

## The Development of a Woodball Swing Tool Model for UNNES Woodball Students (Student Activity Units)

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### Abstract

The objective of this study is to produce special tool product for woodball swing basic techniques for Student Activity Units members of the Universitas Negeri Semarang and produce effective tools for the use in the formation process of good and correct basic techniques. This research method used research and development methods. The research results in the form of swing tool product for the woodball swing basic techniques, it is a wood swing, and this tool model is made to facilitate the formation of basic swing techniques. The effectiveness of the tool that is validated by woodball tool experts is 96.4% and woodball trainers 96%, it is in a good category. 41 students use the wood swing tool, 90% in the good category. The conclusion of this study is: it has produced effective swing wood swing tools for the formation of basic techniques for woodball swing. A significant finding that underlies the formation of the wood swing tool is the development of a swing plane model in which the wood swing tool model is devoted to woodball sports. It is suggested that the wood swing tool can help the achievements of woodball athletes at the world level.

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## INTRODUCTION

The rapid development of science in the past decade has affected the lives of global society, including in Indonesia. Based on this, the thought of reforming the curriculum, learning strategies, and evaluation techniques in Fitrek Hernado (2017).

Sport is a systematic process in the form of all activities or efforts that can encourage developing, and fostering the physical and spiritual potentials of a person as an individual or community member in the form of games, matches or competitions, and intensive physical activities to obtain recreation, victory, and peak achievement in the framework of forming a fully qualified Indonesian human being based on *Pancasila* (Five Principles). From sports physiology, "exercise is a series of organized and planned body movements that people consciously that is carried out to improve their functionalities" (Giriwijoyo, Santoso Y. S, 2013).

Sports is a form of physical activity contained in games, competitions, and physical activities that are intensive in order to obtain recreation, victory and optimal achievement (Munasifah, 2009).

Sports is an activity that is very important to maintain one's physical fitness. Hidayat (2011) states that exercising is an activity to give treatment to individuals to improve their talents, skills, physical, and emotional conditions in the sports they pursue.

Sports achievement is carried out through a planned coaching and development process, tiered, and sustainable with the support of sports science and technology. This opinion is in line with Adang Suherman's (2009) opinion that "sports achievement is a sport that fosters and develops athletes in a planned and tiered manner through competition." to achieve achievements with the support of science and technology.

The training method is a scientific method by giving programmatic treatment to improve the athlete's talent, the athlete's skills and the athlete's physical condition by the sports performed. Ten components of physical conditions must be fulfilled in sports, and their fulfillment is adjusted

to the sports that are followed by the athletes. The ten components of the physical condition include cardiorespiratory endurance, muscle endurance, muscle strength, flexibility, body composition, speed, agility, balance, the speed of reaction, and coordination in Bayu Purwo Adhi (2011).

In Stephen J. B. Mather Swing golf is one of the most complex biomechanical movements and humans can make it in the sport.

According to Craig Davies Vince in Saia (2010), the golf swing is one of the most complex movements in all sports. Almost every joint and muscle in the body is used in several capacities while swinging the golf. The weaknesses or shortcomings in just one swing can create an inefficient swing.

According to Tae-Yong Sim, et al. Swinging golf is a very complex movement, which requires strength, accuracy, and consistency. Strength, however, is probably the most prominent factor in swing, because strength is the factor most closely related to the speed of swing in collisions. Thus, power is often the subject of focus in studies designed to increase swing speed. Every sport requires the athlete to have good technical skills, as well as the woodball branch that has complex coordination. The movement techniques in woodball sports must minimize a small error rate because woodball is a game that requires high accuracy and good achievement of target accuracy. Therefore, mastering the basic technique for a woodball player is absolute.

Kriswantoro (2011) explains that the design or plan of woodball games are (a) woodball game design consists of 12 (twelve) fairways or multiples; (b) The overall length of the 12 fairways must be more than 700 meters; (c) The fairway is designed to have a straight line or curved shape according to the natural forms of the soil.

The woodball sports branch is one of the sports that develop in Indonesia, and it starts to be popular with the community because this sport is not based on age, social status, and gender. Woodball sports were created in 1990 by Ming-Hui Weng and Kuang-Chu Young who are Chinese Taiping (International Woodball

Federation, 2011). The number of official member countries of IWbF until 2016 are 44 countries spread across in five continents (International Woodball Federation, 2016). One of the 44 countries is Indonesia. Until 2016, Indonesia Woodball Association (IWbA) had Regional Administrators in 14 Provinces (D. Soetrisno, 2015).

## METHODS

This research was development research; the purpose was to produce products in the form of swing wood swing tool.

Sugiyono (2010) explains that there were 10 steps that can be applied in developing R & D methods, the steps of R & D research consisted of 10 steps as follows (1) Potential and Problems, (2) Collecting Data, (3) Product Design, (4) Design Validation, (5) Design Revision, (6) Product Trial, (7) Product Revision, (8) Usage Test, (9) Product Revision, and (10) Final Product.

The trial object consisted of (1) evaluation experts consisted of two woodball experts (Drs. Kriswantoro, M.Pd, and Drs. Bambang Sulisty, one woodball trainer, Drs. Sutarno Rabbani, (2) Student Activity Units of Unnes woodball totaling 41 people.

The research instrument used in this study was a questionnaire sheet, documentation, and observation sheets in the field, the documentation in the form of student names, number of students, photos and videos of activities during the trial. Field observations were used to determine the feasibility and acceptability of the product. The questionnaire sheets were used to collect data from expert and student evaluations.

The instrument used to collect data was in the form of a questionnaire. The questionnaire was used to collect data from expert evaluations and trials. The questionnaire covered three aspects; they are (1) cognitive aspects, (2) affective aspects, and (3) psychomotor aspects. The reason for choosing a subject questionnaire is relatively large so that it was conducted simultaneously and in a short time. The experts and students are given a different questionnaire.

The expert questionnaires focused on the first product made, while questionnaires for students focused on the convenience of product use and the effects of product use. Whether or not the students can swing correctly after they used the tool.

## RESULTS AND DISCUSSION

The research results show: (1) it produces a product in the form of wood swing tool as a means to facilitate the formation of basic techniques. (2) the convenience of the tool in the use that is validated by woodball tool experts and the effectiveness test for the students of Unnes woodball Student Activity Units.

The use of the tool that is validated by two woodball experts are 96.4% and 96%, one woodball national trainer is 96%, it is in very good classification, a meaningful tool that can be used, while the tool model which is tested before by 41 students is 90%, in the good clarification, the tool is meaningful, it can be used. This study concludes that it has been produced a model of a tool for woodball basic techniques namely wood swing in Student Activity Units Unnes.



Figure 1. Woodswing

This Woodswing picture is a tool for basic techniques of woodball swing that is used to simplify and accelerate the process of forming a good and correct woodball swing movement.

How to use the wood swing tool is as follows: (1) stand behind the circle and select the line you want to stand in. (2) take the swinging stick and place it with a circular iron in front of you. (3) do the swinging back, down and forward, while sticking the bat on the circle. (4) do the movement many times and with different types of blows so that the formation of the automation movement is faster.

## CONCLUSION

The conclusion from this study is that the *woodball* swing tool has been produced to facilitate and accelerate the process of forming a good and correct swing technique.

*Wood swing* is a rail line that must be passed to form a good and right swing. Woodwing is equipped with a user manual to facilitate the use of tools.

The results are obtained from the conclusion of the average expert evaluation stating that wood swing tool products can be used with each assessment category. Expert I, expert II, and expert III stated that *wood swing* products included in the assessment category were very good, while iron experts stated that wood swing was included in the good assessment category.

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