CHAPTER -1
INTRODUCTION

Research is required for knowledge, for life and best survival of physical education, is no exception and must keep it self updated as per to cater the needs of the modern times. If we look it in the Indian context then we can trace out that the education has well established with broad objectives.

Research is the essence in education which is required to keep the subjects updated. Physical education is an academic subject and also we must keep it updated, so as to answer the trends should be traced in the research. Research trends help the research scholar to identify the practice going on in particular subject i.e., what are the priority areas, what has been done, the trends analysis reveals the exact picture of research in a subject or discipline. It also tries to answer the questions, such as, what are the strength and weakness. Trends analysis further shows the direction or the course taken by such subjects whether the goals/objectives are achieved or not, and development in a given course of time span.
Further, trends analysis helps to predict the future of a subject, it hypothesis on the basis of practice prevailing, and what course of action or direction of a subject can take in future. One can predict the exact nature and design of research. Trends will help to sort out the limitation, fill-up the gaps in the subject help to explore the neglected and ignored areas. Trends study provides the ready reference for the future researcher; it provides the insight and helps to frame the guidelines for the future research.

The formats or rules, varies from university to university and country to country help the researcher to conduct research. The process and eligibility for the same are well defined and well maintained. It is evaluated by number of experts before awarding the degree of doctoral research. Doctoral research has international standard and is recognized at international level. (Dhanajoy Shaw & Rakesh Tomar., 2000)

Research is a systematic investigation towards increasing knowledge. The quality of data collected through research depends on, among other things, the precision and accuracy of the measuring instruments, measurement techniques, and the appropriateness of tests. (Barrow 1989)
1.1. A TIMELINE ON SIGNIFICANT VOLLEYBALL EVENTS
(Online Source)

1. In 1900, a special ball was designed for the sport.

2. In 1916, at the Philippines an offensive style of passing the ball in a high trajectory to be struck by another player (the set and spike) were introduced.

3. In 1917, the game was changed from 21 to 15 points.

4. In 1920, three hits per side and back row attack rules were introduced.

5. In 1922, the first YMCA national championship was held in Brooklyn, NY. 27 teams from 11 states were represented.

6. In 1928, it became clear that tournaments and rules were needed, the United States Volleyball Association (USVBA, now USA Volleyball) was formed. The first U.S. Open was staged, as the field was open to non-YMCA squads.

7. In 1930, the first two-man beach game was played.

8. In 1934, the approval and recognition has been given to the national volleyball referees.

9. In 1947, the Federation International De Volley-Ball (FIVB) was founded.

10. In 1948, the first two-man beach tournament was held.

11. In 1949, the initial World Championship was held in Prague, Czechoslovakia.
12. In 1964, Volleyball was introduced to the Olympic Games in Tokyo.

13. In 1965, the California Beach Volleyball Association (CBVA) was formed.

14. In 1974, the World Championship in Mexico was telecast in Japan.


17. In 1983, the Association of Volleyball Professionals (AVP) was formed.

18. In 1984, the US won their first medals at the Olympics in Los Angeles. The Men won the Gold, and the Women the Silver.

19. In 1986, the Women's Professional Volleyball Association (WPVA) was formed.

20. In 1988, the US Men repeated the Gold in the Olympics in Korea.

21. In 1990, the World League was created.

22. In 1995, the sport of Volleyball was 100 years old!

23. In 1996, 2-person beach volleyball will be an Olympic Sport.
1.2. VOLLEYBALL: EARLY DEVELOPMENT

After it was invented in December 1891, basketball quickly became popular at many YMCAs across North America. But those were YMCAs with a membership of young men who enjoyed running up and down a gym floor.

William G. Morgan was a physical director at the YMCA in Holyoke, Massachusetts, in 1895. Most of his clients were middle-aged businessman who found basketball too strenuous. So Morgan decided to create a sport that would offer them exercise without making them run. He strung a badminton net across a gym floor, brought out the bladder of a soccer ball, and split the men into two teams that volleyed the improvised ball back and forth across the net. Because it was patterned after badminton, Morgan called the new sport "mintonette." In his original rules, the court was 25 by 50 feet and the net was 6 feet, 6 inches high. In a bow to baseball, a match was made up of nine innings, with three serves for each team per innings. There was no limit to the number of players on a team.

