CHAPTER - I

INTRODUCTION

The history of human race reveals that there must have been some kind of education of training for the physical well-being of the people in all societies of the world and that it was imparted either in an organized way or in a random manner. In ancient times, physical education was given in the form of hunting or training for welfare. Incidental physical education was given through games sports and manual work. First of all, Greece felt the necessity of imparting proper physical education to its youth and so included it in their education programme. During the 19th century, in the process of systematizing general education in many countries of Europe, physical education and youth fitness were assigned a definite place in their schemes of education\(^1\). The finding of the biologists, physiologists and psychologists confirmed the necessity of activating muscles of all parts of the human body for their natural growth and the health for all round development.

Science has established the fact that the efficient functioning of the body improves when it is used and regresses when it is not used. This means that

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all normal organs of the body perform more effectively and efficiently when they are regularly exercised. Human body is built to be active and thrives on active. This realization has acquired for physical education and fitness programme an imperative place in the scheme of education in almost all the countries. Further the need of physical education and fitness programme becomes more and more urgent as a result of the increasing use of mechanic in industrially advanced countries resulting in lesser and lesser use of muscles and different parts of the body. Since then, demand for systematic physical fitness programme has been increasing day-by-day².

1.1 PHYSICAL FITNESS

Physical fitness is one of the aspects of total fitness. Physical fitness is not only one of the most important keys to a healthy body, but also the basis of dynamics and creative activity. Fitness is active not passive because from birth to death and from cradle to grave yard and individual is an active organism. One point of consensus is that physical fitness is a desirable quality which one cannot afford to neglect.

Physical fitness is a fundamental importance to all human beings. A man cannot move even an inch without proper physical fitness. Many prominent people in the field of medicine and in other fields have spoken and written about the

need for exercise to maintain an organically sound body from birth to old age. Functioning of the body requires energy, which depends on the ability of the heart, lungs and blood vessels to process oxygen and deliver it to the muscles, where it becomes the fuel for energy.

Age is no bar for keeping oneself fit. To an older person, it might be the feeling of youthful vigor, to a stenographer it is the ability to type for eight hours at a stretch without developing aching shoulder muscles. To a coach, it is smoothness which comes with training, whereas to a physician, it is functional state of the body defined in technical terms.

Fitness is for every body and not just for youth. This makes fitness every body's business. It is a part of education but it is also a part of life. Everybody who wants to be fit needs to do exercise. The basic problem is that the human body is designed and constructed for movement and vigorous activity, not for rest and it functions more effectively when it is active. "Most people take better care of the automobile than they do of their own bodies". The old saying is "If you don't use you lose it". If people are to develop and maintain a desirable level of health and fitness, they must participate regularly in well-designed exercise programme.

A person who does not exercise regularly according to a well-designed programme will have an extra energy reserve because of the increased efficiency
of the body. There is an old saying "Exercise may not necessarily add yours
to your life, but will add life to your years". Indeed it is true.

According to Bucher³,

"Fitness is the ability of an individual to live a full and balanced life, it
involves physical, mental, emotional, social and spiritual factors as a capacity for
their wholesome expression.

"We must change a nationa of softies to a nationa that is physically fit".
The profession of physical education is grateful to president urged however for
urging people to be more physically active former president of USA John Kennedy
urged the schools to lay more stress on physical education programs and physical
fitness.

Barrow⁴ has stated that fitness includes the mental, emotional, social as
well as the physical aspect and all these components of total fitness plays a
significant role for full and happy life. Further freedom from disease, organic
development, efficient movement, alertness of mind, emotional maturing and social
adjustment provide the frame work for fitness.

³ Charles A. Bucher, *Administration of School Health and Physical Education Programme*

   P. 151 - 152
Physical fitness is based upon a solid foundation of the good health. Health living implies freedom from disease different strength, endurance, skill, capacity to meet the daily demands and sufficient reserves to meet extra ordinary stresses without undue fatigue basides mental development and emotional balance according to the maturity level of the individual.

1.2 CONCEPT OF FITNESS

Fitness is a term which is often used as synonynmous as helath in limited manner. Fitness denoted different facts of helath. The term defined in various ways.

The President's Council of Youth Fitness, United States of America, defined 'Fitness' as follows.

"Fitness is the capacity of the individual to live and function effectively, purposefully and zestfully here and how and to meet confidently the problems and crisis which are among life's expectations."

Clarke has similarly defined fitness as the ability to carry out daily tasks with vigorous and alertness without undue fatigue and with amble energy to enjoy leisure time permits and to meet unforeseen emergencies.

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During the great part of the history of the world, men have regarded the mind and body as separate entities. This belief came from many sources, widely separated in the time and space.

