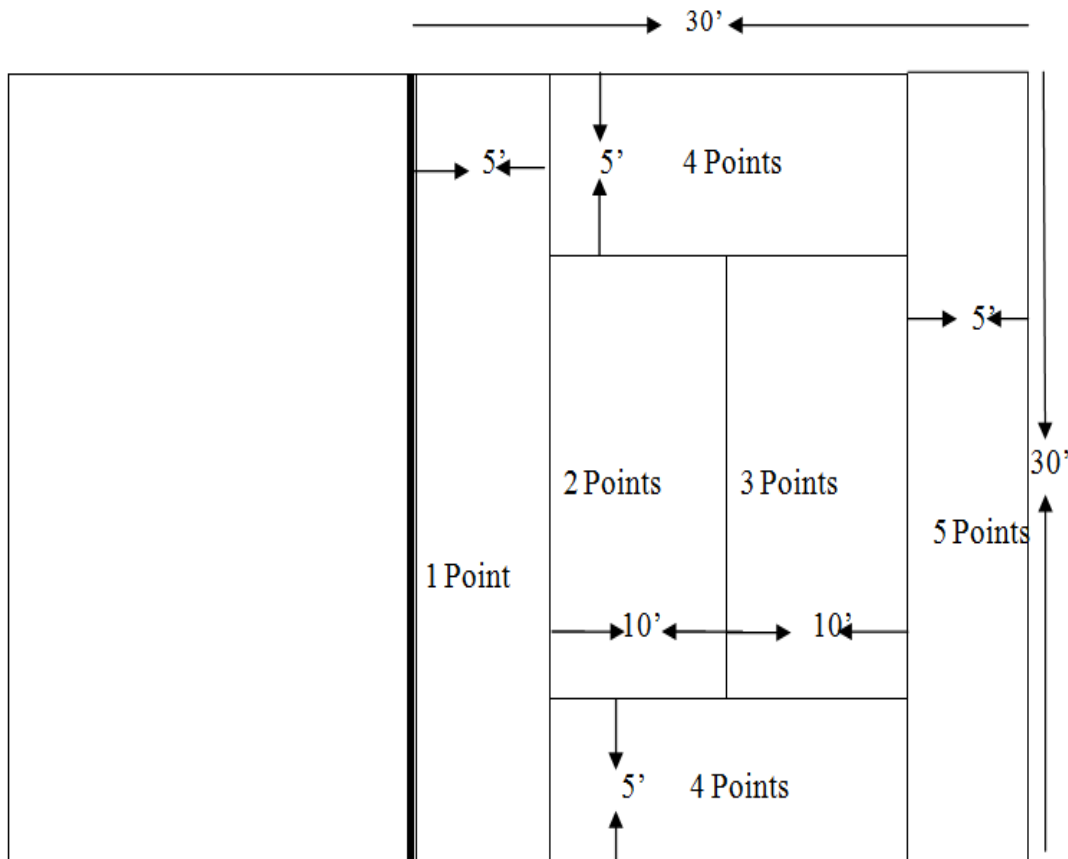
of the three trials was the score of the subject. A maximum score of 50 points was possible on this test.

estimates and the obtained reliability coefficient (R) value for the floating service test has been presented in table-1

**Results and Discussion**

Test- retest method was used to establish the reliability of the floating service. All the players were given three trials administered nu the same tester and inter-class correlation coefficient by analysis of variance method was employed to compute the reliability test. Analysis of variance for reliability

The data obtained as a result of the administration of floating service test and judged by three different volleyball experts who recorded the performance of the players independently was correlated in order to obtain objectivity coefficient. Analysis of variance for objectivity estimate and the objectivity coefficient (R) value for the floating service test has been presented in table-2



**Figure-1**  
 Court Marking for Floating Service Test in Volleyball

**Table-1**  
 Analysis of variance for reliability estimate of floating service test

Source of Variance	Sum of Squares	Degree of Freedom	Mean Squares	F ratio	tab F	Inter-class Correlation(R)
Subjects	3023.792	39	77.533			
Trials	0.467	2	0.233	0.065*	3.11	0.954**
Interaction	279.533	78	3.584			
Total	3303.792	119				

\* Not Significant at 0.05 level      tab  $F_{0.05}(78, 2) = 3.11$ .      \*\* Significant at 0.05 level       $R_{0.05}(38) = 0.304$  N = 40.

**Table–2**  
**Analysis of variance for objectivity estimate of floating service test**

Source of Variance	Sum of Squares	Degree of Freedom	Mean Squares	F ratio	tab F	Inter-class Correlation(R)
Subjects	3270.133	39	83.850			
Trials	0.817	2	0.408	0.136*	3.11	0.964**
Interaction	234.517	78	3.007			
Total	3505.467	119				

\* Not Significant at 0.05 level      tab  $F_{0.05}(78, 2) = 3.11$ .      \*\* Significant at 0.05 level       $R_{0.05}(38) = 0.304$  N = 40.

Correlation coefficient of floating service test and the criterion variable has presented in Table –3.

**Table–3**  
**Relationship of floating service test to the criterion (Playing ability scores)**

Test	Coefficient of Correlation
Floating Service Test	0.888*

\*Significant at 0.05 level       $r_{0.05}(38) = 0.304$

Analysis of data on floating service test indicated that the constructed test in volleyball was found to be reliable and objective. The significant values showed that the directions for administration of the test were specific and clear for performance as well as evaluation.

### Conclusion

The floating service test showed highly significant relationship with volleyball playing ability. The newly developed floating service test in volleyball meet the criterion of scientific authenticity i.e. the test was reliable, objective and valid.

### References

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