CHAPTER - 1

INTRODUCTION
CHAPTER -1

INTRODUCTION

INTRODUCTION OF LADAKH

Ladakh is known for its remoteness, difficult terrain, cold desert areas and their unique culture and tradition. It is bounded by Tibet in the east, Sinkiang (China) in the north, Pakistan held Skardu and Gilgit in the west, and Himachal Pradesh in the south as shown in Figure - 1

Before 1947, Ladakh consisted of three tehsils Leh, Kargil, and Skardu, with a total area of 96,701 sq. kilometres. But following the Pakistan’s tribal raids and the Chinese aggression, Ladakh lost 37,555 sq. kilometres. Thus, it was reduced to an area of 59,146 sq. kilometres only.

Ladakh’s history begins with the introduction of Ashoka’s missionaries around 250 B.C. It was formerly an integral part of Tibet. Ladakh became an independent state, when king Skyelde Nimagon gave it to his eldest son Spalgi-Gon, who started the Namgyal dynasty, still perpetuated at Stok-Palace.

Senge Namgyal (1564-1645) was one of the greatest exponents of Buddhism in Ladakh. This king and warrior proved to be an equally great patron of art and literature. Buddhism since been the religion of the majority of the people of Ladakh. Art, literature and education even the social system are deeply influenced by Buddhism.

The early nineteenth century saw foreign invasion this time from Raja Gulab Singh. Zorawar Singh established the Dogra rule (1840 AD), and thereafter, a stable Dogra rule was maintained in Ladakh. Ever since, Ladakh
has been a part of Jammu and Kashmir which merged with the Indian Union in 1953.

Ladakh covering seventy per cent geographical areas of Jammu and Kashmir state, forms the northern most part of the country in the outer Himalaya. One of the most striking features, we observe in physical aspect of Ladakh is the parallelism of the mountain ranges, running through the region in an unbroken chain from south-east to north-west direction. This direction of mountain ranges is one of the potent factors in shaping the course of the river system and the natural dimension of Ladakh. Ladakh is also called the land of lakes. Most important is Pang-Gong Tso (150 kms. long and 4 kms. wide at a height of 14,000 ft. above sea level), Tsomo -Riri and Tso-Kar.

Ladakh has two districts namely, Leh and Kargil, with a population of approximately two lakh people. About ninety per cent of the total population lives in rural area and while the remaining is clustered in urban areas, which is the centre of social, commercial and political life of the region.

Ladakhi is the regional language, Urdu and Hindi are also spoken by a considerable number of people. Both Leh and Kargil stand in contrast with each other in terms of geography and climate. The great Himalayan mountain, lying to the south, forms a barrier to the monsoon rain. Due to this reason, Ladakh is an isolated cold desert region.

Altitude in Ladakh varies from place to place by several hundred metres and is the main factor affecting the local climate. Winter temperature touches as low as -30°C. (Leh and Kargil) and -40°C. in Drass. During the summer...
season, the mean maximum temperature is 23°C and 26°C. (July and August). The relative humidity is low and ranges from 31 to 64 per cent.

Educationally Ladakh is one of the most backward regions of Jammu and Kashmir state. At present, there are fifty-two high and higher secondary schools and two degree colleges in the whole region. None of them offers physical education as a compulsory subject. Although, they have engaged physical education teachers in almost all the schools, yet they are confined to sports and games only. The schools affiliated to Central Board of Secondary Education, where physical education is a compulsory subject, has no physical education personnel and other required facilities.

Ladakh has a natural environment. The environment factor such as size, position, climate, vegetation, topography, and natural resources play a vital role in determining the physical fitness of a society. People of this area are considered to be more physically fit as far as some fitness components are concerned, and spiritually healthy. That is why, the people of different faiths live in Ladakh with harmony, tolerance and brotherhood.

Good health and physical fitness cannot be taken for granted, especially with today’s sedentary and automated life-style. Scientific evidences indicate that the over-civilization of modern man has made him soften than even before, causing deterioration of health and performance. There have been indications that the consequent deterioration would increase with further scientific and technological development.

