Chapter 1

INTRODUCTION

The system of education in India got a war footing place after independence, but still the system requires more attention and reconstruction so that it can prove more easy and cheap for the down-trodden people of the country. No doubt education has become a state subject, but the centre has kept a keen vigil over its development and requirement.¹

Immediately after freedom the Central Government had created a commission who were made responsible for preparation of comprehensive five year plans which could deal with all the aspects of national development, including education. Thus, the progress of education in the country goes side by side with other areas of disciplines. During the First Five Year Plan commencing from 1950-1955 to the Fifth Five Year Plan 1974-1978, there has been considerable increase in schools and the number of those seeking educational opportunities.²


²Ibid., pp. 423-424.
There were time to time reviews in the educational system in the country, when requirements were felt new commissions were framed. Such resolutions on National Policy of Education were adopted in 1986, called for radical reconstruction of education so that it involved (i) a transformation of the system to relate it more closely to the life of people, (ii) a continuous effort to expand educational opportunity, (iii) a sustained and intensive effort to raise the quality of education at all stages, (iv) an emphasis on the development of science and technology and, (v) the cultivation of moral and social values. The system must be such a comprehensive one which could produce young men and women of character and ability committed to national service and development.3

For the wide spread of educational opportunities for all, there has been a great deal of accomplishment in this field and number of recognized institutions has increased from 2.31 lakhs in 1951 to over 7.61 lakhs by the end of 1987-88. And the total enrollment over the same period has increased about 24 million to 144 million. The national stock of man power is estimated to have increased from 4 million in 1951 to about 50 million

by the end of 1987-88.\textsuperscript{4}

Education is no longer the state subject, in order to make it the centre's responsibility as well as constitutional amendment were felt necessary in 1986. Now both the state and centre are responsible for the development of education, so that effective measures will be taken in the 7th plan for eradication of illiteracy in the age group of 15-35 by 1990. Detailed block and school level planning with community participation and effective linkage with local environment and developmental activities is envisaged as a major strategy to overcome several obstacles associated with achieving the goal of universal elementary education, eradication of illiteracy. A programme, named "Operation Black Board" is being implemented to provide the basic amenities in education in Primary Schools.\textsuperscript{5}

Keeping in view the goal enshrined in the constitution the national education policy 1986 accorded a very high priority to the programme of universalization of elementary education.\textsuperscript{6}

\textsuperscript{4}Ibid., pp. 657.


\textsuperscript{6}Manorama Year Book 1989 (Kerala : Malayala Manorama), pp. 513-14.
With the exploration of knowledge and qualification the physical education scientist are struggling to introduce physical education as an effective subject in the school curriculum, so that it can assume its rightful place in the educational structure of the country. Of course, barriers and hurdles are yet on the way but with the efforts of authorities and people who are at the helm of affairs, it is expected that physical education may become an important subject all over the country. It has been well understood by the authorities that physical education is an essential aspect of general education in which physical activities are used as a means of educating or modifying a person for better and fuller living. These activities are nothing, if not educational in their approach, contents and results. Education of the whole man is the objective which goes beyond the attainment of mere physical 'vigour' so that the individual may grow and develop fully and be enabled to live an abundant life, now as a child and later as an adult. Physical education has a distinct contribution to make towards the enrichment of general education, namely, the attainment of the finest kind of living.\(^7\)

For the improvement and implementation of physical activities in the schools and other institutions, the National Plan

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of Physical Education was prepared in 1956.\textsuperscript{8} Later it became more comprehensive and effective when Kothari Commission Report laid stress on the implementation of physical education in the educational system. The Report 1964-66 assumed significance.\textsuperscript{9}

1. Physical Education programme should be planned for desirable outcomes, keeping in mind the interests and capacity of the participants.

2. The traditional forms of play and physical activities that have developed in our country should receive due emphasis in the programme.

3. The activities promoted should develop in each child a sense of personal health and pride.

4. A sense of sharing responsibility in a spirit of democratic cooperation should grow from experience on the play ground and also in the gymnasium.

5. The programme offered should supplement other programmes of education and not duplicate them.

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6. The programme should be within our financial means.
7. The programme should reach all rather than a selected few.

