CHAPTER-I

INTRODUCTION

Education has always been regarded as an instrument of social transformation. Education is not confined to the four walls of the classroom or to the limits of the school or college campus. The process of getting educated is present in all experiences of a person, whether in the home, school or society. But schools or colleges represent a well-organized form of education where students spend great amount of their time. Besides, schools and colleges have a strong impact as the personality of the students being shaped in a particular way according to the objectives and dynamics of the school.

For many years the term ‘education’ has been narrowly used to designate the curriculum followed in the school and the extent of schooling. Now educators have realized that the general term ‘education’ had restricted the
outlook and focused attention on routine teaching and hence they have attempted to give it a broad base, wider scope and objectives. To develop the students’ personality, leadership, physical skills, fitness, sportsmanship and cooperation, many co-curricular activities have been introduced as part of their education. Co-curricular activities are conducted outside the classroom like games, music, craft, scouting, etc. Such activities are carried out as part of curriculum to provide the necessary curricular values and play a vital role in generating educational values. Similarly physical education in schools was earlier considered to be an extra-curricular activity and was pushed to the back seats, whereas now it is revamped as a co-curricular activity.

For the success of any field of human endeavour, the development and maintenance of a strong body and a healthy mind becomes an indispensable requirement. To achieve this, physical education and sports became important means. Since Physical Education is an integral part of Education, it is obvious that Physical Education and Education should both work harmoniously in the total
process of Education. Physical Education should help to develop skills and attitudes, which will be conclusive to the wise use of leisure, time and provide opportunities for emotional control, living according to acceptable social standards and self-expression (Sannachikkaiah, 2007).

Sport has a very prominent role in modern society. It is an institutionalized competitive activity that involves vigorous physical exertion or the use of relatively complex physical skills by individuals whose participation is motivated by a combination of the intrinsic satisfaction associated with the activity itself and external rewards earned through participation. Sport is a competition, striving to achieve a prescribed goal under rules and standardized conditions (Howell, et. al., 1994).

Sports in 21st century have gained more popularity and prominence than in any other period of human history. Multidisciplinary efforts are put together with the craze of taking human performance to its optimum possible level. Performance in certain events and activities has already reached to its breaking point; unless and until there is some
miracle increase in speed performance by 0.01 second seems to be a difficult and challenging task. The sports scientists and coaches are demanding full time involvement and round the year dedicated practice of sportsmen to reach the pinnacle of their performance. The international community of sports lovers is also curiously looking for better and superb performance of sportsmen and women in their respective sports. Aspirations and expectations of the people pertaining to the performance of sportsmen all over the world are going higher and higher (Deshpande, 2002).

Sports is not the mere participation or practice that brings out victory to an individual. It is affected by various factors like Physiology, Biomechanics, Sports Training, Sports Medicine, Sociology, Psychology etcetera. All the coaches, trainers, physical education personnel and doctors are doing their best to improve the performance of the players of their country. It is widely accepted that there are many physical and psychological benefits associated with physical activity, exercise and sport. In years past, most of the evidences regarding this claim was anecdotal; however,
during the last ten years there has been an increase in research regarding the benefits of physical activity (Ghuman and Dhillon, 2000).

Performance of players has dramatically progressed over the past few decades. Performance levels unimaginable before are now common and the number of athletes capable of outstanding results are increasing. One among the contributing factors is that athletics is a challenging field, and intense motivation has encouraged long and hard hours of work. Also, coaching has become more sophisticated, partially from the assistance of sports specialists and scientists. Sports sciences have progressed from descriptive to scientific setting. A broader base of knowledge about athletes existing now is reflected in training methodology (Howell, et. al., 1994).

High performance sport is also dependent on its own internal machinery for the production of sport performances. It can only be maintained as long as young talents continue finding its way to the top echelons of sport. The question regarding the development of young talent is therefore of
existential importance for all systems of high – performance sports (Digel, 2002).

At the present stage, the development of high-performance sports is characterized by professionalism, commercialization and globalization, and has certain problems that require methodological and organisational solutions. This reality puts pressure on coaches and other specialists to understand the situation and find reserves or new potential for improvement in the system of long-term development that takes beginners to the elite level (Suslov, 2008). Many sports associations within these systems tend to be deeply rooted in traditional patterns of action and seldom are they willing to have their work in high performance sport evaluated.