In 1896, Morgan and some of his members travelled 10 miles to a YMCA directors' conference in Springfield, the birthplace of basketball,
to demonstrate the new sport. Dr. A. T. Halsted suggested that the name should be changed to "volleyball," and Morgan agreed.

The following year, the rules were published in the first Official Handbook of the Athletic League of the Young Men's Christian Associations of North America. As a result, many physical directors introduced volleyball at their YMCAs.

A new set of rules, as revised by A. E. Day, was published in 1900. Match was set at 21 points, the use of innings was discarded, and the net was raised to 7 feet, 6 inches. Volleyball soon spread to other countries, mainly because of the YMCA, although it was brought to Cuba in 1906 by an Army officer. Hyozo Omori, a graduate of the YMCA's International Training Institute in Springfield, introduced the sport to Tokyo in 1908; Max Exner and Howard Crockner brought it to China in 1910, and Elwood Brown introduced it to the Philippines at the YMCA in Manila, also in 1910.

The rules were revised again in 1912. The number of players was set at six per team, the size of the court was increased to 35 by 60 feet, and rotation of players before service was established. For the first time, the ball was standardized, with a circumference of 26 inches and a weight between 7 and 9 ounces.
Volleyball was added to the recreation program of the U. S. armed forces in 1914 and the American soldiers introduced the sport to France and Italy during World War I. The sport also became popular at many colleges. In 1916, the YMCA and the National Collegiate Athletic Association collaborated on a new set of rules.

A match was defined as the best two-out-of-three games, and the number of points required to win a game was lowered from 21 to 15. The net was raised to 8 feet and the weight of the ball was increased to from 8 to 10 ounces. Also, the rule that a player couldn't have two consecutive contacts with the ball was added.

A team was allowed an unlimited number of touches before sending the ball over the net before 1920, when another revision rules set the limit at three. Court size was reduced to 30 by 60 feet.

The basic nature of volleyball was changing, along with the rules. By design, it had originally been a slow game for older men. Many young men (and some young women) were being introduced to volleyball through colleges, as well the armed services and YMCAs, and they were making it a faster-paced sport requiring a full range of athletic skills.
Spiking and blocking became essential elements of volleyball during the early 1920s, requiring some rules changes. In 1922, spiking was formally defined and limited to front-line players only. Beginning in 1937, multiple ball contacts were allowed to defend against violent spikes, and in 1938 blocking was defined in the rules as "a counteraction at the net by one or two adjacent players."

The scoring system also changed a couple of times. In 1922, a team was required to take two consecutive points to win a game if the score was tied at 14, and that was changed to require only a 2-point advantage for victory.

1.3. VOLLEYBALL – COMPETITIVE SPORTS

Volleyball game is of three types namely Smash volley, shooting volley and Beach volley. Indoor volleyball is a fast game played on a large court involving strong, quick, acrobatic athletes. It looks pretty straightforward – serve, pass, set, attack, block and dig.

Volleyball is one of most successful, popular competitive and recreational sports in the world. It is fast, it is exciting and the action is explosive. The game is preferred as it covers a small area which is possible on the plains and hills both. Volleyball game is very thrilling to watch. It is the game of power and tactics.
FIVB (2009): Volleyball is however unique amongst net games in insisting that the ball is in constant flight – “a flying ball”. The introduction of libero – a specialist defensive player had moved the game forward in rally length the multi-phase play. Modifications to the service rule have changed the act at service putting the ball in play to an offensive weapon. The concept of rotation is entrenched to allow for all-round athletes.

Volleyball has adapted jumping power in service and attack, explosive action in defense and rotation. The game volleyball exhibits the best of ability, spirit, and creativity to modern audience. With few exceptions volleyball allows all players to operate at the net (attack) and in the back of the court (defend (or) serve).

Sporting success is governed by three general factors skilled techniques, Physiological fitness and Psychological skills. While each of the three general factors is important in any sport, there are differences in the degree to which optimal performance relies on any one of them.

