

Development Model Learning to Train Pencak Silat Tapak Suci

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Abstract

The inappropriateness of early childhood athlete training has a negative impact for athletes, especially the learning to train stage of 9-12 year old boys and 8-11 years old girls on psychological aspects, physiological aspects and physical aspects. The purpose of this research is to improve basic motion skills and produce a product of the learning model book to train pencak silat tapak suci. The method used by Ploomp's Research and Development. (1) Training needs of athletes and coaches (2) Development stage (3) Assessment stage (4) Systematic and reflection. The results of the study were hand games, types of foot games and combination games in support of improving motion skills with standard pre-test deviation of 14.5 and post-test 7.2. Analysis of T-test test data showed a sig value = 0.000 because the sig value < 0.05 then H0 was rejected and it was concluded that there was a significant difference in training using the learning to train model, and there was an increase in the mean pre-test score to the post test with a value of 41.8 to 80.36 so that the learning model to train the Sacred Site significantly improved the ability of basic motion and was very good and worthy of use by the kader of tapak suci trainers.

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INTRODUCTION

Tapak suci become compulsory extracurriculars in primary schools, this is good for attracting athletes at an early age, but there are many mistakes when from an early age the concept of specialization has been applied. Elite Alets still need multilaterals as advocates to prevent injury, in Rugg (2018) research as much as 15% have a lower risk of injury compared to athletes who focus on only one cabor 85% more prone to injury than 237 athletes. Multilateral training programs are the foundation for comprehensive skills development (Bompa dan Buzzichelli 2018; Jayanthi et al. 2019).

Based on the preliminary questionnaire analysis 32 kader of tapak suci warriors 65% stated that they do not have a material reference book, 68% of coach kader do not have an official certificate and 66% of parents, coaches and institutions want the child to be a champion at an early age. This resulted in irregular learning to train training programs can be applied. In the long run early specialization program adversely affects psychological aspects, physiological aspects and physical aspects (Iswana dan Siswantoyo 2013). Psychological aspects where the child's mentality is not ready to face a bigger opponent or looks better so it is not ready to suffer defeat, boredom so that it stops at a young age, stress training (Jayanthi et al. 2013) with the intensity given like an adult achieves achievements at an early age (Burton dan Raedeke 2009; Crane dan Temple 2015; Hughes 2008; Payne dan Isaacs 2016).

Excessive performance results in the physiological athlete experiencing enlarged blood vessels in the athlete's body and experiencing hormonal disorders resulting in muscle hypertrophy and narrow unilateral organ function (Bompa dan Carrera 2015). In Law UU No 3 of 2005 the National Sports System that Sports Achievement is carried out coaching and development in a planned, tiered and sustainable with the support of sports science.

Long term athlete development (LTAD) programmed in Canada successfully made an impact at the 2010 winter Olympics by finishing first (Balyi, Way, dan Higgs 2020; Kidd 2013), a

policy released in 2002 Sport Canada also established participation and excellence in sports, general health and recreation education (Norris 2010).

Physical, technical, tactical and mental are the main elements of athletes in achieving achievements, being a champion is a process that is passed not instantly, must be passed gradually systematized and well programmed (Balyi et al. 2020; Bompa dan Buzzichelli 2019; Hadi 2011). Early physical formation of athletes needs to be considered karekteristic development of the athlete's biological age in order to develop well, physical abilities affect the motor abilities of athletes (Lloyd et al. 2016) if physical development is trained according to the character of development is an important foundation for its growth (Van Hooren dan De Ste Croix 2020; Vanagosi 2016).

Based on case literature studies and observations conducted in the community, it is necessary to develop a training model book on training models that fit the learning to train pencak silat tapak suci of 9-12 years of men and 8-11 years of girls.

METHODS

The method used is the development of research and development used to produce certain products and examine the effectiveness of the product (Sugiyono 2018). The technique of analyzing the feasibility data of the learning to train model book of the tapak suci uses quantitative data analysis of product effectiveness tests against the basic motion of tapak suci and qualitative data based on closed and open questionnaires through google form and interviews of trainer kader respondents. Research using plomp development design that is considered effective and efficient in developing book products (Plomp 2013). The plomp development procedure in this study begins with 1) Preliminary research, 2) prototype stage, 3) assessment stage, 4) systematic documentation and reflection.

Preliminary research gathers information on library study analysis, field studies, and trainers. Literature studies in collecting library data, reading, recording and managing materials to

develop a model of leaning to train tapak suci. Theoretical basis of several sources of books and national and international journals on learning to train models in balyi (2020) long term athlete development.

