Effect of Conditioning on Selected Motor Fitness Components and Playing Ability of Soccer Players

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Abstract

The aim of the study was to find out the effects of Conditioning on Selected Motor Fitness Components and Playing Ability of Soccer Players. To fulfill the purpose of the study 30 Soccer Players were selected from various courses of Degree College of Physical Education College, Amravati (M.S.).The selection of sample was done by applying purposive sampling technique and there age was ranging from 18-28 years. The data were collected on the entire selected subject by Measuring Motor Fitness Components as Speed, Agility, Balance, and Coordination and Playing Ability of Soccer players as Kicking ability for accuracy and Dribbling after 5 week conditioning program. To find significant difference between Pre-test and Post-test Selected Motor Fitness Components and Playing Ability of Soccer Players t-test was implemented. The results of the study revealed that there was significant difference in between the Pre-test and Post-test in the variables as speed (t = 2.895) , Agility (t = 2.83) and Kicking ability (t = 4.45).

KEYWORDS : Motor Fitness Components, Soccer Playing Ability.

Introduction

The terms exercise and physical activity are often used interchangeably, but this article will distinguish between them. Physical activity is an inclusive term that refers to any expenditure of energy brought about by bodily movement via the skeletal muscles; as such, it includes the complete spectrum of activity from very low resting levels to maximal exertion. Exercise is a component of physical activity. The distinguishing characteristic of exercise is that it is a structured activity specifically planned to develop and maintain physical fitness. Physical conditioning refers to the development of physical fitness through the adaptation of the body and its various systems to an exercise program.

Motor-performance fitness is defined as the ability of the neuromuscular system to perform specific tasks. Test items used to assess motor-performance fitness include chin-ups, sit-ups, the 50-yard dash, the standing long jump, and the shuttle run (a timed run in which the participant dashes back and forth between two points). The primary physical characteristics measured by these tests are the strength and endurance of the skeletal muscles and the speed or power of the legs. These traits are important for success in many types of athletics. Muscular strength and endurance are also related to some aspects of health, as stated above.

A prospect of conditioning brings strength and endurance of skeletal muscles of the trunk helps to maintain correct posture and prevent such problems as low back pain. Minimal levels of muscular strength and endurance are needed for routine tasks of living, such as carrying bags of groceries or picking up a young child. Individuals with very low levels of muscular strength and endurance are limited in the

performance of routine tasks and have to lead a restricted life. Such limitations are perhaps only indirectly related to health, but individuals who cannot pick up and hug a grandchild or must struggle to get up from a soft chair surely have a lower quality of life than that enjoyed by their fitter peers.

The quality of one's athletic performance depends on each individual being in optimum physical condition. Proper conditioning allows the athlete and team to function at the highest possible level. A well conditioned athlete is a successful athlete; a well conditioned team is a successful team. The benefits of conditioning during practice sessions are considered as important as or even more important than the contests. Developing a proper appreciation for benefits of conditioning can carry over into later years and lead to an improved quality of life. The health benefits derived from regular exercise program are well documented. Pursuing lifelong habits are important goals to improve or maintain cardiovascular endurance, muscular strength, muscular endurance and flexibility.

Aerobic Conditioning is a type of conditioning which works at approximately 70 percent to 80 percent of your maximum heart rate for 15 minutes or longer. Many people aim for 30 to 60 minutes cardio workout as the base of their exercise program. Having an aerobic conditioning base helps with activities like jogging, lap swimming and other weight loss workouts.
Anaerobic conditioning is only noticed only after intense tennis rally or football play. It helps you to recover more quickly so you can start your next effort during a game. You improve recovery with interval training; exercising at 80 percent to 90 percent of your maximum heart rate for 30 seconds or so, then recovering for one or two minutes. Anaerobic conditioning also helps your muscle recover; removing some anabolic waste from them between plays and replacing depleted stores of ATP, which helps with muscle contraction. Unlike aerobic exercise, anaerobic training is more sports specific, burning more glycogen than fat, and helps you develop fast twitch muscle fibers.