8. Special instructions and coaching should be provided for students with talent and special aptitude.

The present study is related to the 9th and 10th class pupils and it is an important terminal involving nearly 50 million students by the end of (1987 - 88) as per year book 1992 (S.K. Sachdeva) in the education ladder. Now the students have reached to the age of adolescence, which has been considered as the most critical and crucial stage of one's life. Therefore, the children at this stage need proper and constant guidance.¹⁰

Edmund Fantino¹¹ has well defined this period of one's life as adolescence occurs among adolescents of the same age, there are dramatic difference in physical development and appearance which has no doubt affected the individual's search for identity. Each of these groups contains individual's of the same chronological age 12.75 years for the girls and 15.75 years for


the boys but they represent widely different degrees of physical maturity. These tend to centre around the establishment of personal identity, the development of sexual awareness and the development of new relationship to the opposite sex. The body changes which occur at puberty are well known, the enlargement and maturation of the sexual characteristics such as the growth of the body hair.)

On the other hand Cowell and Hazelton has expressed that the psychological changes relating to physical fitness and motor ability of 10th grade boys and girls are prominent in this period and therefore, they need a comprehensive physical fitness programme, so that their physiological age characteristics are listed hereunder:

1. There is a period of rapid growth and development especially for boys who are catching up to the girls in size and height.

2. There is a rapid increase in muscular development strength and speed, endurance, coordination and increase in height.

3. Boys prefer group games, girls often prefer individual activities.

4. They are concerned about their physical appearance.

5. Most of them are interested in using their own thinking as a means of gaining independance. They dislike being told what to do and what not to do by their parents.

(On the other hand Willgoose\textsuperscript{13} has described that the boys in 9th and 10th are more interested in their physical strength and motor skills and want to expose their talent as compared to their past practices. At the same time girls are interested in the opposite sex and seems more anxious to get recognition from their elders. Therefore, during all these years the opportunity should be provided to guide and encourage individuals and groups participation in the kind of curriculum items, that will foster their personal security and the development of motor skills and physical fitness.)

For the development of motor ability and physical fitness the adequate facilities and leadership must have an important place in the physical education programmes. Without facilities and adequate leadership improvement in physical fitness and motor ability is not possible.

The facilities include play areas which are considered as

the uncovered classrooms. Therefore, it is very important these must be properly equipped and maintained. Facilities are educational tools and have immense educational values and help to transfer the talent from one field to the other for further use.

Play grounds are open air classrooms for physical education in the educational institutions, but majority of schools especially those schools of rural areas are far from adequate in terms of area or maintenance. Following are the standards of space requirements for play grounds as laid down by the Central Government Advisory Board of Physical Education for Secondary Education.\(^{14}\)

<table>
<thead>
<tr>
<th>Pupils</th>
<th>Area Prescribed</th>
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<tr>
<td>160</td>
<td>2 to 3 acres.</td>
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<tr>
<td>320</td>
<td>3 to 4 acres.</td>
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<tr>
<td>480</td>
<td>6 to 7 acres.</td>
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Approximately it should be 75 to 150 square meters per pupil. The grounds should be even and levelled and well laid out with various play fields, pitches, courts and the boundary lines and fixture need be kept in good shape. In urban and rural areas the school must be directed to procure adequate play space in the vicinity of the school. Municipal parks, gardens and open

\(^{14}\)P.M. Joseph, *Organisation of Physical Education* 2nd ed. (Bombay: The Old Students Association, 1963), p. 49.
plots can be used as play grounds for schools and the community. These may be taken either on hire or permanently acquired.

Adequate facilities are those which could satisfy the requirements of an all round programme of physical education. These would normally include play fields for football, hockey, volleyball, handball, cricket, basketball, 400 meters standard track (with various pits for jumps and throws), kho-kho, net ball and throw ball and a gymnasium of at least 50 x 80 feet in size. The gymnasium should accommodate parallel bars, low bars, vaulting buck, vaulting horse, horizontal bars, spring boards, roman rings with proper saintary facilities and a store. All these equipments should be made available to the students. 15

In-adequate facilities are those which are meagre to satisfy the minimum requirements of the national plan.

Besides with the facilities and programmes of physical education, the requirements of the children will remain incomplete unless their needs and aspirations for participation in the fitness programme and sports are adequately met.

The innate talent and potentialities can be best used if

it is exposed through motor ability tests, that will help in assessing the innate capacity of an individual.

Motor ability has various factors which have paramount importance for one's movement and these factors will expose the abilities, which form the basis for movement and are causes to both fundamental body movements such as running, jumping throwing and specific skills in sports.

"Motor skills should take into account only those skills which are one's creation and have no relevancy with the highly specialized techniques."

Barrow\textsuperscript{16} further emphasised on three things: innate capacity, diverse training and experience. Motor abilities are fundamentally universal in nature. Although they do furnish basis for specialised play and work skills, yet they are simple basic skills that are acquired in childhood and in early youth, through repeated play and movements these basic skills become generalized and can be used for varied sports. These skills need to be checked and assessed.

