CHAPTER - I

INTRODUCTION

Health and physical fitness have a vital role in the life of men from time immemorial. The progress of the Nation lies in the hands of the people, who are healthy and physically fit. Every individual should develop physical fitness for a happy and effective living. In order to get physical fitness one has to involve in physical activities.

Physical activity is essential for the development of wholesome personality of a child which would depend upon the opportunities provided for wholesome development of the mental, physical, social and spiritual aspects. Hence a well organized and properly administered physical education programme for school children is very essential.

Physical activity throughout the ages has been acclaimed for health and recreation. It provided fun and enjoyment. It also provided youthful exuberance and the elderly care. Physical activity and movements are as old as human existence. It played numerous roles from struggle for existence to struggle for excellence.

A sports is an activity in our lives where pursuits of different movement achieved through the total investigation of Neuro – muscular co-ordination. In this modern era, we can see that each and every individual directly or indirectly related to sports. Modern Physical Education commonly known as there is sports where pursuit of discipline freely formed such as biological, social and physical sciences.

Over a decades, the society in general has realized the need for keeping fit and health through organized physical activity programme. Scientific evidence has made with a clear and that unless man engages himself in organized vigourous physical activity programme. The real benefits would not come.
Many researchers strongly support the regular exercises helps one to keep a strong and healthy and to prevent cardio vascular diseases. Physically fit person, heart beats at a lower rate and pumps more blood per beat at rest. As a result of regular exercises and individual’s capacity to use oxygen is increased systematically energy production depends on internal chemical or metabolic change.

Health, Fitness and performance are poorly correlated phenomena. Health is generally defined as the freedom from disease, fitness strictly relates to a man’s ability to meet the demands of his environment and excellence in performance.

Meaning and importance of Education

According to Bucher, Education is the reconstruction of events that compose the lives of the individuals so that new happenings and new events become more purposeful and meaningful.

As a result of education, individual will be better able to regulate the direction of ensuring experience. It further means that the individual’s education consists of everything he or she does from birth to death. Education is doing phenomenon. One learns through doing. Education takes in the classroom in the library, in the playground, in the gymnasium and home. It is not confined to school but takes place wherever individual congregate. Education in the beginning considered as reading, writing and doing arithmetic. But in the modern concept of scientific world education is considered to bring out National harmonious and progressive development of man’s innate power. It helps an individual to make an original contribution to human life.

Education contributes to the development advancement and preparation of Nation’s culture. Educational institutions like colleges, Universities are
clearly the chief agencies that improve the progress of the society. Education must meet the challenges presented to the society.

**Meaning and importance of Physical Education**

The primary aim of physical education is physical fitness of the individual. The method can content in physical education to improve physical fitness are to be visualized.

Physical education is a process through which an individual obtain optimal, physical, mental and social skills and fitness physical activity **Lumpkin** (1986)

Physical education is a meaningful and worthwhile experience obtained through participation in physical activities that are physically wholesome mentally stimulating and satisfying and socially sound **William** (1966)

Physical education is necessary because it will make all physically fit to healthy to stimulate and satisfying the mind to keep all the socially sound and to give leadership training. It is a must for youngster like students who like to have mental stimulation and satisfaction. There has been a keen awareness of the need for physical fitness on a nationwide basis.

**Education and Physical Education**

“ body and mind should be driven like a pair of horses hitched to a shaft”.

- **Sathyanesan** (1970)

**Thirunarayanan and Hariharan** (1959) quoted Swami Vivekanandas definition “Education as the manifestation of perfection already in the man”. Education is drawn out the best in man through his, mind and spirit.

Physical education is an educational process that has as its aim, the improvement of human performance through the medium of physical activities
selection to realize this outcome. Physical education includes the acquisition and refinement of motor skills, the development and maintenance of fitness for optimal health and well being the attainment of knowledge the growth of positive attitude towards physical activity Bucher (1989)

The education is taking place in three learning domains, cognitude affective and psychomotor, physical education contributes domains, social needs, trends and for force which influence the objective of education and also sport within a society as well within the educational process. Recent years have been marked by calls for educational reform. Specially revitalization and strengthening of educational process. The nature of educational reform that are being implemented may have for reaching consequence on the conduct of physical educational programmes in schools and colleges Bucher and other (1987)

Meaning of Physical Fitness

Most authors define ‘physical fitness’s the capacity to carry out every day activities without excessive fatigue and with enough energy in reserve for emergencies. Emphatically this definition is inadequate for a modern way of life. By such a definition almost anyone can classify himself as physically fit Gatchell (1977)

According to Clarke (1971) Physical fitness is the ability to carry out daily task with vigor and alertness without undue fatigue and ample energy to enjoy leisure time pursuits and to meet unforeseen emergencies.

