



Development of a Soccer Goalkeeper Reaction Speed Training Tool in Deli Serdang Regency

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Abstract

This study aims to develop a soccer goalkeeper reaction speed training tool. The form of the tool that has been made has been validated by 3 experts, namely 1 football coach, 1 sports expert and 1 tool expert. The validation results show that the percentage for expert trainers is 94%, for sports experts 96% and for alta experts 95%. The research method used for this research is the Research and Development (R&D) method. The results of the small group trial involving 3 experts showed that the soccer goalkeeper's reaction speed tool met the eligibility criteria and to be continued into the large group trial with the average percentage value of 95%. The results of a large group trial involving 6 experts showed that the soccer goalkeeper's reaction speed tool met the appropriate criteria with a percentage of 95%. It can be concluded that this tool can help practice reaction speed for soccer goalkeepers.

Keywords: *R&D, Aids, Reaction Speed*

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INTRODUCTION

Football is a sport that is quite popular and is played in groups, as according to Joseph (2011: 2) Football is a team sport played by two teams facing each other, each consisting of no more than eleven people, one of whom is a goalkeeper. Football is really a team game. While highly skilled players may dominate under certain conditions, a footballer must rely on each other to create a beautiful game and make the right decisions. Football technique is a way of processing the ball and processing body movements in playing (Chloé Nurik, 2017). Players who have more physical and mental abilities can perform skilled movements when in the game. During the game, players who are able to run several meters in a match, almost match the speed of a sprinter and can deal with changing game situations quickly. A player's ability to meet all of these challenges determines his performance on the football pitch (Isabella & Bakti, 2021).

This must be trained and systematically so that the ability to play football is getting better. It is known that the game of football is a game that demands good tactical and strategic skills, good physical abilities are also required optimal teamwork skills. Of course the trainer must consider different exercise programs for children, adolescents and adults according to the growth and development needs of the child. Exercise is a person's efforts to improve the organism and its functions to optimize sports performance and performance (Gimazutdinov, 2020). The purpose of the exercise is to get as much achievement as possible, but in the process of implementing the exercise it is not quite easy and simple. To play the ball well, players are equipped with good basic techniques. Players who have good basic technique, these players tend to be able to play football well. Mastery of basic techniques is a requirement that must be possessed by football players. The player who is central to the success of playing football is the goalkeeper. The goal keeper is in charge of keeping the goal from being conceded by the opponent (Ulfiansyah et al., 2015).

The goalkeeper is a player who is trusted to guard or guard the goal from the opponent's attack. So that this position is the last defense in the game of football and a very important position in defense. Goalkeepers must have good technical skills aimed at improving their ability to anticipate the ball. Goalkeepers are the most important players in a football team. Goalkeepers provide the team's last line of defense and must master a skill set entirely different from those used by players (Gregorius Tigor Malau, Mimi Haetami, 2022). Wild balls from kicks that are blocked by defenders often still aim at the goal but in a different direction. The wild ball which has been a problem for a goalkeeper, is no exception for a professional goalkeeper, no matter how good a goalkeeper is, it will be difficult to dispel wild balls that are blocked by defenders, because the direction of the ball is different from the original direction. Therefore, a goalkeeper must have a good reaction speed to block the ball from entering the goal

Based on data obtained in the previous championship, that from SSB Sinar Pagi Percut Sei Tuan often conceded in the last round of the match, then SSB Postab Percut Sei Tuan in the inter SSB championship most often conceded due to a lack of goalkeeper defense then from SSB PTPN 2 it is known to have had enough achievements, it's just that when in the finals they always concede so they always become runners up. Even for the last 2019 matches, they only reached the preliminary round. This means that there is a decrease in the performance of the goalkeeper in securing his goal.