Statement of the Problem

The present study was stated as, "Effect of Conditioning on Selected Motor Fitness components, & Playing Ability of Soccer Players."

Purpose of the Study

The main purpose of the study was to find out the "Effect of Conditioning on Selected Motor Fitness Components and Playing Ability of Soccer Players."

Hypothesis

It was hypothesized that there might be significant difference in selected Motor Fitness components and playing ability of Soccer Players due to Conditioning Programme.

Methodology

The study was delimited to male soccer players of Degree College of Physical Education, Amravati and their age was ranging from 18 to 28 years. The Study was further delimited to players from the courses as B.P.E 1st year, 2nd year and 3rd year respectively and B.P.Ed. One year. For the purpose of data collection investigator employed Conditioning Program on 30 Male Soccer players who were selected as the

subjects for this research topic. The selection of the subjects was done as Purposive Sampling technique.

Selection of Test and Criterion Measures

a) Motor Fitness Components:-
   1. Speed: - Speed was measured by administering 50 meter dash and the score was recorded in seconds.
   2. Agility: - Agility was measured by administering SEMO agility test and the score was recorded in seconds.
   3. Balance: - Balance was measured by administering Modified Bass test and the score was measured in points.
   4. Coordination: - Coordination was measured by administering Nelson Eye-hand and Eye-foot coordination test and the score was measured in seconds.

b) Playing Ability: - Playing ability was measured by administering L.Heath and G.Rodgers test.
   - Dribbling test.
   - Kicking the rolling ball for accuracy.

Analysis and Interpretation of Data

To find out the Effect of Conditioning on the players the score was tabulated and statistical treatment was given to test the hypothesis. The data were collected from 30 men Soccer players.

Dependent T-test statistical treatment was employed independently for each variable to find out the mean difference between the Pre-test and Post-Test performance of selected group. Following table show results of pertaining data-

Table

Table describes Mean, Mean Deviation, Standard error and t-ratio for the data on 50 meter dash (Speed) , Agility, Dynamic Balance, Eye –hand coordination, Eye-foot coordination and Kicking ability of Soccer Players:

Variables	**Mean**		**M.D**	**S.E**	**t-ratio**
Speed (in seconds)	**Pre-test**	**Post-test**			
	6.805	6.563	0.242	0.836	**2.895***
Agility(in seconds)	12.522	12.499	0.323	0.113	**2.83***
Dynamic Balance	91	93.433	0.63	1.66	0.38@
Eye-Hand Coordination (in seconds)	16.54	16.413	0.126	0.413	0.31@
Eye-Foot Coordination (in seconds)	5.547	5.526	0.0213	0.305	0.07@
Kicking Ability	5.967	6.63	0.963	0.2166	**4.45***

*Significant at 0.05 level Tabulated $t_{0.05}$ (29) = 2.045

@Not Significant at 0.05 Level

The results pertaining to Effect of conditioning on selected motor fitness components and playing ability of soccer players have been presented in the table.

i) The above table reveal that, there is a significant difference between Pre-test and Post-test in the variable as speed (t = 2.895) , Agility (t = 2.83) and Kicking ability (t = 4.45), which are greater than tabulated t-value of 2.045 at 0.05 level of confidence.

ii) The above table also show that, there is no significant difference between the Pre-test and Post-test in the variable as Balance (t = 0.38), Eye-hand Coordination (t = 0.31) and Eye-foot Coordination (t = 0.07) and which are less than tabulated t-value of 2.045 at 0.05 level of confidence.

CONCLUSION

Recognizing the limitations of the study and on the basis of statistical findings the following conclusions were drawn.

There was a significant difference observed between the variables as Agility, Speed and kicking ability for accuracy and dribbling due to 5 weeks conditioning program.

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