Fitness is a broad term denoting dynamic qualities that allow to satisfy the needs regarding mental, emotional stability special consciousness and adoptability spiritual and oral fear and organic health are consistent with heredity. Physical fitness means that the organic system of the body are healthy and function efficiently vigorous tasks and leisure activities beyond
Organic development, muscular strength and stamina.Physical fitness implies efficient performance in exercises Bucher and Prentice (1985)

**Importance of physical fitness**

Every individual must know the importance of physical fitness. In other words, one must have a fundamental knowledge of anatomy and physiology. This fundamental knowledge enables person to understand physical fitness. Physical fitness is the capacity of a person to function steadily and smoothly when a situation arise.

Physical fitness makes you feel mentally sharper, physically comfortable and more with your body and better able to cope with the demands that every day life makes upon you.

Increased physical fitness not only improves health but improves your performance at work. Hundreds of American companies have backed with idea financially by employing full time directors of fitness for their work. Gorden Jackson (1985)

The benefits of physical fitness are numerous. The person who is physically fit has greater amount of strength, energy and stamina an improved sense of well being better protection from injury because strong well developed muscles safeguard bones, internal organs and joints and keep moving parts limbers and Improved cardio respiratory function Bucher and Prentice (1985)

It is necessary for every individual to be physically fit to perform their daily work with ease and to take part in various activities effectively. Every one should be fit enough through participation in physical activities to develop[p the different physical fitness components.
Physical Education and Physical Fitness

The primary aim of physical education is not to develop star athletes, winning team of expert performance but a national vitality with character values and physical fitness. It aims to develop youth into citizen who have the capacity to enjoy vigour and interesting life. Mathews (1967)

According to Falls, (1971) “Physical fitness is an important objective of physical education programme and the programme is directed toward achieving the objectives through specific development exercises as well as games and activities that help to improve physical fitness”.

Harrison Clark (1971) opines “Neuro – muscular coordination of individual which include his ability to learn new skill finally to achieve competency in physical activities in essential to all phase of physical education”.

The Need for Fitness Education

Fitness is that state which characterizes the degree to which a person is able to function efficiently. Fitness is an individual matter. It implies the ability of each person to live most effectively within his potentialities. Falls (1980)

Physical activities help a man achieve high degree of physical conditioning. In schools there is a compulsory physical activities programme for all boys and girls, so it would be interesting to find out which of the components have better physical fitness. There are many physical fitness tests to evaluate the ability of the students to carry out daily tasks without undue fatigue.
Physical Exercise and Physical Fitness

Exercise is the means to an art, vigorous and lengthy life, inactivity will kill you. Many people say that exercise makes them feel better and more relaxed number of studies have shown that people improve psychologically as well as physically as a result of running programmes. There is a lot of circumstantial evidence to suggest that this relaxing effect is caused by the release of endorphin – morphine – like substances which occur naturally in the brain. “If you make an investment in exercise it makes you conscious of other reasonable health habits. You are not about to waste your investments” Morehouse and Brass (1975)

According to Lumpkin (1986) “Exercise means using or exerting body play” refers to the resultant action or what the participants do during physical exertion. “Games” range from amusements or diversions to competition with significant outcomes governed by rules. Freedom from work or duties describe “Leisure” which may or may not be used for physical activity similarly “Recreation” refers or renews one’s strength and spirits after toil again with or without activity. “Sport” encompasses all these diversions and physical activities that are does for pleasure and success”.

Health related Physical Fitness

According to current thinking in the physical education profession, physical fitness is either health related or performance related.

In keeping with wellness trend today and an emphasis on all aspects of healthful living in addition to stressing performance or motor skill related to fitness. This aspect of physical fitness concerns the development of qualities necessary to function efficiently and maintain a healthy life style. Each of the components of health related fitness cardio respiratory endurance, muscular

According to Bucher and Wuest (1987) “Health related physical fitness is concerned with the development of those qualities that often protect against disease and frequently are associated with physical activity. Then health related physical fitness is important to everyone and should be stressed by physical educators”.

Spiraling health care costs and realization of benefit to be gained from participation in health and fitness activities have prompted many colleges, corporation and other organization to establish programmes for their students and client able. They have found that such programmes promote good health and also make economic sense since poor health is cost by in terms of illness, primitive death, development productivity and absenteeism Bucher and Prentice.