Volleyball is an anaerobic sport. Volleyball is possibly the most depending of all sports. Volleyball is an explosive sport that incorporates all different types of movements in multiple planes of direction. In order to prepare the players for these types of movements, one must train that
way. High performance in volleyball cannot be achieved without attaining high standards of conditional and co-ordinational qualities. Broader the base in conditional, co-ordinational and psychological qualities higher is the possibility to implement various tactics. The team should have the capability to change their tactics according to opponents.

The basic qualities to play the game of volleyball are

1. Speed,
2. Strength
3. Agility
4. Anaerobic Power
5. Aerobic Capacity
6. Flexibility
7. Explosive Power

The qualities like speed, strength, explosive power, agility, flexibility, anaerobic power and aerobic capacity all work together for the performance. The game of volleyball demands very good strength and excellent level of intelligence. There are fast actions, surprise, accuracy in performance of techniques and tactics. A team can only reach top level if planned and scientific training is given to the player. To elicit best result and to become best volleyball player sport specific training techniques were followed.
1.4. FUNDAMENTAL SKILLS AND THEIR IMPORTANCE

The game of volleyball is very complicated in terms of skills and team work, to win a rally depends upon the fundamental skills like overhead pass, underhand pass, service, setting, spiking, blocking and defence etcetera. The unpredictability of the action sequence fosters imagination of a kind that can be transformed instantly into physical movements effectively. One needs to concentrated an developing good control of body movements. Then to really enjoy the game one needs to develop proficiency in skills. When one has mastered the fundamental skills of the game, he gains a feeling of well being. Thus high level of performance in volleyball is dependent upon his mastery over the fundamental skills.

Just as individual notes make up a symphony, the individual skills of volleyball make up the game and just as one false note a piece of music mars the whole composition one action inefficiently carried out in volleyball can ruin the whole match. For this reason and especially in their early development players must develop all the skills to play the game of volleyball successfully.

Body movement is the important ingredient that ties all the game skills together. Successful play results from the a strong basis of skills combined.
1.5. VOLLEYBALL SKILL'S AND FITNESS

Volleyball is highly competitive requiring a high degree of fitness, coordination and agility. It provides a wide opportunity for the development of strength, speed, endurance, agility, neuromuscular skills and coordination of all parts of the body by various actions involved in it, such as running, jumping, bending, stretching and other movements which call for balance and poise. It requires a conditioning regimen which develops flexibility, muscular strength, power and agility, all of which must be integrated to achieve the optimum skill performance from each player (Smith, Timothy, 1982).

Preparing to be an excellent volleyball player, it is important to look after health and skill aspects of the game. The health related aspects include cardiovascular endurance, flexibility, strength and muscular endurance; whereas, the skill related aspects involve agility, reaction time, balance, coordination and speed. The quality of explosive power may be considered to be both health and skill related.

The modern game of volleyball puts a great deal of emphasis on the development of ‘fundamental skills, because of the fact that in this game a player is required to play in all the positions during a match due
to obligation of the rule concerned with rotation. At one time a player positions himself as a spiker, at another a blocker, an attack-builder, as server or a deep defender and so on. Therefore, a variety of techniques has been involved which has its different physical requirements. Consequently, a player is expected to work on a wide ranging programme designed to improve his strength, speed, power, agility, flexibility, etc., as the underlying factors of improved techniques (Siridhar, 1984).

Like other games, volleyball is a team game having different skills involved in it. The players, with specific responsibilities, have to maneuvers a definite planned and strategic offensive and defensive pattern. Each offensive play depends upon a good pass from the service or spike, a good set, a timely executed spike.

The failure of any one of these players affects the others and gives the opportunity to the opponent team to take the defence with little difficulty. The spiker is the spectacular hitter. Each player in the team has designated assignment. i.e. receiving, passing and spiking. At each position in the court or in every zone, there are specific offensive and defensive responsibilities. Well-trained and skilful players adjust themselves with the pace of the game and they move with the ball effectively at every position and help their team-mates in every
department of the game. Volleyball is played with more precision, good strategy and advanced techniques and tactics. Best skilled team, having more power for spiking is always a terror for the opponents (Blackmon, 1968; Robert, 1972).

