

Project title

**“EFFECT OF PHYSICAL FITNESS VARIABLES ON AEROBIC TRAINING OF
COLLEGE GOING FEMALE STUDENTS FROM COASTAL AREAS”**

Submitted to

**UNIVERSITY GRANTS COMMISSION
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EXECUTIVE SUMMARY

It is an established fact that sports play an exceptional part in the progression of interspersed individual dynamism promote compassionate among various people, race in sports. Some persons constitutionally retain the preplanned genetics suited to succeed in sports. These persons do not put a enormous deal of time and strain into boosting their achievement. At present there is a substitution towards putting more significance of scientific conditioning procedures to increase reinforcement and optimize performance. Today, even the world's eminent players look to have an advantage everything within their limit to profit a competitive edge. If the players assumed to optimize their support techniques and game achievement, they must first develop their physical tools that will confess them to successfully consolidate their physical and performance trials into their game. This is the fulfillment of the training to brought in tune to their body accelerating their development and teaching them how to produce super skill game performance.

In today's scenario female athlete play a vital role in the development of sports in world. The athletes were selected by sports emphasize for women, who contemplated the athletes on field performance and reinforcement plus the athletes bestowal to women's sports. The greater public awareness of elite female athletes generated a comparable increase in grass roots sports participation. Female sports embrace physiological elements that have the probable to impact the performance.

It will be struggle that women's development into sports corresponds a valid quest by women for equivalence. Control their own bodies, and self-definition, and as such it enact a challenge to the intellective basis of male domination. Yet it will also be indicated that this for equality is not without contradiction and ambiguities. In short the female –and her body- has become a debated and ideological province.

The purpose of the study was to find out the effect of physical fitness variables on aerobic training of College going female students from coastal areas. Total 120 female college students were selected randomly from different colleges near to coastal areas under the affiliation of university of Kerala. From that students researcher grouped them into two categories. one experimental group and other one control group.

To find out the effect of twelve week aerobic training program on the physical fitness variables, the selected physical fitness variables were cardio respiratory endurance, muscular strength, muscular endurance, flexibility and body composition. Before administering the training protocol, an initial test was taken to measure the initial status of physical fitness of the subjects. The training program was also selected randomly and administered in a progressive manner through out a duration of 12 weeks. After the completion of training program, a final test was conducted to obtain the final status of physical fitness of subjects. ANOCOVA was used to find out the significant difference between the mean of experimental group and control group followed by a least significant difference post hoc test, where ever the F ratio was found significant. The level of significant was set at 0.05.

In case of cardio respiratory endurance, the analysis of data revealed that, the group which undergone the aerobic training program was found superior. The control group did not show any significant improvement in cardio-respiratory endurance.

In the case of muscular strength the experimental group did not show any significant improvement in compared to other physical fitness components. The control group also did not show any significant improvement.

In case of muscular endurance, the analysis of data revealed that the experimental group which under gone aerobic training showed significant improvement. The control group did not show any significant improvement.

As far flexibility was concerned the group under gone aerobic showed significant improvement. The control group did not show any significant improvement in flexibility.

In case of body composition the experimental group which under gone aerobic training program showed significant improvement in lean body mass. The experimental group did not show any significant improvement in lean body mass.

Conclusions

Based on the analysis of the data and results, the following conclusions were drawn

1. Aerobic exercises were found superior in improving cardio respiratory endurance .
2. Aerobic exercise were not found any improvement in muscular strength.
3. Aerobic exercise were found effective in case of muscular endurance.
4. Aerobic exercise were very effective in case of trunk flexibility.
5. Aerobic exercises were found more effective in improving the lean body mass and decrease in the body fat .