



## **Development of Bounce Wall Training Aids To Practice Passing In Volleyball Athletes**

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### **Abstract**

This study aims to develop bouncing wall training aids to train passing athletes. The sample/respondent in this study was for a small group trial of 18 athletes from PBV Bina Putri Medan and PBV Gaperta Putra and for large group trials involving 44 athletes. PBV Mulia, PBV TVRI, and PBV Gaperta Putri. The form that has been made beforehand was validated by 3 experts, 1 volleyball coach, 1 sports expert and 1 expert in media/tools, where the percentage of validity is 80% from sports experts, 100% from volleyball experts and 96% from experts media/tools. The method used is the research and development (R&D) method. The results of the small group test involving 18 volleyball athletes PBV Bina Putri Medan as many as 8 athletes got a percentage value of 91% and PBV Gaperta Putra as many as 10 athletes got a percentage value of 92%. volleyball met the criteria to be continued in the large group trial because the average score percentage was 92%. The results of the large group test on 44 volleyball athletes from PBV Mulia Medan as many as 16 athletes got a percentage score of 92%, PBV TVRI as many as 12 athletes and got a percentage value of 92% and PBV Gaperta Putri as many as 16 athletes and got a percentage value of 90%, this shows that the bouncing wall training aid to train volleyball athletes' passing has met the criteria to be continued in the manufacture of mass products because the percentage of the average value is 92%. These training aids are very necessary to train the ability of volleyball athletes in terms of passing, because it is important in training and matches besides that the exercise is not boring and can help coaches train their athletes and also become input for volleyball coaches throughout Indonesia..

**Keywords:** *Bouncing Wall Aid, Passing, Volleyball*

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## **INTRODUCTION**

Volleyball is very popular with urban and rural communities, because volleyball does not require a large enough space, but many volleyball courts are found in the surrounding environment. Although many people play this sport, it is important to know that even though many people who play this volleyball game must also master basic techniques such as service, passing, smash, and block (Dede Sumarna & Muhamad Al Imron, 2020).

The progress and development of the volleyball game that is currently happening is very good, for that it is hoped that many will contribute to the development, creation of new findings in the form of better forms of training for the future including physical aspects, tools, techniques and tactics / strategy and mental (Suriadi & Dewi, 2020). So that any problems that will be faced can be overcome by continuing to improve themselves, by developing, evaluating and improving from all supporting sectors and continuing to look for methods and techniques that are more effective and efficient in order to produce athletes with better performance and ultimately get a team with more achievements .

The progress of science and technology (Science and Technology) is growing rapidly lately. This is indicated by the number of new innovations that have emerged in various disciplines. Sport is an applied science that is influenced by the existence of technology to support sports activities. Technology in achievement sports is used by coaches and athletes to support the training process to the maximum. Through the development of appropriate training technology, it is hoped that the quality of athletes (physical, technical, tactical and mental) can increase so that maximum performance is achieved (Rustiawan, 2020).

Several supporting sectors in improving technical ability, one of which is training aids. The usual training aids improve the ability to basic techniques, such as basic passing techniques. It is rare for clubs in North Sumatra, especially in the city of Medan, one of which is the Mulia PBV club to use assistive devices in their passing practice, this was discovered after researchers made observations at the Mulia Medan PBV Club.

When the researchers made observations for 1 month, it was found that there were no supporting facilities for training at the club, so far they only did regular exercises or without tools to support training in volleyball playing techniques, especially passing techniques. From the results of observations made by researchers in the form of mini matches and receive exercises. Researchers found and saw when the ball was smashed it could be blocked by the opponent, then the ball that came back from the block could not be anticipated and resulted in a point for the opponent. The tip ball made by the opponent is very difficult to pick up or the ball that hits the net is very difficult to return to the opponent's field. Then the researchers conducted interviews with coaches and athletes at the PBV Mulia club by distributing a needs analysis questionnaire to 12 athletes who

practiced at PBV Mulia Medan and the 12 athletes answered 100% that they needed supporting tools to be used when they exercised.

Based on the results of references that have been obtained previously, the subject of research was taken which then became an idea for researchers to develop supporting tools in terms of helping coaches train their athletes in the club. The researcher's idea to design these tools was inspired by soccer goalkeeper training aids sourced from social media (Instagram). Before making these tools, the researchers conducted product consultations with volleyball coaches and sports experts, so that later they are expected to produce products that can be used to help practice volleyball games, especially techniques for passing up, down passing and slading. This study aims to develop products for passing training aids to help coaches and athletes in training, and provide effectiveness in training.

## **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) (R. M. Sari & Hapizah, 2020). Development research method is a research method used to produce certain products, and test the effectiveness of these products. Development research is a process used to develop and validate products used in training (Abroto, Andi Prastowo, 2021). Research Target In the first phase of the trial (small group) the researchers involved 18 male and female athletes, of which 8 athletes came from PBV Bina Putri and 10 athletes came from PBV Gaperta Putra. In the second phase of the trial (large group) in this study, the researchers involved 44 athletes where 16 athletes came from PBV Mulia, 12 athletes came from PBV TVRI, and 16 athletes came from PBV Gaperta Putri.

