



Development of Basic Beach Volleyball Technique Training Program for Intermediate Class

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Abstract

This research is motivated by the fact that there is no guidebook for bolavoli training programs that are in accordance with the characteristics of athletes, especially beach bolavoli, because the training program that is applied is still the same as indoor and outdoor bolavoli. The problem in this study is how the development and validity of the beach volleyball basic technique training program book. This research is a development research (Research and Development) with the Borg & Gall development model. The subjects of this research were beach volleyball club athletes in Tuban Regency. This research instrument uses questionnaires, interviews, observations and measurement tests. While the data analysis used is descriptive and inferential statistics. The conclusion of the results shows that the beach volleyball basic technique training program book is effective in improving the ability of athletes with the tcount value of each passing, service, smash and block test > 1.761 t table. Based on the conclusions of the results of this study, it can be an input to the coach to be able to utilize the beach volleyball basic technique training program book as an alternative media for the training process, so that the training process is more effective and interesting.

Keywords: Training Program, Basic Techniques, Beach Volleyball

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A. Introduction

Physical Education, Sports, and Health are integral parts of overall education, aiming to develop physical fitness, motor skills, critical thinking skills, social skills, reasoning, emotional stability, moral actions, aspects of a healthy lifestyle, and awareness of a clean environment through selected physical education, sports, and health activities planned systematically to achieve national education goals (Depdiknas, 2020). According to (Setia & Winarno, 2021) sports, from its Javanese origin, are defined as "olah," meaning self-training, and "rogo" meaning body. Broadly, sports are interpreted as any activity or effort to encourage, stimulate, develop, and foster physical and spiritual strength (Hartoto, 2018). Meanwhile, according to Santoso (Harvianto & Abeng, 2021), sports are a human culture, implying that there is no sports activity without a personal role played in the sports activity. Sports are tools for the physical and mental development of the nation. Regular exercise makes daily activities feel lighter. The goal of any activity is to achieve the highest satisfaction (Ohrnberger et al., 2017). According to (Supriyoko & Mahardika, 2018), sports are a systematic process consisting of all activities or efforts that can encourage, develop, stimulate, and nurture an individual or group's physical and spiritual

potentials in the form of games, races, competitions, and intensive physical activities to obtain recreation and victory.

With the advancement of science and technology, sports activities in Indonesia, especially volleyball, have experienced rapid development. This is all thanks to the government's role in the field of sports, in regional, national, and international competitions. Volleyball is quite popular and widely enjoyed by the Indonesian people. People in both rural and urban areas can be seen playing volleyball. Moreover, volleyball games have been adapted and modified according to current conditions, such as beach volleyball and others (Suriadi & Dewi, 2020). These modifications have made volleyball more popular. It is a game played by two opposing teams separated by a net. The aim of volleyball is to pass the ball over the net into the opponent's area and try to win the game by keeping the ball in the opponent's area.

Volleyball is a form of competitive and recreational sport (Yahya et al., 2020). Therefore, in playing volleyball, some aim for recreation, while others aim for achievements. High achievement in volleyball is a highly desirable goal for any volleyball player. To be a highly skilled volleyball player is not easy; one must meet several requirements. To become a good volleyball player, one must have four

basic requirements: mastery of technique, physical condition, tactical understanding, and mental strength (Oktariana & Hardiyono, 2020).

Beach volleyball is a type of volleyball played on the beach sand by two teams, each consisting of two players, making a total of four players in the game (Putri & Sungkowo, 2022). Beach volleyball is a variant of regular volleyball. Similar to regular volleyball, this game is played by two teams separated by a net in the middle of the field, hitting the ball with their hands using a specific court and ball size (Prayogi, 2018). Players try to hit the ball over the net into the opponent's area and try to prevent the ball from falling in their own area to gain as many points as possible (Gabriel Alexandru, 2020).

The development of beach volleyball began in the early 1920s, first played at Santa Monica Beach in California. With six players on each side, beach volleyball became an important sport for members of the "free" movement in France in 1927. In 1930, the first 2-on-2 beach volleyball game was played in Santa Monica, California (Lubis et al., 2017).

Based on the results of observations that have been made on volleyball club athletes in Tuban Regency, there is no special training program for beach volleyball that is tailored to the characteristics of athletes,

especially for beach volleyball. Existing training programs are still random and often adapted from indoor or outdoor volleyball training programs. Therefore, achievements in Tuban Regency have not been maximized. The purpose of this study is to develop a special training program for beach volleyball, I hope to see an increase in beach volleyball achievements in Tuban Regency.