Notwithstanding all of the above, it is obvious that success in high-performance sport is not caused by accidental structures. Indeed, high-performance sport is a technological enterprise that can be controlled rather exactly just like any other industrial product. It is really upto the custodians of high-performance sport to put in efforts to
grasp a higher order of understanding regarding the product that they are entrusted to develop and promote (Digel, 2002).

Many young talented athletes have been lost to the sport for varying reasons. They have been initially identified as having talent either through an inventory of talent identification or have exhibited outstanding performances in competition. The reasons they have been lost to the sport may include such factors as conflicting educational interests, illness and injury, socio-economic factors, and competing recreational and leisure interests. The management of these talented athletes has same time been focused solely on the skill coaching of these athletes. There are many other attributes of a young talented athlete that need to be managed. The holistic management would include the coaching, mentoring, empowering and sponsoring of these athletes (Hollings, 2002).

It could be argued that competition itself might very well be the best form of talent identification with competition seeing the best or most talented athletes rise to the top in
their chosen sport. However the many athletes who do not succeed in the particular sport they have chosen, along with many who do achieve a degree of success, may be better suited to a different sport and never realise it. Talent identification would be a waste of time and resources without talent development and, it is easy to see why talent identification is a term that is often confused with the term talent development (Peltola, 1992). A very important factor in talent development is the influence of the teacher or coach. However, it is very rare for the same teacher or coach to progress an individual through all phases of talent development because of the different requirements at each stage of talent development.

In addition to the influence of teachers in the development of talent, a greater influence during childhood comes from the family. Talented individuals often come from so-called ‘complex families’ that are both integrated and differentiated. Integration refers to the stable conditions among family members whereby the children feel a sense of support and consistency. Differentiation refers to the notion
that members of the family are encouraged to develop their individuality by seeking out new challenges and opportunities (Csikszentmihalyi, et. al., 1996).

Ability to function depends upon social physiological, anthropometrical and psychological components of fitness, all of which are related to each other and is mutually interdependent. They can play an important part in developing physical fitness and skill for use in leisure time, presently and perhaps more important in later years. Many of the skills developed through games and sports may be used in years to come to keep physically fit (Bucher and Prentice, 1985).

Fitness is of particular importance during growth when the child explores his or her movement’s potential. Speed of movement and motor co-ordination are major facets of motor component of fitness. Motor fitness contributes only marginally to physical and physiological fitness as seen in a health prospective falls and avoiding accidents particularly in elderly people.
Motor fitness refers to that neuro-muscular condition that permits strenuous work. The basic components of motor fitness factors such as strength, muscular endurance, speed, agility, power and flexibility entail the basic elements of vigorous physical activity. It entails the basic elements of vigorous physical activity. For a good performance in any sport or athletic event, the high standard of fitness is a basic requirement. Mere participation in sports activity is not enough to improve fitness. The fitness must be gained through regular conditioning programme (Bouchard, Shepherd and Stephen, 1994).

Motor skill related fitness includes qualities such as strength, power, balance, agility, reaction time, coordination and speed that are conducive to better performance in sports and other physical activities. The components of health related and skill related fitness overlap. For example cardio respiratory endurance, strength, flexibility and body composition are essential for healthy living. They are also important in skillful motor performance. A more extensive development of these components may be required to achieve
an appropriate level of motor skill related fitness which is often associated with sport (Prentice, 1990).

The experts in the field of sports science and physical education have to monitor and measure the abilities and skills of sports persons for the purpose of selection, training and performance assessment. Clarke and Clarke (1987) state that measurement takes place when the ability or skill is to be tested. By measuring one is able to have an idea of who is the best at what. Reduced to its simplest terms, the function of measurement is “to determine status”. By measurement, the status of the quality to be measured is determined. After the status is known comparisons can be made within groups, with norms, with standards, and within the individual at different points in time. Tests are needed for all these purposes. The tests that are given for the purpose of improving the learning process will be put to further use in grading or interpreting the programme. Test and measurements serve well in many respects. Also, this helps a teacher or trainer to evaluate the different methods of instruction.
Historically sports skill testing has received significant attention from physical educators and coaches. Properly administered skill tests can provide players with very positive experiences. They also provide them both with self-competition and a way to gauge their progress. Moreover, players must also learn to set realistic, attainable goals that are specific to their individual situations. Once goals are set, skill testing can assist them as they evaluate their progress, establish new goals, develop competitiveness within and ultimately lead to physical and technical improvement and self-actualization.

