



PROCEEDINGS

2ND YOGYAKARTA INTERNATIONAL SEMINAR ON HEALTH, PHYSICAL EDUCATION, AND SPORT SCIENCE (2ND YISHPESS)

"Community Building and Development through Physical Education and Sports"

In conjunction with

1ST CONFERENCE ON INTERDISCIPLINARY APPROACH IN SPORTS (1ST COIS)

"Integrating sports science intervention to optimize human performance"



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FAKULTAS ILMU KEBELAKSANGAAN
UNIVERSITAS NEGERI YOGYAKARTA
1 OKTOMB 1961 - 1 OKTOMB 2016



YISHPESS CoIS 2018



**2nd Yogyakarta International Seminar on Health, Physical
Education, and Sport Science
(YISHPESS 2018)**

**1st Conference on Interdisciplinary Approach in Sports
(CoIS 2018)**

October 26-27, 2018,
Yogyakarta, Indonesia

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AMSTERDAM – PARIS – BEIJING

This book is part of the series *Advances in Social Science, Education and Humanities Research* (Volume 278) (ISSN 2352-5398) published by Atlantis Press.

<http://www.atlantis-press.com/publications/proceedings/aer/>

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The series as a whole has as an ISSN-number where each individual volume of proceedings will have its own ISBN number.

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www.atlantis-press.com

ISBN: 978-94-6252-634-1

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2nd Yogyakarta International Seminar on Health, Physical Education, and Sport Science (YISHPESS 2018)

1st Conference on Interdisciplinary Approach in Sports (CoIS 2018)

October 26-27, 2018, Yogyakarta, Indonesia

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Preface

First of all, please allow us to extend our warmest greetings and welcome to you all to the 2nd Yogyakarta International Seminar on Health, Physical Education, and Sports Science (YISHPESS 2018). The conference is held in conjunction with The 1st Conference on Interdisciplinary Approach in Sports (CoIS) by the Faculty of Sport Sciences Universitas Negeri Yogyakarta in Yogyakarta, Indonesia on October 26-27, 2018.

The community building and development require integrated aspects in physical education and sports. These issues should be solved by researchers, lecturers, students and even practitioners to share and present their current research. The purposes of the conference are to share and present the reflection and research results related to Physical Education, Health, and Sports Science. In another issue, interdisciplinary approach has been defined as cross disciplines with an in-depth knowledge in one aspect working together to solve problems. Interdisciplinary approach in sports is very important to gain optimal result of performance. In line with the first goal of this conference, it seeks better understanding both in theoretical and practical situation in every expert's aspects.

With the YISHPESS's conference theme: "Community Building and Development through Physical Education and Sports" and CoIS's theme: "Integrating Sports Science Intervention to Optimize Human Performance", approximately 236 papers have been submitted at this conference but only 169 of these have been accepted for the presentation after a blind peer review process. We do hope that this conferences proceeding can enrich our understanding of the role of physical education, sports, and health in maintaining community building and development as well as become a meeting point for academics, sport practitioners and sports professional to share ideas and knowledge for improving performance in sports.

We would like to thank to all parties who helped running this program. Hopefully, all the time and efforts we have spent for these two conferences may be beneficial and impactful for the future.

Yogyakarta, October 20, 2018
Organizing Committee

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The Development of the Forearm Passing Training Model in Volleyball for Beginner Athletes

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<https://www.atlantis-press.com/proceedings/yishpess-cois-18/55909349>

Proceedings

2nd Yogyakarta International Seminar on Health, Physical Education, and Sport Science (YISHPESS 2018) and 1st Conference on Interdisciplinary Approach in Sports (CoIS 2018)

Part of series

Advances in Social Science, Education and Humanities Research

Publication date

2018/12/18

ISBN

978-94-6252-634-1

ISSN

2352-5398

DOI

[doi:10.2991/yishpess-cois-18.2018.107](https://doi.org/10.2991/yishpess-cois-18.2018.107)

The Development of the Forearm Passing Training Model in Volleyball for Beginner Athletes

