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Development of angel-based gate in practice model for woodball

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ABSTRACT

The purpose of this research was to develop in corner-based gate-in exercise model for woodball. This development research aims to develop in corner-based gate-in exercise model in woodball. The development uses the Luther model which includes six stages, namely: concept stage, design, material collection, manufacture, testing, and distribution. The validation step of the angle-based gate-in exercise model in woodball sports adopts the Dick, Carey, and Carey formative evaluation model which includes four stages: expert or expert evaluation, individual trials, small group trials, and field trials. The trial subjects for the development of the angle-based gate-in exercise model were the experts, athletes at FOK Undiksha Singaraja, and the Singaraja Woodball Association. The field trial phase with pretest and posttest was to determine the effectiveness of the developed model. The t-test is used to determine the effectiveness of the model. The t-test resulted in a comparison of the average pretest and post-test scores. The results of this research, namely first, is development research that aims to develop a corner-based gate-in exercise model in woodball sports using the Luther model covering six stages, namely: concept stage, design, material collection, manufacture, testing, and implementation. distribution. The content expert stated that the gate-in training model based on the shooting angle on woodball on the criteria was very good with a percentage gain of 96%. The responses to individual trials, small group trials, and large group trials were very good with percentage gains of 96%, 94.1%, and 93.6%, respectively. This means that the clarity of the material, attractiveness, and ease of use are appropriate for athletes to use.
***Keywords**: woodball, practice model, gate-in, corner-based*

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INTRODUCTION

The development of sports continues to grow. One of them is the sport of woodball. Woodball is a new sport that has characteristics similar to the golf sport that developed in Taiwan. Woodball entered Indonesia around 2006 until now and has experienced extraordinary development in Indonesia (Kriswantoro, 2012; Yulianingsih et al., 2020). The characteristics of the game of woodball are similar to the game of golf. The goal in this game is to try to get the ball into a predetermined target with as few strokes as possible. The game of woodball starts with hitting the ball from the starting boundary line or starting area until the ball enters the goal (gate) by hitting the ball using a mallet with as few strokes as possible (Dewi, 2020; Kriswanto, 2016; Widiyatmoko & Prabowo, 2019).

In woodball, basic techniques are one of the foundations for someone to be able to play well. The basic techniques include techniques without tools and with tools. Techniques without tools include swinging movements, setups (preparations), and pre-swing routines without tools, while techniques with tools are pre-swing routines with tools (mallet), long-distance hitting techniques, mid-range hitting, close-range hitting, and gate-in or hitting. towards the gate (Irawan et al., 2022). One of the basic techniques that a woodball player must master is hitting the gate. In woodball games, shots toward the gate are always used to finish the game on each fairway (Kriswantoro & Lumbanraja, 2016). Just like sports in general, Woodball also requires basic abilities, namely technical, physical, tactical, and mental (Iman et al., 2017). These four things are interrelated and mutually support each other and must be trained to achieve maximum performance. As revealed by (Prasetya Kurniawan, 2022) that there are four aspects of training that athletes need to pay attention to and train carefully, namely physical training, technical training, tactical training, and mental training.

A woodball athlete needs to master the basic techniques of hitting woodball, one of which is parking and gate-in. A parking or gate-in shot can greatly determine success in completing a fairway in a game because this shot is usually done to direct the ball directly into the gate or direct the ball so that it can easily enter the gate (Iman et al., 2017). However, even though he already has a good hitting technique, sometimes a Woodball player cannot always put the ball smoothly into the gate. This is because other determining factors must also be mastered by Woodball players, namely mental factors. One of the mental factors is the level of anxiety (Agustiar & Sultoni, 2016). Woodball sports require a high level of concentration and calm, sometimes when a player is about to put the ball into the goal, he can be filled with feelings of doubt and fear. This is what often causes a Woodball player to fail when making a shot. The way to get rid of this is through mental training exercises. Mental factors also determine the success of getting the ball into the gate (Tisna & Darmawan, 2020). Based on the results of interviews and observations with the woodball coaches in Buleleng Regency, athletes took gate-in shots when the game was still not good. This is shown by hitting the wrong or wrong direction, lack of concentration and fear when hitting, hitting the wrong ball in the middle of the rubber section, and instability or instability of the hammer swing when shooting. Athletes lack concentration when hitting, as well as the ball is not on target. The gate-in shot does not have the proper direction to the gate. The target angle is still wrong.