B. Methods

This study aims to uncover various symptoms and phenomena that occur during beach volleyball training in order to find a suitable beach volleyball training model for beach volleyball athletes. Therefore, the method used in this research is the Research and Development (R&D) method. The reason for using this method is that the research and development method is often used to produce specific products and test the effectiveness of the resulting products. The development product from this research is a basic beach volleyball technique book suitable for use in training processes and an effective and efficient solution for coaches in conducting training. The research and development model used in the study adopts the development model developed by (Gall, M. D., Gall, J. P., & Borg, 2003).

The steps of this research and

development can be simplified according to the conditions and constraints faced in the research (Dwiyogo, 2007). The steps taken in this research and development are as follows:

1. Field Information Collection
2. Analysis of the Collected Information
3. Initial Product Development (Draft Model)
4. Expert Validation and Revision
5. Small-Scale Field Trials and Revisions
6. Large-Scale Field Trials and Revisions
7. Final Product Creation

The small-scale test of this research was conducted at the BVSM volleyball club in Tuban regency in mid-May 2022. After revision, the large-scale trial was continued at the Sping volleyball club and the YOG Beach Volleyball Academy. The data analysis technique in this research and development is as follows:

- a. Validity Test Analysis
- b. Model Feasibility Analysis
- c. Final Product Effectiveness Test.

C. Result and Discussion

A. Results of Previous Studies

1. Description of Field Study Results

Information collection in the field was carried out through direct observation to various beach volleyball clubs in Tuban Regency about the training programs carried out by the coaches in the various beach volleyball clubs with the focus of

observation being basic beach volleyball technique training. The results of collecting information through observations with several coaches found that there was no bolavoli training program that was in accordance with the characteristics of athletes, especially beach volleyball. Where in making training programs and equated with training programs in indoor and outdoor volleyball so that the achievements in Tuban Regency are not optimal.

2. Interpretation of Preliminary Study Results

From the results of information in the field, it shows that there is no bolavoli training program that is in accordance with the characteristics of athletes, especially beach bolavoli. Making training programs and being equated with training programs in indoor and outdoor volleyball so that the achievements in Tuban Regency are not optimal. So it is necessary to develop a special training program for beach volleyball, later there will be achievements or improvements, especially beach volleyball in Tuban district.

The output of the development of this training program is in the form of a book and can be used as an alternative reference for training variations for both athletes and coaches. The hope is that the developed product will be easily applied during training by both the coach and the athlete

himself.

3. Initial Design (draft) of Product

Researchers developed a beach volleyball basic technique training program book with the hope that the resulting product can contribute to the development of science, especially in beach volleyball, as a reference media for training variations so as to facilitate the

training process.

B. Product Validation

Based on the results of the assessment of experts, namely: (1) media experts, (2) material experts, and (3) practitioners (sports) on the beach volleyball basic technique training program book can be interpreted as follows:

Table 1. Feasibility Value of Expert Validation Assessment Results

No	Expert	Count Score	Max score	Percentage	Category
1	Media	101	108	94%	Good/Feasible
2	Material	59	64	92%	Good/Feasible
3	Practitioner	37	40	93%	Good/Feasible

Based on table 4.4 above, if taken in the form of a diagram the results can be seen as

shown in figure 4.1 below:

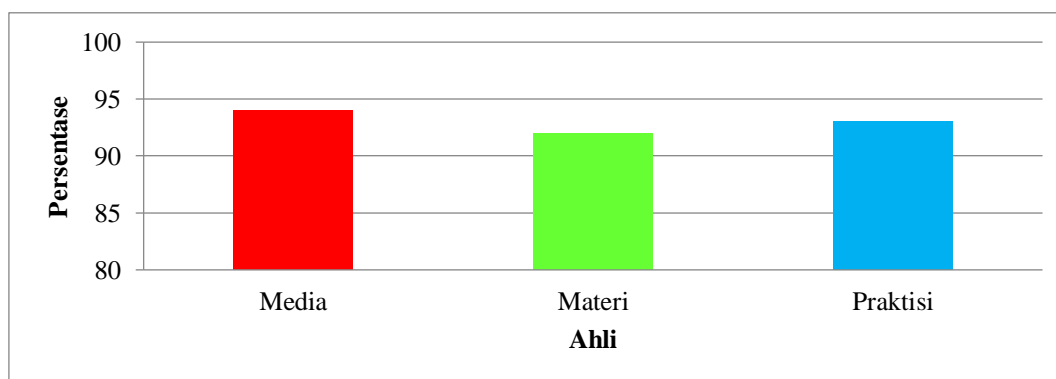


Figure 1. Results of Expert Validation Assessment of the Beach Volleyball Basic Technique Training Program Book