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Abstract—this aim of this study is to generate the best forearm pass training model for beginner athletes. The research was instigated by series of observations and preliminary study conducted to analyzing the problems that arise from coaching beginner athletes. The athletes followed coach's instructions during the application of the training model. Each training model was assessed by both the coach and the researchers. After completion of the first training model, the athletes and coaches filled in the questionnaire before continuing the training up to the eighth model. The Small scale trial involved 10 athletes while the large scale trial involved 31 athletes and 4 coaches. For this study, the samples were selected using the purposive sampling techniques based on the following criteria: (1) female beginner athletes, (2) actively participating in training, (3) at least 5 months of training, and (4) willingness to participate as samples of the study. The research instruments for this study include the observation sheet and the assessment questionnaire. From the analysis, the data generated is presented in a qualitative description and quantitative percentile. The results indicate that the forearm passing training model in volleyball game for beginner athletes is a feasible guideline for training beginner athletes. In conclusion, drills for beginners enable the training model to improve the forearm pass skill in volleyball. In addition, the development of innovation and training model variation also improve athletes' training motivation. To conclude, the forearm pass training model for beginners can be categorized as "extremely feasible" for application amongst beginner athletes.

Keywords—development, forearm pass training model, beginner athletes

I. INTRODUCTION

From its inception, the game of volleyball has gained a lot of popularity due to its continuous development and innovation for creating great techniques and tactics [1]. Volleyball requires a high degree of explosiveness as its players need to jump, strike, and block [2]. From its origin, the game has undergone three developmental stages and each stage is closely related to the rise of new tactics [1]. Volleyball is a game that requires great cognitive and intellectual abilities from its players [3]. Participating in volleyball can optimize children's growth and development as well as improve physical fitness including flexibility,

motor coordination, strength, and endurance. Once players can upgrade their level of gameplay, playing with merely simple techniques will be insufficient for them [1]. They will constantly look for new techniques to play the game, like now serving techniques. The Serve was initially used to start the game. However, as the time went by, it became an aggressive offense technique [1]. Today, volleyball has not really shown any progress and is still under great expectations [1]. To cope with this challenge, a comprehensive analysis of volleyball coaching and recommendation to improve coaching should be given [1]. The recommendation emphasizes on the improvement of techniques and tactics in the volleyball game as well as innovations for passing techniques [1].

Volleyball requires players to master several basic techniques including serving, passing, setting up, smashing and blocking. Among these techniques, passing is more important for players [5]. Passing plays a vital role in building up attack in volleyball [6]. However, passing is not an easy skill to master. Therefore, a lot of players often worry about handling the serve [7]. They are afraid of not being able to dig an attack as they cannot anticipate ball's position before touching the ground [7]. Teams lose a lot of points due to inability of players to handle serves. Experienced players respect teammates who can pass and deliver an effective attack [7]. The forearm pass is the most frequently used passing technique in volleyball. To get the pass right, players must put their forearms together straight and let the ball touch both arms at the same time [7]. There are many ways to master forearm pass technique. Nevertheless, the best ways to learn it is to watch other players play and practice. By adopting an effective volleyball training method, players can level up their abilities in mastering the forearm pass technique [8]. Various coaching methods provide various overviews of drawbacks, responsibilities, optimism, understanding, and essence that turn an abstract concept into a concrete one to help optimize the training process [8].

Children are a vital group that requires proper attention during the training process [9]. The growth and development stage of Children is the most critical stage in their sports career. Hence, it is necessary for coaches to predict and understand the children and determine their training proportion [9]. There are some guidelines to train children such as: variations, action, competition, and recreation [9]. The roles of volleyball coaches are to lead the training process to help athletes improve their volleyball skills [10].

Therefore, the success of athletes greatly depends on their coaches' abilities to lead. [10]. People provide volleyball, football, basketball, tennis, and athletics training for children the same way adults train. However, children are not a copy of adults, they should not be expected to perform like adults; therefore, the training model for children should be modified [9].

