6(1)(2019)1-5



Journal of Physical Education, Health and Sport



http://journal.unnes.ac.id/nju/index.php/jpehs

Short Badminton Service Construction Test in Universitas Islam Riau Penjaskesrek Students

Novri Gazali^{1⊠}, Romi Cendra²

Physical Education Health and Sport, Universitas Islam Riau, Indonesia¹²

History Article

Received 04 July 2019 Approved 25 July 2019 Published 31 July 2019

Keywords

Construction; Test; Service Short service; Badminton

Abstract

This research aims to develop or modify form test instrument servicing existing badminton short then made a slight improvement in accordance with BWF badminton latest applied. This research method using the methods of research and development or research and development. Research and development instrument validation using validation of content performed by some of the experts (experts judgment) which make a person test and measurement experts and two experts in the sport of badminton. Based on the results of the analysis of the evaluation of the test instrument expert servicing three short badminton declared valid and reliability, so that it can be used as research for students of Penjaskesrek Universitas Islam Riau.

How to Cite

Gazali, N. & Cendra, R. (2019). Short Badminton Service Construction Test in Universitas Islam Riau Penjaskesrek Students. *Journal of Physical Education, Health and Sport*, 6 (1), 1-5.

© 2019 Universitas Negeri Semarang

☐ Correspondence Author: E-mail: novri.gazali@edu.uir.ac.id

p-ISSN 2354-7901 e-ISSN 2354-8231

INTRODUCTION

Badminton games are one of the sports games that are popular and are popular with many people in Indonesia, even throughout the world. This game uses a racket as a bat and a shuttlecock as a hit object (Yuliawan & Sugiyanto, 2014). The purpose of playing badminton is to hit the shuttlecock through the net so that it falls in the field of the opponents game that has been determined and tries to prevent the opponent from counterattacking (Nandika, Hadi, & Ridho, 2017).

When badminton, playing abilities are determined by mastering good basic techniques. Technique is a skill that must be mastered by someone to be able to play one of the sports (Nandika et al., 2017). Mastery of basic techniques is absolutely necessary so that achievements can be improved. In the opinion of Seth (2016) in his research stated the basic techniques that are popularly studied are smash, clear and dropshot blows. Whereas according to (Taufan, 2016) in order to be able to play badminton, a player must master the various basic techniques of the game correctly, which includes the grip of the racket, the work of the legs, and various basic techniques of punch

From the four basic badminton techniques, strikes technique is a technique that must be skilled in this sport because with a good punch technique a player becomes easy to apply the strategies and tactics that have been planned. The strikes technique in this game aims to fly the shuttlecock to the opposing field (Alghifari, Suherman, & Saptani, 2018). There are many kinds of punch techniques in badminton, one of which is service strike technique.

Service is the first strike to start a game (Nugroho, 2016). Based on research (Hussain, Ahmed, Bari, et al., 2011) to improve service skills by training hand, elbow and shoulder auctions. The most important service in this game, in addition to getting service figures is also the key to winning. Practicing good service techniques is not easy, it must require a lot of repetition and a long time. Practicing service strikes must be introduced and trained early to form a good technical foundation. In the process of training, of course, a coach wants his athletes to improve in mastering service punch techniques so that the training provided by the trainer has benefits. According to (Hussain, Ahmed, Mohammad, & Khan, 2011) service is known as the core of badminton, because this service can control a game it self.

Service strokes generally only consist of short service (short service) and long service (long service). Short service is the service that the shuttlecock falls near the net, while the long service is serviced with a shuttlecock that is thrown far up (Setiawati, Simanjuntak, & Atiq, 2014). From two service divisions, players often use short service in the game, because the service character is short and allows the opponent to be difficult to attack. Short service is done by directing the shuttlecock with the aim of the two opposing target plots, namely from the right corner to the right of the opposing field and the left to left corner of the opposing field.