Based on table 1 and Figure 1 above, it shows that the results of the media expert's assessment of the beach volleyball basic technique training program book are 94% in the good/acceptable category, while the results of the material expert's assessment are 92% in the good/acceptable category and the results of the practitioner expert's assessment are 93% in the good/acceptable

category. Based on the expert assessment, the product developed is in the good/worthy category, then the expert's suggestions and input on the validation results are revised according to the validation results. This shows that the expert's assessment of the beach volleyball basic technique training program book made is feasible to be tested on a small and large scale.

C. Limited Model Testing

Based on the results of interviews with coaches, it shows that the use of beach volleyball basic technique training program books is in accordance with the core competencies to be achieved, in accordance with the basic technical material of beach volleyball, especially passing techniques, both upper and lower passing. This is very much needed because beach volleyball is different from indoor volleyball because there are deceptive techniques for opponents, so the use of this book has the benefit of adding students' insights into the basic technical material of playing beach volleyball, especially passing material.

D. Expansion Product Testing

Based on the results of the broad trial, it can be seen that the beach volleyball basic technique training program book is effective to help in practicing training programs, especially passing techniques. In addition, the material in the book is easy to understand because in addition to the explanation there are also illustrative images to practice it. This book also has the benefit of adding insight to athletes, especially passing material so that this book can be used as an additional reference for variations in training programs. Based on these results, the beach volleyball basic technique training program book can be recommended to beach volleyball clubs, especially as an alternative reference for

training variations for both athletes and coaches.

E. Product Effectiveness

Based on the results of descriptive analysis of basic techniques, it is known that the average lower passing pretest score is 38.6 with a minimum test value of 30 and a maximum test of 48. While the average posttest score is 67.6 with a minimum test value of 53 and a maximum test of 81. While the average upper passing pretest score is 34.2 with a minimum test value of 23 and a maximum test of 45. While the average posttest score is 49.8 with a minimum test value of 41 and a maximum test of 60.

The average pretest service value is 13.4 with a minimum test value of 9 and a maximum test of 8. While the average posttest value is 18.5 with a minimum test value of 23 and a maximum test of 15. While the average pretest smash value is 14.9 with a minimum test value of 10 and a maximum test of 19. While the average posttest value is 17.1 with a minimum test value of 13 and a maximum test of 20. From the results of the basic technique measurement test there is an increase. To find out the effectiveness of the product, it is necessary to conduct an effectiveness test. In this study, the effectiveness test was carried out using the Paired Samples Test. Before conducting the test, the pretest and posttest data must be normally distributed

and homogeneous. The results of the data analysis are as follows:

Table 3. Normality Test Results

	Sig	α	Description
Pretest Passing Bawah	0,200	0,05	Normally Distributed
Posttest Passing Bawah	0,200	0,05	Normally Distributed
Pretest Passing Atas	0,200	0,05	Normally Distributed
Posttest Passing Atas	0,200	0,05	Normally Distributed
Layanan Pretest	0,200	0,05	Normally Distributed
Posttest Service	0,200	0,05	Normally Distributed
Pretest Smash	0,200	0,05	Normally Distributed
Posttest Smash	0,078	0,05	Normally Distributed
Pretest Blok	0,200	0,05	Normally Distributed
Posttest Blok	0,063	0,05	Normally Distributed

Based on the results of normality testing in table 4.6, the sig. pretest and posttest values of each passing, service, smash and block test > 0.05. Thus it can be concluded that these results indicate that the pretest and posttest data are normally distributed.

Based on the results of homogeneity testing, the sig. value of each passing, service, smash and block test > 0.05. Thus it can be concluded that these results indicate that the data is homogeneous or has the same data variance.