It is a common knowledge that skills in volleyball are relatively more important than the level of fitness. However, the fact is that the skill deteriorates due to fatigue which is an index of fitness. A high level of fitness delays the onset of fatigue and thus enables the player to maintain his level of skill for a longer period so as to show excellence. To withstand the stresses and strains of play in the court for a longer duration of time, one requires lengthy spells of practice.

During the last two decades, significant changes have taken place in the character of volleyball. It has developed into a highly competitive sport requiring a high level of fitness (Ongley Bill, Hopley Jenny, 1981). It requires certain basic motor skills as well as components of physical and mental fitness which affect the performance of the sportsmen at all levels of competition. Over the years, the skill pattern in volleyball has developed into a complex one. All games and sports stand on the plinth of motor activities like running, jumping, skipping etc. Volleyball is no exception. The fundamental skills of volleyball such as serving,
receiving the serve, passing, boosting, spiking, blocking, etc, in fact, a complex combination of various simple motor skills and psychomotor abilities, which are developed in a youngster over a period of time. A game skill is functional and is designed and produced to achieve a common objective and success, especially, in a sport setting. That is, perhaps, why now-a-days much greater emphasis is placed on the practice of and mastery over the basic skills of a game right at the very beginning. Simple skills are not only easy to learn but/are also easy to evaluate more objectively. Complex skills, on the other hand, are learned only after simple skills are perfected and that is the reason why they are difficult to evaluate more objectively.

Sports skill tests are designed to measure the basic skills used in playing of specific sports. Because of wide range of skills in most sports, a selection of most important skills becomes invariably necessary. The selection is usually based on expert judgment or statistical analysis and skill items are called modified test. The skill tests help the students to evaluate their performance in the game and to provide an impetus to improvement. The test also serves the purpose of helping a teacher to measure student’s performance and to evaluate his own teaching procedure and programme.
Constant and consistent evaluation not only helps the students to know where they stand but also assists the teacher, to a great extent, in facilitating instruction and programme planning according to the needs and interests of participants. Evaluation focuses a teacher’s attention in each student. As the aim of physical education is to help each participant in the programme to grow and develop, evaluation aids to a marked degree, in fulfilling such an objective. A programme of evaluation will not only act as a great motivation force to the players but will also help the instructor in many ways (Singh, 1959).

In measurements and evaluation literature, a number of methods of skill evaluation have been mentioned. Some methods are objective while others are subjective. Some are valid and reliable while others are not. The obvious reason is that simple skills are easy to evaluate, while complicated ones difficult to assess. The qualitative aspect of a skill performance is not easy to test objectivity.

Training and coaching in volleyball has assumed a scientific character. Inventions and innovations in the methodology of training for volleyball have contributed much to the change in the character of the game. So far as research work on this game is concerned, the number of studies conducted is very low. In India, the picture is more dismal,
although some flashes of good performance of Indian volleyball in the fifties and sixties, have been reported in literature (Singh, 1973; Singh, 1974; Uppal, 1974; Joseph, 1983; John, 1984).

1.6. TECHNIQUES IN VOLLEYBALL

Technique is an art to execute certain movements to attain the best results keeping in view rules of the game. In volleyball the techniques used are service, passing (overhead pass and Under arm pass), setting, attack, block, digging, diving and rolling. The techniques in volleyball are more difficult to learn because of the following reasons.

1. There is little time to touch the ball as a result more perfection in movement to reach to the ball is required to attain accuracy.

2. There are different types of actions, and movement to touch the balls e.g. for overhead pass the place of fingers touching the ball, is limited although quite difficult movements are required to be made.

3. High degree of perfection is required for all the techniques performed.

4. There are different speeds trajectories of the ball for which lot of quick movements and high demand of physical fitness are needed.
1.7. SIGNIFICANCE OF TESTS, MEASUREMENTS AND EVALUATION

Johnson and Nelson (1982) stated that the Test, Measurements and Evaluation are used:

1. To motivate the students when they are not interested in the instruction. It helps the teacher too and the unit of instruction with a high level of interest.