Besides that, what causes problems related to gate-in shots is that mental skills training has not been carried out carefully and specifically in the training process. One of the roles of mental training is imagery training which greatly supports success in executing gate-in shots

in woodball (Dini & Syafutra, 2021; Iman et al., 2017; Tisna & Darmawan, 2020). One model that can be used in mental training is the angle-based gate-in training model. The angle-based gate-in training model, namely training by imagining, thinking, or describing certain situations or movements to concentrate shots toward the gate (Nurfalah, Surdiniaty, et al., 2016).

The angle-based gate-in training model is very useful for improving the ability of athletes, one of which is for mastering sports movement skills, mastering strategies to be used in matches, preparing to appear confident, improving interpersonal skills, and controlling psychological symptoms, concentration, improving mistakes, even very beneficial in accelerating recovery from injuries. In addition to directly affecting the improvement of movement skills and sports performance, the accuracy of directing the ball into the gate is also positively correlated with the development of mental aspects that can moderate the improvement of motor skills, such as self-confidence, motivation, and anxiety (Komarudin, 2020). Angle-based gate-in training on the court doesn't mean it can replace real-life drills. There is another reason why imagery training is very important as a complement to real training, namely the conceptualization of movement skills that will be learned operationally, indirectly sharpening one's cognitive abilities and ability to think (Nurfalah, Imanudin, et al., 2016)

All these statements show that the development of an angle-based gate-in training model has a positive impact on mental development and improves athlete performance. Mental factors, techniques, and skills are very supportive in woodball, especially regarding gate-in shots. A woodball athlete needs to master the basic techniques of hitting woodball, one of which is parking and gate-in. Gate-in can greatly determine success in completing a fairway in a game because usually this shot is made to direct the ball directly to the goal or to direct the ball so that it can easily enter the goal (Fayogi, 2022).

A woodball athlete needs to master the basic techniques of hitting woodball, one of which is parking and gate-in. Gate-in can greatly determine the success of completing a fairway in a game because usually this shot is made to direct the ball directly into the goal or to direct the ball so that it easily enters the goal. A good woodball athlete must be able to control the ball by swinging the hammer at different distances and angles.

METHODS

Type of Research

This research is development research that aims to develop an angle-based gate-in exercise model in woodball. The development uses the Luther model (Sutopo, 2003). Luther's model includes six stages, namely: concept stage, design, material collection, manufacture, testing, and distribution. The validation of the angle-based gate-in exercise model in woodball adopts the Dick and Carey formative evaluation model (Dick et al., 2005) which includes four stages, namely: expert evaluation, individual trials, small group trials, and field trials.

Subject

The trial subjects for the development of the angle-based gate-in exercise model were experts, athletes at FOK Undiksha Singaraja and Woodball Singaraja Branch with details, namely one content expert, three small group trials at Woodball Singaraja Branch, 12 small group trials at FOK Undiksha Singaraja, 20 people in a large group trial of 20 at FOK Undiksha Singaraja.

Data Collection Instruments and Data Analysis

In the field trial phase, a pretest and a posttest were also held to determine the effectiveness of the angle-based exercise model. The t-test was used to determine the effectiveness of the angle-based exercise model. The t-test resulted in a comparison of the average pretest and post-test scores. The pretest was given before the application of the media and the posttest was given after the application of the media. The effectiveness test did not use a comparison class so it used the group one research design, pretest-posttest design. The data analysis method used in this research is descriptive quantitative (Agung, 2014).

