



## Development of Accuracy Shooting Training Tools in Futsal Games

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### Abstract

The purpose of this study was to develop accuracy shooting training tools in futsal games for extracurricular players in (SMP) Subdistrict, Medan Labuhan. In this study using the R&D Model according to Borg and Gall. The aids have been assembled then validated by 2 experts. Material experts, and trainer experts. The initial trial of the field is 8 players, the main field trial is 30 players. The form of tools that have been created is validated in advance by 1 material expert, 1 expert coach has a background in sports education. So, based on the validation results by experts, it can be concluded that the accuracy shooting training tool in the futsal game is valid and can be used for training in the futsal game.



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## INTRODUCTION

Futsal is a multi sprint sport that has a high-intensity phase compared to football and other intermittent sports (Jaenudin et al., 2018). In addition, futsal games also rely on the very high technical abilities of each player without exception. Individual techniques are combined collectively to execute a trained and conceptualized tactic and strategy. Calm Presentation in the journal (Rakasiwi et al., 2013), said futsal is a sport that shapes a player to always be ready to receive and feed the ball quickly under the pressure of opposing players. That skill is a must-have for players for the purpose of finishing the match.

Benvenuti's presentation in the journal (Mahanani & Indriarsa, 2021), said futsal is currently a sport that is currently popular among the public. Even the development of this futsal sport has increased so much that it has become a spectacle both directly and through the media. In the last two decades, futsal has increased its popularity and evolved into a spectacular sport, involving a large scale of television station viewers. According to (Nugraha et al., 2019), futsal players do not have to use a large court, where futsal games can be played on basketball courts, volleyball courts. But this futsal game is very similar to the game of football, although it can be played indoors. Several players work together to put the ball into the goal guarded by a goalkeeper to create a goal into the opponent's goal not only requires cooperation, but a good mastery of basic playing techniques. Noviada's presentation in the journal (Utomo, 2017), said futsal is a ball game played by two teams, each of which has a team of five with the aim of getting the ball into the opponent's goal, with manipulation of the ball and feet.

The ability of players to master the basic techniques of futsal can support playing futsal well individually and collectively, shooting well and on target for players is not an easy thing, (Pratama et al., 2020). According to Lhaksana in the journal, (Saryono, 2006), said futsal is a fast and dynamic team sport with accurate passing that allows many goals to occur so that accuracy is also needed that can direct the ball to the intended target. Likewise, the training process is very necessary, the explanation according to Scheuneman latihan the physique given is only limited to speed with the ball, agility and coordination in the journal (Kurniawan et al., 2014), and so the usefulness of the tool for Practice is indispensable. Then Bompas said latihan should be varied with the aim of overcoming one monotony and a sense of boredom in practice. Sukatamsi in the journal (Utomo, 2017), said Shooting is one of the individual abilities in the game of football with the aim of putting the ball into the goal. The basic technique of kicking the ball with full turtle legs is commonly used by football players with the aim of inserting the ball into the goal post.

Sajoto said accuracy can be interpreted as rigor or surprise. Accuracy or accuracy is the ability of a person's gestures to control free movement against an object. This target can be a distance or perhaps a direct object that must be known as one of the body parts, in the journal (Hardiyanto, 2019). In accordance with Anam in the journal (Kurniawan et al., 2014), says sasaran can be a distance or perhaps a direct object that is subject to. Wardana's presentation in the journal (M. I. Subki, n.d.) A curation is a person's gesture to control free motion on an object. Accuracy in sports is the ability to determine the direction of a motion an object can be a distance or a direct object that can be

subjected. Accuracy can be defined as to millionth or response. To increase the ability of kick accuracy, it is necessary to use tools that are training media and processed concepts to improve skills. The tool can be absorbed by the mata and ears with the aim of helping the training process so that players are more effective and efficient. Exposure Lhasana in the journal (Mubarok & Prihanto, 2017), said shooting is a basic technique that every player must master. This technique is one way to create goals, this is because all players have the opportunity to create goals into the opponent's goal and win the game or game. To do this shooting technique is actually similar to when we pass it, but in shooting it needs more power, power so as to produce a fast ball rate. The correct way to shoot can be using the inner foot close to the end, the outer leg side and with the instep according to Frayogha in the journal (Alamsyah, 2020). Likewise, shots towards goal can be done by wearing the toe on the shoe with the aim of producing a fairly fast, fast pace of the ball and the direction of the ball still moving straight forward. Gunarsa says attention and concentration are processes that direct awareness of information into something that functions on sensing. Therefore basically, concentration of attention is preceded by various excitatory effects that reach our sensory apparatus. In the journal (Utomo, 2017).

