IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Effect of Specific Training on Selected Physical and Physiological Variable among College Women Players

Dr. RAZIA. K. I.
Associate Professor
Department of Physical Education
Milad E Sherief Memorial College
Kayamkulam, District Alappuzha-690502 (Kerala)

Abstract

The main purpose of the study was to find out the effect of specific training on selected physical andphysiologicalvariablesamongcollegewomenplayers.Toachievethepurposeofthestudyinvestigator selected randomly 30 women players from the Colleges to Kerala University. Their ages ranges from 18 to 24 years. They were divided in to two groups. After analyzing the various factors associated with the presented study. The following physical variables such as speed, agility and explosive power (leg explosive power), physiological variables such as breath holding time and resting heart rate were selected. Speed was tested with 50 meter dash, agility was tested with T- test, and explosive power was tested with standing broad jump, breathholdingtimewastestedstopwatchandrestingheartratewastestedmanual. With the experimental group was exposed to specific training a period of six weeks. The collected data was analyzed statistically used by dependent 't'test. After the analysis of the collected data, it was proved that there are significant improvements in speed, agility, leg explosive power, breath holding time and resting heart rate.

KEYWORDS: *Speed, Agility, Leg Explosive Power, Breath Holding Time and Resting Heart Rate.*

Introduction

Physical fitness is one of the core preconditions of health. We cannot imagine a person to be healthy without being physically fit. Physical fitness therefore needs to be appreciated in full measure. The common perception of physical fitness is the absence of ailment. The physical fitness of a sports person is different from that of the persons working in army factory or a layman. In fact, physical fitness means different things to different people. In this lesson, let us discuss various aspects of physical fitness. Physical fitness is considered as a measure of the body's ability to function efficiently and effectively during work and leisure activities. In order to remain physically fit and healthy, we need to engage ourselves in physical activities and take measures for physically fit. Physical fitness is an important area of discussion as the number of children's becoming obese. The normal physical activities, which were done in earlier times both at home and outside as part of day-to-day routine have reduced due to development of science and technology. The work that was done manually is now being carried out by machines. The use of automated equipment such as automatic machines, remotes, mobiles and changes in lifestyles affect health and physical fitness. It has become a matter of deep thinking for all of us. Now a day we find increased marketing of packaged food and diet for physical fitness. Many such health products now are advertised on TV and radio, and in newspapers, booklets and magazine. It is important for all of us to understand that physical fitness cannot be

achieved without doing physical exercise regularly. We should not resort to any shortcut that is frequently advertised in the media these days to achieve fitness or maintain balance in life style. Moreover, these products may have side effects in our daily life.

Physical Fitness refers to the ability of your body systems to work together efficiently to allow you to be healthy and perform activities of daily living. Being efficient means doing daily activities with the least effort possible. A fit person is able to perform schoolwork, meet home responsibilities, and still have enough energy to enjoy sport and other leisure activities. A fit person can respond effectively to normal life situations, such as raking leaves at home, stocking shelves at a part-time job, and marching in the band at school. A fit person can also respond to emergency situations - for example, by running to get help or aiding a friend in distress.

Physical fitness is to the human body what fine tuning is to an engine. It enables us to perform up to our potential. Fitness can be described as a condition that helps us look, feel and do our best. Physical fitness involves the performance of the heart and lungs, and the muscles of the body. And, since what we do with our bodies also affects what we can do with our minds, fitness influences to some degree qualities such as mental alertness and emotional stability. Physical fitness comprises two related concepts: general fitness (a state of health and well-being) and specific fitness (a task-oriented definition based on the ability to perform specific aspects of sports or occupations). Physical fitness is generally achieved through exercise, correct nutrition and enough rest. It is an important part of life. In previous years, fitness was commonly defined as the capacity to carry out the day's activities without undue fatigue. However, as automation increased leisure time, changes in lifestyles following the industrial revolution rendered this definition insufficient. These days, physical fitness is considered a measure of the body's ability to function efficiently and effectively in work and leisure activities, to be healthy, to resist hypo kinetic diseases, and to meet emergency situations.