In 2018, BWF as the worlds highest federation of badminton sports implemented a new regulation on short service, which requires servers or badminton who will serve to hold a 1.15 meter high shuttlecock above the surface of the field before being hit into the opponents area. The success of implementing a short, short service technique requires special training again because badminton must familiarize itself with the latest short service techniques. In addition to training, to know the short service capabilities of a server is also required standard test instruments. The existing short-service badminton test instrument was first introduced by French in 1941 (Ardyanto, 2018). The implementation is done by short service and directed to the target with as many as 20 service opportunities. The assessment is to add all the service values that go to the target.

The purpose of this study is to make improvements in the badminton short service test. Repaired components are only on the height of the racket handle from the floor, usually the racket handle on the old test should not be above the chest. To find out the quality of short service skills of students at the Islamic University of Riau Penjaskesrek, of course there must be test instruments and test norms for these athletes. Based on the background, the importance of this research is to carry out so that the creation of standard badminton short service test instruments was created and in accordance with the latest BWF regulations. It is expected that with this research, the University and PBSI as the parent of the Indonesian badminton organization will be easy in capturing outstanding athletes through standardized test instruments.

METHOD

This research method uses research and development methods or research and develop-

ment. According to (Sugiyono, 2012) research and development methods are research methods used to produce certain products and test the effectiveness of these products. In this study the aim was to develop or modify the existing forms of short badminton service test instruments and then make a few improvements in accordance with the latest badminton regulations applied by BWF.

There are many development research models that can be used, but in this study using development with the model Borg and Gall (Haryati, 2012). Borg and Gall's version development research model includes ten activities, namely: (1) research and information collecting, (2) planning, (3) developing preliminary form of product, (4) preliminary field testing, (5) playing product revision, (6) playing field testing, (7) operational product revision, (8) operational field testing, (9) final product revision, (10) dissemination and implementation.

The instrument of this research is a short badminton service test introduced by French in 1941. According to Nurhasan dalam (Ardyanto, 2018) the usefulness of this test is to measure the ability and accuracy of service placement with the shuttlecock below. While the validity level of this test is 0.68 and the reliability is 0.78.

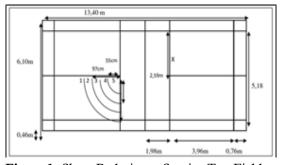


Figure 1. Short Badminton Service Test Field (Nurhasan dalam Irdyanto, 2018)

The implementation of this test is that testee stands on the part of the field which is located at an angular angle with a goal made to carry out service. After the "yes" command, the testee starts serving services directed to the target with a chance of 20 service times. Shuttlecocks must pass above and below the tape. While the assessment is the shuttlecock that falls on the deepest target given a value of 5, then 4, 3, 2 and the shuttlecock that falls outside the target, but still in the service area is given a value of one. If the shuttlecock falls right on the line, it is considered to fall in a higher value area.

Validation of research and development

instruments using content validation carried out by several experts (expert judgment). This is done to ask for an expert judgment whether the instrument compiled in content has been deemed appropriate. Experts judgment uses three experts namely one test and measurement expert namely Rices Jatra, S.Pd., M.Pd, two experts in badminton sports namely Angga Septiadi, S.Pd., M.Pd and Hirja Hidayat, S. Pd., M.Pd.

At the small-scale trial stage it is directed to identify emerging problems related to the implementation of the test, such as the way the test is conducted, the response from the testee, and the score system. The implementation of small-scale trials using testee 10 students Penjaskesrek Riau Islamic University Semester 4. At the large-scale testing phase directed at efforts to test the validity and reliability of the test and the preparation of norms of assessment. The large-scale trial carried out using 30 testees of students of Badminton UKM in Riau Islamic University.

The data analysis technique used in this study is descriptive qualitative and quantitative data analysis. Qualitative descriptive data analysis techniques carried out on the results of observational analysis of needs to clarify the existing problems so as to strengthen the background of the research and the data suggested improvements from the validators and observers to draw conclusions as material for revision. The quantitative descriptive data analysis technique was carried out on: (1) the results of the validation assessment with the value scale of the material experts towardsdraft badminton short service test before trial; (2) assessment data from observers' observations on the implementation of short badminton service tests after the trial; and (3) the results of the badminton short service test results compiled by the researcher.