2. To help the teacher to assess the student’s performance.

3. To help students to evaluate their own knowledge and / or skills in various physical activities.

4. To enable the teacher objectively to measure the improvement by testing before and after the unit of instruction.

5. To assist the teacher in pin pointing the limitations as well as the strong points in a programme.

6. To aid the teacher in evaluating different methods of instructions.

7. To provide a means for determining the better performance with in a group and to gain insight as to the potential ability of others.

8. To provide a basis for the classification of players and teams for practice and competition.

9. To diagnose the needs in relation to the body mechanics, fitness and motor skills.
10. To establish age, sex and grade level norms for the use within schools or districts as well as for comparison with national norms.

11. To determine status and changes in status brought about by physical education for public relation purpose.

12. To collect data for research.

13. To help for determining the relative values of sports activities in terms of meeting the designed objectives.

14. To determine the needs of individuals within the programmed and the latest to which educational objectives have been accomplished.

15. Finally to enable the teacher to evaluate his own teaching effectiveness.

1.8. VALIDITY

Kirkendall and others (1987) stated that “Validity is an all encompassing term. The term validity is used primarily in terms of whether a test is relevant and applicable to a particular situation”.

Validity can be defined as a device that actually measures it to what it is intended to measure. It will help to determine who is the best and who is not the best. By these we can construct a synonym for validity. It may be relevance. If a test has poor validity or relevance, it is a waste of time to use it.
1.9. RELIABILITY

Kirkendall (1987) stated that it is the second most important criterion to be considered in test construction and its selection. "The reliability is the degree of consistency with which a test measures what it is to measure. In another way a test's reliability is in terms of whether the test measures the true average performance of an individual. For example, the obtained score = True score + Error score. When the true score represents the performance level that truly indicate the individual's obtained scores that is due to one or more factors other than the individual's true ability. If a test is perfectly reliable, the obtained scores are equal to the true scores. When a test is measuring true scores, a person taking the test more than once will score the same, every time when the test is conducted.

Two major areas or classification or error contribute to the error score. They are measurement error and systematic error. The measurement error is because of inaccuracy in the equipment, scorer errors and the test administration. But the systematic error is because of the changes in performance or behavior due to biological factors. Both these errors affect the reliability of a test. Among these errors the measurement error can be controllable and eliminated through careful administration of tests and the equipments. But the systematic error is
generally more in the motor performance testing, because it consists of repeating more than one trial of the same task and it needs to be repeated on different days.

1.10. OBJECTIVITY

Safrit (1973) stated that “The objectivity of a test is defined as the degree of agreement among testers. Objectivity is one that will be scored identically by different scorers”.

A synonym for objectivity might be that rater’s reliability that is the consistency with which different raters score or to judge a performance. To determine rater’s reliability for a test, two individual’s score the test or to judge the performance of all tested students, and correlation coefficient is determined. This coefficient indicates the degree of agreement between the two judge’s scores or ratings. Like the validity and reliability several factors can affect the objectivity of a test.

1.11. NORMS

Hebbel Inele and Borms (1974) stated that the norm is a standard point of reference which provides a basis for judgment. It is used to interpret relative standings to compare scores or groups and whether to combine or average scores. It can be derived from the scores obtained as raw from a specific group on a specific test. It implies a larger number of
cases. One hundred cases is minimal and several hundred are more desirable. “The norms are determined for a given group of people, half of the people will fall above the middle of the distribution and half of the people will fall below. Any judgment made about the norms is by the person using the norm score”.

The norm is a scale that permits conversion from raw score to a score which is capable of comparison and interpretation. In a table of norms, raw scores and derived scores are typically presented in parallel columns for easy conversion to the derived score. Normally the raw score becomes capable of comparison and Interpretation when there is a norm. It is the true representative of some larger population. Sufficient cases above do not make good norms but coupled with proper sampling, this provides a symmetric distribution. If the performance of a group is not similar in range and average to the normative group, the norms are not appropriate and should not be used for interpretive purpose. Generally the norm scale be sufficiently sensitive to make a discrimination between the scores of the different subjects. “Normally the Hull Scale will be the find choice and mostly preferred over the other type of scales, because this scale is more applicable to the real testing situation where great variations are present.
The norms scales are accepted as one, valid and practical criteria for evaluating the individual physical fitness tests. When norm scales are being constructed, one must consider the following practical statistical and educational principles. They are:

1. Sampling techniques
2. Equivalency
3. Progressivity
4. Sensitiveness

Norms is a set standard to which an obtained score may be compared.