Performance related Physical Fitness

Ko Ko (1985) says, “General physical fitness is the capacity of the body to perform work to resist disease and infection and to resist physical stress imposed by such things as heat, cold, atmospheric pressure changes at high attitude or under water and the forces of jolts and vibrations”.

Thomas (1962) opines, “Physical fitness is the total fundamental capacity of an individual to perform a given task”.

Exercise is not always performed in a sport or training when you paint your room or change a flat time you are exercising and when you exercise or number of important bodily changes influence psychological functioning in every striking ways if you are eventually to organize a realistic personal programme of exercise it is important that you understand these changes.
Components of Physical Fitness

There is no single measure of physical fitness and no single way of achieving it. However, these are three major qualities which contribute to overall fitness, they are strength, stamina and flexibility.

“The achievement of total fitness depends upon combining these three main strands, strength, stamina and flexibility” Garden Jackson (1985)

According to Mathews (1967) “Total fitness refers to individual capacity to measure and live effectively in the environment. AAHPER fitness is that state which characterizes the degree and which the process is able to function. Fitness is an individual matter. It implies the ability of each person to live most effectively with potential ability to function and depend upon the physical, mental, emotional, and social and spiritual components of fitness, all of which are related to each other and are mutually independent.

“Fitness means the development of components muscular strength, muscular endurance cardiovascular endurance and flexibility”

Physical Fitness:

According to Bucher (1958) Physical fitness is “the ability of an individual to live a full and balanced life. It involves physical, mental, emotional, social and spiritual factors and the capacity for their wholesome expression”. Physical fitness refers to practical performance of exercise that calls for the number of experiences, they are the feeling of happiness in the process of correct performance of movement, feeling of “confidence, self satisfaction, surprise and unhappy in the process of confusion and disappointment etc.

It is a positive quality, extending on a scale from death to “abundant life”. All living individuals have some degree of physical fitness which varies
considerably in different people and in the same person at different times. It is not as broad in its meaning as ‘total fitness’. It include, adequate degree of health, posture, physique, proper functioning of vital organs, nutrition, and good health habits along with an adequate amount of endurance, strength, stamina and flexibility Clark and David (1978).

Its Hoary Tradition

Fitness has always been a great concern of mankind. Physical fitness from prehistoric to the present day has been equated with survival and power. The earliest human beings were dependent mainly on their own individual strength, vigour and vitality for survival. For existence they had to acquire basic skills such as agility, balance, strength and endurance. Their physical activity was related first to survival activity. They had to run in search of food, clothing shelter and protection from a hostile environment Barrow and McGee (1979). They had to prepare themselves to fight with the animals and other enemies. From time immemorial, the most celebrated countries over the globe which have created glorious past and famous civilizations of Greeks, Spartan, Athenians, Romans have best owed paramount importance to the concept of physical fitness of the human body Empire Barrow and Brown (1988). The great rulers and citizens of the olden times were quite aware of the fact that physically fit subjects constituted not only a fit country but a healthy one too.

This is not to suggest that fitness testing cannot be a valuable tool in the education of children and youth. It was the order of those days that physically fit man had survived in the life struggle and comparatively a weaker man could not succeed in his attempts to establish himself triumphantly. The old saying ‘Fit or Perish’ was present in Sparta and Athens – during the Golden Era of Greek history and again in the early centuries of the Roman Empire Nixon and Jewett (1969).
The Nation is quite simple. The world’s renowned thinkers have emphasized the importance of physical fitness in human beings to ensure a productive and meaningful life. It is from memorabilia of Xenophon, we come to know of Socrates emphasis on the necessity of physical fitness and possession of a robust physique for the Greek citizens.

“No citizen has any right to be an amateur in the matter of physical training; it is a part of his profession as a citizen to keep himself in good condition, ready to serve his State at a moment’s notice Barrow and Brown, (1988)”. Plato, the disciple of Socrates and a great philosopher and also twice a winner of Isthmian games in his youths, observes in his “Republic”, gymnastics as well as music should receive careful attention in childhood and continue throughout life. He also emphasized the importance of physical fitness for both men and women. Aristotle stresses that “body and mind” are closely inter related and interdependent and opines that education of the body must precede the intellect Tirunarayanan and Hari Harasarma (1985).

The one experience common to almost all people in this country is attending school during childhood. History of man kind is full of evidences that physical fitness has always been an important and essential objective of various civilizations and governments. The English historian, Arnold Toynbee wrote that out of the twenty one great civilizations of the past, nineteen of them failed to survive because of the physical and moral decay from written. John Locke has also affirmed, “A sound mind in a sound body”, is a short but full description of a happy state in the world. He that has these two, has a little more to wish for Barrow and Brown (1988).

