



EFFECT OF CIRCUIT RESISTANCE AND COMBINED TRAINING ON PHYSICAL PHYSIOLOGICAL AND PSYCHOLOGICAL VARIABLES AMONG INTERCOLLEGIATE PLAYERS

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ABSTRACT

Physical Fitness is the capacity to carry out responsible vigorous physical activity and includes qualities in pertain to the individual health and well being. Sports training largely depend on Physical Fitness. Physical Fitness improves the general fitness, health, organic functioning capacity, strength, stability of muscular and skeleton system etc. Importance of Physical Fitness or motor abilities is the main criteria in sports training. As per Sebastian Coe - says that, the basis for overall physical fitness is achieved by improving your respiration and your circulation, and to the end the most effective activity is running. The longer you keep running and exercise well the longer you will stay well. Physical Fitness is the basic criteria for every individual in the society. To lead a successful life an individual has to undergo fitness programmes in his daily life. It is an important programme for sportsman. Through fitness a sportsman easily adapts motor abilities and conditioning. Sports specialists traditionally define the term fitness as a physical capacity to perform a task. The types of physical capacities necessary to participate in a sporting contest vary between sports and within sports. From the many components of physical fitness mo.

Keywords:

Introduction

Education may be considered as a lifelong process. It begins at birth and continues throughout life. The child learns through his experience .He gains experience when he comes in contact with different social institutions, persons places and things. Education may also be considered as a product. A person is said to be educated, when he acquires knowledge, skills, attitudes etc. Education is an integral part of human life. It is the basic condition for the development of the "whole man" and vital instrument for accelerating the well - being and prosperity of all, in every direction. Without education man would still be living just like a splendid slave or like reasoning savage. Therefore, it is one of those subjects, which are talked about by all.

A physically fit person is less susceptible to disease. Fitness is almost synonymous with health. It consists of a state of high level and includes the absence of remedial handicaps and disease, optimal functioning of all body systems of a rest and enthusiasm for work and play. It enables an individual to live a contributing, rewarding and self fulfilling life. A sedentary persons muscles are flabby his tissues over burdened with fat, and his heart and respiratory organs deteriorated to the extent that they are barely able to provide enough blood and oxygen to take care of their usual needs. It is not surprising that they are succumbed to a heart attack even in their early age. Exercise is one of the factors that inhibit cardiovascular degeneration. It helps to keep the blood verses elastic and the capillary open Exercise counteracts the effects of anxieties and tensions which stimulate was constriction.

Fitness Components

Physical Fitness, a complex factor, is the ability of any individual to perform his daily tasks with ease and undue fatigue comparatively at faster rate." The sports performance depends largely on physical fitness, which is strength, speed, endurance, flexibility and various coordinative abilities. Sports activity is physical activity, which is not possible without these motor abilities. Therefore the improvement of physical fitness or motor abilities is the principal aim of sports training. The process of improvement of motor abilities is also called conditioning. Improvement of physical fitness also includes the improvement of general health and organic functions as well as increasing the strength and stability of the musculo skeletal system. The physical fitness can be differentiated into general and specific physical fitness. Each sports activity demands different types and levels of different motor abilities and when a sports man possesses these, he is said to have the specific physical fitness. General physical fitness is the level of various motor abilities, regardless of any sport, which the sportsman possesses. The contribution of general physical fitness towards sports performance is indirect. But it should never be overlooked that specific physical fitness depends largely on the general physical fitness.

Physical Fitness is a complex factor

The term components of physical fitness refer to the several key components required to facilitate quality overall 19 fitness. In most traditional circles, there are considered to be five general components of fitness: cardio respiratory endurance, muscular strength, muscular endurance, flexibility, and body composition, although healthy body composition is most often a by-product of the

other components, and is therefore not recognized in some circles as an actual "component" of fitness. Following the five general components of fitness are the components of "motor" fitness, which most affect athletic performance. These include muscular power, speed, balance, coordination, accuracy, and agility. Reaction time is also considered by some to be a component of motor fitness; however, some also contend that it is a type of speed, i.e. "reaction speed". Improvements in endurance, stamina, strength, and flexibility come about through conditioning/training. Training refers to activity that improves performance through a measurable organic change in the body. Concurrently, improvements in coordination, agility, balance, and accuracy are developed through practice. Practice refers to activity that improves performance through changes in the nervous system. Power and speed are adaptations of both training and practice.

Fitness and Present

Today man indulging in activities to keep him for his nature of work does not give him much scope for physical exertion. Most of his works are done by a machine or a computer and he has to simply sit with it just to coordinate with the work done by it. Most of the cultivated lands have been converted to concrete forests of factories and houses and the percentage of physical work in the existing field is reduced to a large extent with the advent of modernization. Man is depending upon a transport system even to cover a small distance and there by refusing in cardiovascular system to increase pulse rate and blood flow. He has become very busy since far off place are through closer by aero planes and he forests to keep a time table in his routine for physical exercises.