The initial stage of development is the collection of information through surveys. First, the implementation of accuracy shooting must be aimed at one goal along with the accuracy of the ball towards a predetermined direction. Both the results of collecting information and surveys watching Youtube videos. From the 25 forms of tools that researchers have seen, they can come up with the idea that they will develop a player target accuracy training tool that looks attractive. The

three results of an image survey from Google with a total of 15 tools through it reappeared the idea of researchers to develop interesting tools. The fourth is based on the result of a low percentage of kicks with the ball not aiming at the goal during a futsal match. It becomes important data for a basic researcher to design and implement training aids. The fifth conducted a journal survey to research the development of existing tools and narrated limitations and advantages.

Based on the background explanation to straighten out the research so that it is at a level that can be studied by reason as well as the attractiveness and newness of a work, the purpose of this study is to develop accuracy shooting training tools in futsal games for extracurricular players that attract motivation and please players in training. So that the tools developed can be designed as attractive as possible and are worth using as a role to help players shoot towards the specified target.

## METHODS

This type of research is used to develop products and validate products. This means that the product already exists and will be designed by researchers and then test expert validation of the product so that the validation results will be used as a basis for stating that the validated product has become a product that is worthy of development (Gultom et al, 2020). Next in the journal (Y.I.Siregar, R.Situmeang, 2020) said that research and development is research used to produce a certain product and test the effectiveness of the product Then Winarno's opinion said "Development research is research that seeks to develop certain products according to the needs of this community". The development research design can be used as an effort to

solve problems in learning in journals (Mustafa et al., 2016).

In this study using the development method with the stages passed are first research and data collection through surveys, second planning, third development of the initial form of the product, fourth initial field trial, fifth expert validation test, sixth operational product revision, seventh main field trial, eighth product revision, ninth final product revision.

### **Participants**

#### **a. Expert Review**

Expert validity is carried out with the intention of knowing the extent to which the feasibility of accuracy shooting training tools for futsal extracurricular players is studied from experts who are considered competent in the scientific and technological fields that are the basis of development research so that the assembly of the designed product can be used appropriately in accordance with the research objectives. The experts are appointed to fill out the research questionnaire sheet then go through the assessment and examination result data into a total recapitulation of the data from the validation results of material experts, futsal trainer experts.

- The Material Expert in question is a lecturer / expert who plays a role in determining whether this media / training tool is in accordance with the material and truth.
- Futsal coach experts, futsal coach experts will assess several aspects, namely: from the development of accuracy shooting training aids on futsal extracurricular players, the feasibility of the tool parts for players to use. The assessment is expected to determine the quality of players.

#### **b. Early Field Trials**

The purpose of this trial person is to find out the suitability of the product to be developed. This trial was carried out with 8 research trials and also 2 trainers who assessed the trainer user research questionnaire sheet. According to Arikunto in the journal (Kurniawan et al., 2014) As for determining the size of the sample apabila number less than 100 it is better to take all. So that the trial numbers include players who carry out activities with accuracy shooting training aids as training aids.

#### **c. Main Field Trials**

This trial person was planned using 30 research subjects. The trial phase includes 30 players called trial people with 3 coaches who each fill out a coach user research questionnaire sheet. Players perform activities with accurate shooting training aids as training aids.

### **Sampling Procedures**

In a study is something whose position is very central because it is on the subject of the study that the data about the variables studied are located and observed by the researcher. In the past section, the definition of the research subject was just discussed, respondents to the Arikunto data source research, (2009: 97).

Based on the above understanding, it can be explained that the subjects in this study will later be generalized to draw conclusions based on the data obtained. The subjects referred to in this study were all junior high school futsal extracurricular players in Medan Labuhan District taken randomly (purposive random sampling) to become trial people for tools according to research needs. Arikunto, (2009: 97) concluded the sampling technique used by researchers to make certain decisions in sampling.

### Materials and Apparatus

Maksum in the journal (I.L.Siswanti, 2020) Instruments are measuring instruments used to collect data in research. This research uses research instruments as research questionnaires used in obtaining data.

Kunto in the journal (Armand & Faruk, 2018), said Research instruments are tools used by researchers to collect data.

According to (Sugiyono, 2019) A research instrument is a tool used to measure the observed natural and social events (research variables). The instrument was developed using a likert scale with 5 scales. The lowest score is given the number 1 and the highest score is given 4. The instruments used in this study were questionnaires given to material experts, coaching experts, coaches and extracurricular players. It is clear that data collection techniques are the most important step in research, because the main purpose of research is to obtain data. Without knowing the data collection techniques, the researcher will not get data that meets the established data standards.

Data collection can be done in various settings, various sources, and various ways. When viewed from the settings, data can be collected in a natural setting, in a laboratory with experimental methods, in schools with educational and educational personnel, at home, with various respondents, at a seminar, discussion, on the road and others.