The rewards of a rich and full life are closely related to physical capacity of the man. People throughout the ages were staunch in the belief that the Nation’s status, standard and destiny were to be decided not by the numerical strength of the people but by the ‘Fit people’. Rudyard Kipling has aptly expressed:
“Nation have passed away and left no traces, and History gives the naked cause of it, one single, simple reason in all cases, they fell because their people were not fit”. Barrow and Brown (1988)

Physical Fitness in Ancient India:

The profound tradition of physical fitness in India could be traced back to thousands of years. It has been closely associated with the religious practices, traditions and culture of India. The then Indian Physical Education was nothing but contributing to physical fitness.

The physical fitness programme was in the form of physical activities like Yogasanas, Pranayama, Dands, Baithalls, Malkhamb, Lezium, Lathi, Calisthenics, Combatives, Dumb-bells and so forth and the games like, Khabaddi, Kho-kho and Atyapatya have been in vogue from time immemorial, but the names of the inventor and the dates of their origin are not clearly known. Yet we are aware of the fact that a scientific system of Physical fitness programme was in existence in India and it was practiced by the people from time of yore. These physical fitness programmes were organized and practiced in parnashalas, ashramas, hermitages and the temples. The preceptors were the ustad Tirunarayana and Hariharasarma. The age - oral Vedas have also sounded the strength as one of the components of the physical fitness programme. This could be assessed in the following words “Barana Vai Prithivi Tishtati, Balan Upasura” (The world stands protected by strength, worship strength)

Medical authorities of ancient India, such as charka and susruta, recommended physical exercise (Vyayam), oil bath and message for maintaining and restoring health. Susruta defined Vyayam as movements of the body that produced sufficiently vigorous circulation of the blood and quick respiration to fatigue the individual. Charaka recommended various
exercises to ward of disease, reduce, weight and activate digestion, present a pleasing appearance, and delay the encroachment of old age Van Daley and Benett (1971).

Dance requires a great deal of physical fitness. It has a long and systematic history in India and is intimately associated with religion. The bronze figure of a dancing girl found in the ancient city of Mohenjo-Daro proves the antiquity of the art, and the early literature reveals the people’s love of dancing and the important role played in their religion. In fact, Shiva, one of the trinity of Hindu Gods, was known as ‘the Lord of Dance’. The development of physical fitness and motor skills was incorporated in the vocational aims of certain groups of people especially that of the Kshatriyas or military caste. Dancing girls were also trained to give expression to religious concepts and to provide recreation for spectators. The great epics the ‘Ramayana’ and ‘Mahabharata’ have considered physical fitness as an important factor in all welfare. It was promoted through participation of Indigenous system of physical activities Tirunarayanan and Hariharasarma (1985). The great Nalanda and Takshasila Universities prominent in Ancient and Medieval India, had physical fitness programmes for 12,000 students at one time in the form of Indigenous activities and gymnastics of Indian origin.

Physical Fitness in Pre-independent India

The responsibility of education in the year 1833, was in the hands of British rulers, and hence they never paid any attention to the inclusion of physical fitness system in the school education programme Kamlesh and Sangral (1991).

The war of Indian independence of 1857 had suppressed the physical fitness programme of Indigenous physical activities, and it was replaced by Westernised type because the whole country was under the control of the whites. The fire of patriotism was injected into the minds of strong and stout
Indians to refuse the physical fitness programme of Westernised system of physical activities, but in vain. The then rulers themselves were lover of gymnasium work. They patronized several wrestlers – to develop strength and Malkhamb (wrestler’s pillar) to develop flexibility as components of physical fitness *Tirunarayanan and Hariharasarma* (1985).

In 1870, the education was made a state subject retaining the supervisory power at the centre. Even then, physical fitness programme was given no place in the school programmes *Kamalesh and Sangral* (1991).

The alien rulers had the fascination of promoting Western games in schools and colleges and thus degraded the indigenous physical activities. To give more impetus, Britain had introduced in India, the Maclarens system of gymnastics adopted from the German system, Swedish drill, military drill as adapted by Ling system, Marching and rhythmic exercises adapted from the Danish system and the modern British games like Football, Cricket, Hockey and so forth., to aim at fulfilling the desired components of physical fitness *Tirunarayana and Hariharasarma*. (1985)

The outstanding development of physical fitness programme in pre-independence days goes to YMCA College of physical education founded in 1920 by Mr. Harry Crow Buck at Madras. The network of physical fitness components such as strength, endurance, flexibility, speed, agility and so forth, were found a place in the games of Volleyball and Basketball introduced in India with the American influence through the YMCA. Afterwards several institutions, namely, Government College of Physical Education, Hyderabad (1931), Christian College of Physical Education, Lucknow (1932), Training Institute of Physical Education, Kandivali (Bombay) (1938) and so forth sprang up basically to serve the cause of the physical fitness programme in India.