If a person’s body grows soft and inactive and he fails to develop physical prowess, he is undermining his capacity for thought and work which
are vital to life and society in a welfare state. It is the responsibility of every nation to promote physical fitness of its citizens.

Fitness of the citizens is an index of the prosperity of the country. The standard of health and fitness of the citizens of the country determine the productivity of a nation. Fit citizens are an asset. On the other hand, weak people are a liability. Youths of the country need abundant health and ethical qualities of character. There is an urgent need for physically fit citizens. In peace or in war, a fit nation is an efficient and productive one.

Modern civilization has made life soft and luxurious. The diminished physical efforts and artificial life are responsible for a physically weak population. People today, lack both strength and endurance. The average man spends more time in attending his automobiles than in attending his body (Featherstone, 1965).

The modern age is a age of technology which inhibits physical activity. Machines are used to perform much of our work and we are forced to lead a sedentary life. Our life span is increasing but physical fitness is deteriorating. Most of our leisure time is also passed in an inactive way watching television (Jones, Shainberg and Byer, 1972).

The main aim of the physical education has always been promotion of "health and physical fitness" Yogic exercises also emphasize physical well-being, besides mental and spiritual attainments. Ancient Greece, which is considered to be the cradle of civilization, attached great importance to physical health and physical fitness of the nation, whether in liberal Athens or in the rigid Spartans. Body is the temple of the soul, and to reach harmony of
Body mind and spirit, the body must be physically fit (Greek Philosopher, Aristotle).

Physical fitness is the ability to carry out daily task with vigour and alertness with undue fatigues and with ample energy to enjoy leisure time pursuits and to meet unforeseen emergencies. Physical fitness is more than “being well” or “not being sick” and extends on a scale from “abundant life” to “death”. Physical fitness is the ability to last, to bear up, to withstand stress and preserve under difficult circumstances, where an unfit person would quit (Clarke, 1976).

The degree of fitness one has to develop and maintain depends upon the profession of the person. The needs of the individual are to be taken care of—high performance athletes need much more physical fitness then a classroom teacher, a doctor, an official or a scientist. All need physical fitness, so that the body may sustain the demands of the intellect. The degree of fitness differs from person to person. The fitness of healthy man of eighty years age is entirely different from that of young sportsman (Edmundson, 1953).

Physical fitness differs from one area to another. Reported studies reveal that transcontinental physical fitness level of school children differs significantly. The physical fitness of north Indians may differ from that of the south Indians.

Physical fitness of physical education major may be superior to that of non-major students. It may depend on the nature of work to be performed. May be it is health related, in the form of maintaining physical well-being and being free from diseases. It may be dance related, to attain optimum grace in dancing.
Physical fitness may be sports related to win laurels and so on. Physical fitness is a comprehensive phenomenon which can be precisely defined or identified with reference to a pertinent group or aspect, rather than in general terms.

Factors which determine the state of fitness are many but more important among them are age, sex, life-style. The more the body moves, it is considered to be more lively and healthy. We live “to move” and “move to” live.

The concept of movement contributing to growth and health connotes new dimensions to physical fitness, as the child grows through different stages—childhood, youth and adult. The standard of health and physical fitness of adult would determine the productivity of a nation. A healthy nation an asset; a weak one a liability.

Another important factor which determine the level of fitness is the person’s life-style. Whether one is working in laboratory or office, fighting on the top of Himalayas, or in the space, one need physical fitness required of the specific activity, so that the demands are met.

One of the most important factors promoting physical fitness is nutrition. Healthy parents beget healthy children. In fact, the nutrition the child gets during period of early growth, largely decide the structure, functional efficiency and future performance.

Freedom from disease, organic development alertness of mind, efficient movement, emotional maturity and social adjustment provide the framework of fitness. Fitness not only adds years to one’s life but life to one’s age (Barrow, 1977).
A new concept of fitness includes the mental, emotional, social as well as physical aspects. Thus, when total fitness is used in its modern context, it includes the emotional, mental, social as well as physical components. And all the components play a significant role in living a full and happy life.