The initial use of skill test was Athletic Badge test in 1913. However, with emphasis on sports and games of the athletic type in 1920s and early 1930s it was only natural that measurement should be slanted largely in this direction. The early form of skill testing was more of the general or fundamental type, but as the new design in test construction through statistical procedures became more prevalent, skill test development became more common. The general procedure was to determine statistically a few simple test
items to measure the total activity of the sport. Tests were
developed for more sports, both team and individual and in
some cases were established for age and sex groups
(John, 2008).

Natural ability is the promising potential, but
fundamentals are the foundations of excellence in action. All
sports activities depend on the natural and fundamental
skills of walking, running, climbing, jumping and throwing.
Any achievement in sports is largely based on the finer
aspect of any one, or the combination of these fundamental
skills. Nevertheless, these skills are determined by the
skeletal and muscular systems of an individual.
Fundamental skills are indispensable for maximum
utilization of the motor qualities and for successful execution
of the tactical actions in the game situation.

In any competition a high degree of individual
performance depends upon the particular individual’s
mastery over the fundamental skills of the game. To win a
game the team members are to be coordinated to carry out
their various tactical moves (Chandrasekaran, 1997).
Bosco and Gustafson (1983) suggest that four criteria have to be considered in the selection or the construction of a new test item, namely validity, reliability, objectivity and administrative feasibility. Of these, validity is the most important. But the discussion of validity is incomplete without any analysis of reliability, since a test cannot be considered valid unless it also possesses suitable reliability. Administrative feasibility of tests is as much important as are the reliability and validity. Due consideration have to be bestowed on the local conditions and resources before a test is designed. Also, objectivity is important when more that one judge or scorer is to be used.

Bosco and Gustafson (1983) also stated that apart from these four criteria, some major practical considerations must be addressed to during construction of tests:

1) The researcher should examine the sports critically so that the skills chosen for study are recognized as important by students, teachers and coaches.

2) The skills to be tested must be measured as closely as possible to a game like situation.
3) The test should involve only one player at a time.

4) The test should be economical in terms of time and equipment.

5) The test has to be specific as to the age group, sex and grade level of the subjects.

6) The scoring must be done objectively and with ease.

7) The test should include norms. A norm is a standard point of reference that can provide a basis for judgment. Norms are used to interpret relative standing to compare scores or groups and either to combine or average scores.

Sports educators and coaches in India during administering tests go for the package of tests that are available in the manuals and handbooks. These test programmes are mostly devised and recommended by foreign experts. The manuals simply list a host of tests, which are designed for some exclusive subjects, and they cannot be taken good for all subjects. It is natural that one may question about the validity, reliability, and feasibility in administering a foreign test model or package on the Indian
subjects. These packages are not designed for all subjects for all logistic conditions. They could not have taken into consideration all kinds of climatic conditions and diet variations. In short, these manual tests are not universal tests; they would not apply to all kinds of subjects.

Hence, the test administration at various stages has to be reconsidered regarding the suitability of the test for the Indian testers, and the innovative possibilities for the various levels of subjects. Also, group of new test items in each area have to be constructed so as to suit any chosen subjects. Coaches and physical educators have to select the players at an early age and train them scientifically to peak the achievement levels of the players. Both subjective and objective measures have been used to assess sport skill achievement in Physical Education. **Safrit (1989)** has stressed the importance of making objective rather than subjective judgements. While a subjective rating instrument may be used effectively by a privileged few, most of the physical educators search for objective skills tests to assist in the evaluation of sport skills.
With this purpose in mind an exclusive test battery named as the World Beaters Talent Spotting Scheme was introduced by the Youth Welfare and Sports Development of Tamil Nadu State, India in the year 2002 to discover the motor ability and child’s potential to play a particular game or an individual report for the school children. The chief objective of this study was to revalidate the World Beater’s Talent Spotting Scheme. An additional purpose was to provide normative data for eighth standard girls.