Table 4. Effectiveness Test Results

	T _{value}	Df	T _{tab}	Sig	Description
Pretest-posttest passing bawah	15,586	14	1,761	0,000	H0 rejected Ha accepted
Pretest-posttest passing atas	20,279	14	1,761	0,000	H0 rejected Ha accepted
Pretest-posttest servis	23,844	14	1,761	0,000	H0 rejected Ha accepted
Pretest-posttest smash	8,342	14	1,761	0,000	H0 rejected Ha accepted
Pretest-posttest blok	9,609	14	1,761	0,000	H0 rejected Ha accepted

Based on the results of the effectiveness test in table 4.8, the tcount value of each passing, service, smash and block test > 1.761 t table, then the beach volleyball basic technique training program book is effective in improving the

ability of athletes. When viewed from the average, it can be seen that there is an increase in the ability of athletes after studying the basic beach volleyball technique training program book.

Discussion

Based on the results of the analysis, it can be concluded that the beach volleyball basic technique training program book developed is suitable for use. Where the assessment of media experts is 94% in the good/acceptable category, the material expert is 92% in the good/acceptable category and the practitioner expert is 93% in the good/acceptable category. Based on the results of the effectiveness test, the tcount value of each passing, service, smash and block test > 1.761 ttable, then the beach volleyball basic technique training program book is effective in improving the ability of athletes. When viewed from the average, it can be seen that there is an increase in the ability of athletes after studying the basic beach volleyball technique training program book.

The use of beach volleyball basic technique training program books as an effort to provide basic beach volleyball technique training, especially good passing techniques, has a very big role. Through media in the form of books, the sensory potential of athletes can be accommodated, so that training results will increase. This is in line with the opinion expressed by (Balasas et al., 2017) which states that one of the aspects that are favored to be able to improve learning outcomes is multimedia, which is a combination of various media elements such as text, images, and

animation. The existence of media elements such as text, images, and animation will accommodate a person's senses with stimulation through text, images and animation in media in the form of books.

The beach volleyball basic technique training program book can also be a training reference so that athletes do not experience boredom during training. This is supported by the results of research by (Rifai et al., 2022) whose research results suggest that passing and smash technique training in beach volleyball games packaged in guidebook media can be applied to add variations to the training model, so that boredom in training can be overcome properly.

This beach volleyball basic technique training program book is intended to increase athletes' knowledge and abilities about basic beach volleyball techniques. (Eka Putri, 2021) explains at this level, the training structure is already similar to older players. The most important part of training is technical. It is very good at this age to develop technique and understanding of basic tactics. So players should start to be taught dynamic basic tactics. At this level, players are in pre-puberty and have physical limitation issues especially in strength and endurance.

However, it is important to acknowledge the limitations of this study. The sample size and specific demographic

characteristics of the athletes involved may impact the generalizability of the results. Additionally, the study focused on specific techniques, and the applicability of the training program to a broader range of beach volleyball skills should be explored.

The novelty of this research lies in the development of a comprehensive beach volleyball basic technique training program book, integrating multimedia elements, and its demonstrated effectiveness in improving athletes' skills. This adds a valuable contribution to the existing literature on sports training methodologies. Future research could explore further enhancements to the program and its adaptability to diverse athlete populations and skill levels.

D. Conclusion

Based on the research results, it can be concluded that:

1. The development of a beach volleyball basic technique training program book uses a development model developed by Borg & Gall with 7 stages, namely collecting information in the field, analyzing information, model drafts, product validation and revision, small-scale field trials and revision, large-scale field trials and revision, making the final product.
2. The validity of the beach volleyball basic technique training program book

from the results of the assessment of media experts 94% is in the good/acceptable category, 92% material experts are in the good/acceptable category and 93% practitioners are in the good/acceptable category.

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F. Conflict of Interest

No conflict of interest

References

- Balasaras, D., Christoulas, K., Stefanidis, P., Vamvakoudis, E., & Bampouras, T. (2017). The effect of beach volleyball training on muscle performance of indoor volleyball players. *The Journal of Sports Medicine and Physical Fitness*, 58. <https://doi.org/10.23736/S0022-4707.17.07162-6>
- Depdiknas. (2020). *Kurikulum Berbasis Kompetensi Pendidikan Prasekolah, Dasar, dan Menengah Ketentuan Umum*. 21(1), 1–9.
- Dwiyogo, W. D. (2007). *Pengembangan Kurikulum Pendidikan Jasmani dan Olahraga*. Wineka Media.
- Eka Putri, V. N. (2021). Analisis Spike Atlet Bola Voli Pasir Indonesia. *Jurnal Muara Olahraga*, 3(1), 36–45. <https://doi.org/10.52060/jmo.v3i1.454>
- Gabriel Alexandru, P. (2020). Essential