The Olympic movement in India resorted to encourage participation in high level competition and also to create a sense of participation in games and sports among mass in general. It was in the year 1920 that six competitors
were sent for the first time to represent India in Athletics and wrestling in the world Olympic games held at Antwerp (Belgium) after having made them physically fit and also fit in the skills for the high level performance.

With a view to feed players and athletes for the high level competitions, several physical fitness training programmes were launched in order to develop strength, endurance, and agility.

**Physical Fitness in Post-independent India:**

The impact of World War II made to develop physical fitness in the youth of the nation. The need for the national programmes of physical fitness was felt by the then administrators of India because young people were not in sound physical condition for selective services and professional preparation programmes. Physical fitness programme was very much necessitated for rehabilitating the war victims and it was also used in the educational and training institutions in the form of physical therapy, occupational therapy and physical re-training.

After attainment of Independence, utmost importance was given by the Indian Government for the promotion of physical fitness programmes to keep the citizens fit, both in body and mind for the national security, individual welfare and efficiency in production. The Government launched various measures for the betterment of physical fitness among youths and improved performance of the Indian sportsmen at International competitions. The development of physical fitness programmes was started with the establishment of Rajkumari Sports Coaching Schemes (1953), and the All India Council of Sports (1954) and National Discipline Scheme (1954).

Many programmes with an idea of improving the physical fitness at the grass roots level (that is, at the school level) were launched. Each student was given an opportunity to assess the physical fitness level as to develop skill and
understanding that will enable him to enjoy productive presence and more meaningful existence in the school. The physical fitness programmes in schools were initially placed at the hands of retired army personnel. There were no special periods allotted for physical fitness; it was expected that students would develop a certain amount of physical fitness through participation in some physical activities.

The Central Advisory Board of Physical Education has made further progress with the existing programmes on scientific lines by introducing specific schemes like National Discipline Scheme, National Physical Efficiency Drive, Auxilliary Cadet Corps, Youth Services Camps, Scouts and Guides, National Cadet Corps and the like.

A National Plan of Physical Education and Recreation sponsored by the Ministry of Education finalized in 1956 suggested norms for physical efficiency tests. Government of India, Ministry of Education (1956), One of the programmes of National Physical Efficiency Drive as specified above, was sponsored from the year 1959-60 with a specific purpose to create consciousness and enthusiasm among the people of our country for physical welfare, which would help them to attain a better healthful living and in turn, increase the efficiency of work and result in a prosperous life. The factors that normally contribute to the physical efficiency of an individual are nothing but physical fitness components namely strength, speed, agility and endurance. To assess these factors, batteries of tests in certain physical performances were framed. These are known as “Physical Efficiency Tests”. These tests (100 metres run, 800 Government of India, Ministry of Education, The Central Advisory Board of Physical Education and Recreation, A National Plan of Physical Education, 1956. 100 metres run, Long jump, High jump, and Shot-put) were based on certain standards and homogeneity to the age group and sex. There were three distinct standards viz., 1. One star standard, 2. Two star standard and 3. Three star standard.  

Kamlesh and Sangral, The National
level awards were also given to the participants after they qualify for the requisite battery of tests in their own age group.

In 1959, the tests were conducted in 10 States and Union Territories at 269 centres. The number of participants were 77,109; out of which 42,357 people received merit certificates and medals. In 1968-69 the tests were administered in 12 States and 10 Union Territories at 5,500 centres and 10,50,000 people took part. Out of which 4,10,000 people were qualified for merit certificates and medals, 12 people won national awards. To make it more appropriate and specific, the nomenclature of National Physical Efficiency Drive had been changed as National Physical Fitness Scheme. This scheme was in operation for some years. While administering the batteries of test under this scheme, some difficulties were experienced such as (i) technical events involving considerable training which were to be given in mastering over the performance and (ii) over - emphasis of neuromuscular skills. Besides, there were other important factors like loose organization, disinterestedness on the part of conductors, and Bureaucratic mismanagement in the matter of awarding prizes and medals. Therefore the National Physical Efficiency Drive Scheme became gradually weak and extinct.