Getting the product reliability prepared is searched by reliability testing using the testretest technique, the test that has been prepared, is given twice to the same group with a one day delay. to obtain the reliability coefficient of the test, the results of the first test and the results of the second test were correlated using the product moment correlation analysis technique from Pearson. data analysis with Pearson product moment correlation analysis using SPSS. decision making on data analysis is done by looking at the significance value (sig.) of the calculation results. if sig. count is smaller than 0.05 then the item is considered valid / reliable, and vice versa if sig. count is greater than 0.05 then the item is considered invalid / reliable.

RESULTS AND DISCUSSION

A short service test is a measuring device used to know and measure the ability to do a short serve well in a badminton game. Based on the results of the observation, the short service punch ability of the University's Penjaskesrek studentsIslamic Riau is pretty good. But when doing a short service, students have not used the latest regulation from BWF, namely requiring a server or badminton player to serve to hold a 1.15 meter shuttlecock above the surface of the field before being hit into the opponent's area. Therefore, it is deemed necessary to make a short service punch test instrument that complies with BWF regulations.

This short badminton service test was introduced by French in 1941. The usefulness of this test is to measure the ability and accuracy of service placement with the shuttlecock below. While the validity level of this test is 0.68 and the reliability is 0.78. The implementation of this test is the same as the test instrument introduced by French, which is short service and directed to the target with as many as 20 service opportunities. Repairs only to the height of the racket handle from the surface of the field as high as 1.15 meters

The short test of short-service badminton service resulting from small group trials is the first step before conducting research on large group trials, for which the data generated is a validation from one test and measurement expert and two experts on badminton. Based on tests and measurements of short-term bad service blow ability in a small-scale trial of 10 students from the Islamic Education University of Riau University.

The test is carried out based on the criteria of the item, if the sample does the item correctly then it is given a value of 1 (one) but if the sample does the wrong item then the value is 0 (zero). The method of calculation is the average of 1,2,3 experts correlated with the total score of the day 1 and day 2. Next, the results are entered into the helper table, then calculated by product moment correlation technique or formula r.

The results of the validity of the small group trials used the average correlation of experts 1,2,3 with the total score of the first day obtained 0.63, including the high category. while the average correlation of experts was 1,2,3 with a total day punch score of 2 obtained 0.63, including the high category. the results of known validity are then compared with r table prices according to the number of samples used in the study. if the price of r count is greater than the price of r table,

the results of the instrument test are valid and can be used to retrieve data in the study.

Calculation of reliability was carried out with the total day punch score 1 correlated with the total day punch score 2, then the results of the two trials were entered into the table, then calculated using alpha formula. The results of the reliability of the small group trial were 0.74, including the high category. The known reliability results are then compared with the r table price according to the number of samples used in the study. if the price of r count is greater than the price of r table, the results of the instrument test are reliable and can be used to retrieve data in the study.

Based on the data above, the short badminton service test instrument developed through an expert test 1,2,3 which was correlated with the total blow score of day 1 and blow day 2, had a validity of 0.63 and 0.63 greater than r table (0.497) While the reliability results are 0.74 greater than r table (0.497). This means that expert judgment and measurement of short badminton service tests are valid and reliable, so that they can be used as research.

The results of the measurement of the accuracy test of the short-term bad service test punch in a large group developed have a reliability value of 0.74. Based on the data analysis, the lowest accuracy of the shortest badminton service punch with a score of 14 with the highest percentage and the accuracy of the short service badminton punch with a score of 78.

Table 1. Frequency Distribution of Badminton Short Service Test

Interval	Category	Frekue- ncy	Percent- age
64-79	Very Good	3	10,00
48-63	Good	12	40,00
32-47	Good enough	10	33,33
16-31	Fairly good	4	13,33
0-15	Not good	1	3,33
Total		30	100

CONCLUSION

The development of a short service badminton test instrument with a high when a short service of 1.15 meters can be tested on the test subjects. This is a validity of 0.63 and reliability

of 0.74, including the high category.

