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A STUDY ON THE SELECTED PHYSICAL & MOTOR FITNESS COMPONENTS OF LAWN TENNIS AND CRICKET PLAYERS OF PACHIM MAHARASHTRA REGION

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Abstract:

The present study was undertaken to find out whether the effect of circuit programmed can develop the Performing exercises at a satisfactory level depends on physiological, anthropometric, psychological factors. These factors are found in many of the models which are used to analyze the performance in different exercises. The precondition for any progress is having physical abilities. Knowing the anthropometric and physiological characteristics of players in each type of exercise is the most important and effective factor in their performance. For the purpose of conducting the present investigation the Pachim Maharashtra University sports dept men and women's , selected Further, total male & females 60 subjects as ranged from 17 to 19 years. The circuit training program was useful to improve motor components such as flexibility, power, muscular endurance, agility, speed, cardio-vascular endurance and strength of female lawn Tennis & cricket players.

Keywords: circuit training, Motor Fitness, physical training, lawn tennis & cricket.

Introduction:

Sports play an important role in the development of human personality. Tennis originally was known as Lawn tennis, and formally still is in Britain, because it was played on grass courts by England boys and girls player. the creation of the games can be traced to a 12th -13th decade France handball games called jeu de paume ("game of the palm") from which was derived a complex indoor racket –and –ball game. Expanding professional tournament circuits and the rise of some notable players and rivalries broadened players and rivalries broadened the appeals of the game. A number of major innovations in fashion and equipment fueled and fed the boom. The serves as a means of self-protection, giving one the assurance of being able to do so if the need arises. Our program is styled to keep the body conditioned, and the mind clear. It provides confidence and self-control. Circuit training is a training method that brings strength training and aerobic training together into one great routine. This is especially good for clients who aren't big on doing "cardio" at the gym.

Circuit training is just what it sounds like: training in a circuit. In fact, it's an exercise technique we use in our core classes here at Total Therapy! You select anywhere between 6-8 exercises (for our core classes, we use 6 exercises), and perform each exercise for either a pre-determined time period or number of repetitions. Some of these exercises may use the same muscle groups, but exercises that use the same muscle group (i.e. bench press and pushups) should not be done back-to-back. **"Utility of Circuit Training Programmed on motor fitness Components of female lawn tennis player cricket."**

The objectives of this research study considered for investigation were as follows: motor fitness components related to male & female lawn tennis players.

The aim of this study was to compare data obtained from the variables of anthropometry, leg power, flexibility and reaction time in lawn tennis cadet athletes, in order to observe if there are differences between the values of athletes at different competition levels of success; and whether these variables are determinant for competitive success because of sport characteristics and according to the data for junior and senior athletes.

The null hypothesis sought to be tested were:

Ho 1 : There is no significant difference in strength , Agility, Flexibility, Power ,Speed Muscular Endurance, Cardin-Vascular Endurance of experimental and control group.

MATERIALS AND METHODS:

To achieve the objectives of the study, compare data obtained from the variables of anthropometry, leg power, flexibility and reaction time in lawns tennis cadet athletes, in order to observe if there are differences between the values of athletes at different competition levels of success; and whether these variables are determinant for competitive success because of sport characteristics and according to the data for junior and senior athletes. The researcher has applied t test to compare the means.

Research design:

The experimental design consists of two groups of subjects: an experimental group and a control group. The experimental group undergoes the treatment, program or intervention of interest. Researchers then measure the differences between the two groups on a particular outcome.

Procedure:

The modern game of tennis is played by millions in clubs and on public courts. The subjects were evaluated in a single session using the battery of tests and protocols described. The evaluation session lasted approximately one hour, and a 10-minute rest period separated one test from the next. All participants were active competitors in combat (Olympic) modality, and were also in their first months as junior athletes. They had thus recently finished their career in the cadet category and their full success could be analyzed. The participants had to have had four years' competition experience in order to guarantee they had fought in official championships as their first year in the cadet category. The training programmed was divided as follows:

- A. warm up and stretching 15 min.s
 - B. Circuit exercises 35 min.s
 - C. Limbering down 10 min.s
- Total 60 min.

- A. Warm up and stretching : The subjects were made to run at slow pace, strides, static and dynamic stretches for 15 min.
- B. Circuit exercises: The subjects were made to run the circuit training programmed. The repetition and the intensity of the training have been presented below :
 - 2 sets of circuit 1 training (10-5-10)

- After each station 30 second rests.
- 10 stations in one set.
- After completion of set 5 min. rest

C. Limbering down: The subjects performed the slow jog and some stretching exercises for 10 min.

DATA ANALYSIS : The data on pre-test and post-test of all the subjects have been analyzed by using 't' test to compare the means of experimental and control groups. The statistical package for social sciences (SPSS) software was used.

Dependent variables:

The following measures were used dependent variable of the present study:

- sit and reach test to measure Flexibility
- Standing broad jump to measure leg power.
- 50 yard dash to assess speed.
- 4*10 shuttle run to evaluate Agility.
- Vertical Jump to measure Leg Strength.
- Bent knee sit ups to assess muscular endurance.
- 9 min run and walk to measure Cardiovascular Endurance.

Independent variables:

The following circuit training programmed was considered as independent variables of the present study.

1. High knee action, 2. Dumbbells curl, 3. Skipping, 4. Crunches, 5. Hop kicks, 6. Good morning, 7. Jumping jacks, 8. Touch toes, 9. Side Ward running, 10. Half squat.

Data analysis:

The data was analyzed by using paired sample t test and independent t tests. Within group comparison was done by paired sample t test while between groups comparison was done by independent t test

Conclusion:

The investigator, within certain limitations concludes the study as follows: the Circuit training is a versatile training modality that allows the possibility of a large number of people taking part in the same exercise session, requiring less time than other modalities. It is a great strategy to improve body composition, muscle strength and consequently, cardiovascular functions and, to maintain functional capacity during aging. In addition, patients with several diseases may improve their quality of life; thus, resistance circuit training may be included in their treatment and professional tournament.

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