II. METHODS

A. Participants

The small scale trial involved 10 athletes while the large scale trial involved 31 athletes aged between 9 and 12 years old. The samples in this study were selected using the purposive sampling techniques based on the following criteria: (1) female beginner athletes (2) actively participating in training, (3) 5 months of training, and (4) willingness to participate as samples of the study. All participants are volleyball athletes in Yogyakarta, Indonesia.

B. Training Procedure

The trial was performed two times in both the small and large scales. It was done to give feedback on the weaknesses, drawbacks, and mistakes in the development of the model. There are eight training models to develop and the coach was responsible for applying the training models. The athletes followed the instructions of the coach during the application of the training model. Each training model was assessed by the coach and the researchers. After completion of the first training model, athletes and coaches filled the questionnaire before continuing from the second to the eighth model.

III. RESULT

TABLE I. PRESENTS VALIDATION RESULTS FROM EXPERTS IN THE ASSESSMENT OF FOREARM PASSING TRAINING MODEL IN VOLLEYBALL

| Expert | Total Score | Acquired score |
|-------------|---------------------------|----------------|
| E 1 and E 2 | 768 | 690 |
| Results | 690 : 768 × 100 = 89, 84% | |

TABLE II. PRESENTS RESULTS OF COACHE'S ASSESSMENT FROM SMALL SCALE FOREARM PASS TRIAL IN VOLLEYBALL

| Coach | Total Score | Acquired score |
|-----------|----------------------------|----------------|
| C1 and C2 | 144 | 117 |
| Results | 117 : 144 × 100% = 81, 25% | |

TABLE III. PRESENTS RESULTS OF ATHLETE'S ASSESSMENT FROM SMALL SCALE FOREARM PASS TRIAL IN VOLLEYBALL

| Athletes | Total Score | Acquired score |
|----------|----------------------------|----------------|
| A1-A10 | 720 | 563 |
| Results | 563 : 720 × 100% = 78, 20% | |

TABLE IV. PRESENTS RESULTS OF ATHLETE'S ASSESSMENT FROM LARGE SCALE FOREARM PASS TRIAL IN VOLLEYBALL

| Athletes | Total Score | Acquired score |
|----------|--------------------------------|----------------|
| A1-A31 | 2,232 | 2,051 |
| Results | 2,051 : 2,232 × 100% = 91, 90% | |

TABLE V. PRESENTS RESULTS OF COACHE'S ASSESSMENT FROM LARGE SCALE FOREARM PASS TRIAL IN VOLLEYBALL

| Coach | Total Score | Acquired score |
|-----------|----------------------------|----------------|
| C1 and C2 | 144 | 129 |
| Results | 129 : 144 × 100% = 89, 58% | |

IV. DISCUSSION

The results obtained from this study indicate that forearm passing training model is feasible for application as a guideline in volleyball among beginner athletes. This finding was reported after a conduction of a series of assessment by the validator and coaches as well as trials in the field. The final results of the assessment conducted by the content experts reveal that such training model is considered "extremely feasible" (percentage is shown in Table 1). Similarly, final results generated by coaches' assessment indicate that the model is considered "extremely feasible" (percentage is shown in Table 2). Results generated from the small scale trial show that the training model is considered "extremely feasible" for application as shown in Table 3. Similarly, from the results of the large scale trial, the training model is classified as "extremely feasible" for application as shown in Table 4.

The difference in the results of both trials is considered normal due to the fact that the subjects of study are young athletes who are still unstable in both skill and psychological aspect. Similarly, z decrease in the results generated from the large scale trial is also normal due to the aforementioned reason. The trial results prove that the quality of the developing training model is not influenced.

V. CONCLUSION

This study concludes that drills in the forearm pass training model for beginners enable the training model to improve the passing skill. The training model also significantly influences the improved forearm pass skills of beginner athletes. Peer drills seem to influence athletes' psychological aspect, hence, it makes them feel more relaxed, happier, and less pressured while playing. In addition, the development of innovation and training model variation also improve athletes' training motivation. Generally, the forearm pass training model for beginners can be categorized as "extremely feasible" for application among beginner athletes.

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