Kennedy emphasized the need for sound mind and sound body among the citizens. He said ‘We do know what the Greeks know that intelligence and skill can only function at the peak of their capacity when the body is healthy and strong, that hard spirits and though minds usually inhabits sound bodies. He further stated that only physically fit individuals can develop both intelligence and skills. Intelligence can only function at the peak of their capacity when the body is healthy and strong’.

Physical Education deals with the education of individual in terms of his body how he moves in relation to his immediate enviroment and how he appears to other.

Achieving and maintaining of physical fitness helps present premature occurrence of numerous illness and diseases. It also helps in rehabilitation after the illness of diseases.

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1.3 PHYSICAL FITNESS AND ITS IMPORTANCE

Fitness is the capacity to achieve the optimal quality of life. This dynamic multidimensional state has a positive healthbase and includes individual performance goals. Fitness is a quality, each and every material possess this quality to survive in the universe. When fitness is reduced, the stability to survive decrease. In other words, fitness increases the ability to survive for organs system and for organism too, this principle of fitness is applicable. The ability to carry out a given task with easy and asthetics, determines the fitness level of that organ, or organ system or organism.

Muscles constitute seventy to eighty percent of the body weight when we think of muscles, we may think whether they are strong or weak, vigorous or lethargic,

Regular participation in exercise schedule improve all the important physical and motor fitness components namely strength, speed, endurance, flexibility coordination etcetera.

Physical fitness is one’s richest possession, it cannot be purchased. It has to be earned through a daily routine physical exercise.

A fit nation is an asset and a weak.

Nation is a liability\textsuperscript{10}.

\textsuperscript{10} Uppal, Physical Fitness - How to Develop (New Delhi : Friends Publications, 1980) P. 10
That is if a country desires to excel in the field of games and sports, the only short-cut to make the people fitness conscious and encourage them to regular physical fitness programmes. For each and every activity in day to day life, the organism need one sort or other sort of fitness. For example, professional fitness is the fitness of the organism to be suited in its profession. Being a human body also needs fitness to survive. Fitness can generally be classified into two, namely general fitness and specific fitness.

It is the responsibility of every country to promote physical fitness of its citizen because physical fitness is the basic requirement for most of the tasks to be undertaken by an individual in his daily life. If a person’s body is under developed or grows soft of inactive and if he fails to develop physical powers, he is undermining his capacity for thought and for work, which are of vital importance to one’s own life and society in a welfare state.

Physical fitness is the capacity to carry out reasonably well various forms of physical activities with at being unduly tired and included qualities important to the individuals health and well being. Many scientific studies over the past twenty years support the value of regular exercise as part of healthy life style. Studies have documented to a sedentary life style as a risk factor for major degenerative diseases national health statistics indicate that a high percentage of visit to physical are for vague complaints such as chronic fatigue. In many cause, the cause of fatigue is the lack of regular physical exercise.
Regular participation in vigorous exercise increase physical fitness. A high level of physical fitness is desirable for a fully, productive life. Sedentary living habits and poor physical fitness have a negative on both health and daily living.

Regular vigorous physical activity, throughout life significantly reduce the risk of disability and premature death from stroke and heart disease. It can also effectively after many of the important risk factors for cardiovascular disease by lowering body weight and total serum cholesterol level, raising HDL “good cholesterol and promoting the maintenance normal blood pressure”.

The physical fitness is the ability to carry out the daily task with vigour and alertness without undue fatigue.

1.4 THE COMPONENTS OF PHYSICAL FITNESS

1. Strength
2. Power
3. Speed
4. Endurance

These components are considered to be very vital in any physical activity including athletics.

So physical fitness is defined as the aspects of an ultimate quality of life that are related to positive physical health. Physical fitness is a necessary ingredient of fitness, but fitness includes much more than the physical aspects.
Thus a person cannot achieve total fitness without a good physical health base. On the other hand, a person with a high level of physical fitness without the other aspects of fitness would live long. So physical fitness of a person, state, country and world is essential. Physical fitness of an individual or team is very important for athletics also. Physical fitness of an fundamental element which involves achievement performance.

1.4.1 **STRENGTH**

Strength is a conditional ability that is it depends largely on the energy liberation process in the muscles. Strength is also the most important ability in sports as it is direct product of muscle contractions. All movements in sports are caused by muscle contraction and therefore strength is a part and partial of all motor abilities, technical and tactical actions. Strength assumes higher importance for achieving good performance in all sports. It always appears in some combinations with duration and speed movement.

