



TRAINING TO IMPROVE THE PHYSICAL CONDITION OF INDONESIA BADMINTON ELITE ATHLETES

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Abstract

The purpose of Community Service activities is one of the pillars of the Tri Dharma of Higher Education, in addition to the Dharma of Education and Teaching and the Dharma of Research. Community Service Research which is an integral part of the Tri Dharma of Higher Education which is inseparable from the other two dharmas involving the academic community including lecturers, students, education staff and alumni. This study aims to determine the Training for Indonesian Badminton Athletes in the context of Preparation for the 2023 International Championship. This study used a survey method. The samples in this study were Indonesian Badminton Pelatnas Athletes. The data analysis technique used in this study is using descriptive analysis. Research on Physical Condition Training of Indonesian Badminton Athletes so that athletes understand the importance of physical exercise, carry out physical training programs. All those involved in this training must get in-depth briefing in order to be able to carry out the training program appropriately according to the target or goal at the 2023 International Championship and achieve optimal achievements and where at the same time Indonesia can improve achievements in sports, especially Badminton. The target to be achieved is so that athletes can understand the elements of physical condition and how to improve it as one of the efforts to improve. The output to be achieved is that athletes understand about the elements of physical condition and how to improve it, especially badminton for Pelatnas Athletes at PBSI and the publication of scientific papers in national service journals. To achieve this, there are two methods used, the first is to make observations in the field and collaborate with partners. The second stage is to provide training on physical condition for Pelatnas Athletes at PBSI. The third stage evaluates the achievements achieved in the training activity.

Keywords: Physical Condition Improvement, National Athletes, Badminton

INTRODUCTION

Badminton is one of the achievement sports that has complexity in training programs (locomotor and manipulative) (Ahmed, Saraswat, and Esht 2022; Devi Catur Winata and Bastanta Mujiriah P.A 2021; S. Nugroho et al. 2021). Therefore, this sport is increasingly popular in the community for children, adolescents to adults. The problem faced is still the lack of a comprehensive understanding of athletes about the elements of physical condition and how to improve it in badminton athletes. In fact, an athlete should have good physical condition in order to be able to realize techniques and apply tactics/strategies in playing. This condition is one of the causes of the decline in the performance of Athletes elite Indonesia at PBSI. The solution provided to improve the physical condition of athletes is through training on the physical condition of badminton and how to improve it for athletes because physical condition is needed in badminton.

Athletes' problems in carrying out physical training and carrying out physical training programs are sometimes ignored both in programs and coaching athletes who excel at the provincial, national and international levels (Davis and Kukureka 2017; Malone, Barfield, and Brasher 2012; Santtila, Pihlainen, and Pihlainen 2017). The progress of Indonesia's achievements depends on qualified human resources, one of which is Athletes as a tool of the State to defend both from the provincial, national and international levels which we usually refer to as the Unitary State of the Republic of

Indonesia (NKRI). The more advanced a sports achievement requires human resources, namely qualified athletes. In today's era of globalization, athletes are required to have superior techniques and have qualified physique to compete with their opponents. To improve the quality of physical quality of athletes to be able to compete with their opponents, athletes must work hard in improving the quality of techniques both psychological and physical, including education, leadership, tactics, competence, motivation, and excellent physical condition and other factors such as social factors. Therefore, to support success in improving the physical condition of athletes carried out and expected, it is necessary to prepare consistent and stable training in the sense of not changing from one measurement time to another through scientific studies.

The study of science which includes physiology, biomechanics, psychology, tests and measurements, sports health, motion learning, nutrition, history and sociology are sub-disciplines to support the theory and methodology of training (Jariono et al. 2020; Jariono, Nugroho, Hermawan, et al. 2021; Jariono, Nugroho, Nugroho, et al. 2021; Jariono, Nurhidayat, et al. 2021; H. Nugroho et al. 2021; Nurhidayat et al. 2021). In addition, the achievement of excellent physical quality is influenced by fundamental factors in training. The factors in question are physical preparation, technique, tactics, psychology, and theory that are interrelated in all athletes' physical condition coaching programs. Therefore, these factors need to be considered for coaches (Jariono et al. 2022; Jariono and Subekti 2020). Terkait dengan terwujudnya kondisi fisik yang optimal, atlet khususnya diposisikan sebagai posisi sentral di dalam pelaksanaan proses peningkatan kondisi fisik atlet. Meningkatkan kualitas fisik atlet seharusnya ke arah yang lebih baik, sehingga yang dilakukan kedepan akan lebih baik. Berkaitan dengan terwujudnya kualitas fisik yang prima, hal itu tidak terlepas dari kerjasama yang baik antar pelatih dan atlet dalam meningkatkan kondisi fisik.

