



## **Drill Based Model of Forehand Drive Practice in Table Tennis for Beginner Athlete**

**Bessy Sitorus Pane<sup>1✉</sup>, James Tangkudung<sup>2</sup>, Abdul Sukur<sup>3</sup>,**

Graduate Program, Universitas Negeri Jakarta, Indonesia<sup>123</sup>

### **Article History**

Received 22 January 2020  
Accepted Februari 2020  
Published Februari 2020

### **Keywords:**

Drill, Forehand Drive,  
Table Tennis, R&D

### **Abstract**

The purpose of study was to develop drill based model of forehand drive practice in table tennis for beginner athlete. The forehand drive had important role in table tennis playing. Forehand is a way to do a punch when hitting the ball the position of the palm holding the bet is facing forward. This research is development research using Research and Development from Borg and Gall which consists of ten stages. The subject in this research was beginner athlete at PTM Gajah Mada Medan. Data were collected through documentation, observation, interview and test of forehand drive in table tennis. Data analysis used qualitative and quantitative. The results of finding show that there are 24 items of drill model in forehand drive practice. The variety of practice table tennis were shadow ball, rolling ball, multiball MP, and multiball DP. It gave the impact on beginner athlete skills. They can be played the table tennis using forehand drive practice.

### **How to Cite**

Pane B., S., Kurdi, Tangkudung J., Syukur A., (2020). Drill Based Model of Forehand Drive Practice in Table Tennis for Beginner Athlete. *Journal of Physical Education, Sport, Health and Recreation*, 9(1), 48-52.

© 2020 Universitas Negeri Semarang

✉ Correspondence address :

E-mail: [bessysitorus\\_por16s3@mahasiswa.unj.ac.id](mailto:bessysitorus_por16s3@mahasiswa.unj.ac.id)  
[james24061952@gmail.com](mailto:james24061952@gmail.com)  
[abdulsukur69@yahoo.com3](mailto:abdulsukur69@yahoo.com3)

**p-ISSN 2460-724X**  
**e-ISSN 2252-6773**

## INTRODUCTION

The facts show that table tennis in northern Sumatra is still lacking in public interest. People still think table tennis is a recreational sport and it is not an achievement. Scouting for the talent of table tennis athletes in North Sumatra is still minimal. In essence, table tennis is a simple game by hitting the ball after it bounces to the table, the movements are consistent with hitting, directing and placing the ball on the opponent's table which is expected that the opponent cannot return the ball. Table tennis is a game that is played by 2 people (for singles) or in pairs (for doubles) as opposed, using a flat table equipped with a net as a field, and a small orange or white ball that is made of celluloid or plastic and the game uses a bat called a bet. Table tennis is a sport that can be played as a team or individually with games and fast ball movements so that it can improve motor development and burn calories contained in the body (Páez, Fuente, & Floria, 2010).

There are still many beginner athletes who experience problems in the basic technique, especially forehand drive. There are still many beginner athletes who make mistakes in doing the right forehand drive technique. The result of observation and interview with the coach at PTM Gajah Mada about the constraints on beginner athletes from several techniques in table tennis found beginner athletes still experience errors when doing basic forehand drive techniques such as delay in hitting when the ball is bouncing, too fast when swinging the bet before the ball is hit and still lacking focus when receiving the ball. The factors that influence failure in making a forehand drive are: (1) The athlete's view does not focus on the ball to come, (2) the slow backward pull of the hand when the ball reaches the hit area results in athletes being late to hit, (3) waist rotation speed that is not balanced with the backward hand pull when the ball has not reached the hit area which results in failure hitting, (4) poor standing position, (5). Lack of concentration.

Table tennis has several basic techniques, namely the technique of holding the bet (grip), the technique available (stance), the technique of leg movement (footwork) and the technique of stroke. When defending, techniques are available and blows are needed to deflect the opponent's ball. When attacking, stroke and leg movements must be prepared. For beginners, these techniques must be trained, especially the hitting technique. Hitting is one of the important techniques in table tennis. When you don't have hitting skills, the player loses points in a match. This makes the

table tennis coach prioritize his athletes to practice hitting skills than other skills. So that hitting skills can be mastered well requires a fairly long period of time.

