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Effectiveness of Basic Physical Training Material for DKI Jakarta Sports Coaches

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Abstract
This study aims to determine the effectiveness of basic physical exercise training for DKI Jakarta sports coaches. The research was conducted in May 2023. This data collection was carried out at the Faculty of Sports Science, State University of Jakarta by using stationery to fill out a questionnaire. The research method used is descriptive method with survey technique. This research instrument is a closed questionnaire and is distributed to the entire sample. The number of samples was 40 coaches who were the population of DKI Jakarta sports coaches. Based on the results of the research analysis, there is a significant difference between the pretest and posttest values in the overall research sample data with a significant value of pretest and posttest of 0.000 ($p < 0.05$) so it can be concluded that there is an increase in the trainer's knowledge after attending basic physical training.
Keywords: Physical exercise, Coach, DKI Jakarta.

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INTRODUCTION

Learning through the training process among sports coaches in recent years has become more widespread and has quite a lot of interest. This is because learning through the training process can increase and improve skills and knowledge (Banuwa & Susanti, 2021) so as to realize quality human resources (HR). According to the Society of Health and Physical Educators (2016) a qualified coach is defined as an individual who is proficient in eight defined domains namely philosophy and ethics, safety and injury prevention, physical conditioning, growth and development, teaching and communication, sport skills and tactics, organization and administration, and evaluation. Trainers to be competent in all domains, or at least most of these areas, can be done through a form of education, one of which is through training. Methods Training is also a viable alternative method of teaching essential skills to trainers, especially if trainers do not have opportunities in formal education (Macdonald et al., 2010).

It is known that coaches play various roles in an athlete's life, such as coaches as teachers, parents, and other roles that make coaches central in developing athlete potential (Sabiston et al.,

2020). Coaches also have ongoing interactions with athletes, so have the potential to have a significant impact on athlete development (Conroy & Coatsworth, 2007). In addition, the coach is also one of the factors that determine the achievement of athlete achievement (Gu et al., 2023). Insight development is needed by coaches to improve athlete achievement (Muslihin, 2017). Thus, learning through the training process for a coach needs enrichment and continues to be carried out, so that it can help carry out the duties of the coach, improve the quality in designing training programs and implementation, and have a positive impact on athletes.

Currently, basic physical training or training theory and methodology is one of the mandatory materials provided at a sports training to be understood and applied by trainers in carrying out training. This is because physical condition is the main factor that needs to be of concern to coaches. Physical condition is the most dominant factor influencing athletes' game skills (Guntoro et al., 2020) and athletes' achievements (Candra & Farhanto, 2021). The components of physical condition include strength, speed, endurance, muscular explosive power, agility, balance, flexibility and coordination, and all physical components must be understood and developed by the coach (Purnomo et al., 2019). This is because, improving the physical condition of athletes is influenced by the training program (Siramaneerat & Chaowilai, 2022; Xiao et al., 2021).

In addition, coaches must also understand the basic concepts of coaching. Coaching theory is the idea of developing a structured training system that can run according to training activities so that it can achieve target specifications, be it physical condition, psychology, and performance characteristics of the athlete (Daulay, 2019). Training theory is the idea that a structured system of training can be formed by combining training activities that target specific physiological, psychological and sport performance characteristics of individual athletes (Sports Coaching et al., n.d.)

A coach's knowledge of basic physical training and coaching theory helps him or her to design a good, systematic training program that suits the needs of the sport. However, in practice there are still many coaches who are weak in understanding the need for training. Based on some of the information above, it can be understood that physical ability is the main factor that needs to be of concern to coaches, and coaches must be able to develop training programs for athletes' physical abilities. Thus, this study aims to determine the effectiveness of basic physical training training on DKI Jakarta sports coaches by analyzing the effect of the level of change in knowledge.

METHOD

This study is a descriptive survey research using quantitative methods to investigate and analyze the effectiveness of the training program that has been provided to increase the knowledge of trainers about basic physical exercises. The research data was obtained by distributing questionnaires before and after training to the research sample, in this case the training participants. The research sample amounted to 44 people. The research data were analyzed using Statistical Product and Service Solutions (SPSS) software version 26. Descriptive statistics were used for analysis related to number, average, percentage, and standard deviation. The Shapiro-Wilk test was used to check the normality of the data. Furthermore, paired t-test was used to determine the difference in mean pretest-posttest scores with the significance level set at $p<0.05$.

