

WOODBALL GAME TECHNIQUE SKILLS TEST MODEL FOR SOUTH SUMATRA ATHLETES

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Abstract

The aim of the research is to produce a test model for woodball game technique skills for South Sumatran woodball athletes. This test model is adapted to the match patterns and playing techniques of South Sumatran woodball athletes. This type of research is research and development using the Sugiyono model. The small scale trial consisted of 9 IGM club athletes, the large scale total of all South Sumatra woodball athletes was 12 people. Data collection uses interview sheets, value scales, test effectiveness observation sheets and test result data sheets. The data analysis technique uses quantitative descriptive analysis. The results of the research are a form of woodball game technical skills test as outlined in the woodball game technical skills test manual consisting of long area, parking area and shoot on the gate tests. Testing the validity of the test instrument produces a correlation coefficient of 0.915 with valid criteria. Testing the reliability of the test produces a correlation coefficient of 0.928 with reliable information. The evaluation carried out by material experts can be concluded that the woodball game technique skill test model is suitable for use for South Sumatra woodball athletes.

Keywords; Woodball Skills Test

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INTRODUCTION

One of the games that has become quite popular recently is woodball. According to (Dewi & Broto, 2019) explains that woodball is a sport that is categorized as a target game with several basic techniques. This game is played outdoors with game patterns and rules slightly similar to the game of golf. The goal of the woodball game is where players try to get the ball into a goal or gate that has been determined with the principle that the fewer number of shots they make, the one who wins the match. Kriswantoro & Lutfi in (Susanto, Herlambang, & Kresnapati, 2022) explain that woodball is a sport with a closed

skill type, because the target is the same as golf where the environment is predictable and has a stationary or fixed target.

Woodball is a type of game that emphasizes the element of accuracy. Woodball is a sport that is developing very rapidly in Indonesia, this is in line with the statement (Kriswantoro & Lumbanraja, 2016) that woodball is a type of sport that is currently developing in many provinces, for example Java, Bali, Kalimantan and Sumatra. Woodball is a sport whose parent organization in Indonesia is IWbA (Indonesia Woodball Association). One of the management bodies that has been established for a long time is the South Sumatra IWbA Provincial Management. Even though this sport is developing quite rapidly, coaches and athletes lack references both in theory and in coaching sciences, especially regarding test and measurement guidelines. Meanwhile, test and measurement guidelines for technical abilities in the game of woodball are very much needed considering the role of tests and measurements of technical abilities as a benchmark for coaches in preparing training plans and evaluating athletes' performance during training and matches.

Tests and measurements are a series where humans are able to obtain information from the tools used on the object being assessed. According to Philips in (Ngatman & Andriyani, 2017) states that tests are tools that can be used to obtain data regarding specific characteristics and characteristics of certain objects. The definition above indicates that tests are useful for exploring information originating from certain objects. This is certainly useful as evaluation material so that developments in the object can be known in the future.

It is important to design a test and measurement model in the woodball game for South Sumatra athletes considering that South Sumatra woodball athletes are expected to be able to compete with other national athletes based on the development of training results. Tests are very important so that coaches have guidance in developing and training athletes' potential. Considering that tests seem to be inseparable and are needed as measuring tools to achieve certain measurement goals so that the evaluation process can continue, (Utomo, 2018). So

far, both on a national and regional scale, there have been no official guidelines issued by PB Wooball regarding a standard test model as a guide for athletes in carrying out a form of assessment of the technical abilities of woodball athletes. Therefore, a test model and measurement of the technical ability of the woodball game is needed.

How to play woodball is a bit similar to the technical pattern of playing golf. According to (Dewi P. C., 2015) woodball is played by both individuals and teams by hitting the ball gradually until it passes through the goal or gate at each crossing called the fairway (Nopianto et al., 2020). The game of woodball has techniques or skills that are quite simple, consisting of only three main techniques, namely hitting the ball a long distance, hitting the ball to place the ball on a close target and hitting the ball to enter the gate. It is said (Agustiar & Sultoni, 2016) that the technique for playing woodball is to hit long distance, medium distance, short distance and towards the gate with a preswing routine using a tool or mallet (Okilanda et al., 2018).