Considering the importance of mastering the ability to hit the ball in table tennis, in practicing this ability must take precedence by practicing the basic movements of hitting. So that each player will be able to hit the ball well to get a score. Selection of the right practice to produce the desired stroke by providing good and correct training methods. By training the process of obtaining and improving skills, knowledge and attitudes can improve athlete achievement.

Previous research have been conducted relating to techniques in table tennis. As it has been that table tennis smash skills with a tactical approach has significant impact both for forehand smashes and backhand smashes on table tennis extracurricular students. Tactical approaches can improve table tennis smash skills that have an impact on students who take table tennis extracurricular activities at SD Negeri Pasirmulya II Karawang (Sasmita, 2018). Other technique used to increase the table tennis skills. The provision of multiball practice has a significant effect on increasing the accuracy of forehand drives, there is a significant difference between multiball practice and practice with other players on the accuracy of forehand drives in table tennis extracurricular students at SMA Negeri 1 Jalancagak (Nurdianti, Mudian, & Risyanto, 2018). The multiball and shadow training methods have impact to increase table tennis forehand drives skills. Both methods of practice affect the frequency of forehand drive table tennis, but the most significant influence on increasing the frequency of punches is by using the multiball training method (Setyawan, Safari, & Akin, 2018). The same studied concluded that there are significant influence of mulltibal training methods towards forehand and backhand skill in table tennis extracurricular at Fisabilil Mutaqien Islamic Elementary School Tempurejo (Qoid Falahi & Andrijanto, 2019). The development of roll spin media proved effective as a medium of training to improve forehand spin of table tennis at UPGRIS Table Tennis club with the results of the effectiveness of media experts (Setyawan et al., 2018).

Whenever, the need for creativity and innovation as well as good skills in the process of training forehand drive table tennis for novice athletes so that trainers can provide a new and different atmosphere for the novice athletes so that they do not get bored with the existing table tennis forehand drive training materials. Thus

researchers have the initiative to research and develop a model of forehand drive practice for table tennis for novice athletes.

Based on this explanation, this study aims to resolve the need for technique of forehand drive in table tennis using drill. Therefore, the problem of research is, “how is drill based model of forehand drive in table tennis for beginner athlete?”.

**METHODS**

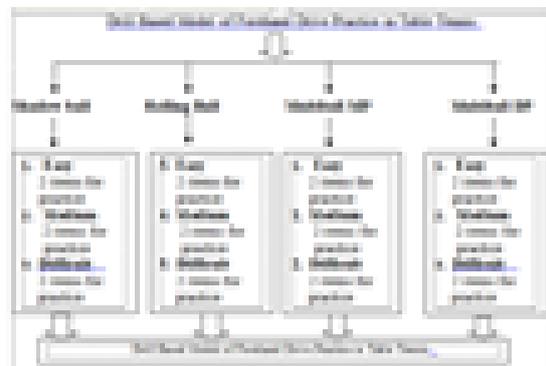
This research used reseach and development method using Borg and Gall procedure. Research and development (R&D) was the process of researching consumer needs and then developing products to fulfill those needs (Gay, Geoffrey, & Airasian, 2009). It is a research step that combines both qualitative and quantitative research. Mixed research is a research approach that combines quantitative and qualitative reseach (Creswell, 2012). Borg and Gall’s model is a process to develop material products that are to suit the needs of athlete. This research is included in the research development model, according to Emzir (Emzir, 2007) that main purpose of development research is developing effective products to be used by an institution. Here are the steps of research procedure;

1. The initial step that must be implemented is to determine the ideas to be developed.
2. Collecting information is factually after getting potential and problems that can be used as planning material.
3. The product design is the result of a series of initial studies which in this study are a model of forehand drive practice in table tennis for beginner athletes.
4. Design validation is a process of evaluating model by experts
5. Design improvements.
6. Limited product trials by practicing the training model at PTM / club
7. Product revision based on field test results.
8. Trial usage
9. The product is revised again if there are deficiencies in the actual situation
10. Dissemination

The source of data is taken from model of forehand drive practice in table tennis of Gajah Mada athelet. The data collection techniques will be done through various instruments of observation, tests, and interviews . analysis data technique used the trial of field, peer assessment, and experts.

