

The Development of Practical Modules on Creative Step-Up to Enhance Lampang IPE Students' Agility in Basketball Skills

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ABSTRACT

Research on the development of creative step-up training sets to enhance physical fitness in agility in basketball for students of the Institute of Physical Education Lampang. The objectives of this study are: 1) Develop a creative step-up training set to enhance physical fitness in agility in basketball. For students of the Institute of Physical Education Lampang 2) Compare physical fitness in agility in basketball of students of the Institute of Physical Education. And 3) study the satisfaction of students towards using creative step-up training to enhance physical fitness in agility in basketball for students of the Institute of Physical Education Lampang. The population includes physical education students Faculty of Education, Institute of Physical Education Lampang, 2nd year, 1st semester, academic year 2561, 3 classrooms, 90 students. The sample groups were physical education students. Faculty of Education, Institute of Physical Education Lampang, the second year that enrolled in the course of skills and teaching basketball (PE041045), 30 people were obtained from simple randomized by lottery method. The tools used in this research are 1) Creative Step-Up training set to enhance physical fitness in agility in basketball. Divided into 10 styles Physical fitness in agility in basketball 2) Evaluation form of physical fitness in agility in basketball of students of the Institute of Physical Education and 3) Satisfaction Questionnaire for Creative Step-Up In order to enhance physical fitness in the agility of basketball in 20 questions. The statistics used in the research were mean, standard deviation and hypothesis testing t-test statistics.

The results showed that

1. The development of creative step-up training sets to enhance physical fitness in agility in basketball for students of the Institute of Physical Education. Lampang has 10 training sets and every training set is 89.50 / 95.00.
2. Comparison of physical fitness in agility in basketball at the Institute of Physical Education students Lampang Having an average score after studying higher than before learning at the statistical significance of .05.
3. Student satisfaction towards using creative step-up training to enhance physical fitness in agility in basketball for students of the Institute of Physical Education Lampang, which is at a high level, has an average of 4.30 and standard deviation 0.57.

Key words : Creative Step-Up Training Kits, Physical fitness, Agility, Basketball

Backgrounds and Importance of the Study

Basketball is a popular sport. Athletes rely on the basic fitness related sports, including jumping power, to be able to jump up and collect uninitiated balls from rebounds or jump to prevent scoring (block). In addition to that, reaction time is a fundamental sporting

performance on the other side that represents the ability to evade opponents who come to a defense and agility that is the ability to move, change direction or evade opposing players to maneuver to find space to score. By moving from the decision-making moment to the period that moves to the desired area in line with what comes to stimulation is a side of fitness called

reactive agility and the change of direction speed. Bompá (2006) said speed, agility, reaction time and leg muscle power are much-needed performance in basketball players. Athletes must have good physical fitness, that is, speed and agility, such as changing direction quickly and correctly.

Agility is part of an important physical fitness, as Charoen Prakashrat (2004, page 12) defines physical fitness as physical fitness, referring to the body's ability to perform heavy or long-lasting activities. This includes features of a person's health-related fitness, which includes: Endurance of the respiratory and circulatory system Muscle strength Muscle endurance, weakness, body components. There is also another element that will help effectively perform movement skills in a livelihood or athletic skills and lead to completeness and success in moving: motor fitness, which is the ability of each individual to move effectively and it is something that can be trained or improved on its own, which consists of a movement relationship, balance, agility, accuracy, reaction, rhythm, movement and power.

Based on studies of relevant documents and research, it found that basketball is a sport that requires agile physical fitness to quickly change positions and directions in short-distance movements. To effectively run away from opponents. Without causing injury and losing the opportunity to score. For that reason. Therefore, basketball players should have good agility, physical fitness as the basis for playing effective basketball. Therefore, researcher, as a basketball instructor and trainer, recognize the importance of agility towards basketball, and are interested in conducting research on the development of creative step-up training kits to enhance physical fitness, agility in basketball, for students of the Institute of Physical Education, Lampang Campus, to help improve their physical fitness in agility, to benefit students, and to use the results as a way to improve and increase their capacity.

Objectives of research

1. To develop creative Step-Up training kits to enhance physical fitness in basketball agility for students of the Institute of Physical Education, Lampang Campus.