RESULTS AND DISCUSSION

Result

Based on the data obtained from the research that has been conducted. The following are the results of descriptive analysis of *pretest* and *posttest* data presented in Table 1.

Table 1. Descriptive Statistics of Pretest and Posttest Data

Variables	n	Mean	Std. Deviation	Maximum	Minimum
Pretest	44	26,07	2,12	31	21
Posttest	44	31,57	2,50	36	25

Based on the data presented in Table 1, it shows that the average pretest score of the research sample was 26.7, while the posttest score was 31.57. Furthermore, data analysis was carried out to determine the increase in the average pretest and posttest scores of the research sample and to see the percentage of effectiveness of increasing the ability of trainers on basic physical training calculated based on the average value of the pretest and posttest.

Table 2. Percentage of Effectiveness of *Pretest* and *Posttest* DataMean Mean

Pretest	*Posttest*	Improved	Effectiveness
26,07	31,57	5,5	21,10%

Based on the data presented in Table 2, it shows that there is an increase in the average *pretest-posttest* score of 5.5. In addition, the results of calculations using the effectivenessformula show a percentage of effectiveness of 21.10% or it can be said that basic physical training is effective

for increasing the knowledge of trainers about basic physical training materials. However, in order for the research results to be more valid, it is necessary to conduct another statistical analysis, namely using the *Paired Samples t Test*. The prerequisite for conducting the *Paired Samples t Test test*, *pretest* and *posttest* data must be normally distributed, so before the *Paired Samples t Test* is conducted, the data normality test is carried out using the *Shapiro-Wilk* test with the results presented in table 3.

Table 3. Normality Test of *Pretest* and *Posttest* Data

Variables	Statistic	df	Sig.
Pretest	0.962	44	0.149
Posttest	0.951	44	0.062

Based on Table 3, the *Shapiro-Wilk* test results show the Sig. *pretest* value of 0.149 and *posttest of* 0.062, with another meaning that the Sig. value is greater than 0.05. These results indicate that the *pretest* and *posttest* data are normally distributed. Thus, the *Paired Samples t Test* can be continued.

Table 4. Paired Samples t Test of *Pretest* and *Posttest* Data

Variables	df	Sig. (2-tailed)
Posttest	44	0.000

Based on Table 4, the results of statistical analysis using the *Paired Samples t Test, the* significant value of the *pretest* and *posttest* is 0.000 ($p<0.05$) so it can be concluded that there isa significant difference between the *pretest* and *posttest values* in the overall research sample data. Thus it can be concluded that, there is an increase in the knowledge of trainers after attending basic physical training.

Discussion

This study aims to determine the effectiveness of basic physical exercise training for DKI Jakarta sports coaches. Based on the results of data analysis, it was found that there was a significant difference between the *pretest* and *posttest* values in the research sample of 0.000 ($p<0.05$). Thus, the results showed that basic physical training was associated with an increase in the knowledge of DKI Jakarta sports trainers about basic physical training materials. The findings of this increase in knowledge can have a positive impact on the development of athlete potential and achievement. This is because training that has a basis in coaching science will understand problems related to

coaching, so that the chances of achievement will be greater(Wira Utama, 2017). Trainers who have a good level of scientific knowledge can design and implement quality training programs, and ultimately produce positive results for athletes. In line with other statements that, the coach is responsible for helping athletes develop their skills, enjoythe experience, achieve their *goals* and maintain them (Guzmán et al., 2022). In addition, basic physical training or training theory and methodology is one of the knowledge that coaches must have. Physical exercise is an effort to achieve the goal of improving the organism and its functions to optimize sports achievement or performance (Muhamad Abdurrahman, 2019).

Competition in sports performance is currently also increasing, and scientists from various disciplines continue to study to find strategies to produce athletes who excel. A coach is also required to continue to increase knowledge about coaching science in order to encourage thedevelopment of athlete achievement. Increasing science coaches can assist in finding solutions for coaches to deal with athletes who may not have reached their potential (Taragos & Strand, 2021). Given, the many tasks of coaches ranging fromcompiling and applying training programs, athlete achievement, identification, and development of athlete talent. Thus, attending training provides an advantage because it will help a coach to carry out optimal tasks

CONCLUSION

Based on the results of the research and data analysis conducted, training on basic physical training materials can increase significant improvements related to the knowledge of DKI Jakarta sports coaches. The results of this study can provide valuable guidance for sports organization administrators to increase the knowledge of sports trainers in an effort to produce outstanding athletes.