Education from the ‘State list’ was brought under ‘concurrent list’ by the 42nd Amendment to the Constitution of India in the year 1976 The Constitution (Forty – Second) Amendment Act, 1976, Section 57 (c). The role of education has become vital instrument on the part of the State and Union Governments. The National Physical Fitness Scheme has become a failure because of the reasons mentioned above, not only at the centre but also in the State and Union Territory. Though the Programme of Physical fitness is existing in the State of Andhra Pradesh. The Government of Andhra Pradesh taken keen interest to promote physical fitness, Health fitness, and Sports and games related fitness. The Government of Andhra Pradesh has constituted a **Sports Authority of Andhra Pradesh** (SAAP) in the year of 1987 to suggest ways and means to improve physical fitness, health fitness and sports and games performances
which is lacking in the State especially among the youths both rural and urban. The Governments have been very keen to develop the State at grass root level as “Kreedanandhra Pradesh” as a model State in Sports and Games, but there is no standard norms and follow-up actions. Therefore, the need for improving physical fitness and raising the performance standard in various games and sports have been considered very imperative. In order to assess the physical fitness, there is a need to establish norms on the basis of the standard test batteries. In this direction, a significant step has been taken by this research scholar to establish the norms and to assess the physical fitness of school-going boys of the Rayalaseema Region, Andhra Pradesh.

Norms referred as standard is based on statistical procedure which are developed to judge the individuals’ performance in relation to others in the same age group, sex and at particular ability level. Therefore, norms of physical fitness are quite necessary in order to interpret the test scores, results and to evolve a standard procedure.

The New Policy on Education treats, Education as a unique investment in the present and the future. It states that “Sports and Physical education are an integral part of the learning process, and will be included in the evaluation of performance” it will have appreciable impact on student’s motivation to take part in sports activities. Therefore, however, certain irritant like the weight age to be assigned to sports activities in the curricula of school and college education and the criteria for making sports performance. The National Sports Policy in India (2001) has declared that Sports activities, in which the country has potential strength and competitive advantage, need to be vigorously promoted. Towards this end, sports and Physical Education; would be integrated more effectively with the Education Curriculum, while the broad basing of sports will primarily remain a responsibility of the State Government. The Union Government will actively supplement their efforts within direction and for Taping the latent talent including in the rural and tribal areas.
The AAHPER (American Alliance for Health, Physical Education and Recreation) youth fitness test battery is very popular in this region because of its comprehensiveness, simplicity, easy accessibility, and availability of the most of the physical fitness components. These components are strength, endurance, agility speed, power, and cardio-respiratory endurance. The problem for investigation in this test battery is undertaken by the research scholar with a view to establish valid and reliable physical fitness norms for school boys of Rayalaseema Region, Andhra Pradesh and then to find out the influence of intensive physical activities programme on them.

**OBJECTIVES OF THE STUDY**

- To prepare physical fitness norms for the particular region, since this region is economically very poor, geographically draught area this region people were not getting sufficient rainfalls.
- The main objective of the study was to find out the status of physical fitness among school going boys of Rayalaseema region of Andhra Pradesh.
- To compare the physical fitness status between rural and urban school boys of Rayalaseema Region of Andhra Pradesh.
- To find the influence of Intensive physical activities programme on select physical fitness variables
- The purpose of the study was to find out physical fitness and latent talent identification among the school boys.
- This study will bring awareness about physical fitness among school boys of Rayalaseema region of Andhra Pradesh.
STATEMENT OF THE PROBLEM

The purpose of the study was to Survey the Physical Fitness among School boys of Rayalaseema region of Andhra Pradesh and thereafter to find out the Influence of Intensive Physical Activities Programme on them.

HYPOTHESIS

1. It was hypothesized that physical fitness level of high school boys of twelve to fifteen years of age would not be the same.
2. It was hypothesized that urban school boys are better than the rural school boys in physical fitness variables.
3. It was hypothesized that the Intensive Physical Activities programmes may influence a significant difference in Physical fitness variables.

DELIMITATIONS

The study was delimited in the following:

1. The study was delimited to the school boys studying from seventh standard to tenth standard in the Rayalaseema region of Andhra Pradesh.
2. Their age ranged from 12 to 15 years.
3. The study was considered 3030 school boys (both rural and urban) belonging to 35 Schools in Rayalaseema region of Andhra Pradesh.
4. AAHPERD Youth Fitness Test has been used as a measure of physical fitness variables.
5. The experimental treatment was restricted for a period of twelve weeks.
6. Each group consisted of thirty subjects which were assumed to be large enough for the purpose of this study.
LIMITATIONS

The study has the following limitations:

1. The study was conducted on sample drawn from different populations in different places. So the motivation level of the subjects at the time of testing was not controlled.
2. Certain factors like habits, life style, daily routine work, diet, etc, might have influenced the results which were not considered in this study.
3. The background of the previous training of the students was not considered.
4. The conditions of the school ground and environmental factors had not been taken into consideration.
5. The subjects for the study do not come from the same social, economical and cultural background.

