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Contributions of Physical Condition to Gymnastics Basic Skills of College Students

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***Abstract*— Physical conditions are considered a very important foundation for developing techniques. The aim of this study to determine the contribution of physical condition to Gymnastic basic skill. This Study is survey and used descriptive qualitative method. 82 students, whose aged 18-19 years and study in Sport Coaching Education Department, Sport Science Faculty of Universitas Negeri Yogyakarta, recruited as samples. Data collection techniques used tests and measurements of biomotor and gymnastic basic skills. Data analysis techniques using linear regresion. The results showed that there is significant effect of physical condition with basic skill of Gymnastics**

Keywords*— *Gymnastics, physical condition, basic skill

I. INTRODUCTION

In achieving maximum movement skills in a sport is influenced by several factors. These factors need to be known in order to maximize the achievement of the learning process. Gymnastics is one of the sports that is taught to sports students. Basic gymnastics skills courses are Fakulter courses that must be taken by all students of the Faculty of Sport Science, Yogyakarta State University. The material given specifically for PKO Study Program students is Fitness Exercise and Forming Gymnastics, the theoretical lectures delivered include the basic motion techniques in gymnastics formation. To be able to maximize the achievement of basic motion learning exercises requires a study of the factors that affect the achievement of learning the motion.

One of the factors that is thought to greatly influence the achievement of movement skills is a physical condition that supports [1]. Physical condition is a very important element in almost all sports including the gymnastics exception. Evaluation results obtained in the basic skills courses of gymnastics there is no maximum achievement of learning basic motion exercises, so it is necessary to do research in an effort to help students achieve maximum learning outcomes [2].

Based on literature studies and data from students in the field, the researcher indicated that the PKO students' physical condition was one of the influential factors. Pre dominant biomotor special gymnastics in PKO students who basically are not only branches of gymnastics finally less trained. Based on these problems the researchers sought to conduct a study of the Contribution of Physical Conditions to the Basic Skills of Gymnastics PKO FIK UNY Students.

II. METHOD

This research includes quantitative descriptive research, because the purpose of this study is determine the contribution of physical condition to Gymnastic basic skill. The research methods used are surveys using tests and measurements. The aim of this study to determine the contribution of physical condition to Gymnastic basic skill. This Study is survey and used descriptive qualitative method. 82 students, whose aged 18-19 years and study in Sport Coaching Education Department, Sport Science Faculty of Universitas Negeri Yogyakarta, recruited as samples. Data collection techniques used tests and measurements of biomotor (physical condition) and gymnastic basic skills. As for the instrument as an indicator of the talent identification of athletes used in the study is: (a) Physical Ability Test (sit and reach, standing balance, broadjump, vertical jump, side step test agility, push up, and sit up; (b) gymnastic basic skill (forward roll, back roll, tiger sprong, kayang, split, Cartwheel, headstand, handstand, roll kip, stut, round off, and handspring.

The collected data is then analyzed using quantitative descriptive analysis techniques by presenting data with tables. The sampling technique was based on a purposive sampling taking into consideration the research objectives. Regression test was applied as part of the data analysis techniques

III. RESULTS

Data analysis in this study is based on linear regression analysis on physical condition data and gymnastic skills of research subjects. based on linear regression analysis shows the following.

TABLE I. LINEAR REGRESSION ANALYSIS RESULT

Variable	***Sig.***	***Explanation***
Physical Ability* Gymnastic Skill	0.032	Significant

From the table above it can be seen that the results of the linier Regresion test showed that physical ability have significant effect on gymnastic skill. this means that good physical condition will be able to support the appearance of good gymnastic skills. if a person's physical condition is not good then his gymnastic appearance will not be maximal.

There is need many factor to be include in artistic. Gynastics talent scouting instrument. gymnastics is a type of complex exercise. there are several components or elements needed to do gymnastic movements. each movement has its own biomotor form and needs. so that the influential biomotor will be in accordance with the type of motion carried out. When learning gymnastics skills one has to stick to methodological principles of complex motor skills acquisition after reaching suitable level of simple motor skills (A. L. Claessens).

The anthropometric traits, somatotype, body composition, and biological maturation characteristics have been useful in the prediction success of the gymnastics competition . These elements have been used widely during the initial identification phase and the training process

IV. DISSCUSSION

Physical condition in terms of physiology is the ability of a person can be known to what extent his ability as a supporter of running sports activities. The physical condition is one of the intact unity of components that cannot be separated just like that, either its enhancement, its maintenance. This means that in an effort to improve physical conditions, all of these components must be developed, although here and there a priority system is carried out according to the state or status of each component and for what needs the state or status needed [3].

Physical ability is important to support psychomotor activity. Skillful movements can be carried out if the physical abilities are adequate. Gymnastics is a physical activity that can help optimize children's development, gymnastic movements are very suitable to help the development of fundamental fundamental movements that are important for physical activity in other sports, especially in terms of controlling attitude and motion effectively and efficiently [4][5].

Gymnastics generally contain skills that contain a rich pattern of motion, which in its implementation is very dependent on 3 components, namely: Locomotor, Non-Locomotor and Manipulative, although the pattern of motion was actually very unlimited, but experts agree that in gymnastics there are at least 7 patterns motion which is very dominant, so commonly called Dominant Movement Patterns. The seven patterns are: (1) Landing, (2) Static Position, (3) locomotor, (4) Swing, (5) rotation, (6) repulsion, (7) height and kites.

If seen from the seven dominant motion patterns above, we can conclude that the most important component is gymnastics is mainly strength, speed and power. These three components are inherently contained in almost all dominant patterns of motion which are characteristic of the appearance of gymnastics [6].

Gymnastics formation in this study uses floor gymnastics, where students perform basic movements that exist on the floor number artistic gymnastics. Movements made include: front roll, rear roll, wheel, tiger sprong, stuut,

Gymnastics formation or also called basic gymnastics is a body exercise that was chosen and created deliberately and planned, arranged systematically and methodically, with the aim to shape the body. The child's body needs to be formed basic attitude and motion first, so that the body is always in the right state of attitude. Understanding the attitude of the attitude of the body in a state of silence and in a state of movement. Silent posture, such as standing, squatting, sitting, and lying down, while posturing, such as walking, running, jumping, jumping, hitting, and kicking [7].

Preventive efforts that can be done so that children avoid mistakes in attitudes and basic movements of the body is to get children to always make the right attitude and movement. We need to be aware of the habits of children, especially in the school environment that can have an unfavorable effect on posture, such as the habit of sitting incorrectly during class lessons, or the habit of carrying a school bag, which can allow children to have kiposis, lordosis, posture or scoliosis [8].

V. CONCLUSION

Physical conditions have an important role in achieving good gymnastic performance. Each movement has different biomotor needs. The trainer must train the dominant biomotor used.

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