Related to the realization of optimal physical condition, athletes in particular are positioned as a central position in the implementation of the process of improving the physical condition of athletes. Improving the physical quality of athletes should be in a better direction, so that what is done in the future will be better. With regard to the realization of excellent physical quality, it is inseparable from good cooperation between coaches and athletes in improving physical condition.

Athletes in facing the competition are greatly affected by optimal physical condition, starting from preparing physically either to be able to show performance or expected technical performance with optimal performance. Athletes in each sport must be professional in making training programs appropriately according to the character of the sport and right on the match schedule in order to reach peak performance. Therefore, based on the assumptions above, an answer to the problems previously described is needed, so there must be a deeper study through research using a community service approach. Thus, researchers want to hold a training entitled "Training for Improving the Physical Condition of Cipayung Badminton Athletes 2023".

METHOD AND PROCEDURES

The implementation of community service activities is carried out by holding Training on Improving the Physical Condition of Cipayung Badminton Athletes 2023. Speakers in this activity will collaborate with PBSI. The method to be carried out is to use the method of lecture approach, practice and discussion. Activities will be carried out in coordination with the Indonesian Badminton Association (PBSI) to be able to conduct Training on Improving the Physical Condition of Cipayung Badminton Athletes. The activities carried out will be evaluated, after carrying out the Physical Condition Improvement training, each follow-up is to conduct a joint evaluation of what is happening in the field and will discuss to find solutions. This activity is the beginning in preparing the physical condition of elite Indonesian badminton athletes in Cipayung in July 2023. The stages and methods carried out in this activity were carried out through observation at the service location followed by interviews with management, coaches, and athletes.

RESULTS

Phase I observations and interviews with administrators, coaches, and athletes:

The purpose of this stage is to gather confirmation information and obstacles in improving the physical condition of athletes. The results of this service show that it is necessary to conduct a feasibility study as a long-term coaching framework



Figure 1. Devotees provide explanations related to the physical condition of badminton athletes



Figure 2 Implementation of physical condition training



figure 3 Implementation of physical condition training

Phase 2 Briefing of Pre-Feasibility and In-depth Feasibility studies with administrators and trainers

In-depth discussions with administrators and trainers aim to elaborate in more detail the action plan to be taken in conducting a feasibility study and a feasibility study of the subject of a comprehensive financial feasibility study. Therefore, the feasibility study is the main activity to be carried out.

CONCLUSION

Community service through educating both managers, coaches, and athletes about the importance of improving physical condition to support qualified achievements Pre-feasibility and

feasibility studies have provided additional knowledge and understanding to the audience. The audience can understand that pre-feasibility and feasibility analysis are necessary actions before carrying out further development such as infrastructure, information systems to human resource development programs

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REFERENCES

- Ahmed, Sohel, Avi Saraswat, and Vandana Esht. 2022. "Correlation of Core Stability with Balance, Agility and Upper Limb Power in Badminton Players: A Cross-Sectional Study." *Sport Sciences for Health* 18(1):165–69. doi: 10.1007/s11332-021-00789-w.
- Davis, C. L., and S. N. Kukureka. 2017. "The Physical Conditions of Pencak Silat Athletes The Physical Conditions of Pencak Silat Athletes." *IOP Conference Series: Materials Science and Engineering*. doi: 10.1088/1742-6596/755/1/011001.
- Devi Catur Winata, and BASTANTA MUJIRIAH P.A. 2021. "Survey of Physical Fitness Levels of Badminton Athletes in Binjai City, Indonesia." *JUMORA: Jurnal Moderasi Olahraga* 1(02):84–94. doi: 10.53863/mor.v1i02.228.
- Jariono, Gatot, Haris Nugroho, Iwan Hermawan, Fahmy Fachrezzy, and Uzizatun Maslikah. 2021. "The Effect of Circuit Learning on Improving The Physical Fitness of Elementary School Students." *International Journal of Educational Research & Social Sciences* 2(1):59–68. doi: 10.51601/ijersc.v2i1.22.
- Jariono, Gatot, Haris Nugroho, Djoko Nugroho, Sae Dikdaya Nyatara, Tunjung Marganingrum, and Dewi Setiawati. 2021. "Determining Factors Of Jump Service Volleyball In The Student Activity Unit Of Volleyball." *Kinestetik : Jurnal Ilmiah Pendidikan Jasmani* 5(4):799–808. doi: 10.33369/jk.v5i4.19771.
- Jariono, Gatot, Nurhidayat, Eko Sudarmanto, Ardhian Tomy Kurniawan, Chandra Triadi, and Maimunah Nur Anisa. 2021. "Pendampingan Dan Pelatihan Peran Guru Dalam Mengurangi Perilaku Hiperaktif Anak Berkebutuhan Khusus Di SLB Negeri Sukoharjo." *Panrannuangku Jurnal Pengabdian Masyarakat* 1(1):37–43. doi: 10.35877/panrannuangku478.
- Jariono, Gatot, Nursubekti Nursubekti, Pungki Indarto, Singgih Hendarto, Haris Nugroho, and Fahmy Fachrezzy. 2020. "Analisis Kondisi Fisik Menggunakan Software Kinovea Pada Atlet Taekwondo Dojang Mahameru Surakarta." *Transformasi: Jurnal Pengabdian Masyarakat*. doi: 10.20414/transformasi.v16i2.2635.