2. To compare physical fitness in agility in basketball of physical education students. Lampang Campus

3. To study students' satisfaction with the use of creative Step-Up training kits to enhance their agility in basketball.

Research Methodology

1. Population and sampling

The population used in this research was students in physical education, Faculty of Education, Institute of Physical Education, Lampang Campus. 2nd year enrolled in basketball skills and teaching, semester 1, academic year 2018, totaling 90 persons

The samples used in this research were students in physical education, Faculty of Education, Institute of Physical Education, Lampang Campus. 2nd year enrolled in basketball skills and teaching courses 30 people were obtained in a simple random by using the lottery method.

2. Tools used for data collection

2.1 Creative Step-Up training kits to enhance physical fitness in agility in basketball for students of the Institute of Physical Education Lampang campus are divided into 10 forms as follows: 1) Home-shaped, Creative Step-Up Training Kits 2) Pyramid-shaped, Creative Step-Up Training Kit 3) Dice-shaped, Creative Step-Up Training Kit 4) Rocket-shaped, Creative Step-Up Training Kit 5) Clock-shaped, Creative Step-Up Training Kit 6) Star-studded- shaped, Creative, Step-Up Training Kit 7) Rail-Road-shaped, Creative Step-Up Training Kit 8) Nazi shaped, Creative Step-Up Training Kit 9) Kite Chula shaped, Creative Step-Up shaped, Training Kite and 10) Rubic's shaped, Creative Step-Up Training Kit.

2.2 Assessment of physical fitness in basketball agility for students of the Institute of Physical Education, Lampang Campus.

2.3 Student satisfaction questionnaire on the use of creative step-up kits to enhance their agility in basketball for students at the Institute of Physical Education, Lampang Campus, There are 20 questions.

3. Research methods

1. The researcher clarified their understanding by students of the Institute of Physical Education at Lampang Campus. 30 people with learning activities with creative step-up training kits to enhance physical fitness in basketball.

2. Test basketball skills before training with the agility, physical fitness test by using a training kit.

3. Conduct a trial of creative step-up training kits to enhance your fitness in basketball in semester 1, academic year 2018, 8 weeks, 1 hour and 30 minutes a week and tested after training, all 10 training sessions for 4 hours and 30 minutes, including 36 hours by the researchers to control the student training.

4. Ask students for their satisfaction with their studies using creative Step-Up training kits to enhance their physical fitness in basketball. Using a satisfaction questionnaire created by the researcher, 20 questions

4. Data collection

1. Tested agility, basketball before training with creative step-up training kits.

2. Organize learning activities using creative step-up training kits to enhance your agility in basketball, 10 training kit and tested for agility after all training sessions, with a record of training results.

3. Ask students for their satisfaction with their studies using creative Step-Up training kits to enhance their physical fitness in basketball.

Findings

1. The results of the development of creative step-up training kits, to enhance physical fitness in basketball agility for students of the Institute of Physical Education, Lampang Campus.

The researcher developed a creative Step-Up training kit to enhance their agility in basketball for students of the Institute of Physical Education, Lampang Campus, divided into 10 training kits as follows: 1) Home-shaped, Creative Step-Up Training Kits 2) Pyramid-shaped, Creative Step-Up Training Kit 3) Dice-shaped, Creative Step-Up Training Kit 4) Rocket-shaped, Creative Step-Up Training Kit 5) Clock-shaped, Creative Step-Up Training Kit 6) Star-studded- shaped, Creative, Step-Up Training Kit 7) Rail-Road- shaped, Creative Step-Up Training Kit 8) Nazi shaped, Creative Step-Up Training Kit 9) Kite Chula shaped, Creative Step-Up shaped, Training Kite and 10) Rubic's shaped, Creative Step-Up Training Kit and there was an analysis of the effectiveness of creative step-up training kits to enhance physical fitness in basketball agility for students of the Institute of Physical Education, Lampang Campus. As shown in Table 1.

Table 1 Analysis of The Effectiveness of Creative Step-Up Training Kits to Enhance Physical Fitness in Basketball for Students of Physical Education Institute Lampang Campus.