SIGNIFICANCE OF THE STUDY

Evaluation is an essential aspect of any educational venture and it is true in the case of physical education also. To determine the effectiveness of any physical activity, it is essential to evolve a standard procedure to measure the achievement level. No efforts so far have been made to formulate scientific evaluation procedures. For any evaluation procedure, where the performance can be obtained in terms of numerical scores, it is necessary that a standard scale be available to interpret, without which the scores may not convey much meaning. The present study, therefore, will be of a great significance as it will provide physical education teachers and coaches the norms to grade their students on the basis of their performances in the physical fitness tests. It will also help the students to know their own level of achievement in relation to the group, thus to motivate the students, to raise themselves to higher performance levels in comparison with their fellow students.
Physical education teachers in various schools of the Rayalaseema region of Andhra Pradesh have been entrusted with the responsibility of looking after the development of youth. During their growth and development period, it is essential to know their physical fitness status before giving any physical education programme to them. This study would provide norms to determine the fitness status of the students and help the physical education teachers to plan physical education programmes accordingly.

No two individuals are alike. Individual differences make every physical education class a heterogeneous group. Therefore, no one programme of physical education can be ideal for all. Unless the strength and weakness of the individuals are known to the teachers, with the availability of norms, the coaches and physical education teachers in schools cannot determine the fitness status of the students and know the exact needs of each individual. Thus a norm serves the purpose of a parameter to indicate the state of affairs with respect to physical fitness of the students. The present study will be significant and reliable physical fitness norms for school boys of Rayalaseema Region of Andhra Pradesh.

The present study will be significant in the following ways:

- The present study enables us to estimate the present physical fitness status for the school boys in the Rayalaseema region of Andhra Pradesh.
- The computed physical fitness norms serve as a guide for the other schools to assess their physical fitness status.
- On the basis of the results of this study, proper physical education programme can be planned effectively for the school boys.
- The study provides an opportunity to physical education teachers and coaches, to spot-out the latent talents of the students and to select potential boys for different sports and games.
- This study is more useful in planning our educational curriculum.

Through this study pupil can be encouraged to participate in physical fitness Programmes
DEFINITION AND EXPLANATION OF THE TERMS

Survey

The survey method gathers data from a relatively large number of cases of particular time. It is not concerned with characteristics of individual or individuals. It is concerned with generalized statistics that result when data are obstructed from number of Physical fitness of individual cases. Best (1977)

Physical Activity

Physical activity is any body movement that works your muscles and uses more energy than you use when you’re resting.

Physical activities help a man achieve high degree of physical conditioning. In schools there is a compulsory physical activities programme for all boys and girls. So, it would be interesting to find out which of the components have better physical fitness. There are many physical fitness tests to evaluate the ability of the students to carry out daily tasks without undue fatigue.

Urban and Rural

For Census 2000, the Census Bureau classifies as “urban” all territory, population and housing units located within an urbanized area (UA) or an urban cluster (UC). It delineates UA and UC boundaries to encompass densely settled territory, which consists of:

Core census block groups or blocks that have a population density of at least 1,000 people per square mile and

Surrounding census blocks that have an overall density of at least 500 people per square mile
In addition, under certain conditions, less densely settled territory may be part of each UA or UC.

The Census Bureau’s classification of “rural” consists of all territory, population and housing units located outside of UAs and UCs. The rural component contains both place and non place territory. Geographic entities, such as census tracts, countries, metropolitan areas, and the territory outside metropolitan areas, often are “split” between urban and rural territory and the population and housing units they contain often are partly classified as urban and partly classified as rural.

Norms

According to Chambers Dictionary, Norm is “an authoritative standard” Kirkpatrick (1983).

According to Barrow and McGee, (1979) a norm is a scale that permits conversion from a raw score to a score capable of comparisons and interpretations.

Allen Phillips and Hornak (1979) define, Norms represent the achievement level of a particular group to which obtained scores can be compared.