### Questionnaire

The data collection of this study used questionnaires to obtain data on the validity of the feasibility of accuracy shooting training aids which can be seen from validation by material experts, trainer experts and user assessments by players and coaches.

1. Material experts, experts will question whether the drafts made are in accordance with the material accuracy, true not basic techniques are correct not understanding, assess the need for accuracy training aids. The assessment is expected to determine the quality of these tools.
2. Expert Futsal coaches will give an assessment of several aspects, namely: from the questionnaire sheet of the assessment instrument for the development of accuracy shooting training aids on futsal extracurricular players, the feasibility of the tool part for players to use. The assessment is expected to determine the quality of players.
3. The trainer as a user has the function of obtaining an assessment in data collection so that the results obtained meet the criteria.

Players as users fill out the assessment of the questionnaire instrument sheet as well as people who conduct trials related to tool experiments to obtain research databases.

### Procedures

Researchers apply a method of implementing the development of accuracy shooting training aids with the basic techniques of futsal games as follows:

1. Researchers placed the presence of aids in a position tied exactly parallel to the goal.
2. The player kicks at a position point 6 meters away from inside the field towards the empty area of the auxiliary media, the movement of the ball running instead of stationary.
3. The trainer holds a bluetooth-connected android to animate the light signal through an electronic sensor.

4. Players drill combined with ready-to-shoot moves, one player kicks with 6 or more balls.
5. After that, the player has performed the shooting technique according to the lighting connection controlled by the coach in the training process.
6. So this exercise has the right to be carried out within the duration determined by the coach and can also be combined with drills and other combination methods to be able to develop the ability of shooting accuracy in extracurricular players.

So it can be concluded that it is necessary to develop accuracy shooting training tools. Preparation, planning, and preparation are made in order to provide clear demands in the implementation of development research. Planning and drafting models are related to the strategy to be planned and compiled systematically. This research using the research and development method was chosen because it has the main objectives, namely (1) how to develop the product and (2) test the feasibility of the product which is carried out with validation assessment by experts so as to achieve the goals to be achieved by referring to theoretical studies that support the existence of databases to obtain the results of factual data analysis in the development research process.

Based on this opinion, the researcher explained that it only takes stages that are relevant to the aim of developing accuracy shooting training tools in futsal games that are centered on the needs of extracurricular players carried out in the school environment. Therefore, this research runs with a process from starting to design, plan, design, compile a series of validations, and revise the final product, all of which have been thought of by researchers by carrying out reasonable rules of the form of development research and also adjusted to supporting theories which function as reinforcements of a

research in the process of solving problems so that they can provide solutions to these problems.

### **Design or Data Analysis**

After the data is collected, quantitative data in the form of assessments are collected through a questionnaire sheet for product trial assessment instruments during field trial activities. Analyzed by descriptive statistical analysis, which is in the form of Strongly Agree, Agree, Disagree, and Strongly Disagree terms which are converted into quantitative data with a scoring scale of 1 to 4. Furthermore, the results of the trial of the product are concentrated. This technique is used to get quantitative data analysis obtained from the distribution of questionnaires, using formula:

Data processing formula from the distribution of questionnaires with trial subjects.

### **RESULT**

The results of the futsal material expert questionnaire assessment instrument stated 82.35% (strongly agree) and 17.64% (agreed), the conclusion is that the accuracy shooting tool questionnaire instrument is valid and can be used for the main field trial person stage. The results of the sports coach expert questionnaire assessment instrument stated that 86.66% (strongly agreed), 6.66% (agreed) and 6.66% (strongly disagreed) concluded that the accuracy shooting tool questionnaire instrument is valid and can be used for the main field trial stage and the stone tool is suitable for use by futsal extracurricular players. The initial trial phase of the field involving 8 player subjects and 2 coaches through data from the results of the questionnaire instrument sheet obtained 75% - 85.7% of

players stated that the operation, clarity, attractiveness, efficiency of providing positive effects were appropriate. 87% - 87.5% of trainers stated the level of effectiveness, usability, design of giving positive values is appropriate.