Questionnaire needs through characterisitk VARK four kategory in the kader of trainers in understanding visual, aural, read and kinesthetic (Ismantohadi et al. 2015).

Table 1. Questionnaire needs of kader of Coaches

VARK Style	Information
Visual	easily understand exercise materials with the help of images and charts
Aural	easily learn the training materials when equipped with moving animations and videos
Read	easy to understand the material with a lot of reading
Kinesthetic	easy to understand the material if performing movements or performing vidio actions

Source: Primary Data Analysis 2021

The typeface consists of Comic Sans Ms, Times New Roman, Arial Rounded and Microsoft JhengHei. The selection of the color of the trainer kader consisting of blue, red green and yellow in the form of a google form questionnaire distributed by the kader of coaches tapak suci rondon sampling with the number of 20.

Expert validation questionnaire on the development of a learning model to train tapak sucideveloped in testing the level of validity. The expert validity questionnaire involves 5 expert validators, namely 2 material experts, 2 media experts and 1 kader trainer member. Validators play a role in providing assessments and suggestions in the development of a learning model to train tapak suci.

Questionnaires for material experts, sports practitioners and senior warriors of tapak suci are required to obtain quality data on the development of the learning model to train tapak suci from elements of sports academics and senior members of tapak suci warriors. Questionnaires for media experts, practitioners of the pencak silat book media are used to obtain validation regarding the flipbook model of learning to train tapak Suci. Questionnaire of practitioners kader of trainers, kader of trainers as users and implementing to their students is necessary for validation of conformity data and effectiveness to the implementation of learning models to train tapak suci. The effectiveness test of the learning to train tapak suci model for early childhood athletes amounted to 25 athletes from four branches of exercise, beginner athletes of early childhood tapak suci aged 9-12 years old boys and 8-11 years old girls. Researchers

organized training activities, by conducting pretest by implementing training leaning to train model of tapak suci based on literacy and advanced technology by kaders of trainers who have used the learning to train model. To obtain the results of prodak effectiveness data with post test basic motion skills of tapak suci, jurus katak, ikan terbang menggoyang sirip, ikan terbang menjulang angkasa, harimau membuka jalan.

Data analysis techniques in this research effectiveness test is comparative descriptive analysis using parametic statistics of T-test sample tests. Quantitative descriptive analysis uses a likert scale with a scale of 5 to 1, which is very well graded to very under-presented in table 2, because the data is ordinal using the median or mode.

Table 2. Training model scoring and scoring criteria

Score and Scoring criteria	
Score	Criterion
5	Excellent
4	good
3	enough
2	less
1	Very lacking

Source:Noramogey. Coordinator, LTDI, (1998)

The use of *E_Book learning to train models* directly connected through the internet link and explanation of the training model on the image when clicked can be directly connected via youtube.



Figure 1. Training Model Video View

RESULTS AND DISCUSSION

The product assessment phase is already planned, developed and ready for validation by experts and tested by analyzing the feasibility of the learning model to train tapak suci such as table 3.

Table 3. Overall Mode Score Validator Rating

No.	Validation and Trial Stages	Score Mode
1	Material Expert Validation	5
		4
2	Media Expert Validation	5
		4
3	Coach kader response	5
4	One to one Evaluation	5
5	Small Group Evaluation	4
6	Field Trial Evaluation	5

Source: Primary Data Calculation Results 2021

Based on the feasibility indicator table 2 validation expert material I score mode 5, expert material II score mode 4, media expert I score mode 5, media expert II score mode 4 and response kader trainer score mode 5, so it can be concluded validation experts state that the model learning to train tapak suci can be tested. Dick and

Tabel 5. T-Test Results of Basic Motion SkillsN 25

0		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
25	Equal variances assumed	23.944	.000	-11.894	48	.000	-3.856.000	324.185
	Equal variances not assumed			-11.894	35.320	.000	-3.856.000	324.185

Cerry development trials with three steps, individual trials obtained excellent 5 criteria mode score, small group trials of good 4 criteria mode score and 5 criteria mode score field trials were excellent.