1.4.2 **POWER**

Power is the rate of accomplishing work. It is defined in terms of speed at which you can produce force. A powerful individual can make muscular exertion very fast.
1.4.3 SPEED

Speed is a conditional ability. It has a complex nature and it depends to a considerable extent on the central nervous system. The high role of coordinative processes in a speed performance the improvement of speed has to be done with specific means and methods. Speed ability should not be equated with mechanical speed which is equal to the distance covered per unit of time. Speed ability primarily signifies the ability to execute motor movements with high speed.

“It is the performance pre-requisite to do motor actions under given conditions in minimum of time”.

Speed performance appear in different forms in various sports.

Speed is the capacity of moving a limb or part of the body’s lever system or the whole body with the greatest possible velocity. Speed is measured in metres per second, to give values for the speed of one body’s lever system relative to another. Speed is determining factor in the explosive sports. Speed is very essential in track and field events.

1.4.4 ENDURANCE

Endurance is primarily determined by energy liberation processes. The ability of the human body to maintain a level of energy production forms the physiological basis of endurance. In all sports it relates to doing work for a long time. It relates to working under fatigue conditions. It involves a large number of muscles. It involves work efficiency.
“Endurance is the ability to do sports movements, with the desired quality and speed, under condition of fatigue”. In sports endurance optimum speed of motor actions.

The ability to maintain pace or tempo of an exercise or during a competition is impossible without the requisite level of endurance. Endurance training results in the improvement of functioning of various organs and systems of the human body. Endurance activities have been found to be of high value for maintenance of good organic health.

1.5. STATEMENT OF THE PROBLEM

The purpose of the study was to compare the physical fitness variables among rural urban school boys in Cuddapah District.

1.6 DELIMITATIONS

1. The study has restricted to ‘200’ boys studying in Cuddapah District only.

2. The following schools around Cuddapah District have been selected for rural subject.

1. Z.P.H. School, G.K. Rachapalli


3. Z.P.H. School, Rayavaram

4. Z.P.H. School, Pincha
And the following schools in Cuddapah District were selected as the representative of the urban areas.

1. Nagarjuna High School, Cuddapah.
2. Municipal High School, Cuddapah.
3. C.S.I. High School, Cuddapah.

3. The number of subjects in each school was selected as '25' randomly which was considered enough for study.

4. The study was confined to those in the age group of 13 to 15 years.

5. The following variables were chosen for the study:
   1. Speed
   2. Power
   3. Agility
   4. Endurance
1.7. LIMITATIONS

1. Hereditary and environment factors which contribute to both physical and mental efficiency could not be controlled.

2. The day-to-day activities, rest period, food habits life style and family factor were not taken into account.

3. The internal and external factors which may discourage or motivate the subjects while performing the physical fitness test period could not be controlled.

4. Physical fitness test for all the subjects could into be completed within a single day and the changes in climate condition during the physical fitness test period could not be controlled.

1.8. HYPOTHESIS

1. It was hypothesized that there may be a significant variation in physical fitness between rural and urban areas.

1.9. DEFINITION AND EXPLANATIONS OF TERMS

1.9.1 PHYSICAL FITNESS

The basic physical fitness components are muscular strength, muscular endurance and circulatory respiratory endurance, muscular power, agility, speed and flexibility are added to compose motor fitness, kinesthetic, arm, eye and foot eye coordinations are needed for general motor ability.
1.9.2. **SPEED**

The capacity of an individual to perform successive movements of the same pattern at a fast rate\(^\text{11}\).

1.9.3 **ENDURANCE**

The result of a Physiological capacity of an individual to sustain movements over a period of time\(^\text{12}\).

1.9.4. **POWER**

The capacity of an individual to testing into play maximum muscle contraction at the fastest rate of speed\(^\text{13}\).

1.9.5. **AGILITY**

Agility refers to the controlled ability to change position and direction rapidly and accurately\(^\text{14}\).

1.9.6 **STUDENTS**

Students those who enrolled himself for the disciplines like Cuddapah District rural and urban high schools during the year of 2000-2001 is treated as students for as this study is considered.

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\(^{12}\) Ibid

\(^{13}\) Ibid

1.9.7. **RURAL**

Rural in this study refers to the population from the villages of Cuddapah District.

1.9.8. **URBAN**

Urban in this study refers to the population that resides in big towns of Cuddapah District.

1.10. **SIGNIFICANCE OF THE STUDY**

1. The findings of the study will explore the status of physical fitness rural and urban.

2. The findings will bring out the difference among rural and urban boys on physical fitness.

3. The result of the study will be useful for students, parents and teachers to be aware of the level of physical fitness of rural and urban boys and sufficiently motivate them to improve their physical fitness.

4. The result of the study would be of great use in designing the programme to develop physical fitness.

5. On the whole the study would be of great significance to the physical educationists.