**Tables & Figures**

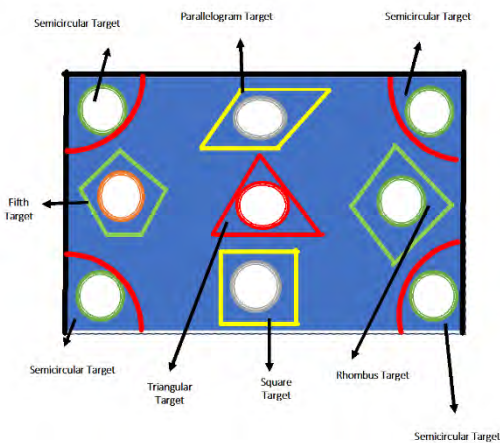
**Table 1.** Questionnaire Instrument Percentage Analysis Table

Percentage	Information	Meaning
80% - 100%	Valid	Used
60% - 79%	Quite Valid	Used
50% - 59%	Less Valid	Replaced
< 50%	Invalid	Replaced



**Fig1.** : Step Method R and

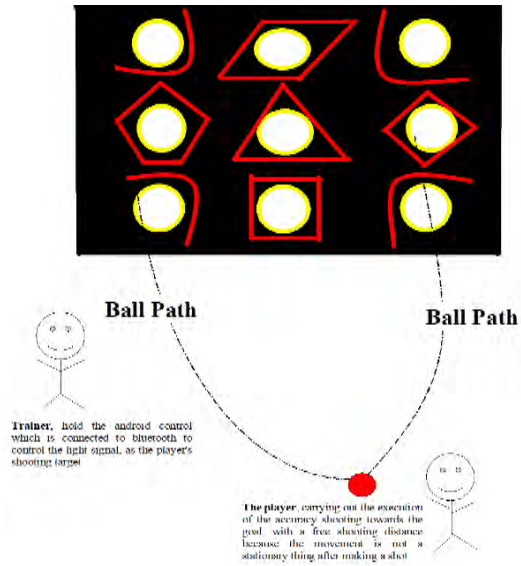
**a. Prosedur Research**



**Fig 2.** Source, (Researcher's Personal Document) Shotarget Accuracy Shooting

**Assembly Images On Futsal Games Before Expert Validation**

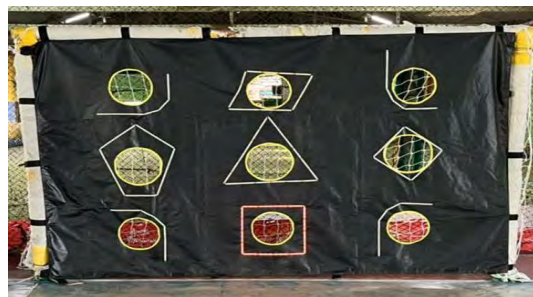
**b. Illustration of Synchronization of Research Implementation Shootarget Tool**



**Fig 3.** Source, (Researcher's Personal Document) Illustration of the Use of Accuracy Shooting Training Tools in Futsal Games.

**Information:**

- Orbit Tent : 2 meters high
- : 3 meters wide
- Hole for Target: 24 centimeters
- : 29 centimeters Horizontal
- Tent Field Distance: 65 centimeters
- Vertical Tent Field Distance: 1 meter



**Fig 4.** Source, (Researcher's Document) Finished form of the final product

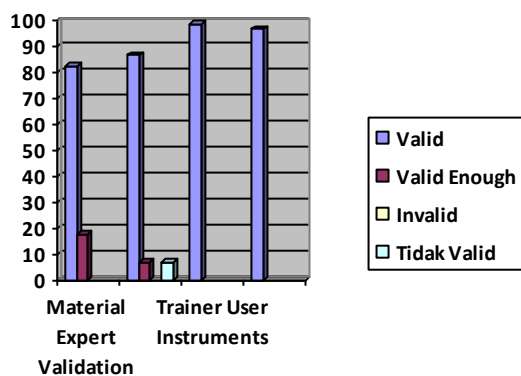


Fig 5. Percentage conclusion graphic Questionnaire Instruments

## DISCUSSION

Based on the data obtained, accuracy shooting training tools in futsal games can be used by extracurricular futsal players. Because it has been assessed by experts in the field of futsal material, experts in the field of futsal coaches are academics of sports education so that it is declared valid with a meaning worthy of use by coach and player users. The design has undergone the first stage of development to stage nine so that it has undergone many changes in shape and improvements made on an ongoing basis to obtain a design that is worth using.

## CONCLUSION

Through research findings, preliminary field trial results, operational field tests (expert validation) questionnaire assessment, main field trials and final improvements. The conclusion must answer the formulation of the problem, namely how to design the development of accuracy shooting training tools in futsal games, it can be concluded:

1. The creation of accuracy shooting training tools in futsal games for futsal extracurricular players has been created

2. By using accuracy shooting training tools, players are more eager to try the process of practicing with a stimulus to direct the ball towards the desired target.
3. By using accuracy shooting training tools, coaches abandon the old way of training player accuracy so that they can apply technological assistance in the training process to be effective and efficient to improve players' basic techniques, especially accuracy.
4. By using training aids, players can learn how to build space in mathematics so that it adds more confidence to be precise in directing the ball to the goal of the goal target area.

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