Motor ability is to carry out reasonably vigorous physical activities involving muscular strength, muscular endurance, cardio-

respiratory endurance and flexibility. More stress has been given on that motor ability as presently acquired and innate ability to perform motor skills of a fundamental nature, exclusive of highly specialized sports or gymnastic skills. It further laid stress that general motor ability depends on heredity and practice, but must be measured by assessment of basic performance traits rather than by specific sports skills. For example if an individual scores exceptionally high in a motor ability test it would indicate that he has a high degree of ability for most of the sports activities.17

There should be a place in the school programme for conducting certain tests, through which the innate abilities of boys and girls can be checked in their early years and accordingly they will be brought up and their abilities can be used in a variety of sports activities.

We gain insight into the natural progress that takes place as the child moves through various stages of development towards the achievement of mature motor performance. Therefore, the children must be provided opportunities for free play, then only

significant improvement is possible.\textsuperscript{18}

Thus, the gap between what children do and what they can do holds an important secret to the better understanding of optimum motor development. A general training in childhood fosters the requirement for the acquisition of the basic skills and the development of mature form. They emphasise on an orderly progression towards higher levels of achievement including an introduction to sports skills. In subsequent years there is a contribution of the process towards progressively higher standards of mature performance.\textsuperscript{19}

Beitel\textsuperscript{20} has quoted the definition of Fleishman as "abilities are general traits which are fairly enduring in adults and are inferred from patterns of response on certain kinds of tasks. Abilities can be thought of as capacities for utilizing certain types of information. The complex coordination task be studied which involve total body stability with manipulation of objects


\textsuperscript{19}Ibid., p. 21.

with hands, arms, feet and legs. Abilities to be more related to earlier stages of performance with more emphasis on the specific of the complex coordination task as practice continued."

Clark\textsuperscript{21} defines the term motor ability as "the measure of innate or inherent motor performance of an individual."

Oxendine\textsuperscript{22} defines motor ability thus "the term motor ability has been used to describe one's proficiency in a wide variety of rather basic skills and general fitness activities."

Singer\textsuperscript{23} defines this term in two different forms "motor ability indicates present athletic ability. It denotes the immediate state of an individual to perform in a wide range of motor skills."

Motor ability as a sort "intelligence" test to predict ultimate motor potential of an individual." In this connection a number of motor ability tests have been developed to find out the classification and achievement expectancy, with the purpose of predicting an individual's possible competency in physical activities


at different stages of life for both the sexes.

The second aspect of this study is physical fitness which has remained as a very important requirement for the survival of the fittest from the time immemorial. Our ancestors had to hunt for their food find shelter and more over fight for survival. All over their surroundings they had to face number of problems and challenges which forced them to keep fit. Therefore, fitness should be given an important place in the school plan and the physical fitness assessment must be made in the early years of one's life so that they will be treated accordingly, individual's with low fitness scores need to be identified so that a plan of action can be undertaken for their improvement.

Physical fitness is viewed as that state which characterised the degree to which the person is able to function. It is treated as an individual matter and it implies the ability of each person to live most effectively within his potential. Ability to function depends upon the physical, mental, emotional, social and spiritual components of fitness all of which are related to each other and are mutually interdependent.  

Further physical fitness within a country often reflects

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the need to the better health of the populace for the benefit of the society at large. This was certainly the case in the United States when a record number of conscripts military service were rejected during the 2nd World War. Response was massive infusion of fitness programmes and training to ameliorate deficiencies. However, physical fitness by mandate has never been particularly successful in the United States and until the current fitness craze where individual's opt for a more physically fit life style, the national fitness picture continued to look glum. China too have national imperative and drive for physical fit military and work forces and has taken on dimension never witnessed in this country.25

Keeping in view the importance of physical fitness Jimmi Carter and President Late Kennedy26 had advised their countrymen and had said "Physical Fitness is not only one of the most important key to healthy body, but it is the basic of dynamic and creative intellectual activity. The relaxation of the body and the activities of mind is subtile and complete in this sense physical fitness is the basis of activities of our society and if the body grows soft and inactive, we fail to encourage physical development


and prowess, we will understand our capacity for thought, for work, and for the use of skills vital to an expanding complex-America."

