



CONSTRUCTION AND DEVELOPMENT SKILL TEST IN SERVICE AMONG BALL BADMINTON PLAYERS

P.Raj Kumar and R.Kalidasan***

* Ph.D. Research Scholar, Department of Physical Education, Bharathidasan University, Tiruchirappalli-620 024

** Asst. Prof (SS), Department of Physical Education, Bharathidasan University, Tiruchirappalli-620 024



ARTICLE INFO

Article history:

Received: 19 Sept 2013;

Received in revised form:

24 Sept 2013;

Accepted: 26 Sept 2013;

Keywords

Reliability, Objectivity

ABSTRACT

The purpose of this study was to assess the service in Ball Badminton. In order to achieve this purpose four test items were designed by the investigators, after analysing the various factors. These test items were Low service, High service, High spin (twist) service and Fast drive (wrist) service. The above said test items were administered to sixty seven male Inter-collegiate level Ball Badminton players and their age ranges from 16 to 20 years (Mean = 17.72, SD = ± 1.64). In order to find out the reliability, objectivity and validity correlation analysis was used. Based on the test-retest method, the reliability coefficient score on tests item reveals that it was acceptable according to arbitrary standards for the evaluation of physical performance tests. But, the acceptable coefficient for validity was observed only in Low service. Among the four test items, low service was most appropriate to measure the service in Ball Badminton.

2013 Star All rights reserved.

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 are few skill tests in various physical activities, which help to measure the playing abilities of the students/players in different games and sports.

Pushpendra Purashwani (2010) 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 the game and to provide an incentive for improvement. The test also serves the purpose of helping the teachers/coach to measure student's/player's performance and to evaluate their own teaching/coaching procedure and programme.

Ball Badminton is basically a South Indian game. There is no exact record available, when and by whom this game was introduced. But there is evidence that before 1856 the rulers of Thanjavur played this game. It is learned that the royal family of 'Travancore' (Kerala) played this game as a recreation sport. Some historians opined that the 'Ball Badminton' takes its name from the Badminton game because originally Badminton is

an Indian game. The game to different parts of the country. Ball badminton is a team game. This game is played in two different formats namely FIVES and DOUBLES. Nowadays few singles tournaments are also organized. The 'five' format is the most popular and almost all the major tournaments are held in this form only. The mixed doubles game is getting popular in recent times.

METHODOLOGY

The purpose of this study was to assess the service in Ball Badminton. In order to achieve this purpose four test items were designed by the investigators, after analysing the various factors. These test items were four Low service, High service, High spin (twist) service and Fast drive (wrist) service. The above said test items were administered to sixty seven male Inter-collegiate level Ball Badminton players and their age ranges from 16 to 20 years (Mean = 17.72, SD = ± 1.64). The instructions and a demonstration of the test items were given properly to avoid any vagueness of the test. In order to find out the reliability, objectivity and validity correlation analysis was used.

TEST ADMINISTRATION

Low service

Purpose

To measure the low serving ability of the ball badminton players.

Facilities & equipment required

Ball badminton court with required marking, rope, ball and rackets were used.

Testing personnel

A scorer and helper

Marking: The test is time consuming unless areas can be marked and prepared for taking the test off to side of the regulation court it several courts can be marked and divided in equal area the use of different colors for the box makes scoring more accurate and points are given 5,4,3,2, and 1 respectively.

