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EFFECT OF LADDER TRAINING CIRCUIT TRAINING AND COMBINATION LADDER CIRCUIT TRAINING AGILITY OF YOUNG BADMINTON PLAYERS

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Abstract

For the purpose of this study total 60 badminton players were selected from kanayakumari dist various badminton clubs. All random based method was used and subjects age range between 18 – 22 as per the club age proofs. Total population was spate into four experimental groups namely circuit training group (CG) , ladder training group (LG) combination of circuit and ladder training group (CG&LG) and control group (Cnt.G). Each group contain 15 subjects and underwent 12 weeks of training programme. Pre and post test score were taken and test values are computed with the help of SPSS , ANCOVA. Agility table value at 0.05 level of significance for 3 for 56 and 3 for 55 is 2.77. Form the table 0.018 and 0.166 F value was observed in pre test and post test and 87.11 was noticed for adjusted post this value was higher than the table 2.77 hence this result shows significant different on agility.

Keywords: Circuit training, ladder training, Combination of ladder and circuit training, Badminton , Systolic blood pressure and diastolic blood pressure.

INTRODUCTION

Physical fitness is a must for all sports and games. It provides the capacity for doing all kinds of activities. The greater the physical fitness, the better will be the physical endurance, precision of movement, performance and capacity for recovery which are highly essential for delivering top performance in any activity. The general health helps to accomplish top performance in any activity. The general health and ability to excel in sports and games depends mainly on the athletes physical fitness levels**.** Physical fitness is one of the world's richest accomplishment. It cannot be acquired without training. It has a daily exercise to pave the way for regular physical activity. To fulfill the duties of one's household, including daily attentiveness to the vigor and physical fitness is not unexpected; Emergency meeting of the condition of fatigue under the direction of Clark has defined orientation. Physical fitness is the ability to save it under a difficult situation where unfairness is to deny a person to bear. Because it is an example of the body's level of physical fitness and performance on the demanding felt lacking in energy and predictable access to activities in the life of becoming, that is conflicting and being worn on the common efforts. Physical fitness plays a very important role in any of the performance.

In general, it refers to the physical fitness and the ability to relate to one another, especially in the sports and physical work; however, due to the wide variety of skills that encompass physical fitness, it means different things to different people. The main categories of aerobic endurance are physical fitness, and muscular endurance, strength, speed, power and flexibility. Physical fitness and work capacity of the heart, blood vessels, lungs, and muscles are epitome of efficiency. The Physical fitness includes muscular endurance, muscular strength, endurance, flexibility and cardiovascular and respiratory components.

Without great physical fitness, one can no longer be able to continue in his capacity for recovery from fatigue and more efficient performance. It is common knowledge that any organ that is not in optimum use compels an individual to adhere to some well-established regiment, if he wants to enjoy sound health and physical fitness. It is true that muscles do help in attaining health and fitness by their regular rational employment of physiologically useful work. But it must also be remembered that muscular exercises, which are of local influence on certain parts of the body, will not provide the desired health and fitness. General requirement of the body is a well coordinated rhythmical movement, which is specially designed for organic and functional promotion of the body.

DELIMITATIONS

- The study was restricted to 60 badminton players.
- The study was restricted to badminton players in kanyakumari dist only.
- The age of the subjects selected for this study was 18 - 24 years as per their records.
- The training programme consisted of circuit training, ladder and combination of ladder and circuit training.
- The training was given three days in a week for six weeks.
- The study was delimited for the following variables:
  - Agility

LIMITATIONS

- Subjects included in the study were not controlled with regard to their life style, diet and habits which may have influenced their performance.
- The subjects have engaged themselves in different type of games and the effect of those activities on their playing ability could not be controlled
- Subject's body type and the economic status of the badminton players were not taken into consideration.
- Variations in the environment conditions like temperature, humidity and atmospheric pressure during the training and testing period were recognized as limitations.

HYPOTHESIS

It was hypothesized that there would be a significant improvement on ladder training circuit training and combination ladder circuit training on agility variable of young badminton players

SIGNIFICANCE OF THE STUDY

- Based on the results of the study a suitable exercise programs could be designed and implemented for the benefits of the badminton players.
- It is the guideline of the badminton players to improve efficiency in their play.
- The study may be useful for physical educationists and coaches to assume the retraining period to regain the previous performance level.

