ABSTRACT

This study assessed the effect of health related physical fitness exercises and Massage Therapy training program on selected physical fitness variable in maximizing strengths of thigh and calf muscles of college students between the age group of nineteen and twenty three years.

Students’ physical variables like age, height, weight and institutional background, level of study and their health status were given due attention whether or not they have any influence on students’ participation in to the experimental study.

The overall objective of this study was to explore the impacts of health related physical fitness exercises and the combinations of health related physical fitness exercises and Massage Therapy on the selected physical variables of physical fitness in maximizing calf and thigh muscles of the subjects (College students of Visakhapatnam city) who involved in these both interventions.

Thirty seven basic hypotheses of the Study and three Research Questions were raised to guide the procedures of data collection, analysis and interpretation.

A descriptive survey was employed to gather relevant data for the study. The research utilized both quantitative and qualitative data to seek answers to the Hypotheses and Research Questions.

A pilot study in health related physical fitness exercises and Massage Therapy was conducted for a duration of one month before the actual research study to ensure the validity and reliability of the study, intensity, duration and repetitions of workouts.

A total of 180 male students (45 from each college) such as Dr. Lankapalli Bullayya College, B.V.K. Degree College, Prism Degree College and Gayatri Vidya Parishad Degree College, were selected as a subjects for the study.

As stated above, the study employed 180 (N=180) male Volunteered students who were made randomly into three groups for the research study as follows.
1. Experimental Group as a Control Group (60 students from four colleges; each 15 students). This group includes subjects who never engaged in any health related physical fitness exercises with therapeutic massage interventions.

2. Experimental Group as an Experimental Group - A (60 students from four colleges; each 15 students). This group comprises subjects who engaged only in health related physical fitness exercises.

3. Experimental Group as an Experimental Group - B (60 students from four colleges; each 15 students). This group comprises subjects who engaged both in health related physical fitness exercises with therapeutic massage interventions.

According to exercise schedule, the selected various exercises were carried out in the training program for three months, six days a week throughout the study. Exercises are divided in to three parts. The first part consists apparatus exercises (exercises with machines in the Gym) performed twice a week. The second parts of the exercises are free exercises performed twice a week on stairs and running track. The third parts of the excises are also free exercises which were performed twice a week in the Gym and outside of the Gym.

Gentle form of Massage interventions (body workouts) that use long strokes, kneading, deep circular movements, vibration and tapping to help relax and energize the hamstring group and the quadriceps group of thigh muscles and the gastrocnemius muscle (calf muscle) of the subjects were also performed trice a week.

All groups were subjected to pre-test session prior to the training program for the experimental treatments.

Finally, for these groups, post-tests were conducted to assess the strength of calf and thigh muscles among the subjects on the selected physical fitness variables such as Long Jump from stationary position, Shuttle Run, 50 Meters Dash, Hop steps with Right Leg, Hop steps with Left Leg, and 800 Meters Run. The investigator selected the American Association for Health, Physical Education and Recreation (AAHPER) youth fitness testing manual for test and measurements as it is considered to be the most reliable and valid for health related physical fitness exercises.
Analysis and interpretation of Data, Statistical Computations such as Means, Standard Deviations, ‘t’ - Value and Analysis of Variance (ANOVA) have been carefully processed and systematically analyzed.
Lastly, results and discussions of the data, summary of the study, Major findings, Conclusions, Recommendations of the present study, Bibliography and Appendices were included to make the study comprehensive and acknowledged the source cited.