Test results	Full Score	\bar{X}	S.D.	Percent
Test scores during training kit used	100	16.50	0.91	89.50
Test scores after using training kits	100	16.90	0.99	95.00

From Table 1, it was found that the creative Step-Up training kit to enhance the physical fitness of agility in basketball for students of the Institute of Physical Education, Lampang Campus. Efficiency equals 89.50/95.00

2. Comparison of physical fitness in agility in the basketball of physical education institution, students Lampang Campus, **as shown in Table 2.**

Table 2 Comparison of Physical Fitness in Basketball of Physical Education Students Lampang Campus.

Training Results	Number of Students	Full Score	\bar{X}	S.D.	t
Pre-training test	30	20	9.68	1.88	-3.43**
Post-training test	30	20	16.95	1.81	

** Statistically significant at .05

From Table 2, the results of the comparison of physical fitness in agility in the basketball of physical education students were found. Lampang Campus The average score after class was statistically significantly higher than before class at .05.

3. The results of the student satisfaction study on the use of creative Step-Up training kits to enhance their agility in basketball for students of the Institute of Physical Education, Lampang Campus, appear as shown in Table 3.

Table 3 Students' Satisfaction at The Institute of Physical Education Lampang Campus on the Use of Creative Step-Up Training Kits for Students of The Institute of Physical Education Lampang Campus.

No.	Estimate list	\bar{X}	S.D.	Satisfaction level
1.	learning subject	4.25	0.46	high
2.	Learning Management Process	4.35	0.61	high
3.	learning media and learning resources	4.17	0.63	high
4.	Learning Measurement and Evaluation	4.18	0.68	high
Overall		4.30	0.57	high

From Table 3, students' satisfaction with the Institute of Physical Education Lampang Campus towards the use of creative Step-Up training kits for students of the Institute of Physical Education Lampang campus is very high, with an average of 4.30 standard deviations of 0.57.

Summary and discussion

Summary

1. Developing creative Step-Up training kits to enhance physical fitness in basketball agility for students of the Institute of Physical Education Lampang Campus, 10 training kits and all training kits as effective as 89.50/95.00.

2. Comparison of physical fitness in basketball of physical education students Lampang Campus The average score after class was statistically significantly higher than before class at .05.

3. Students' satisfaction with the use of creative step-up training kits to enhance their agility in basketball for students at the Institute of Physical Education, Lampang Campus. It is very high, with an average of 4.30 and a standard deviation of 0.57.

Discussion

1. As a result of the development of creative Step-Up training kits to enhance physical fitness in basketball agility, for students of the Institute of Physical Education, Lampang Campus, 10 training kits and all training kits that have achieved the same efficiency as 89.50/95.00, which meets the criteria set out, possibly due to creative step-up training kits, to enhance physical fitness in agility in basketball that the researchers created. The development of the procedures in accordance with Chaoyong Promwong (1996 : 119) said that there are four steps to produce a series of activities: content analysis, teaching planning, Produce teaching materials, and test the effectiveness of the activity series. The researcher used a skill set

designed by the researchers to organize the event. It is divided into the following steps: Step 1: Demonstration of skills or actions. The researchers will demonstrate to students the overview from start to finish. By separating the skills into steps for students to see, Step 2: demonstration and allowing students to perform sub-skills by demonstrating and explaining slowly to students and learn the process of skills training accordingly. After that, students will be required to perform step-by-step skills, according to the researchers³ Step 3: Allow students to perform sub-skills without demonstrations, Step 4: Methodology techniques At this stage, after the researchers observed the students' skills, The researcher will also tell students the techniques of basic skills, Step 5: Allow students to link small skills into complete skills, allowing students to practice several times from start to finish, repeatedly practicing to complete their skills, the findings are consistent with a research study by Tawan Lopetch (2010) study, Effects of basketball skills training on mobility Using the sample as a female basketball player. Rajamangala University-Lanna, Payap Chiang Mai, 12 people are divided into 2 groups of 6, with the experimental group practicing agility programs in conjunction with basketball skills training and the control group practice basketball skills, performs 8 weeks of training. The results showed that after training in accordance with the agility program, together with basketball skills training in the trial group, there was agility and fast basketball dribbling skills increased statistically significantly, $p < .01$ after training in a regular basketball training program in a normal control group found to be agile and fast parenting skills increased statistically significantly, $p < .01$, when comparing experimental groups with control groups. There was no statistical difference.