- Aspects of Beach Volleyball Technique. *Geosport for Society*, 13, 131.
<https://doi.org/10.30892/gss.1304-063>
- Gall, M. D., Gall, J. P., & Borg, W. R. (2003). Educational research: An introduction (7th ed.). In *Boston, MA: A & B Publications*.
- Hartoto, S. (2018). Pengaruh Latihan Piramida Descending dengan irama lambat dan cepat terhadap Kekuatan, Kecepatan, Daya ledak dan Hypertropy Otot tungkai. *JOSSAE: Journal of Sport Science and Education*.
<https://doi.org/10.26740/jossae.v2n2.p58-60>
- Harvianto, Y., & Abeng, A. T. (2021). Pelestarian Nilai Luhur Budaya Dayak Melalui Olahraga di Kota Palangka Raya. *Jendela Olahraga*, 6(1), 130–138.
<https://doi.org/10.26877/jo.v6i1.7073>
- Lubis, M. R., Satrianingsih, B., & Irmansyah, J. (2017). Evaluasi Program Pembinaan Prestasi Cabang Olahraga Bola Voli Pantai di NTB. *Jurnal Ilmiah Mandala Education*, 3(2), 223–231.
<https://doi.org/10.58258/jime.v3i2.250>
- Ohrnberger, J., Fichera, E., & Sutton, M. (2017). The relationship between physical and mental health: A mediation analysis. *Social Science and Medicine*, 195(November), 42–49.
<https://doi.org/10.1016/j.socscimed.2017.11.008>
- Oktariana, D., & Hardiyono, B. (2020). Pengaruh Daya Ledak Otot Lengan, Daya Ledak Otot Tungkai Dan Kekuatan Otot Perut Terhadap Hasil Smash Bola Voli Pada Siswa SMK Negeri 3 Palembang. *Journal Coaching Education Sports*, 1(1), 13–24.
<https://doi.org/10.31599/jces.v1i1.82>
- Prayogi, A. (2018). Evaluasi Kondisi Fisik Atlet Bolavoli Pantai Puslatda Jawa Timmur 2018. *Jurnal Prestasi Olahraga*, 1(4), 1–21.
<https://journal.unnes.ac.id/sju/index.php/ujss/index>
- Putri, L. M., & Sungkowo. (2022). Pengaruh Latihan Selftalk Dan Imagery Terhadap Kemampuan Hasil Permainan Bola Voli Pantai Pada Atlet Voli Pantai Kota Tegal. *Unnes Journal of Sport Sciences*, 6(2), 132–137.
<https://journal.unnes.ac.id/sju/index.php/ujss/index>
- Rifai, I. P., Rahayuni, K., Hanief, Y. N., & Yunus, M. (2022). A qualitative study of beach volleyball student athlete career transition at Malang State University. *Journal of Science and Education (JSE)*, 3(2), 62–68.
<https://doi.org/10.56003/jse.v3i2.159>
- Setia, D. Y., & Winarno, M. E. (2021). Survei Tingkat Kebugaran Jasmani Tim Bola Basket. *Sport Science and Health*, 3(3), 107–116.
<https://doi.org/10.17977/um062v3i32021p107-116>
- Supriyoko, A., & Mahardika, W. (2018). Kondisi Fisik Atlet Anggar Kota Surakarta. *Jurnal SPORTIF: Jurnal Penelitian Pembelajaran*, 4(2), 280.
https://doi.org/10.29407/js_unpgr.v4i2.12540
- Suriadi, S., & Dewi, R. (2020). Pengembangan Instrumen Tes Passing Bolavoli Berbasis Digital. *Jurnal Prestasi*, 4(1), 9.
<https://doi.org/10.24114/jp.v4i1.16821>
- Yahya, R., Kurniawan, F., & Effendi, R. (2020). Penggunaan Pembelajaran Cooperative Learning permainan Bola Voli Dalam Meningkatkan Hasil Passing. *Journal Coaching Education Sports*, 1(2), 105–114.
<https://doi.org/10.31599/jces.v1i2.366>