METHODOLOGY

For the purpose of this study total 60 badminton players were selected from kanayakumari dist various badminton clubs. All random based method was used and subjects age range between 18 – 22 as per the club age proofs. Total population was spate into four experimental groups namely circuit training group (CG) , ladder training group (LG) combination of circuit and ladder training group (CG&LG) and control group (Cnt.G). Each group contain 15 subjects and underwent 12 weeks of training programme. Pre and post test score were taken and test values are computed with the help of SPSS , ANCOVA.

TABLE 1
AGILITY– ANCOVA TABLE

	CG	LG	CG&LG	Cnt.G	SV	SS	MS	F raio
Pre test	10.09	9.99	10.00	10.06	B	0.009	3	0.018
					W	10.11	56	
Post test	10.08	9.83	9.79	10.06	B	0.718	3	0.166
					W	10.46	56	
Ad.Post test	10.06	9.80	9.76	10.09	B	0.847	3	87.11*
					W	0.24	55	

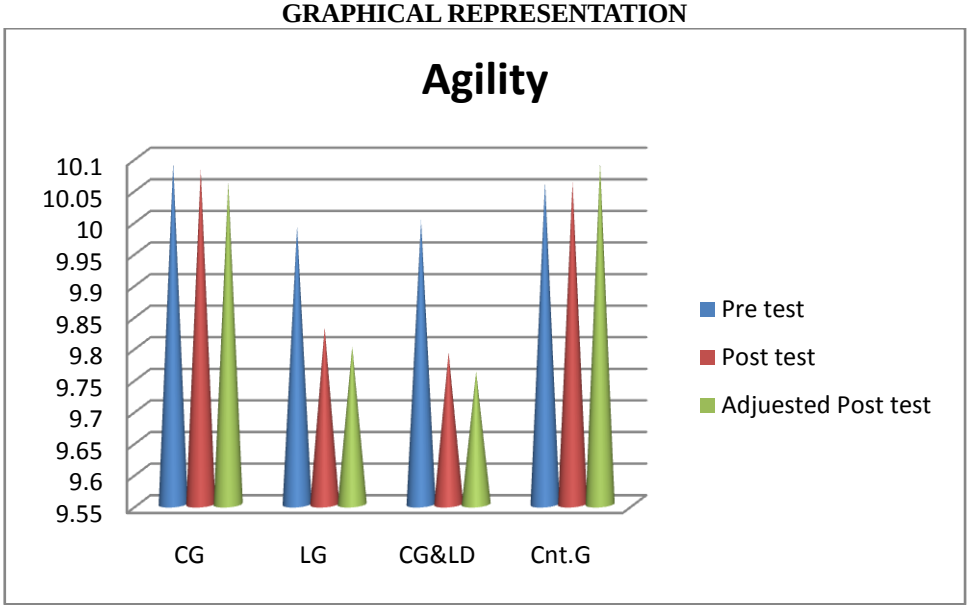
The required table value at 0.05 level of significance for 3 for 56 and 3 for 55 is 2.77. Form the table 0.018 and 0.166 F value was observed in pre test and post test and 87.11 was noticed for adjusted post this value was higher than the table 2.77 hence this result shows significant different on agility.

TABLE 2
SCHEFFE'S POST HOC TEST – AGILITY

CG	LG	CG&LG	Cnt.G	M.D	C.I
10.06	9.80			0.26*	0.06
10.06		9.76		0.30*	
10.06			10.09	0.03	
	9.80	9.76		0.04	
	9.80		10.09	0.29*	
		9.76	10.09	0.33*	

Scheffe's post hoc test method was used for testing the mean differences between experimental groups. Observed from the table between the circuit training and control group and ladder training and combination of ladder & circuit training shows 0.03 and 0.04 for mean difference this value lower than the required C.I value hence above group have no significant and reaming all the value higher than the C.I value so reaming groups shows significant on agility.

FIGURE I
GRAPHICAL REPRESENTATION



RESULT AND DISCUSSION

From the table mean and graph we understood that 12 weeks of circuit, ladder and combination circuit and ladder training improve the agility and combination of ladder and circuit training have shows good training effects.

RECOMMENDATIONS

1. The same study may be conducted with changes of intensity and gender.
2. Similar study may be under taken among various game players.
3. The same study may be experimented in greater detail to assess changes on biochemical, hematological and physical fitness variables.
4. To find out the improvement on criterion measures periodically, the same study may be designed with repeated measures.

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