Physiology is the study of the functions of the normal human body. Physiology is one of the bio-medical science, it deals with the functions of the living organism, its systems, organs, individual cell and cell structures, as well as with the mechanism regulating the functions and interaction of the organism with the external environment. The goal of physiology **is to gain in right in to the machinery** of the human organism. The roles and interaction of its parts and the resultant output of these interactions, that is, the overall functioning of the organism. **Hardyal Singh (1991)**

Statement of the Problem

The main purpose of this study is to find out the effect of specific training on selected Physical and Physiological variable among College Women Players.

Hypothesis

It was hypothesized that there will be a significant improvement due to the effect of specific training on selected Physical variable Speed, Agility, Leg Explosive Power among College Women Players.

It was hypothesized that there will be significant improvement due to the effect of game specific training on selected Physiological variables Breath Holding Time, Resting Heart Rate, among College Women Players.

Review of Related Literature

Binnie M.J., (2013),This study compared the effect of an 8-week pre-season conditioning program conducted on a sand (SAND) or grass (GRASS) surface on 20 m sprint performance. Twelve team sport athletes were required to attend three 1 h training sessions per week, including two surface-specific sessions (SAND, n=6 or GRASS, n=6), and one group session (conducted on grass). Throughout the training period, 20 m sprint times of all athletes were recorded on both and grass surfaces at the end of week 1, 4 and 8. Results showed a significant improvement in 20 m sand time in the SAND group only ($p<0.05$), whereas 20 m grass time improved equally in both training sub-groups ($p<0.05$). These results suggest that surface-specificity is essential for20 m speed improvements on sand, and also that there is no detriment to grass speed gains when incorporating and surfaces in to a pre-season program.

SharmaandTyagi,(2011),investigated the effect of specific training programme on physiological and fitness components of Table tennis players. For the study Table tennis players from Delhi were identified as subjects randomly. To conduct the study in accordance of the methodology the subjects were given a pre test for the physical and

physiological parameters. The physiological parameters selected were systolic blood pressure, diastolic blood pressure, pulse rate, vital capacity, cardio respiratory endurance and breathing holding rate. The physical parameters were speed, flexibility, power, balance and agility. The subjects underwent the programme of the specific training designed for the players. Pre test and post test comparisons were done to find the effect of the specific training on the players. The result reveals that significant difference were obtained on physiological (systolic blood pressure, pulse rate, and breathing holding rate) and fitness (speed and agility) components on the comparisons of means within the components on the comparisons of means within the control group.

Research Methodology

The main purpose of the study was to find out the effect of specific training on selected Physical and Physiological variables among college women players. To achieve the purpose of the study investigator selected 30 women players were randomly selected from the colleges affiliated Kerala University. Their ages ranges from 18 to 24 years. The subjects were divided in to two groups' namely experimental group and control group. Each group consists of 15 subjects. Experimental group were exposed to circuit training for a period of 6 weeks. Control group was not exposed to circuit training. After analyzing the various factors associated with the presented study. Pre and post test on the selected Physical variables such as Speed, Agility and Explosive Power (Leg Explosive Power), Physiological variables such as Breath Holding time and Resting Heart rate were conducted before and after the experimental training. Speed was tested with 50meter dash, Agility was tested with T- test, Explosive Power was tested with Standing Broad Jump, Breath Holding time was tested with Stop Watch and Resting Heart Rate was tested manual. The collected data was analyzed statistically used by dependent 't'test.