Initial documentation, athletes numbered 25 conducted Pretest after it was known the results of basic movement skills tapak suci and then in the training for 2 weeks by a kader of trainers by applying a model of learning to train tapak suci. The results of basic motion skills summarized in the distribution of skill results can be seen in the following table:

Table 4. Pretest and Posttest Distributions

N	Valid	25	
	Missing	0	
	Pretest Results		Posttest Results
Mean	418.000		803.600
Median	450.000		820.000
Minimum	20.00		61.00
Maximum	68.00		91.00

Source: Primary data analysis 2021

The results of the analysis in table 4 can be seen that the pretest value has the lowest value of 20 and the highest value of 68 and the average of 41.8 and the median of 45. While the posttest score has the lowest score of 61 and the highest 91 and the average of 80.36 and the median of 82. The T-Test is tied to the results of basic motion skills of The tapak suci data analysis with the T-test parametric statistical test.

The effectiveness of table 5 of the Learning to train model of The tapak suci shows the value of F homogeneity test result of 23,944 and sig = 0.00 because the sig value < 0.005 then H0 is rejected and it is concluded that the pretest and posttest data have unequal variations.

DISCUSSION

The seven-stage framework to achieve Peak Performance at the age that should be in long term athlete development (LTAD), the three early stages of recreation stream are active start 0-6 boys and 0-5 year girls, FUNdamentals 6-9 years boys 8-5 years girls, and learning to train 9-12 year old boys 8-11 year old girls. Recreation stream where athletes at this age are independent and without the pressure of rules in more fun activities (Hills 2010).

The learning to train model recommends a multilateral training foundation for early childhood athletes (Salaj, Krmptotic, dan Stamenkovic 2016). Multilateral foundations before early childhood towards specialization training to maximize the physiological and psychological foundation required in his career gained long-term victories (Bompa dan Buzzichelli 2018; Impellizzeri, Marcora, dan Coutts 2019).

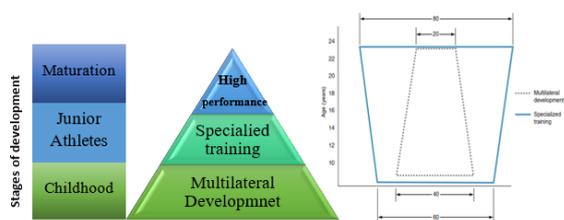


Figure 2. The relationship between specialized and multilateraal traning. (Bompa dan Buzzichelli 2019)

Figure 2 illustrates the important stages that should not be avoided in providing an early athlete training model. The development of multilateral training becomes a specialization in delivering athletes to obtain needs according to their stages in acquiring basic motion skills (Balyi et al. 2020; Bompa dan Buzzichelli 2019; Seiler dan Kjerland 2006).

Leaning to train orients the recreational stage by adapting the basic motion of the tapak suci, a sports skill that depicts athletes thirsty for learning overall motion skills. Simple and fun workout modifications make athletes not bored in training, when the heart is happy and happy it will be easier to make the athlete's response in capturing the training material. The main point of skill this stage with simplified games, developing endurance, speed, strength with the body itself, general sports skills (multilateral) and flexibility exercises (Balyi et al. 2020).

Martial arts is synonymous with sports that impress hard with body contac, researchers designed a model of learning to train avoid violence and hostility, generate feelings of pleasure and spiritual education and foster an interest in practicing pencak silat tapak suci (Budiarti, Handini, dan Dlis 2018). have the meaning of the attitude of flora and fauna consisting of eight names jurus katak, mawar, ikan terbang, harimau, rajawali, lembu, merpati and naga. Pencak silat basic motion skills are designed to be fun and increase mastery of basic motion skills by using learning to train models that researchers develop from hand exercises, types of foot exercises and types of combination exercises.

Early childhood is the next seed of future generations, so that the next generation of the future is better then adjusting the characteristics of age needs to be noticed. The leaning to train stage is the golden age of athletes in achieving skills focusing on technique and skills development.

Long term athlete development at the learning to train stage becomes one of the models that should be run by a kader of tapak suci trainers. The concept of fun training for early childhood, multilateral and basic movement skills of the tapak suci according to karekteristiknya (Salaj et al. 2016), free of independence and fun while honing his skills (Hills 2010).

It is very important to open the scientific insight of the kader of trainers in providing training materials (Isoard-Gauthaur, Guillet-Descas, dan Gustafsson 2016),with sports science model learning to train tapak suci, especially the age of 9-12 years old boyss 8-11 years girls.

CONCLUSION

This study resulted in: (1) five types of hand games, (2) ten types of foot games and (3) six types of combination games with the literacy design of Ebook. All three types of games are considered very good and worthy to be used by the tapak suci coaching kader to be implemented to athletes aged 9-12 years boys and 8-11 years old girls.

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