## **RESULTS AND DISCUSSION**

### **Results**

This development is very necessary for the development of training aids because athletes need special tools to train passing in volleyball games. With this tool athletes become more enthusiastic in training and can train independently when the coach is not present on the training schedule.

## **Expert Trial**

The development of bouncing wall tools to train volleyball athletes' passing in 2020 was validated by experts in their fields, namely a media/tool expert, sports expert and volleyball expert/coach. The expert's review resulted in the following revised data:

1. The results of sports validation obtained a percentage of 80% with a decent category. With the revision, the tool is better used for athletes who are already proficient in performing volleyball game passing techniques.
2. The results of the volleyball expert's validation obtained a percentage of 100% with a decent category. Should be used for volleyball athletes who are proficient and skilled.
3. The results of the media/tool expert validation obtained a percentage of 96% with a decent category. Use paint so that the metal frame doesn't rust easily.

Therefore, bouncing wall training aids to train volleyball athletes' passing can be categorized as feasible to be tested with revisions.

## **Small Group Trial**

The small group trial phase of the research "Development of Bouncing Wall Exercise Aids to Train Volleyball Athletes Passing in 2020" was carried out in 1 meeting at the PBV Bina Putri Medan club and PBV Gaperta Putra totaling 18 female athletes at the small group trial stage. Where 8 athletes came from PBV Bina Putri Medan and 10 athletes came from PBV Gaperta Putra. The sample reduction was carried out because considering the advice and criticism from experts for novice athletes who were unable to use these assistive devices. The stages carried out by researchers during small group trials are:

- a. The researcher explained how to operate the tool before it was used.
- b. Athletes practice the tool directly or try the tool.
- c. The researcher distributed a questionnaire or questionnaire to the athletes after trying the tool and explained the procedure for filling it out.

The results of the data from the respondent/athlete's questionnaire or questionnaire regarding "Development of Bounce Wall Exercise Aids to Train Volleyball Athletes Passing in 2020" got a total score of 92%, thus the tool can be categorized as "Valid (Valid)" and can be tested on The next step.

### **Large Group Trial**

At the large group trial stage, 44 female volleyball athletes from the PBV Mulia club were carried out, 16 athletes, PBV TVRI as many as 12 athletes, and PBV Gaperta Putri as many as 16 athletes. The large group trial was carried out in 1 meeting. The steps carried out by the researcher during the large group trial were:

- a. The researcher explained how to operate the tool before it was used.
- b. Athletes practice the tool directly or try the tool.
- c. The researcher distributed a questionnaire or questionnaire to the athletes after trying the tool and explained the procedure for filling it out.

The results of data from questionnaires or questionnaires from respondents/athletes regarding "Development of bouncing wall training aids to train volleyball athletes' passing in 2020" in three clubs got an average value of 92%, thus the media can be categorized as "Valid (Valid) ".

At the product validation stage, it was carried out by 3 experts, namely, sports experts gave an average score of 80%, then volleyball experts/coaches gave an average score of 100% and media/tool experts gave an average score of 96%. Thus, the product is included in the category of 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 phase, a total of 18 female volleyball athletes from the PBV Bina Putri club were conducted with 8 athletes and PBV Gaperta Putra as many as 10 athletes. The small group test at the PBV bina Putri club got a percentage result of 91% while the small group test at the Gaperta Putra PBV club got a score of 92%, thus the average score given by the respondents was 92%. Then in the large group trial stage, a total of 44 female athletes from the

PBV Mulia club with 16 athletes, PBV TVRI with 12 athletes and PBV Gaperta Putri 16 athletes. In the large group trial at the Mulia PBV club, the percentage value was 92%, the large group trial at the TVRI PBV club obtained a percentage value of 93%, and the large group trial at the Gaperta Putri PBV club obtained a percentage value of 90%, thus for the large group trial, the average score was 92%. The average scores from the experts and athletes that have been described previously were obtained through the assessment instruments provided by the researchers in the form of statement questionnaires and questions.

## **Discussion**

At the beginning of the development of volleyball training aids, it was designed and produced into a product that can help coaches and volleyball athletes to practice their passing. 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 validation of sports experts, volleyball experts and media/tool experts.

The technique of passing down and passing over in the game of volleyball is a basic techniques that must be mastered by an athlete, because the technique of passing down and Overpass is very important in the game of volleyball (Ridho IlhamdiLubis, 2020). Useful down passing technique in defending against the opponent's attacks and in building attacks, the better the technique Under an athlete's passing, the direction of the ball being passed will be more controlled. While the top passing technique is useful in taking the ball that is high coming to the ground athlete and one of the players who must master the technique of passing over is the tosser, because the tosser is in charge of dividing the ball to attack because the ball that is held Upper passing is quieter and makes it easier for the spiker to hit the ball.

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## **CONCLUSION**

Based on the results of research which has stated that the development of bouncing wall training aids is feasible and validated by sports experts, volleyball experts and media / equipment experts in the volleyball sport.

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