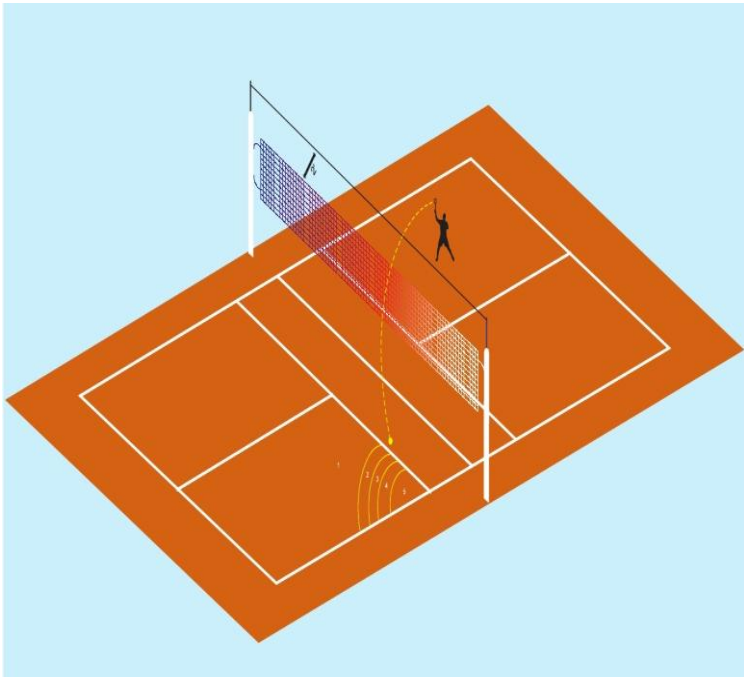


Figure:1 Low service

Testing Procedure: The player is asked to stand in the diagonally opposite court and serve the ball between the top edges of the net the string in to the target areas. The same test in repeated on the left side of the court also. In few services are move five from the right court and five from the left court.

Scoring: Score is awarded as per the landing of the ball in the in the target area as shown is the figure. If the ball does not pass through the string and the net or if it touches the net or the string only zero mark is awarded, if the ball lands and of the target area only one point is awarded. The total points score by the player is few attempts is taken as the score of this test.

High service

Purpose

To measure the serving ability of the subject

Facilities & equipment required

Ball badminton court with required marking, rope, ball and rackets were used.

Testing personnel

A scorer and helper.

Marking

The test is time consuming unless areas can be marked and prepared for taking the test off to side of the regulation court it several courts can be marked and divided in equal area the use of different colours for the box makes scoring more accurate and points are given 6,5,4,3,2, and 1 respectively.

Testing procedure: The player should stand in the diagonally opposite court and make a high service above the net and the string is to the target area. The same test in repeated on the left side of the court also. In all 10 chances are given five from the right court and five from the left court.

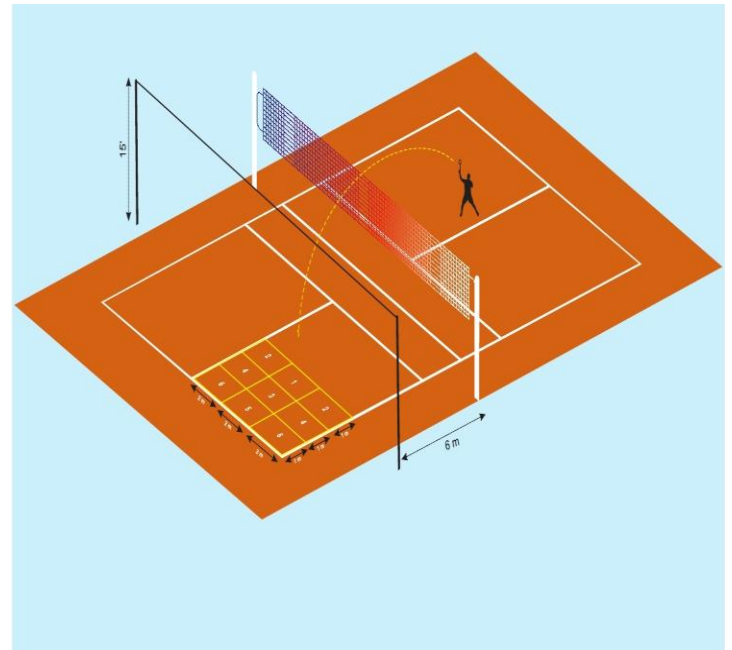


Figure: 2 High service

Scores

Scoring: Points are awarded as per the landing of the ball in the target area. If the ball touch the string or land and of the target area 0 points is awarded. A total point scored in few attempts is the same for this study.

High spin (twist) service

Purpose

To measure the High spin (twist) service ability of the subject

Facilities & equipment required

Ball Badminton court with required marking, rope, ball and rackets were used.

Testing personnel

A scorer and helper

Marking

The test is time consuming unless areas can be marked and prepared for taking the test off to side of the regulation court it several courts can be marked and divided in equal area the use of different colors for the box makes scoring more accurate and points are given 6,5,4,3,2, and 1 respectively.

Testing procedure

The player should stand in the diagonally opposite court and make a high service above the net and the string is to the target area. The same test in repeated on the left side of the court also. In all 10 chances are given five from the right court and five from the left court.