**STATEMENT OF THE PROBLEM**

The aim of the present study was to establish revalidation and construction of norms for the test items of the World Beaters Talent Spotting Scheme for the eighth standard girls of Tamil Nadu State, India.

**HYPOTHESIS**

It was hypothesized that the battery items of the World Beaters Talent Sporting Scheme might be the valid tools to assess the motor fitness qualities in order to identify the
talents at the early stage among the girls of eighth standard in Tamil Nadu State, India,

**DELIMITATIONS**

1. The study was conducted only for the eighth standard school students of Tamil Nadu state.

2. The study was confined to the girls students studying eighth standard.

3. The age of the subjects ranged from 12 to 13 years.

4. The test items recommended by the World Beaters Talent Spotting Scheme were selected as criterion measures such as 50 Meters Run, Shot Put, Long Jump, 6x10 Meters Shuttle Run and 600 Meters Run.

5. Sixty subjects were selected in the first phase to establish scientific authenticity of the test items of the World Beaters Talent Spotting Scheme.

6. One thousand five hundred subjects were selected in the second phase to construct norms for the test items of the World Beaters Talent Spotting Scheme.
LIMITATIONS

1. The effect of the external factors like climate, atmospheric temperature, height, weight and body structure which may have an effect on the result of the study were considered as limitation of this study.

2. No special motivation techniques were used during the collection of data. Therefore the difference that might have occurred in the test due to the lack of motivation was recognised as a limitation for this study.

3. The differences that might exist among the subject due to the varied social culture, economical, religious background were considered as limitation.

DEFINITION OF TERMS

Test

Test is a specific tool, procedure or technique used to elicit a response from the students in order to gain information to be used as a basis for appraisal of the
quantity (or) quality of elements such as fitness, skill knowledge and value (Barrow and Gee, 1996).

Measurement

Measurement is an aid to the evaluation process in that various tools and techniques are used in the collection of data (Johnson and Nelson, 1988).

Evaluation

Evaluation transcends mere measurement in that basically subjective judgements are based upon the data collected in the measurement process (Johnson and Nelson, 1988).

Reliability

Reliability refers to the degree to which a test consistently measures a given factor. This is not to say that the factor is necessarily the one that the test or other measurement instrument is thought to measure, i.e., a test may be reliable but not valid in the same of measuring what is thought to be measured (Bosco and Gustafson, 1983).
Objectivity

Objectivity is similar in nature to reliability, except that applies to the consistency of agreement among scores with respect to the quality or correctness of a performance. This is to say that scores assigned by different scorers who have completed the same test for a group of subjects will yield high reliability coefficients (Bosco and Gustafson, 1983).

Validity

Validity is an estimate of the degree to which a test measures the factor for which it was designed (Bosco and Gustafson, 1983).

Norms

Norms are standard point of reference that provides a basis for judgment.

A Norm is defined as a scale that permits conversion from a raw score to a score capable of comparisons and interpretations (Barrow and Gee, 1996).
**Speed**

It is the capacity of the individual to perform successive movements of the same pattern at a fast time (Singh, 1991).

**Strength**

Strength is the force that a muscle group can exert, against a resistance in one maximal effort (Gothi, 1993).

**Power**

Power is the capacity of the individual to bring into play maximum muscle contraction at the fastest rate of speed (Dick, 1980).

**Agility**

Agility is the ability to perform a series of explosive power movements in rapid succession in opposing directions (Gothi, 1993).

**Endurance**

Endurance is the ability to keep on exerting force against a resistance. Cardio vascular endurance related to
the whole body. Local muscle endurance related to specific limbs or muscles group (Kent, 1994).

**SIGNIFICANCE OF THE STUDY**

The study will be significant in the following ways:

1. Measuring provides a basis for the classification of players and teams for practice and competition.

2. The results of the study may be used as an instrument for motivating the players while learning.

3. The study will help to classify the girl students into different groups on the basis of their fitness performance.

4. The study may help in identifying sports talents from the schools based on their fitness.

5. The study may help in assessing the fitness of the students and also to formulate fitness programmes according to their needs.

6. This study may help the authorities in formulating fitness programmes for the school students.
7. The study may help to estimate the students' interest in activities through self-evaluation of the performance.

8. This study may help in construction of norms and standardize the test items.

9. This study may motivate further research studies on revalidation of related variables.