Based on the description above, considering the need for tests and measurements which are felt to be very important for the progress of South Sumatra's woodball achievements, researchers are interested in developing a test model and measurement of woodball technical ability in South Sumatran athletes which focuses on long area hitting tests, parking. area (medium range) and shoot on the gate (close range). The aim of this development is to find out a test model and measure the ability of woodball playing techniques that are valid for use by South Sumatra woodball athletes.

METHOD

The use of this research and development model aims to produce certain products and test the effectiveness of these products using the model (Borg & Gall, 1983) (Putra et al., 2020). The resulting product is a technical skills test guidebook for South Sumatran woodball athletes. The development steps consist of: (1) Gathering field information where the researcher conducted an initial study regarding finding the source of the problem by conducting interviews with several

coaches and athletes, then obtained information that the form of the woodball skills test which was not yet available was indeed the main problem for coaches in evaluating performance. the athlete. (2) Planning and analyzing needs from data collected from interviews and then concluding the truth of the problem. (3) Develop an initial product (initial draft of the product) by paying attention to test elements such as test name, test objectives, test criteria, test materials, test implementation steps up to the point of assessing the results. (4) Expert validation and revision where the validation carried out involves a number of experts/experts in accordance with their field of expertise consisting of one woodball coaching expert and one test and measurement evaluation lecturer. (5) Small-scale field trials and revisions to determine and produce an assessment of product effectiveness through observation activities on 9 Woodball Club IGM athletes. (6) Large-scale trials and revisions were carried out by conducting observations to determine the effectiveness of the product involving 28 South Sumatran woodball athletes. (7) Product finalization where researchers determine products that have gone through various evaluations from experts and test results to be prepared for the dissemination stage. Data analysis in this research was carried out descriptively quantitatively by analyzing value scale data from material experts and observing product effectiveness. Score categorization refers to the category values in the table below:

Table 1. Score Category Formula

Category	Formula	Value
Low	$X < M - 1SD$	
Currently	$M - 1SD \leq X < M + 1SD$	
High	$M + 1SD \leq X$	

(Nurhasan & Hasanudin, 2007)

The validity of the test is obtained by conducting a correlation analysis between the test results obtained and the trainer's research results. The correlation used is the Rank Spearman Order Correlation level correlation, with the formula:

$$p = 1 - \frac{6 \sum d_i^2}{n(n^2-1)}$$

(Hadi, 2004)

DISCUSSION

Expert Validation

The initial draft of the test model with the aim of producing a guidebook for implementing game technique skills tests for South Sumatran woodball athletes that has been prepared is validated by involving experts before field trials are carried out to determine the effectiveness of the product. The experts/experts in this research, namely the first expert, is an expert in woodball game techniques and skills, namely Mr. M. Ali Khanafi MA, M.Pd, who is a coach and General Secretary of Woodball for South Sumatra Province, the second expert is a sports science expert in the field of sports testing and measurement, namely Mr. Dr. . Iyakrus, M.Pd. In the table below you can see the results of validation information from experts:

Table 2. Explanation of Expert Validation

Expert	Value	Validator	Description
Skill	37	Dr. Iyakrus, M.Pd	High
Measurement Tes	34	M. Ali Khanafi, M.Pd	High
Mean	35,5		High

Based on the validation information table above, it can be seen that the average score reaches 35.5 with the validity level criteria being high, meaning that the woodball game technique skills test model that will be used by South Sumatra Woodball athletes is declared feasible and can be tested on a scale. small. However, some revision notes submitted by each expert/expert can be explained as follows:

Expert/Expert Revision

Based on the observation notes filled in by experts, there are several corrections and revisions that must be perfected in the woodball game test model, for example the revisions submitted by the expert/expert in woodball game skills, namely Mr. M. Ali Khanafi MA, M.Pd where the revision points include (a) The size of the field must really meet match standards, (b) the use of equipment outside the field should not be a kun but must resemble the match scenario except

for the markers inside and (c) the distance of each shot must be in accordance with field measuring standards. Meanwhile, the revised results were submitted by the expert in sports science testing and measurement, namely Mr. Dr. Iyakrus, M.Pd, there are several notes including: (a) Detail correctly using language that is easy for athletes to understand regarding the steps for carrying out the test, (b) there is no assessment observation sheet yet, (c) create assessment criteria using PAN/PAP. In accordance with requests for corrections made by experts/experts, researchers perfect these corrections and revisions, then are then consulted again with experts/experts to ask for approval to conduct small and large scale trials.

Small Scale Trials

Carrying out small-scale trials is a follow-up to research that can provide an illustration that the model can be applied. Applying the woodball game skill test on a small scale, the researchers used a trial sample of 9 people, during the process of which photographs were taken with a camera and video. The results of the documentation are then observed to provide an assessment of the suitability of implementing the test model. The results of small-scale trials based on expert assessment are as follows:

Table 3. Effectiveness of Small Scale Draft

Expert	Value	Validator	Description
Skill	34	Dr. Iyakrus, M.Pd	Tall
Measurement Tes	38	M. Ali Khanafi, M.Pd	Tall
Mean	36		Tall

Based on the table above, it can be seen that the average assessment of the effectiveness of product implementation on a small scale is 36 in the high category, meaning that the product model on a small scale can be continued in large scale trials. Some notes that need to be revised regarding product improvements on a small scale are as follows: (a) clarify the steps for carrying out the test, so that athletes can more easily understand the procedures for carrying it out, (b) the size of the field is still not in accordance with game standards.

Large Scale Trials

Carrying out large-scale trials is a follow-up to continuing small-scale research which can provide an illustration that the model can be applied on a large scale. The implementation of the woodball game skills test on a large scale used a trial sample of 28 people, during the process of which photographs were taken with a camera and video. The results of the documentation are then observed to provide an assessment of the suitability of implementing the test model. The results of large-scale trials based on expert/expert assessments are as follows:

Table 4. Effectiveness of Large Scale Draft

Expert	Value	Validator	Description
Skill	35	Dr. Iyakrus, M.Pd	Tall
Measurement Tes	38	M. Ali Khanafi, M.Pd	Tall
Mean	36,5		Tall

Based on the table above, it can be seen that the average assessment of the effectiveness of product application on a large scale is 36.5 in the high category, meaning that the woodball game technique skills test model is effective and suitable for use by South Sumatra woodball athletes in measuring game technique skills.

Play Assessment

Test Validity

Next, the results of measurements previously tested by large-scale subjects are correlated with the test results with the aim of measuring the validity of the test instruments prepared. The calculation of test validity can be seen below:

$$p = 1 - \frac{6 \sum d_1^2}{n - (n^2 - 1)} = 1 - \frac{6 (308)}{28 - (784 - 1)} = 0,915$$

Test Reliability

The reliability of the test is obtained from a combination of 3 technical skills, namely long area, parking area and shoot on the gate, where the reliability of the three tests is 0.928.