Fitness is the capacity of the individual to live and function effectively, purposefully and zestfully and to meet confidently the problems and cries which are among life's expectations (Frost, 1971).

A fit person is free from diseases and possesses adequate strength and endurance, flexibility and skill to live a productive and happy life. A physically fit individual is capable of withstanding fatigue for longer period; better equipped to tolerate physical stress; has more efficient circulatory and respiratory system and exhibit good mental alertness and absence of nervous tension. In addition, a physically fit person has less chances of coronary heart disease, hypertension, obesity, anxiety and depression that lead to early disability or death.

In spite of fitness being one of the most persuasive influence on society today, its conceptual analysis has received comparatively little attention. Recently, however, there has been a marked change in the concept, approach and philosophy of physical fitness and lot of scholarly attention has been brought to bear on its potential. In nineteenth and twentieth centuries, many countries have taken seriously the physical fitness of their citizens. The German Nazis are known for their strong nationalistic feelings and give great importance to physical fitness of their countrymen. Hitler could not tolerate any one fitter than the Germans. Americans also during the world war-I and II,
noticed their weak youth, and started physical fitness programme for them which continues even today.

Many health leaders feel that the foundation for life-time fitness can be laid through youth programmes. The health related physical fitness is relevant to all children. In 1980, the United State Department of health endorsed the implementation of health related fitness programmes for the children (Pate, 1985).

In 1979, Canadian commission for United Nations Educational, Scientific and Cultural Organization recommended that physical education and sports are the birthright of every child. Every human being has a fundamental right and access to the physical education and sports, which are essential for the full development of his personality. Many complexes are easily overcome by success in physical activities. That in childhood and adolescence periods, most often, physical inaptitude creates inferiority complex in an individual. Athletic success can help in getting rid of it and enhance one’s self-esteem which ultimately depends upon the degree of physical fitness of that individual.

Many diseases that are noticed only in adults are results of chronic disease process that begins in childhood. For example, coronary heart disease and stroke have their root in early childhood (Strong, 1985).

About twenty per cent of the children are obese. Children obesity is likely to persist into adolescence (Oscai, Spirakis and Wolfe, 1985).

Now-a-days in physical education, physical fitness is either health related or performance related. Health related physical fitness is concerned with the development of those qualities that offer protection against disease and
frequently are associated with physical activity. Performance related physical fitness on the other hand is associated with those qualities which are conducive to better performance in sports and other physical activities such as those requiring strength, endurance, agility and speed.

In spite of schemes, development efforts and awareness among the masses, the physical fitness of our youth, especially school going children, remains a matter of concern. Therefore, a physical education programme which can suit most of our institutions with nominal facilities are very much needed.

Ideal place for development of the children is the nation’s educational institutions. Sports and games are viable means. Truth is that no scientific and systematic method are followed to improve the fitness of our youth in educational institutions. Time allotted for physical education and sports is inadequate and is improperly utilized.

Most programme for physical fitness are often vigorous, time consuming, and require special equipment, space and supervision (Morehouse and Gross, 1975).

People are given impression that fitness come slowly and needs real exhaustion. This wrong conception about fitness discourages a great number of people and fitness programme is usually undertaken by athletes or patients in hospital getting physiotherapy. They recommended that a programme of physical fitness should be flexible and enjoyable. They do not want compulsion. They feel strongly that a number of enjoyable exercises should be selected.
It has been suggested that the right set of exercise for fitness must provide fun. If the programmes of fitness is not interesting and enjoyable, it is useless because a majority of the participants will drop out (Bud, 1969).

Fitness can be assessed by fitness tests in the institutions and these tests also motivate the children to be fitter. Who recommended that (Firstly) the fitness test be selected with great care because it communicates to the children and their parents what fitness is (Secondly) the teacher should recognise that fitness test scores are influenced not only by exercise habits, but also by maturation, genetic ability, skill, level of motivation and test conditions, and (Thirdly) that teacher should not only concentrate so much on the product of fitness by emphasizing fitness norms and comparison among children, rather, fitness testing should be viewed as a means monitoring progress towards personal fitness goals that can be achieved by participation in realistic exercise programmes.