RESULTS AND DISCUSSION

The presentation of the product development results in the form of a gate-in exercise model based on the shooting angle on the woodball follows the product development procedure used, namely the Luther model as follows.

Results

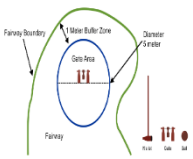
The Concept Stage

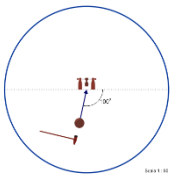
The concept stage consists of several activities, namely: a) conducting a needs analysis, b) determining goals, c) analyzing the characteristics of athletes, and d) mapping the object of training with a gate-in training model based on shooting angles on woodball. First, do a needs analysis. It was found in the field that the athlete's shot on the basic technique theory of the gate-in shot did not show optimal results. This problem certainly cannot be separated from several influencing factors, namely: 1) the exercise model tends to be monotonous; 2) the limitations of athletes who have not been able to master the concept of training and have not optimally mobilized their potential to build skills; 3) have not mastered the strategy related to the gate-in stroke, and 4) the existing training models have not been utilized. Second, set goals. This goal consists of training objectives and skills that must be mastered. Third, analyzing the characteristics of athletes, this analysis needs to be done because it can affect the making of the developed training model. In general, the characteristics of athletes have high training motivation with training models.

Design Stage

Activities carried out at the design stage, namely making model designs and making storyboards. First the model design. The design of the model occupies an important role in this research, from the design stage an initial description of the exercise model itself will be found, both in terms of model drawing, in terms of how to do it, and the layout. Second, Storyboard is a framework for making exercise models. The storyboard function makes it easier for writers to understand the flow of the material presented and other components of the developed training model. The storyboard design is shown in table 1.

Table 1. Storyboard

Object model	***Descriptions***
	Designing the gate-in area on the Fairway boundary, as well as the gate area and infrastructure facilities in the form of mallets, balls, and gates



Designing the gate area and shooting angle with various distances with a scale of 1:50

The Collection of Materials Stage

The collection of materials can be done in parallel with the manufacturing stage. The type of material collected is closely related to the characteristics of the training material. There are two modes of delivery of learning materials, namely text and images. The selected text type, namely times new roman, is used to describe the image. In addition to text selection, image collection is also carried out.

The Manufacturing Stage

The manufacturing stage is the stage where all media objects are created. Making is done based on the structure and storyboard that comes from the design stage. Model objects such as text and images are arranged according to their respective roles.

Testing Stage

Testing is a stage that is carried out after the manufacturing stage and all data has been entered into the product of the gate-in training model based on the shooting angle on the woodball. At this stage, it is done by printing the results of the development of the training model.

Distribution

The distribution stage is the stage where the product is produced and distributed to users for use in evaluation. At this stage, the completed model will be saved in the form of a CDR file. This stage cannot be the final stage if there is still product development to be even better.

The results of the development in the form of a gate-in training model based on shooting angles on woodball were reviewed by a content expert who is competent in woodball eye content. Based on the results of the content expert's review, the content aspect score was 72, while the maximum score was 75. The score obtained was then entered into the formula below.

$$\text{Percentage} = \frac{\sum(\text{Answer x Score for Each Choice})}{\text{n x Highest Score}} \text{ x } 100\%$$

$$\text{Percentage} = \frac{72}{75} \text{ x } 100$$

Based on the calculation of the formula above, the percentage level of quality achievement of the gate-in training model based on the shooting angle in woodball is obtained. from the aspect of content is 96%. If it is converted to a scale of 5, the level of validation and accuracy of the angle-based gate-in training model for woodball is very good.