2. Based on the comparison of physical fitness in agility in basketball by students, the Institute of Physical Education Lampang Campus The average score after class was statistically significantly higher than before class at .05. This may be due to creative Step-Up training kits to enhance physical fitness in basketball agility for students of the Institute of Physical Education, Lampang Campus. Effective according to the 80/80 benchmark when used to organize practical skills instruction activities in basketball. This gives students higher basic

basketball skills, in line with Tisana Khammanee (2008 : 321), it is said that the steps that instructors take to provide students with objective learning in different ways are that many learners learn material, see the practicality, learning occurs by seeing the obvious consequences of their thoughts and actions, firsthand experience, participate in learning activities, learn about things in a fun way, have studied for yourself, learners learn in real conditions and Hands-on Lead to effective student development. In line with the concept of De Cecco (1974 : 272-279; referred to in Arporn Jaiteng. 2007 : 68), it is said that the skill teaching procedure, especially the training process, is to be followed by the stage from easy to difficult. From basic skills to complex skills Sub-skills should be provided first and then all practiced. In line with the findings of Kanitha Mulmanus (2017), research on the effects of agility training in basketball players. The research aims to study the effects of agility training on basketball players, dividing the sample into two groups: a group of 15, designating group 1 as a control group (a group that practices, basketball training programs) and group 2 is an experimental group (a group that trains in accordance with the basketball training program alongside the agility training program), with training for 8 weeks, 3 days a day, performing agility tests before training after the 4th and 8th week of training. The results showed 1) Average agility test scores between control groups and trial groups. The pre-training and post-week 4 training periods were no different, but in the post-week 8 training period there was a statistically significant difference at .05 and 2) In the pre-training session, after week 4 and 8 is no different. The agility test scores of the trial group, which trained normally alongside the agility training program in the pre-training period after weeks 4 and 8, differed statistically significantly at .05. The average of the agility test differed by at least one pair; therefore, the test was conducted in pairs with the method of Tukey B, it appears that before training with after week 4 training and before training with after week 8 training, there was a statistically significant difference at .05.

3. Based on the results of the study, students' satisfaction with the use of creative step-up training kits to enhance their physical fitness in basketball for students at the Institute of Physical Education, Lampang Campus. The

average is 4.30 and the standard deviation of 0.57 indicates that students at the Institute of Physical Education, Lampang Campus, study using creative Step-Up training kits, to strengthen your fitness in basketball, be satisfied with creative Step-Up training kits, to strengthen the physical fitness of agility in basketball at the highest level, possibly due to creative step-up training kits, to strengthen the physical fitness of agility in basketball, you can use the Energy players to improve your fitness in basketball and there are training arrangements from easy to rare. To attract attention, use a short training exercise so as not to get bored. This allows students to perform the sub-skills of basketball. Students are confident in learning and are satisfied with creative step-up training kits to enhance their agility in basketball. In line with the research of Supakorn Phosrithong (2014). The effects of warming up with weight and elastic exercises on the reactionary agility and jumping abilities of basketball players. This research aims to study and compare the effects of warming up with weight exercise machines, elastic and warm-up, activity patterns, movement towards reactive agility and the ability to jump in basketball players. There are three different forms of warm-up, including warming up using Smith machine squats at 5RM heaviness, warm up using elastics with squats at a heaviness of 5RM heaviness and warm-up activity patterns, movements. The results showed that after the three forms of warm-up, the average ability to jump was found. There is a difference by warming up the activity patterns of movement. The average and standard deviation of the maximum jump height (0.423 ± 0.064 meters) is second only to warming up using elastics, with squats (0.408 ± 0.060 meters) and warming up using Smith machine squats (0.404 ± 0.065 meters) respectively, but found no difference in the time mean of the reactionary agility test in the warm-up of the three samples, statistically significant at 0.05.

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