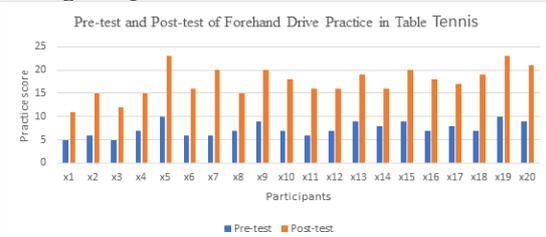
**RESULTS AND DISCUSSION**

The results of needs analysis is taken from observation and interviews with table tennis trainers concluded that; 1) the application of the forehand drive technique still makes the athlete saturated, 2) the book development of the table tennis using forehand drive practice model is needed by the coach as a reference for forehand drive technique practice, and 3) many beginner athletes do not understand the correct forehand drive capability. Thus, the result of data analysis, here is the model of drill based model of forehand drive practice in table tennis for beginner athlete.



**Picture 1.** Design of Drill Based Model of Forehand Drive Practice in Table Tennis

The feasibility of the model can also be known from the results of tests that have been given to athletes. The treatment was carried out for 3 months. Before giving treatment, the research subjects conducted a preliminary test using the forehand drive table tennis test instrument on the study subjects, after conducting the initial test the subject was treated with 3 repetitions of each practice item. After the treatment is given in accordance with the specified time, the subject is given a final test using the same instrument at the time of the initial test. Research data using 20 athletes on the effectiveness of the table tennis forehand drive practice model is shown in the following **Graph 1**.



**Graph 1.** Comparing the Result of Pre-test and Post-test of Forehand Drive Practice in Table Tennis

The average score before it is being given a forehand drive practice model is 0.34, after it is being given treatment for the development of a forehand drive practice model are 0.72, which means there is an increase resulting from the pre-test and post-test so that the forehand practice model in table tennis drives for beginner athletes are increasing. Here is the result of paired sample correlations pre-test and post-test.

The correlation coefficient of the table tennis using forehand drive practice model before and after the treatment is given which are .830 p-value  $0.00 < 0.05$ , it means that there is a significant relationship. It can be concluded that the table tennis forehand drive practice model is appropriate to be used in practice and is effective in increasing the ability of the table tennis forehand drive. There is a comparison of numbers that shows the results of the initial test and the final test has increased. Initial tests amounted to 153, then after treatment was given the final test and increased in numbers by 193. So the forehand drive practice model was effective for the development of forehand drives in table tennis.

Drill method in forehand drive practice is an exercise with practice that is carried out repeatedly continuously to gain practical skills and dexterity about the training material being studied. In practice, athletes are first equipped with theoretical knowledge. The function of using the drill method is to be used by athletes in order that they have movement skills and the ability to connect a situation with other things. The function of the drill method is to provide motivation to athletes, enrich training methods and athlete skills. For success in implementing the drill method, the trainer must pay attention to the steps to be compiled, among others, this exercise is used for actions that are carried out automatically such as reflexes. Prioritizing the accuracy and speed carried out with a predetermined time. The exercises must be fun and interesting by changing the situation and condition so that the athlete's optimism will create joy. The trainer must also pay attention to individual principles in practice. Tennis is a sport that compels the player to have a highly developed psycho-motor baggage. The tennis player must be prepared to face any emerging challenge during a match and to adapt to any situation, regardless of the conditions (Mosoi, 2013).

The development of the forehand drive practice model in this study has specificity for each individual or group, so that novice athletes can have the ability to play table tennis very well. This forehand drive practice model has been adapted to the needs of athletes and the table tennis

training environment. Many factors have been used by researchers to determine the concept of items in forehand drive practice, such as psychological and physical factors of athletes, facilities, and social environment. Exercise is a systematic sporting activity over a long period of time, gradually and individually enhanced, aimed at forming humans who have physiological and psychological functions to fulfill their task guidance (Sukadiyanto & Dangsina, 2011)

Researchers have input on the advantages and disadvantages of the products made. Some input are:

- a. The use of practice aids will be more effective in forehand drive practicing, in addition to eliminating the athlete's boredom in practice.
- b. Attention to athlete is safety when conducting practice with the forehand drive model that has been made is important to avoid injury.
- c. The difference in character and understanding of different athletes requires the trainer that must be able to practice the forehand drive model well, so that it is easily understood by the athlete.