The number of athletes during individual trials was three people who had different learning achievements. The average percentage of athletes' responses to the gate-in training model based on shooting angles in woodball from the aspect of individual trials is entered into the following formula.

$$Average\ of\ Percentage = \frac{F}{N}$$

Percentage = $\frac{216}{225}$ x 100

Based on the calculation results of the above formula, the percentage level of the angle-based gate-in training model is 96%. If converted to a scale of 5, the athlete's response rate to the accuracy of the angle-based gate-in training model on woodball is very good. This result means that the clarity of the material, attractiveness, and ease of use are considered feasible when used by athletes.

The number of athletes during the small group trial was 12 people who had different learning achievements. Based on the results of product trials in small groups, a score of 847 was obtained, while the maximum score was 900. The scores obtained were then entered into the formula below.

$$Average\ of\ Percentage = \frac{F}{N}$$

Percentage = $\frac{847}{900}$ x 100

Based on the calculation results of the above formula, the percentage level of the gate-in training model based on the shooting angle in woodball is 94.1%. If converted to a scale of 5, the athlete's response rate regarding the accuracy of the angle-based gate-in training model on woodball is very good. This result means that the clarity of the material, attractiveness, and ease of use are considered feasible when used by athletes.

The number of athletes during the large group trial was 20 people who had different learning achievements. Based on the large group trial, a score of 1404 was obtained, while the maximum score was 1500. The score obtained was then entered into the formula below.

$$Average\ of\ Percentage = \frac{F}{N}$$

Percentage = $\frac{1404}{1500}$ x 100

Based on the calculation results of the above formula, the percentage level of the gate-in training model based on the shooting angle in woodball is 93.6%. If converted to a scale of 5, the athlete's response rate regarding the accuracy of the angle-based gate-in training model on woodball is very good. This result means that the clarity of the material, attractiveness, and ease of use are considered feasible when used by athletes.

Discussion

In coaching athletes, it is found that several training models are less than optimal and do not even exist, such as limited numbers and not balanced with the number of athletes in an exercise group. The lack of an exercise model that can support a variety of exercises results in a lack of interest in athletes participating in the training process. Burner's learning theory says there are three levels of learning modes, namely, "direct experience (inactive), pictorial/image experience (iconic), and abstract experience (symbolic)" (Nurhadi, 2020; Sundari & Fauziati, 2021). Visual stimuli produce better learning outcomes for tasks such as remembering, recognizing, recalling, and associating facts and concepts (Selamet, 2020).

The development of this exercise model is designed to be a product in the form of an angle-based exercise model. The development process is through research and development procedures, some planning, production, and evaluation. Products are developed with evaluation by experts through validation and need to be tested on athletes. The evaluation stage used is a formative evaluation of Dick et al. (2005) which includes content expert testing, individual trials, small group trials, and large group trials.

At the validation stage, the content expert gave a score in the range of 4 to 5 for each assessment criterion. The results of the exercise model review on the criteria are very good with a percentage gain of 96%. Inputs and suggestions are also given, namely to use good and correct Indonesian and put more emphasis on shooting angles that must be made clear. After completing the content expert validation, it was continued to be tested on athletes consisting of individual trials, at this stage the model was already in very good criteria and there was no input from athletes so the model did not need to be revised. After conducting individual trials, then small group trials, at this stage the model is already in very good criteria and there is no input from athletes so the model does not need to be revised. After small group trials were carried out, followed by large group trials at this stage the model was already in very good criteria and there was no input from athletes so the model did not need to be revised, the values

given were in the range of 4 to 5 in each assessment criteria by obtaining a percentage of 96%, 94.1%, and 93.6%. The quality of this training model is included in the very good criteria, the statement can be proven from the results of content expert review analysis, athlete responses in individual trials, small group trials, and large group trials.

CONCLUSION

This section contains the conclusion of research results related to the research questions. This section also contains answers to research questions. The conclusion must answer specific objectives. This section is written in essay form and does not contain numbers. In the conclusion, suggestions can be written in the form of input for further research, as well as implicative recommendations from the research findings.

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