Government of India felt it great concern and directed the person concern to make a wide publicity among the people of India about the importance of physical fitness. In this context, in Nineteenth All India Seminar on National Physical Fitness Drive which was held at Gangtok, Sikkim, stress was laid for a vigorous physical fitness programme from the school to the university level. It was further resolved that fitness programme should be included in the school teaching requirement and be graded properly so that it will not be taken as a casual programme.27

Also the National Council of Educational Research and Training held a workshop in physical education at the YMCA College of Physical Education, Madras, where the delegates emphasised on the physical fitness and have said that physical fitness remains the most important requirement for nations for its survival from past. Therefore, it should become an essential habit for boys and girls and men and women.28

27 Nineteenth All India Seminar on National Physical Fitness Drive held at Gangtok, Sikkim (May 26 to 29, 1979).

28 National Council of Educational Research and Training Workshop in Physical Education, held at YMCA College of Physical Education, Madras (September 24 to 29, 1980).
Clark\textsuperscript{29} has rightly defined the term "physical fitness is the ability to carry out daily task with vigour and alertness, without undue fatigue and with ample energy to engage in leisure pursuits and to meet emergency situations." It is a positive and dynamic quality extending on continuum from death to abundant life. It is related to ability to meet the demands of the environment. Specifically to pursue to withstand stress to resist fatigue and to possess the energy for vigorous and well rounded life physical fitness is minimal in the seriously ill and maximal in the highly conditioned person.

Again it was felt necessary to quote here how the Americans have taken this aspect of physical fitness, so seriously for the welfare of their countrymen.

Robert\textsuperscript{30} has analysed and had said that all children have the right to a life of physical fitness. It is the responsibility of the school to provide opportunity for them to achieve the goal of developing and maintaining a level of physical fitness that allows them to live at ease. Unfortunately, it appears that children may not be as fit today as they were some 20 years ago according

\textsuperscript{29} Clark, Application to Measurement to Health and Physical Education, p. 12.

to the study conducted by the U.S. Department of Health and Human Services (Ross and Gilbert 1985). The study showed that about half American children were not acquiring adequate exercise skill to develop a healthy cardio-vascular system. A recent statement issued by the American Academy of Pediatrics reported that children from the ages of 2 to 12 years spend about 25 hours a week in watching a television. Only about 1/3rd of American youth are participating in organised physical education programmes. Even in school programmes children may be fortunate to spend one hour a week in an organised Physical Education lesson. Physical fitness programme board has put forth the following instructions.

1. Teach students to assume responsibility for their personal fitness development. It implies an extension of fitness development beyond recess and free time in school, as well as application of the home and community environment.

2. Make them to understand how fitness is developed. This implies an explanation of the value and procedures followed in class sessions.

3. Make them to understand the basic components of a personal fitness programme. And teach them how to perform the fitness activities programme. They need to know the values derived
from maintaining a minimal fitness level.

4. Give them fundamental knowledge of Anatomy and Kinesiology as they should know the location of major bones and muscular groups, and what is the impact of its function during the course of activities.

5. Children should know emphatically the values of physical fitness programme. In fact values shared with children should develop the comprehensive that physical fitness is the foundation of skill performance personal health and wellness.

Physical fitness implies the ability of each individual to live most effectively with vigour. The school, therefore, as the miniature society should provide a healthy activity programme of motor ability and physical fitness for each student. This should be based on accepted scientific principles in order to encourage the development of good healthy practices. It is the need of the hour that an individual has to live at the optimal level of health or fitness. The over crowded industrialization has created sufficient leisure for the people, who have to used this leisure time for their maximum fitness purpose programme. Keeping in view such diverse need and immediate necessity of the day, Meyers has expressed the ideal thought on physical fitness and

suggested the following:

1. To be a resource to the community on physical fitness.

2. To provide an effective programme based on available gymnasium or other community facilities and leadership.

3. To seek out and develop potential physical fitness leaders.

4. To develop optimum cardio-vascular function in order to delay degenerate changes typically associated with physical inactivity.

5. To develop muscular strength and endurance adequate to meet the demands placed on the body through vocational and recreational activities.

6. To develop flexibility of the joints adequate to ensure normal postural alignment.

Therefore, the importance of motor ability and physical fitness should be kept in mind. The focus must be on the determination of physiological, physical, intellectual, social and behavioural development during infancy, childhood and adolescence, and the general physical fitness, or motor fitness of all boys and girls in a school must be in an indirect contribution factor to higher physical fitness level for them, as the school is an agency which could definitely contribute and play a major role towards these inscrutable aspect.
Geographical Description of the State of Jammu Kashmir

and Ladakh

The state of Jammu and Kashmir has unique character with regard to its geographical position. Jammu region is hot and dry, Kashmir region is comparatively cool and wet, and at the same time Ladakh is of tremendous cool and dry. All the three regions of the state have their distinct languages, traditions, and living habits. The state of Jammu and Kashmir and Ladakh is situated in the extreme north of the Indian Geographical Map. It is bounded by Pakistan in the West, Afganistan and Russia in the north west, on the north east of Sinkiang Province of China and on the east by Tibet and Himachal Pradesh and Punjab in the South. The state has different latitudinal and longitudinal values only Kashmir lies between 34.5° north latitude and 74.48° north longitude and its elevation is above 5200 feet about the sea level.32