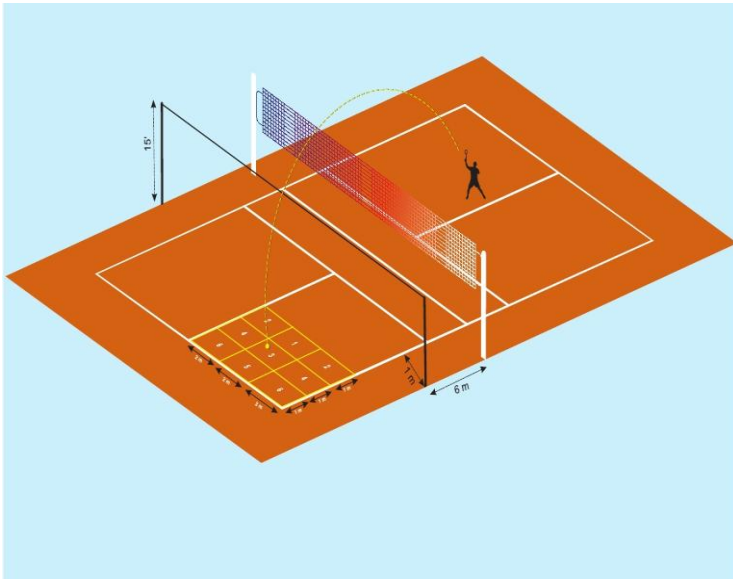


Figure: 3 High spin (twist) service

Scoring: Points are awarded as per the landing of the ball in the target area. If the ball touch the string or land and of the target area 0 points is awarded. A total point scored in few attempts is the same for this study.

Fast drive (wrist) service

Purpose

To measure the High spin (twist) service ability of the subject

Facilities & equipment required

Ball Badminton court with required marking, rope, ball and rackets were used.

Testing personnel

A scorer and helper

Marking

The test is time consuming unless areas can be marked and prepared for taking the test off to side of the regulation court it several courts can be marked the net and parallel to it on the examiner’s side of net. A mark on the subject’s side of the net, the target was fixed at an area and divided in two equal area and points are given 3, 2, and 1 respectively

Testing procedure

The player should stand in the diagonally opposite court and make a high service above the net and the string is to the target area. The same test in repeated on the left side of the court also. In all 10 chances are given five from the right court and five from the left court.

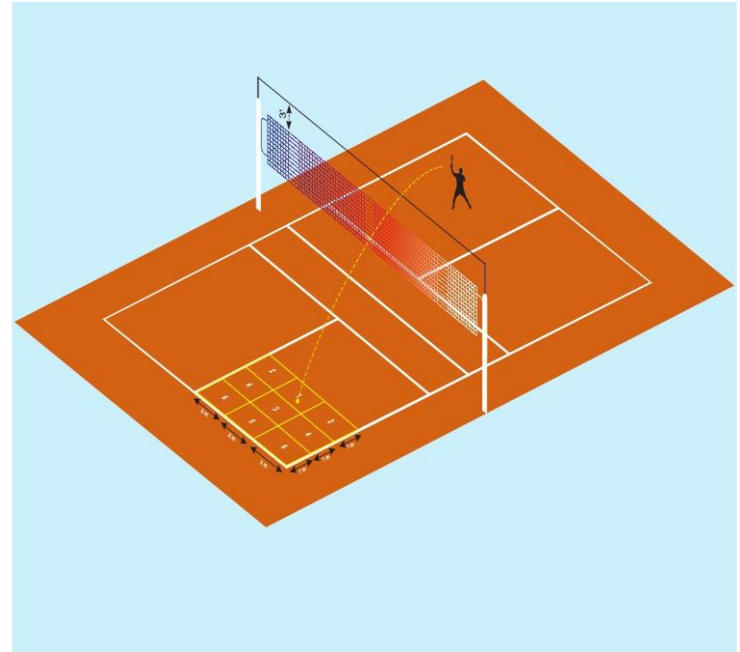


Figure: 4 Fast drive wrist service

Scoring: Points are awarded as per the landing of the ball in the target area. If the ball touch the string or land and of the target area 0 points is awarded. A total point scored in few attempts is the same for this study.

STATISTICAL TECHNIQUE

To analyse the collected data Pearson product moment correlation was adopted in this study.