Mean Score of Pre and Post Test on Motor Ability Components and Physiological of College Men kabaddi In Different Groups

| VARIABLES | TEST | DIFFERENT GROUPS | | | | | |
|------------------------------|----------|------------------|-------|-----------------|-------|-----------------|-------|
| | | CONTROL GROUP | | SLOW-CONTINUOUS | | FAST CONTINUOUS | |
| | | MEAN | SD | MEAN | SD | MEAN | SD |
| SPEED | Pre-test | 8.476 | 0.258 | 8.529 | 0.212 | 8.587 | 0.164 |
| | Pre-test | 8.558 | 0.253 | 8.097 | 0.041 | 7.762 | 0.616 |
| CARDIO RESPIRATORY ENDURANCE | Pre-test | 26.090 | 1.477 | 25.697 | 1.445 | 25.54 7 | 0.898 |
| | Pre-test | 26.102 | 1.504 | 27.848 | 1.278 | 29.49 1 | 1.070 |
| VO2 MAX | Pre-test | 111.933 | 4.084 | 110.233 | 3.568 | 108.500 | 2.460 |
| | Pre-test | 112.800 | 3.898 | 114.966 | 2.498 | 116.433 | 2.070 |
| BREATH HOLDING TIME | Pre-test | 24.800 | 2.696 | 23.433 | 1.851 | 23.333 | 1.688 |
| | Pre-test | 25.433 | 2.514 | 26.800 | 1.471 | 28.066 | 1.311 |

The above table showed that the mean and SD scores of speed among college men kabaddi pre-test in control group is 8.47 and 0.25 then in the post-test is 8.55 and 0.25. Further, it is noted that the mean and the SD of speed among college men kabaddi pre-test in Slow continuous group is 8.52 and 0.21 then in the post-test is 8.09 and 0.04. Next, it is noted that the mean and the SD of speed among college men kabaddi pre-test in Fast continuous group is 8.58 and 0.16 then in the post-test is 7.76 and 0.61. This showed that there is a difference between control group, slow continuous group and Fast-Continuous group in speed among college men kabaddi.

The above table indicated that the mean and SD scores of cardio respiratory endurance among college men kabaddi pre-test in control group is 26.09 and 1.47 then in the post-test is 26.10 and 1.50. Further, it is noted that the mean and the SD of cardio respiratory endurance among college men kabaddi pre-test in Slow continuous group is

25.69 and 1.44 then in the post-test is 27.84 and 1.27. Next, it is noted that the mean and the SD of cardio respiratory endurance among college men kabaddi pre-test in Fast continuous group is 25.54 and 0.89 then in the post-test is 29.49 and 1.07. This showed that there is a difference between control group, Slow Continuous group and fast continuous group in cardio respiratory endurance among college men kabaddi.

The above table indicated that the mean and SD scores of VO2 MAX among college men kabaddi pre-test in control group is 111.93 and 4.08 then in the post-test is 112.80 and 3.89. Further, it is noted that the mean and the SD of VO2 MAX among college men kabaddi pre-test in Slow-Continuous group is 110.23 and 3.56 then in the post-test is 114.96 and 2.49. Next, it is noted that the mean and the SD of VO2 MAX among college men kabaddi pre-test in fast- Continuous group is 108.50 and 2.46 then in the post-test is 116.43 and 2.070. This showed that

there is a difference between control group, Slow-Continuous group and fast- continuous group in VO2 MAX among college men kabaddi.

The above table indicated that the mean and SD scores of breath holding time among college men kabaddi pre-test in control group is 24.80 and 2.69 then in the post-test is 25.43 and 2.51. Further, it is noted that the mean and the SD of breath holding time among college men kabaddi pre-test in Slow continuous group is 23.43 and 1.85 then in the post-test is 26.80 and 1.471. Next, it is noted that the mean and the SD of Breath holding time among college men kabaddi pre-test in fast-Continuous group is 23.33 and 1.68 then in the post-test is 28.06 and 1.31. This showed that there is a difference between control group, show continuous group and fast-continuous group in breath holding time among college men kabaddi.

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Conclusion

The findings of the present research highlight the importance of physiological and motor ability component variables for preserving and developing sports performance. The findings concluded that all the three group's slow-continuous training, fast-continuous training and control group are not only varying on sports performance they also distinguish themselves on the physiological variables. It has been observed that the breath holding time is instrumental in determining the performance of the sports persons.

Positions of certain motor ability component variables distinguish the performance of high achievers from low achievers in the field of sports. One of the important conclusions of the study is the consideration of individuality in the physiological variables. Further the present research indicated that both physical as well as psychological characteristics are important in sports behavior.

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