Statement of the Problem

The purpose of this study was to find out difference in the motor ability and physical fitness of boys and girls of class 9th and 10th who are studying in different schools of the State

32N.L. Bakaya, Holidaying and Treking in Kashmir (Kanikadal, Srinagar : Published by the Author), p. 13.
of Jammu Kashmir and Ladakh having adequate facilities and inadequate facilities.

**Delimitations**

The following were the delimitations of this study:

1. The study was undertaken in some selected high schools of both boys and girls in all the three regions of the State of Jammu Kashmir and Ladakh only.

2. This study includes only 9th and 10th class pupils both boys and girls numbering 760.

**Limitations**

The following were the limitations of the study while computing the results of this research project.

1. This study has not taken into consideration the after school activities of boys and girls who might be studying in the schools, having adequate and inadequate facilities.

2. This study has not taken into consideration the higher secondary schools.

3. This study has not taken cognizence of the influence of outside agencies and the community as a whole which would otherwise have influenced the cause of motor ability and physical fitness.
4. This study has not taken into consideration the sports participation of pupils who have been selected for the study and their worth and capacity into consideration.

Hypothesis

It was hypothesised that the level of motor ability and physical fitness would be better amongst students studying in schools having adequate facilities as compared to the students studying in schools having inadequate facilities.

Definitions and Explanations of the Terms

Motor Ability

According to Larson and Ycorn (1951) this ability may be defined as present acquired and innate ability to perform motor skills of a fundamental nature exclusive of high specialised sports or gymnastic skills.\(^{33}\)

Motor ability is innate talent of an individual related with motor skills, which has not received any guidance from his elders, teachers and parents.

Physical Fitness

Physical fitness is the plentht for the total fitness which

includes activities of the body/mind, nutrition, feeding, the body/mind/spirit and fitness exercise/warm-up and cool downs which strengthen, the body and tone the mind while purifying them for full flow of the conscious energy. These exercise need to include the properties of tonning and strengthening the body, focusing the mind and opening a person to the spirit energy.  

Physical fitness is the capacity to carry out reasonably vigorous physical activities and includes qualities important to the individual's health and well being in general as opposed to characteristics that relate to performance of specific motor skills.

Adequate Facilities

The term "adequate facilities" refers to those facilities which could meet the requirements of students in terms of their equipments leadership and ground facilities. As the school population had varied aspirations and needs adequate facilities to meet these requirements.

Inadequate Facilities

The term "inadequate facilities" refers to those which

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could not cater the needs and necessities of children in the school. Their varied demands and aspiration regarding their play and recreation could not be met with due to the inadequate facilities.

**Significance of the Problem**

Education should cater to the all round development of the individual through disciplines evolved in the course of man kind's long quest for usable knowledge, cultural understanding and intellectual power and no individual should be deprived of it because of caste, creed, colour and socio-economic status. Moreover education the root for the development of the nations. Therefore, stress must be given for its wide range development.

1. This results of the present study and recommendations may lay the foundations for a better and improved programme and facilities in these schools taking into consideration the special and peculiar conditions in all the three regions of the state.

2. This research study may also make all those concerned authorities and professional personnel aware of the important role of the programme in building the motor ability and fitness development of pupils of this age group 13-16 years (9th and 10th standard).
3. The findings of this study may help the education policy makers in understanding the importance of motor ability and physical fitness and may emphasise on giving the physical education programme a place in the total curriculum of the school.

4. The performance of every sports activities depends upon, how much talent a participant possess since motor ability is considered to be the inherent talent, the result of this study may show the concerned a path for exposing the talent among the youth, who are passing through the doors of the school, such talent can be brought into book for further scientific guidance and coaching to enable them later, to represent the nation in varied activities.

5. The study may motivate other physical educators to take up studies with some other variables and other category of students.

6. There is a great emphasis on classroom subjects by both the teachers and the parents at the cost of other very important aspects of education. The results of this study may bring to light the importance of physical and health aspects of the educational system.

7. The results of this study may create sense of competition among the school going children who are the future hope of the nation.