The forehand drive practice model is a product that has the objective to assist the trainer in providing forehand drive practice materials, improve the athlete's forehand drive ability and as a reference for training materials. The table tennis forehand drive model is based on the level of athlete's need to practice the forehand drive technique in table tennis. Some of the advantages of this product include:

- a. Improve the ability of forehand drive for beginner athletes in table tennis.
- b. This model makes athletes more active and enthusiastic in practice the forehand drives.
- c. The forehand drive model is more effective and efficient.
- d. For reference, trainers are in carrying out forehand drive exercises.
- e. This forehand drive model is implemented in stages from an easy practice model to a difficult practice model.
- f. The model used varies so that it can improve the enthusiasm

## CONCLUSION

A drill-based model of forehand drive practice in table tennis can be developed and applied to novice athletes. Utilizing this training model makes athletes become more independent, con-

fidient and responsible when the trainer has not provided an exercise program. Researchers have tried this research to the maximum, but there are still some limitations that researchers put forward as a material consideration of the results of the research achieved. Some of these limitations include:

- a. Limited facilities and infrastructure.
- b. Factors of movement ability, self-confidence, courage and physical condition factors of athletes.
- c. Explanation and regulatory systems in the table tennis forehand drive training model are still not perfect.

## REFERENCES

- Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. London & New York: Pearson Education.
- Emzir. (2007). *Metodologi Penelitian Pendidikan, Kualitatif dan Kuantitatif*. Jakarta: PT. Raja Grafindo Persada.
- Gay, L. ., Geoffrey, E. M., & Airasian, P. (2009). *Educational Research Competencies for Analysis and Applications Ninth edition*. United State of America: Pearson.
- Mosoi, A. A. (2013). Skills and Motivation of Junior Tennis Players. *Procedia - Social and Behavioral Sciences*, 78, 215–219. <https://doi.org/10.1016/J.SBSPRO.2013.04.282>
- Nurdianti, S., Mudian, D., & Risyanto, A. (2018). Pengaruh Metode Latihan Multiball Dan Latihan Dengan Pemain Lain Terhadap Ketepatan Forehand Drive Pada Siswa Ekstrakurikuler Tennis Meja Sma Negeri 1 Jalancagak Tahun 2018. *Biormatika : Jurnal Ilmiah Fakultas Keguruan Dan Ilmu Pendidikan*, 4(02), 25–37. Retrieved from <http://ejournal.unsub.ac.id/index.php/FKIP/article/view/284>
- Páez, L. C., Fuente, F. P. D. la, & Floria, P. (2010). Grip Strength in Young Top-level Table Tennis Players. *International Journal of Table Tennis Sciences*, 6.
- Qoid Falahi, M., & Andrijanto, D. (2019). Pengaruh Metode Latihan Mulltibal Terhadap Keterampilan Pukulan Drive Pada Ekstrakurikuler Tennis Meja. *Jurnal Pendidikan Olahraga Dan Kesehatan*, 7(3). Retrieved from <https://jurnal-mahasiswa.unesa.ac.id/index.php/jurnal-pendidikan-jasmani/article/view/30201>
- Sasmita, B. S. K. (2018). Meningkatkan Keterampilan Smash Tennis Meja Dengan Pendekatan Taktis. *Jurnal Speed*, 2(1).
- Setyawan, E., Safari, I., & Akin, Y. (2018). Perbandingan Latihan Shadow Dengan Latihan Multiball Terhadap Frekuensi Pukulan Forehand Drive Tennis Meja. *Sportive*, 1(1), 241–250. Retrieved from <https://ejournal.upi.edu/index.php/Sportive/article/view/13360>
- Sukadiyanto, & Dangsinia. (2011). *Pengantar Teori dan Metodologi Melatih Fisik*. Bandung: Lubuk Agung.