According to Ebel (1966) “A Norm as the term is used in relation to test scores is the average of typical test scores (or other measure) for members of a specific group. Norms are often presented in tables giving the typical score values for a series of different homogeneous groups in a given grade or students of a given age.” Norms are standard point of differences to provide basis for judgement or for the determination of relations.
Physical Fitness

Physical fitness has been defined “as the development and maintenance of a sound physique and a soundly functioning organs, to the end that the individual realizes in an optimum measure his capacity for physical activity as well as for mental accomplishment unhampered by physical drains or by a body lacking in physical strength and vitality” *Ebel*, (1966).

Physical fitness as the capacity of an individual to perform given physical takes involving muscular effort *Mathews* (1973).

Physical fitness as the capacity of an individual to perform physical work *William* (1970).

In the words of Willgoose, Physical fitness is “The capacity for an activity which must be enough to perform the give task” *Willgoose* (1968).

According to *Hubert Dhanaraj*, (1968) Physical fitness refers to the ability of the body to tolerate stress in all its kinds and maintenance manifestations.

Strength

According to *Barrow and McGee* (1979) strength is the capacity of the whole body or of any of its parts to exert force.

According to *Mathews* (1973) Muscular strength is the force that a muscle or group of muscles can exert against a resistance in one maximum effort.

According to *Hockey* (1973), strength may be defined as “The force, a muscle can exert against a resistance in one maximal effort”. It is measured in units of pounds or kilograms.
Endurance

Endurance is the capacity for protracted work and is a measure of the ability to stave off fatigue. Barrow and McGee (1973) define Endurance as the result of a physiologic capacity of the individual to sustain movement over a period of time.

Agility

Barrow and McGee (1979) interprets Agility as the ability of the body or parts of the body to change directions rapidly and accurately.

According to Phillips and Hornak (1979) the agility is the ability to change directions rapidly and accurately. It depends essentially on strength, speed of reaction and movement, and big muscle coordination.

Cratty and Hutton (1969) defines agility as the accuracy and speed with which an individual integrates his body parts in various ways.

Fleishman (1964) defines agility as the ability to change the direction of the body or of the parts of the body rapidly. It is interrelated with speed, strength, balance and coordination. Agility, like speed, is partially innate; yet, it can also be improved through practice. The acquisition of agility is very important to success in game activities requiring dodging, changing of direction, and quick starts and stops. Carl Gabbard and Susan Lowy (1987).

Power

Barrow and McGee (1979) define power as the capacity of the individual to bring into play maximum muscle contraction at the fastest rate of speed. Power is an explosive action and it is equal to the product of force times
velocity, where force has to do with muscle strength and velocity with the speed with which strength is used in motor performance.

According to **Bosco and Gustafson** (1983) Power is “A function of force and time (Power = Work / Time) and is defined as the rate of performing work (Work = Force x distance). Since work is the product of force and distance over which the force is applied, power is that product divided by the time during which the force is applied.

According to **Mathews** (1973) one’s ability to get one’s body mass moving in the shortest period of time is a measure of power. The physiologists refer to such events as being anaerobic (without oxygen) i.e., they are performed in such a short period of time that Oxygen is not required in producing the necessary energy.

Power is the combination of strength with explosiveness (speed); maximum muscular force released at maximum speed. Power is a fundamental factor in jumping, throwing, kicking and striking. Power is improved through increase in strength and practice.

**Speed**

**Barrow and McGee** (1979) define speed as the capacity of individual to perform successive movement of the same pattern at a fast rate.

**Johnson and Nelson** (1985) define speed as the rate at which a person can propel his body, or parts of his body through space.

Speed is the ability to move from one place to another in the shortest possible time. It is primarily innate, yet it can be improved through practice for technique and movement efficiency.
Cardio-Respiratory Endurance

According to Willgoose (1968) Cardio-vascular endurance, also referred to as cardio-respiratory endurance and circulatory endurance, is a kind of physiological fitness demonstrated through an adjustment of the heart and lungs to prolonged physical exertion.

According to Jenson and Fisher (1965) Cardio-vascular endurance -- the endurance of circulatory system, is the ability to carry on its functions efficiently under conditions of heavy work.

Cardio-respiratory endurance is the ability of the heart, lungs, and blood vessels to deliver essential nutrients, especially oxygen, to the working muscles and to remove waste materials from the body.

Thaxton (1988) It is identified as the most important component in health-related fitness, cardio-vascular endurance is the ability of the heart, lungs and vascular system to function efficiently for an extended period of time. Directly related to this function is physical working capacity. A heart and circulatory system that is functioning at a higher level, thus delivering more blood, is also making more O₂ available for working muscles. This process increases the child’s ability to work at a greater intensity and over longer period of time without debilitating fatigue.