- Jariono, Gatot, and Nur Subekti. 2020. "Sports Motivation Survey And Physical Activity Students Of Sport Education Teacher Training And Education Faculty FKIP Muhammadiyah University Surakarta." *Kinestetik : Jurnal Ilmiah Pendidikan Jasmani*. doi: 10.33369/jk.v4i2.12449.
- Jariono, Gatot, Nur Subekti, Vera Septi Sistiasih, Muhad Fatoni, Eko Sudarmanto, Pungki Indarto, Nurhidayat Nurhidayat, Moch Danny Yudha Pradana, Ahmad Sova Sundoro, Dwi Adiyana Bayu Kristiyadi, Dwi Endri Mei Minawati, Aulia Ajeng Destiana, Wulandari Wulandari, Rafli Muhammad, Ginting Baharudin Putra, Sae Digdaya Nyatara, and Tunjung Marganingrum. 2022. "PKM Pelatihan Kemampuan Motorik Anak Usia Dini Melalui Olahraga Renang." *Dharma Raflesia : Jurnal Ilmiah Pengembangan Dan Penerapan IPTEKS* 20(1):190–98. doi: 10.33369/dr.v20i1.21963.
- Malone, Laurie A., J. P. Barfield, and Joel D. Brasher. 2012. "Perceived Benefits and Barriers to Exercise among Persons with Physical Disabilities or Chronic Health Conditions within Action or Maintenance Stages of Exercise." *Disability and Health Journal*. doi: 10.1016/j.dhjo.2012.05.004.
- Nugroho, Haris, Satria Yudi Gontara, Prayogi Dwina Angga, Gatot Jariono, and Inosen Lingsir Maghribi. 2021. "Quality Of Physical Condition Of Youth Pencak Silat Athletes Reviewed From Speed, Power, and Strength." *Kinestetik : Jurnal Ilmiah Pendidikan Jasmani* 5(1):154–62. doi: 10.33369/jk.v5i1.14376.
- Nugroho, Sigit, Ahmad Nasrulloh, Tri Hadi Karyono, Riky Dwihandaka, and Kukuh Wahyudin Pratama. 2021. "Effect of Intensity and Interval Levels of Trapping Circuit Training on the Physical Condition of Badminton Players." *Journal of Physical Education and Sport* 21(3):1981–87. doi: 10.7752/jpes.2021.s3252.
- Nurhidayat, Nurhidayat, Eko Sudarmanto, Gatot Jariono, Ardhian Tomy Kurniawan, and Fathurrahman Fathurrahman. 2021. "Analysis Strength And Endurance Of New Students Sports Education Faculty In Teacher Training And Education, Muhammadiyah University Of Surakarta." *Kinestetik : Jurnal Ilmiah Pendidikan Jasmani* 5(3):512–17. doi: 10.33369/jk.v5i3.17327.
- Santtila, Matti, Kai Pihlainen, and Pihlainen. 2017. "Optimal Physical Training During Military Basic Training Period." *Journal Of Strength and Conditioning Research* 29(11S). doi: 10.1519/JSC.0000000000001035.