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**IMPACT OF RESISTANCE ENDURANCE  
TRAINING AND COMBINED TRAINING ON  
DETERMINED PHYSICAL FITNESS  
PARAMETERS**

# Impact of Resistance Endurance Training and Combined Training on Determined Physical Fitness Parameters

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**Abstract – The motivation behind the study was to discover the impact of resistance training, endurance training and combined training on chosen physical fitness variables. Sixty male students matured between 17 and 22 years were chosen for the study. They were partitioned into four equivalent groups, each one group comprising of fifteen subjects in which Group I underwent resistance training, group II underwent endurance training, group III underwent combo training, three days for every week for twelve weeks and group IV went about as control, which completed not take part in any training. The subjects were tried on chosen rule variables, for example, leg strength, back strength and cardio-respiratory endurance at preceding and instantly after the training period. For testing the leg strength and back strength, the dynamometer was utilized and to test the cardio-respiratory endurance, the Cooper's 12 minutes run/walk test was managed. The analysis of covariance (ANCOVA) was utilized to discover the huge contrast if any, between the trial groups and control group on chosen rule variables independently. Since there were four groups included in the present study, the Scheffé S test was utilized as post-hoc test. The chose paradigm variables, for example, leg strength, back strength and cardio-respiratory were enhanced altogether for all the training groups when contrasted and the control group and the leg and back strength were enhanced altogether for combined training group and resistance training group, and in cardio-respiratory endurance, the endurance training group and combined training groups were altogether moved forward.**

## INTRODUCTION:-

Physical education or vaulting is a course taken throughout primary and secondary education that supports psychomotor taking in a play or development investigation setting. The term physical education is most usually used to mean Physical Exercises or Games or Sports in which the students to have partaken in the branch of knowledge instead of examined it. Physical training is one of the most paramount elements in training to attain high execution. The targets of physical training are to build the player's physiological potential and to advance biomotor capabilities to the most elevated standards (Tudor O. Bompa, 1999). Sports training is a procedure of athletic change, which is led on the support of investigative standards and which, through deliberate advancement of mental and physical effectiveness, limit and cause, empowers the athletes to generate outstanding and record breaking athletic exhibitions (Dietrich Harre, 1982).while arranging the motion of training, consider these perspectives, alluded to as the variables of training as per the utilitarian and mental qualities of a rivalry. All around the training stages going before a rivalry, characterize which part to underline and attain the arranged execution objective (Vladimir M.zatsiorsky, 1995).resistance training has two separate

significances. A broader implying that alludes to any training that uses a resistance to the energy of husky compression (better termed strength training), and versatile or pressure driven resistance, which alludes to a particular kind of strength training that uses versatile or pressure driven strain to furnish this resistance.

Resistance training - sometimes called weight training or strength training - is a "specific technique of molding intended to expand muscle strength, muscle endurance and muscle power," consistent with the American Sports Medicine Institute (ASMI). endurance is a term generally utilized as a part of game and can mean numerous diverse things to numerous diverse individuals. In sports it alludes to a jock's capability to manage delayed activity for minutes, hours, or even days. Endurance requires the circulatory and respiratory frameworks to supply vigor to the working muscles keeping in mind the end goal to backing supported physical movement . Leg strength assumes a key part in the day by day exercises of man. It is an vital element for incorporating in practically all recreations and sports. There is an old adage that a contender will go just as long as his legs will convey him. Cardio-respiratory endurance is the capacity to work near one's greatest vigorous limit for a delayed time of time. To build

one's endurance is to hinge on expanding the capacity to work at high, relative work load for developed periods of time.

## METHODS

In this study it was intended to discover the impact of resistance training and endurance training and combined training on leg strength, back strength and cardio-respiratory endurance. To attain the reason sixty male students from different staffs of Vivekananda College (Residential and Self-governing), Tiruvedakam West, and Tamil Nadu were chosen as subjects at random from the aggregate populace of 275 students. They were separated into four equivalent groups of fifteen every and further separated as three test groups and one control group, in which the group I (n=15) underwent resistance training, group II (n = 15) underwent endurance training and group III (n = 15) underwent the mix training for three days for every week for twelve weeks, and group IV (n=15) went about as control which finished not partake in any exceptional training separated from the customary physical education programme of the educational program. For each training programme there might be a change in different structure and frameworks in human form. In this way, the analysts counseled with the masters and then chose the accompanying variables as measure variables: 1. Leg strength, 2. Back strength and 3. Cardiorespiratory endurance

## ANALYSIS OF THE DATA

Analysis of covariance was used to determine the differences, if any, among the adjusted post test means on selected criterion variables separately. Whenever the 'F' ratio for adjusted post test mean was found to be significant, the Scheffé S test was applied as post-hoc test. The level of significance was fixed at .05 level of confidence to test the 'F' ratio obtained by analysis of covariance.

## CONCLUSIONS

It was finished up from the outcomes of the study that the leg and back strength have enhanced fundamentally after the particular training programme. Anyway in the cardiorespiratory endurance, resistance training group has not enhanced fundamentally. The point when contrasted and the control group, all the training group has fundamentally contrasted in both the foundation variables, aside from in cardio-respiratory endurance, the resistance training has not contrasted from the control group fundamentally.

It was likewise presumed that the resistance training group has enhanced their leg and back strength superior to the endurance training group and combined training group fundamentally. Be that as it may the endurance training group and combined training group have likewise enhanced their execution

fundamentally. There was no significant change in cardio-respiratory endurance for the resistance training group when contrasted and the control group. Yet all the remaining training groups have enhanced cardio-respiratory endurance fundamentally.

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