This means that expert judgment and measurement of short-term badminton service tests are valid and reliable, so that it can be used for students of Islamic Education in Riau Islamic University.

Based on the steps of development research to produce the product that has been done, the final product is a form of a short badminton test instrument service.

After making this short badminton test instrument service, students have no longer had the trouble to look for tests that are appropriate and in accordance with the latest BWF regulations. Penjas students who are also members of the UKM Badminton can also make this instrument a reference to basic technical skills of short service

The development of this short badminton service test has been studied by (Nugroho, 2016) entitled the development of a badminton short service test for athletes in groups of children, beginners, teens and cadets. Based on Nugroho's research, this test instrument is suitable for use by athletes in groups of children, beginners, adolescents and cadets.

Mastery of the basic short service is a very important, because it is the opening blow of badminton games that are used as initial capital to get points. Short service is a blow with a packet that flies into another field with a diagonal direction that is not the same as the game that has been blown (Poole in Ardyanto, 2018).

REFERENCES

Alghifari, A. F., Suherman, A., & Saptani, E. (2018).
Pengaruh Penggunaan Media Petak Angka
Terhadap Ketepatan Sasaran Servis Backhand
Dalam Permainan Bulutangkis. SpoRTIVE,
1(1), 141–150.

- Ardyanto, S. (2018). Peningkatan Teknik Servis Pendek Pada Bulutangkis Melalui Media Audio Visual. Jurnal Ilmiah PENJAS, 4(3), 21–32.
- Haryati, S. (2012). Sebagai Salah Satu Model Penelitian Dalam Bidang Pendidikan. Majalah Ilmiah Dinamika, 37(1), 15.
- Hussain, I., Ahmed, S., Bari, M. A., Ahmad, A., Mohammad, A., & Khan, A. (2011). Analysis of Arm Movement in Badminton of Forehand Long and Short Service. Innovative Systems Design and Engineering, 2(3), 13–18.
- Hussain, I., Ahmed, S., Mohammad, A., & Khan, A. (2011). Videographical Analysis of Short Service in Badminton. Journal of Education and Practice, 2(2), 25–29.
- Nandika, R., Hadi, D. T., & Ridho, Z. A. (2017). Pengembangan Model Latihan Strokes Bulutangkis Berbasis Footwork Untuk Anak Usia Pemula (U-15). Gladi Jurnal Ilmu Keolahragaan, 08(02), 103–111.
- Nugroho, A. (2016). Pengembangan Tes Keterampilan Servis Pendek Bulutangkis Untuk Atlet Kelompok Anak-Anak, Pemula, Remaja dan Taruna. Jurnal Pendidikan Dan Kepelatihan Olahraga, 1(6), 1–7.
- Seth, B. (2016). Determination Factors of Badminton Game Performance. International Journal of Physical Education, Sports and Health, 3(1), 20–22.
- Setiawati, H., Simanjuntak, V. G., & Atiq, A. (2014). Teknik Dasar Servis, Pukulan Forehand dan Backhand Bulutangkis pada Siswa Kelas Viia di SMP. Jurnal Penelitian Dan Pembelajran, 3(9), 1–12.
- Sugiyono. (2012). Metode Penelitian Kuantitatif Kualitatif dan R&D. Bandung: Alfabeta.
- Taufan, A. (2016). Pengaruh Strategi Pembelajaran dan Konsep Diri Terhadap Keterampilan Smash Bulutangkis. Journal Sport Area, 1(2), 10–22. https://doi.org/10.30814/sportarea. v1i2.383
- Yuliawan, D., & Sugiyanto, F. (2014). Pengaruh Metode Latihan Pukulan dan Kelincahan terhadap Keterampilan Bermain Bulutangkis. Jurnal Keolahragaan, 2(2), 145–154.