REFERENCES

Banuwa, A. K., & Susanti, A. N. (2021). Evaluation of Pre-Test and Post-Test Scores of New SIGA Technical Training Participants at the BKKBN Representative of Lampung Province. Widyaiswara Scientific Journal, 1(2), 77-85.https://doi.org/10.35912/jiw.v1i2.1266

Candra, A. T., & Farhanto, G. (2021). Analysis of KKGO Muncar Athlete Achievement Based on Physical Condition Level and Anthropometry. Jp.Jok (Journal of Physical Education, Sports and Health), 4(2), 195-209. https://doi.org/10.33503/jp.jok.v4i2.1300

Conroy, D. E., & Coatsworth, J. D. (2007). Assessing Autonomy-Supportive Coaching Strategies in Youth Sport.

Daulay, B. (2019). Basic Fundamentals of Exercise in Sports Coaching. 3(5), 42-48.

Gu, S., Peng, W., Du, F., Fang, X., Guan, Z., He, X., & Jiang, X. (2023). Association between coach-athlete relationship and athlete engagement in Chinese team sports: The mediating effect of thriving. PloS One, 18(8), e0289979. https://doi.org/10.1371/journal.pone.0289979

Guntoro, T. S., Muhammad, J., & Iy Qomarrullah, R.'. (2020). Physical and psychological ability factors supporting the skills of elite football athletes in Papua Province. Journal of Learning Research, 6(2), 390-406. https://doi.org/10.29407/js_unpgri.v6i2.13765

Guzmán, J. F., Madera, J., Marín-Suelves, D., & Ramón-Llin, J. (2022). Effects of a notational analysis-based intervention on coaches' verbal behavior according to physiological activation during competition. Heliyon, 8(10). https://doi.org/10.1016/j.heliyon 2022.e11077

Heri Yusuf Muslihin. (2017). Training of Trainers and Athlete Achievement. Proceedings of the 2nd International Conference on Sports Science, Health and Physical Education (ICSSHPE 2017), 2, 199-202. https://doi.org/10.1037/0022-0663.84.3.290

Sports Coaching, P., Sports Science, F., Agus Prianto, D., & S-, Mp. (n.d.). The Effect of Tabata Circuit Training Exercises on Increasing Agility in Futsal Players Sakir Romdani.

Macdonald, D. J., Côté, J., & Deakin, J. (2010). The Impact of Informal Coach Training on the Personal Development of Youth Sport Athletes.

Muhamad Abdurrahman, F. S. R. A. W. (2019). 16190-36068-1-SM. Indonesia Sport Journal, 2(2).

Purnomo, E., Gustian, U., & Puspita, I. D. (2019). The Effect of the Exercise Program on Improving the Physical Condition of Porprov Kubu Raya Bolatangan Athletes. Journal of Sport and Exercise Science, 2(1), 29-33. https://journal.unesa.ac.id/index.php/jses

Sabiston, C. M., Lucibello, K. M., Kuzmochka-Wilks, D., Koulanova, A., Pila, E., Sandmeyer-Graves, A., & Maginn, D. (2020). What's a coach to do? Exploring coaches' perspectives of body image in girls sport. Psychology of Sport and Exercise, 48. https://doi.org/10.1016/j.psychsport.2020.101669

Society of Health and Physical Educators. (2016). Domains, standards and benchmarks. http://www.shapeamerica.org/standards/coaching /coachingstandards.cfm

Siramaneerat, I., & Chaowilai, C. (2022). Impact of specialized physical training programs on physical fitness in athletes. Journal of Human Sport and Exercise, 17, 435-445. https://doi.org/10.14198/jhse.2022.172.18

Taragos, M., & Strand, B. (2021). Benefits of Attaining Coaching Certification. https://www.researchgate.net/publication/348607850

Wira Utama, M. (2017). Analysis of Basic Technical Ability to Play Football in 16 Year Old Players. Kinesthetic: Scientific Journal of Physical Education, 1(2), 2017.

Xiao, W., Soh, K. G., Wazir, M. R. W. N., Talib, O., Bai, X., Bu, T., Sun, H., Popovic, S., Masanovic, B., & Gardasevic, J. (2021). Effect of Functional Training on Physical Fitness Among Athletes: A Systematic Review. In Frontiers in Physiology (Vol. 12). Frontiers Media S.A. https://doi.org/10.3389/fphys.2021.738878