Finished Products/Bulk Products

The results of the analysis of large-scale product data which have been revised and refined can then be presented as the final product/mass product of the game technique skills test model for South Sumatra woodball athletes as follows:

Long Area Test

This test is called the long distance hitting ability test, the purpose of the test is to measure the distance of the hit, the facilities used are a) mallet, b) ball, c) 3 mm rope, d) test blank. The field design:



Figure 1. Long Area Field

The implementation stages are described as follows: a) the tutor prepares the testees who will be called in turns. b) After the testee's name is called, the testee stands just behind the starting area. c) The testee hits as far as possible and is given the opportunity to hit 3 times. Grading stages: a) The three scores are recorded and the score furthest between the three strokes is used as the final result. b) Shots that go outside the track are considered disqualification and will not be scored. Remote Test Form

Table 5. Long Distance Punch Test Blank

No	Name Testee	Blow to			Final Results
		1	2	3	
1	Testee				
2	Testee				
Dst					

Parking Area Test

This test is called the parking area punch test. The aim of the test is to measure the accuracy of ball placement. Facilities used are a) mallet, ball, c) 3 mm rope, d) code numbers, e) test blanks. The field design is as follows.

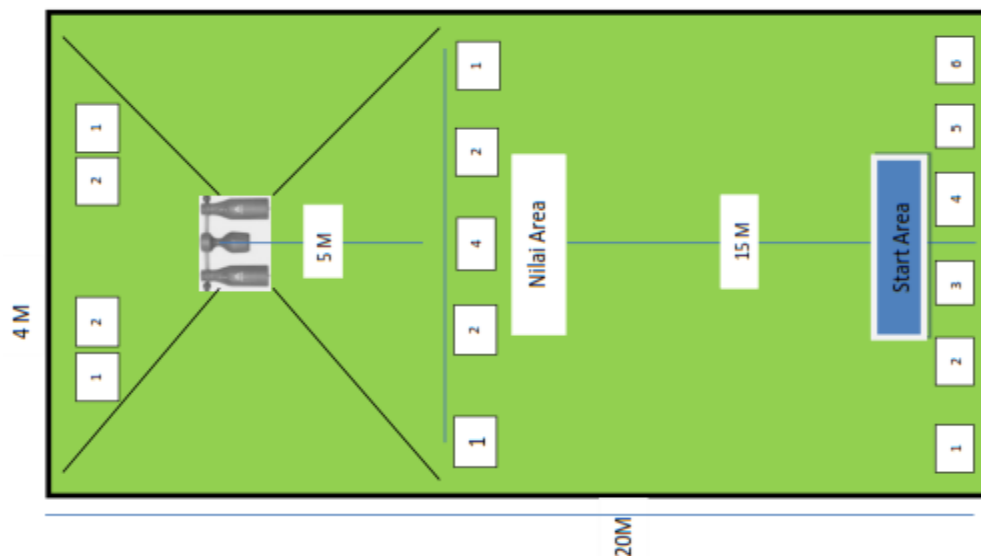


Figure 2. Parking area

The field is made in dimensions of 15 meters long and 3 meters wide. The field is divided into two areas, the first shot distance is 13 meters to get to the parking area, and the shooting distance to the gate is 2 meters. The value code is given code 1 for the far left and right corners, code two for the corner between code 1 left and right, code 4 in the middle of code 2. When carrying out the test, standing exactly in the starting position, the test student is given the opportunity to hit 6 balls that have been lined up (Arisman & Agun Guntara, 2021). At the start area, the ball that is hit must be directed at the area value that has been given the code. To get the value of the hit ball that enters the area determined as a value, the result will be determined by the sum of the 6 balls that enter the area value column.

Shooting To Gate Test

This test is called the gate shooting ability test, the purpose of this test is to measure the accuracy of a player's shooting stroke. The tools used are mallets,

balls, gates, 3 mm rope, code numbers and test blanks. The field design can be seen in the image below:

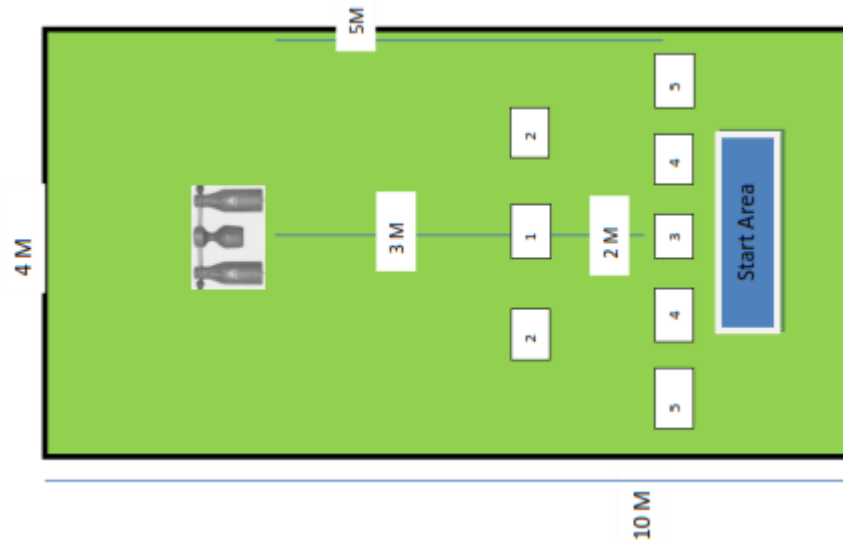


Figure 3. Shoot On The Gate Field

The field is designed with a length of 10 meters x 3 meters. At a distance of 3 meters, 3 balls are placed with a value code of 2 in the left and right corner positions, and a value code of one in the center position. At a distance of 5 meters, 2 code values 5 are placed in the left and right positions, 2 code values 4 are placed between the values 5 left and right, and value 3 is in the center position. Implementation, the testee hits 8 balls that have been lined up in the first 3 meter area for 3 balls, and the last 4 balls with a distance of 5 meters. Scoring, the ball hit that enters the area value will be the score.

Table 6. Shooting Test Blank

No	Nama Tes	Blow to								Final Points
		1	2	3	4	5	6	7	8	
		3 meters distance			5 meters distance					
		2	1	2	5	4	3	4	5	
1	Testee									
2	Testee									
Dst										

Next, you can see the table of woodball technical ability test forms for the three types of tests as follows:

Table 7. Woodball Technique Ability Test Form

No	Name/ Inisial	Types of Punches									Final Points	Kriteria
		Long Area			Parking Area			Parking Area				
		Tot	Kon	Kategori	Tot	Kon	Kategori	Tot	Kon	Kategori		
1												
2												
Dst												

Description (Tot) Total Value, (Con) Conversion Value

Table 8. Criteria for Hitting Success

Category	Rumus	Conversion Value
Low	$X < M - 1SD$	1
Sedang	$M - 1SD \leq X < M + 1SD$	2
Tall	$M + 1SD \leq X$	3

(Nurhasan & Hasanudin, 2007)

Measuring tools or instruments in a sport are essentially very important, considering that the results are a source of evaluation of the training program carried out during the period. Apart from measuring training ability, it also functions to determine what follow-up program will be given next. (Sepdanius, Rifki, & Komaini, 2019, p. 4) argue that the data obtained from the accumulation of tests and measurements will be very useful in evaluating athlete needs, as well as being very decisive for taking policy steps for the next training process.

Woodball is a sport that has been registered with the Central Koni membership, and has held PON exhibitions in West Java, only the competition in Papua PON was canceled due to technical matters. Meanwhile, at the upcoming 2024 Aceh North Sumatra PON, woodball has been scheduled to be competed in Aceh Province. In this way, the guidelines for implementing woodball game skills tests for South Sumatran athletes are a very strong basis for coaches in developing their athletes' training.

CONCLUSION

Based on the results of the research and discussion that have been described previously, this research can conclude that the creation of a game technique skills test model product for South Sumatran woodball athletes where

the test that has been developed meets the criteria and is in accordance with the character of actual woodball matches on the field. The woodball game technique skills test model consists of three test items, namely the long area test, parking area test and shoot on the gate. The results of small scale and large scale tests stated that the product had a high level of validity or was suitable for use with a validity level of 0.915 and a reliability of 0.928.

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