Observations were made on the position of goalkeeper athletes at SSB Sinar Pagi Percut Sei Tuan, Postab Percut Sei Tuan and SSB PTPN 2 that the focus of goalkeeping training so far has only been to practice catching the ball. Even though the goalkeeper needs tactics, innovative techniques to train the feeling and accuracy of the goalkeeper's catch. Then the researchers observed that during several days of practice, that the implementation of exercises for the goalkeeper position at SSB Sinar Pagi Percut Sei Tuan, Postab Percut Sei Tuan and SSB PTPN 2 did not use any tools, such as simple cones. Due to the absence of using tools, the researcher's idea emerged to develop a training model for goalkeepers who use assistive devices. This tool will be used by the goalkeeper to improve the goalkeeper's performance in the match.

The problems above make researchers interested in developing reaction speed training aids because after researchers have collected literature, they will arrange what will be developed. Based on this problem, the researchers conducted a research entitled: Development of a Soccer Goalkeeper Reaction Speed Training Tool in Deli Serdang Regency in 2020. The purpose of this development research was to produce a reaction speed training aid product for soccer goalkeepers.

METHOD

This type of research is different from other educational research because the goal is to develop products based on trials and then revised to produce products that are suitable for use (Research and Development). Development research method is a research method used to produce certain products, and test the effectiveness of these products (Artyhadewa, 2017). Development research is a process used to develop and validate products used in training. This research and development aims to develop a soccer goalkeeper reaction speed training tool.

RESULTS AND DISCUSSION

Results

The soccer goalkeeper reaction speed training aid is a tool that can help the goalkeeper's reaction speed. This tool is a combination of certain objects such as tarpaulin, wall soccer, adhesive, water, square foam, duct tape and ball. This tool is used as a simulation when the game is raining, where we know that when it rains the surface of the field becomes slippery and the ball when it is played the speed becomes faster than usual. The goalkeeper's role here is extra, because

he has to focus and be able to take into account the speed with which the ball comes. Therefore this tool was created to train the reaction of the goalkeeper when the game rains.

The results of the assessment data from expert sports validators, football coaches and media/tools are stated that the development of a soccer goalkeeper reaction speed tool which was developed from the aspect of needs received an assessment of the "Valid (Decent)" category, and can be continued for field trials. The result of the small group trial of 3 experts was 94%. It was concluded that the reaction speed tool for soccer goalkeepers had met the criteria to be continued in the large group test because the percentage of each model was between 80%-100% which was taken from the smallest to the largest percentage value of the overall results.

The large group trial phase of the research "Development of a Football Goalkeeper Reaction Speed Tool" obtained the average value of the data from the questionnaire or respondent/athlete questionnaires of 95%, thus the tool can be categorized as "Valid (Valid)" and can tested at a later stage.

Discussion

The development of this soccer goalkeeper reaction speed tool is designed and manufactured into a product that can help coaches and goalkeepers to train reaction skills. This development process goes through research procedures and some planning, expert validation and evaluation. Then the product is developed with the help of someone who has mastered training techniques, after the initial product is produced it needs to be evaluated to experts through the validation of sports experts, trainer experts and equipment experts. At the product validation stage, it was carried out by 3 experts, namely, sports experts gave an average score of 96%, then expert trainers gave an average value of 94% and equipment experts gave an average value of 95%. Thus, the product is categorized as suitable for use and can be tested.

Furthermore, the research carried out stages, namely, small group trials and large group trials. In the small group trial stage, with 3 experts due to the COVID-19 pandemic, the average score was 94%. Then in the large group trial stage, 6 experts were conducted with the average value of 95%. The average value from the experts described previously was obtained through the assessment instrument provided by the researcher in the form of a statement questionnaire and

questions. So from the discussion that has been described previously, the soccer goalkeeper's reaction speed training aid is feasible to use.

To play the ball well, players are equipped with good basic techniques. Players who have good basic technique, these players tend to be able to play football well. Mastery of basic techniques is a requirement that must be possessed by football players (Tarigan & Winata, 2020). The player who is central to the success of playing football is the goalkeeper. The goal keeper is in charge of keeping the goal from being conceded by the opponent.

CONCLUSION

Based on the results of this research and development, it can be concluded that: The results of the research "Development of Soccer Goalkeeper Reaction Speed Training Aids in Deli Serdang Regency in 2020" are categorized as suitable for use as training tools in helping coaches train their athletes, especially goalkeepers in training reaction speed.

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