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 on different occasion

TABLE – I

RELIABILITY COEFFICIENT FOR TEST-RETEST SCORES

Test item	Low service	High service	High service	Fast drive service
Test-Retest (r)	0.89*	0.82*	0.83*	0.82*

In above table the reliability coefficient for test retest scores on Low service, High service, High spin (twist) service and Fast drive (wrist) service were 0.89, 0.82, 0.83 and 0.82. According to Barrow & McGee (1979) arbitrary standard for acceptable reliability was 0.80. Hence it was acceptable according to arbitrary standards for the evaluation of physical performance tests.

Objectivity is a measure of the worth of the scores and is inherent in the test. Objectivity is enhanced by clear test directions, precise scoring methods, and adherence to them. These precautions were taken in the construction and administration of this 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 physical performance tests Low service, High service, High spin (twist) service and Fast drive (wrist) service was an acceptable coefficient for reliability.

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. Subjective ratings were done (from one to ten point scale, with ten being the highest) by a jury of experts. Guidelines were given by the investigators regarding the system of rating. A correlation analysis was employed in obtaining coefficients for validity. Test scores were correlated with the criterion score. After obtaining the subjective ratings, 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 rating. The judges ratings were highly correlated.

standards for the evaluation of physical performance tests, low service and fast drive (wrist) was an acceptable coefficient for validity. In case of high service and high spin (twist) service it was not acceptable coefficient for validity.

RESULTS

The correlation analysis based on the test-retest method revealed a reliability coefficient scores on Low service, High service, High spin (twist) service and Fast drive (cheating / wrist) service were 0.89, 0.82, 0.83 and 0.82. It was acceptable according to arbitrary standards for the evaluation of physical performance tests. Validity of the service from Low service, High service, High spin (twist) service and Fast drive (cheating / wrist) service were 0.82, 0.68, 0.62 and 0.72. According to arbitrary standards for the evaluation of physical performance tests low service, fast drive (wrist) service was an acceptable coefficient for validity. In case of High service, high spin (twist) service, it was not acceptable coefficient for validity. To make this study more effective the above said tests may be conducted with large samples of different level of players. The present study however did not assess all the skills in Ball Badminton due to certain factors. So the present study needs deeper analysis in different skills with large samples.

CONCLUSIONS

Within the limitation of this study, the results indicate that the low service tests have shown to be most reliable and valid among the four tests, however the effectiveness of the test varies depend upon the players, size of the sample etcetera.

REFERENCES

Baumgartner, T. A., Jackson, A. S., Mahar, M. T., & Rowe, D. A. (2003). Measurement for evaluation physical education & exercise science (7th Ed.) Boston: McGraw Hill.

Pushpendra., Purashwani. (2010) Construction of Norms for Skill Test Table Tennis Players International Journal of Table Tennis Sciences,

Harold, M. B., & Rosemary, McGee. (1979). A Practical Approach to Measurement in Physical Education. Philadelphia: Lea & Febiger.

James, R. M., Allen, W. J., James, G. D., & Dale, P. M. (2005). Measurement and Evaluation in Human Performance. USA: Human Kinetics.

Kalidasan, R., Suresh Kumar, M. (2009). ABC of Ball Badminton vinsi publications, Karaikudi.

Ted, A. B., Andrew, S. J., Matthew, T. M., & David, A. R. (2003). Measurement for Evaluation in Physical Education & Exercise Science. New York: Mc-Graw Hill

**TABLE – II
CORRELATION COEFFICIENTS FOR ALL THE TEST ITEMS**

	Criterion	Low service	High service	High spin (twist) service	Fast drive (wrist) Service
Low service	0. 82*	-	-	-	-
High service	0.68	0.18	-	-	-
High spin (twist) service	0.62	0.11	0.08	-	-
Fast drive (wrist) Service	0.72*	0.22	0.14	0.10	-

*Significant at the 0.01 level.

In table-2 the correlations of the test scores and the criterion score of playing ability are described. Validity of the Low service, High service, High spin (twist) service and Fast drive (wrist) service were 0.82, 0.68, 0.62 and 0.72. According to Barrow & McGee, (1979) arbitrary standard for acceptable validity was 0.70. The test score on low service was highly related to the criterion scores than other three tests. According to arbitrary