Tests that have an accompanying set of norms are much more useful than those that do not have (Mathews, 1978). To get the true picture of the level of performance or fitness of the subject of a particular region, a regional norm must be prepared. It is incorrect and unscientific to judge performance against norms prepared for different countries or states. In fact, every region, district and school should go for its own norms. Norms used today may not be correct five years later. Levels of performance of the participants are on the increase. Therefore norms must be revised from time to time.

Another important factor which influences fitness is the socio-cultural structure of a society.
SOCIO - CULTURAL STRUCTURE OF LADAKHI SOCIETY

The socio-cultural structure plays an important role to establish physical fitness norms of a particular community or race. Almost all the tribal races have less height, less symmetry, broader and flatter face, shorter and flat nose, small eyes, longer ears, stout and muscular body with dark complexion. The legs are disproportionately shorter and the arms are disproportionately longer (Heratio, 1974).

The tribes of India, most of whom have remained unique in respect of their culture and tradition, are numerous and some of them are populous. They are generally put under two classes those who originally entered India from north-east via Tibet and described as exhibiting the characteristics of the Chinese race and those who came through the passes of Himalaya are generally, regarded as Aryan.

The people of Ladakh are mixture of Mongolian and the Aryan races. The Aryan who originally settled in the country were the early Buddhist people from Kashmir and the Dard of Gilgit. Mongolian stock is traced to Tibet from which only shepherds and nomads came to the places of Ladakh to graze their flocks.

Ethnically, the entire present population of Ladakh consists of Ladakhi, Changpa, Balti and Dard. Ladakhi, Changpa and Balti are Tibetan by race and religion and inhabitants of the central part of Ladakh.

The Baltis (from Kargil district) who are immigrants from Baltistan, were later converted to Islam. Dards are the immigrants from Gilgit - they are industrious people and exhibit extraordinary skills in rock carving, construction
of water khuls along the accessible cliffs and are sports lovers. It is said that they are the people who introduced Horse polo (Game) which exists even today.

People of Ladakh are fond of fairs and festivals. Archery is quite popular and is organised as a fair in every village. The most popular sports of Ladakh are Horse Polo, Archery, Mountaineering, Trekking, Rock-Climbing, River-Rafting and Ice-Hockey.

Ladakh, a population of only two lakh people, has contributed a lot to the field of sports by producing several international level Skiers, Archers and Marathoners.

In the present study, an attempt has been made to investigate the hitherto unexplored and unexposed, underlying sports potential of this section of the society. It is now being, increasingly felt and realized that there is profound scope for this hidden and untapped talents in the hills and ravines of this country of wonderful diversities, which need to be brushed and polished to achieve the desired results to be researched or investigated for their level of physical fitness.

No research study and norms on physical fitness has been established so far. The investigator being an inhabitant of this areas, felt that the norms be established for physical fitness of the students (male) of high and higher secondary schools of Ladakh (age 13-17 years).

STATEMENT OF THE PROBLEM

The researcher wishes to establish norms for the high and higher secondary school male students of Ladakh, between the age group 13 to 17
years of age. The study is entitled “Physical Fitness Norms for High and Higher Secondary Students of Ladakh.”

DELIMITATION

The study was delimited to those male students who were in the growth period from 13 to 17 years. Thus, in this study only students of 13, 14, 15, 16 and 17 years age group were considered.

The study was limited to the assessment of selected physical fitness abilities by means of simple field test.

Only the native and school-going boys of the selected block were studied.

The study has been confined to the following components of physical fitness.

a) Flexibility
b) Strength
c) Speed
d) Agility
e) Endurance

OBJECTIVE OF THE STUDY

1. To measure the present level of physical fitness of high and higher secondary male students of Ladakh (age 13 to 17 years).