Results and Discussion

Table-1

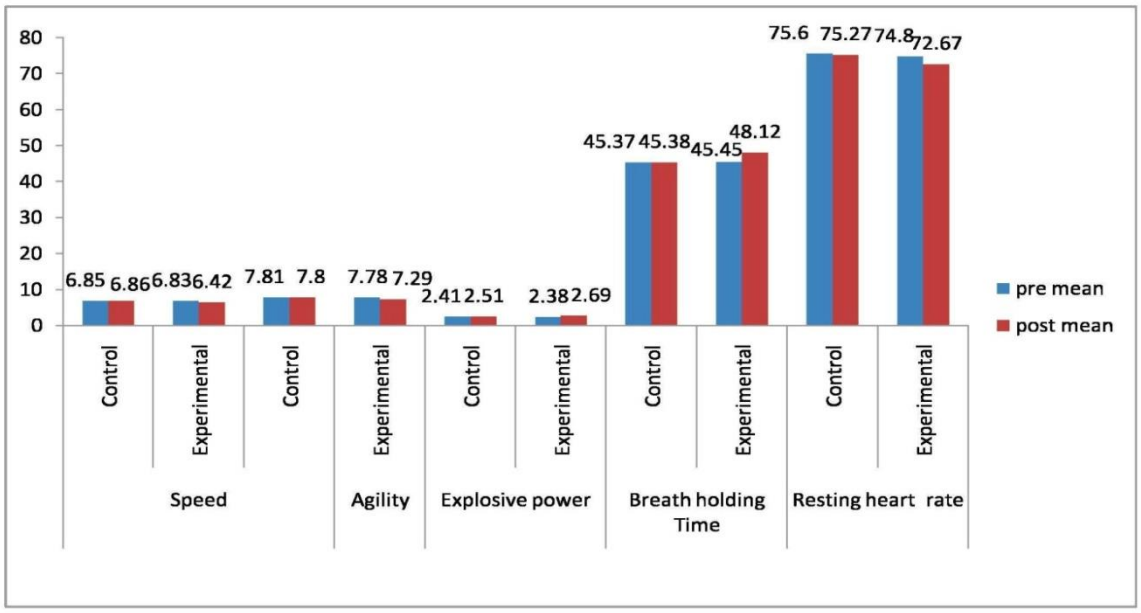
Showing the Mean Value of Control and Experimental WomenCollegeLevelPlayersonSpeedAgilityExplosivePowerBreathHoldingTimeandRestingHeartRate

Variables	Group	Number of Subject	Mean		SD		T
			Pre	Post	Pre	Post	
Speed	*Control*	15	06.85	06.86	0.14	0.17	**0.98**
	Experimental	15	06.83	06.42	0.13	0.19	**9.02***
Agility	*Control*	15	07.81	07.80	0.16	0.15	**0.42**
	Experimental	15	07.78	07.29	0.24	0.31	**5.87***
Explosive Power	*Control*	15	02.41	02.51	0.15	0.22	**0.73**
	Experimental	15	02.38	02.69	0.10	0.17	**3.06***
Breath Holding Time	*Control*	15	45.37	45.38	3.05	3.05	**0.07**
	Experimental	15	45.45	48.12	3.35	2.99	**2.49***
Resting Heart Rate	*Control*	15	75.60	75.27	2.87	2.81	**0.81**

*Significant at 0.05 Level df 28 is 2.04

- The result presented in Table-1 proved that there was significant improvement in Speed as the obtained 't' value of 9.02wasgreater than the table 't' value of 2.04.
- TheresultpresentedinTable-1 proved that there was significant improvement in Agility as the obtained 't' value of 5.86wasgreaterthan thetab1e't'valueof2.04.
- TheresultpresentedinTable-1provedthat there was significant improvement in Explosive power as the obtained 't' value of 3.06 was greater than the table 't' value of2.04.
- The result presented in Table-1 proved that there was significant improvement in breath holding time as the obtained't'valueof2.49 was greater than the table 't' value of2.04.
- The result presented in Table-1 proved that there was significant improvement in Resting heart rate as the obtained 't' value of 2.96 was greater than the table't'valueof2.04.

Figure-1 is Showing the Mean Value of Control Group and Experimental Group of College Level Women Players on Speed, Agility, Explosive Power Breath Holding Time and Resting Heart Rate



Conclusion

The results of the study showed that there were significant improvements in Physical variables on Speed, Agility, and Leg Explosive Power after six weeks of specific training among College Women Players. The results of the study showed that there were significant improvements in Physiological variables such as Breath Holding Time, and Resting Heart Rate after six weeks of specific training among College Women Players.

References

- **Binnie MJ, Peeling P, Pinnington H, Landers G, Dawson B.** Effect of surface-specifictrainingon20msprintperformanceonsandandgrasssurfaces.2013Mar8.
- **Hardyal Singh(1991)** science of sports Training. New Delhi: DVS Publications.
- **Sharma and Tyagi, (2011)** investigated the effect of specific training programme on physiological and fitness components of Table tennis players.