2. To establish norms for physical fitness of high and higher secondary male students of Ladakh.
3. To compare the standard of physical fitness of high and higher secondary male students, according to their different socio-economic-status group.

HYPOTHESIS

On the basis of literature reviewed, research findings and investigators own understanding of the problems it was hypothesised that:-

1. There will not be significant differences in physical fitness components among the different age group (13 to 17 years).
2. There will not be significant differences in physical fitness of the students belonging to different socio-economic-status group.
3. There will not be significant differences in the physical fitness index of the students belonging to rural and urban areas.

DEFINITION AND EXPLANATION OF THE TERMS USED

The main terms used in the present study are briefly explained below:

PHYSICAL FITNESS

Physical Fitness is that condition of the body which will permit the youngster to maintain good health, respond favourably to physical effort and physical stress, enjoy the sensation of his/her own body and function at an optimal mental and physical level.

(Lorin, 1978).

TEST

Test is form of questioning, measuring used to cases retention of
knowledge and capability or to measure ability in some physical endeavour.  

(Johnson and Nelson, 1982)

**TEST OF BATTERY**

A test battery is a group of several tests standardized on the same population so that results on the several tests are comparable, sometimes loosely applied to any group of tests administered together even though not standardized on the same subjects.

(Barrow and Mc. Gee, 1979)

**NORMS**

A norms is a standard to which an obtained score may be compared. Tests that have an accompanying set of norms are much more useful than those that do not.

(Mathews, 1978)

**FLEXIBILITY**

It is the ability of an individual to move the joints through a maximum range of motion without undue strain.

(Miller and Allen, 1982)

**MUSCULAR STRENGTH**

Strength is the muscular force exerted against movable and immovable objects.

(Johnson and Nelson, 1982)
STRENGTH ENDURANCE

Strength endurance is the athlete's tolerance level against fatigue in strength performance of longer duration.

(Harre, 1982)

SPEED

It is the rate at which a person can propel his body, or part of his body through space.

(Johnson and Nelson, 1982).

AGILITY

Agility is the physical ability which enables an individual to rapidly change body position and direction in a precise manner.

(Johnson and Nelson, 1982).

ENDURANCE

Cardiovascular endurance is the ability of the circulatory and respiratory system to adjust and to recover from the effect of exercise of work.

(Johnson and Nelson, 1982)

SOCIO-ECONOMIC-STATUS

The three important variables that contribute to the socio-economic status in urban areas are education, occupation and income.

(Kuppuswamy, B., 1962).
SIGNIFICANCE OF THE STUDY

The present study is significant. Ladakh being a border region, there are all the more reasons for its youth to be more physically fit to face the challenges of border disturbances from time to time and nature of altitude of the areas.

The study will promote fitness programme in educational institutions in particular and society in general. Physical fitness is one of the objectives of physical education and for the evaluation of physical fitness, the availability of standard procedures is of utmost importance to measure the achievement level of the students.

A test accompanied by norms has several advantages over test without norms. Their use enables a comparison of the performance of the student with other pupils, and gives uniform measuring to the comparison of the students score on one test with his score on another. Also, a test with norms provide a reliable and useful basis for interpretation and evaluation of test results, for evaluation procedure, where the performance can be obtained in terms of numeral scores, it is necessary that a standard scale should be available to interpret such scores without which the scores will be of no meaning. Therefore, the present study will contribute a great deal in the following manner.

1. The norms prepared by the researchers will not only be useful to the physical education teachers in evaluating the performance of the children scientifically but also will help the students to assess their
performance in relation to the performance of the students belonging to the same grade.

2. The norms will be a yardstick for the physical education teachers in preparing the programme of physical education suiting the status of the students of different grades in the manner that the weakness of the students is eliminated. At the same time, the stronger students are further given a feedback to accomplish a higher level of physical fitness.

3. The norms prepared by the investigator will provide a reliable and useful basis for interpretations and evaluation of physical fitness test battery result.