Constructing norms are very useful in classifying the students in particular activity according to their ability. Apart from that norms are widely used to diagnose the needs and weaknesses of the students and to grade the students.

1.12. TYPES OF NORMS

Usually four types of norms have been most commonly used in comparing the test scores.

1. **Age norm**: It is based on the average performance of students at various age levels. It is relatively easy to understand. In this comparison of different traits, it is difficult to make, because of the lack of uniformity of units.
2. **Grade norm:** Almost the age and grade norms have similar characteristics. It is based on the average scores earned by the students and interpreted through the use of grade equivalents. It is not often used like age norm since the grade equivalents are based on units that are unequal from grade to grade and it complicates interpretation substantially.

3. **Percentile Norm:** The percentile norm is widely used in all the statistical analysis. It is easily calculated and relatively well understood. It provides a basis for interpreting an individual’s score in terms of his or her standing in some specified group. The norms using percentiles are widely applicable for many situations, and easy to interpret by the student as well as the instructor. This norm is useful in physical education because many components of the psychomotor domain can be tested. The major drawback of percentile norm is inequality of units. In the middle of the normal distribution a rather small change in the raw score gives a rather large percentile change. At the end of the distribution, the reverse is true. With careful interpretation, the limitation of percentiles can be overcome.

4. **Standard score Norms:** Since the norm system has its limitations on percentiles efforts are made to find scales that have units with the
same meaning throughout the entire range of scores. Several sophisticated standard score scales have been developed to score these purposes. They are Z-score, T-score, 6-sigma scale and the Hull scale. With these types of standard scores the relative performance of an individual can be expressed in units that are equal over the entire scale so that a small difference at one point on the scale has the same meaning as an equal difference at some other point.

All types of norms have advantages and disadvantages. The uses of standard scores or percentile norm are generally recommended by the experts in the field of Physical Education.

1.13. IMPORTANCE OF NORMS

Norms always represent the achievement level of a particular group to which the obtained scores can be compared. It is obvious that a test accompanied by norms have several advantages over the test without norms. Norms enable the instructor to interpret the student scores in relation to a larger group in the same population. Its use enables a comparison of the performance of a student with other pupils and gives uniform meaning to the comparison of a student’s score on one test with his or her score on another one. In addition, norms provide a reliable and useful basis for interpretation and evaluation of test results. The following factors must be taken into consideration in the development and use of norms.
1. **Sample:**

   The sample must include a large number of cases so that it approximates the population considering the age, sex, race, educational level, socio economic status and sampling method.

2. **Administration:**

   The administration of the test must be standardized.

3. **Representative ness:**

   The norms should be true representative of the population for which the test is intended.

4. **Temporariness:**

   The norms generally are temporary and can be expected to charge and should be periodically evaluated.

5. **Presentation:**

   Norms should be presented in a format that is easily understood.

6. **Comparability:**

   Often it is necessary to compare the scores from different tests to evaluate the student’s performance.
1.14. CRITERIA FOR SELECTING NORMS

Safrit (1973) stated that “All educationists have been interested in this function of measurement in knowing how much a student has achieved and to examine his score in relation the scores of others on the same test, in other words a student’s scores are compared to other student’s score. Here differences are anticipated because some students are expected to perform better than others. This function identifies the test as norm”.

Johnson and Nelson (1982) stated that the following as some of the criteria for the norms:

1. The number of subjects to compute the norms should be sufficiently large. Generally speaking the larger the sample the norm likely will approximate the population.

2. The norms should represent the performance of the population for which the test was devised.

3. The geographical distribution that norms represent should also be taken into account, considerable variation in performance is often found among students belong to different geographical locations.

4. The clarity of the directions for the administration and scoring is definitely involved in the evaluation of the accompanying norms.

5. Norms are only temporary and most of them should be periodically revised.
1.15. HULL SCALE AND ADVANTAGES

Becker says (1960) that the Hull scale, which extends to ± 3.50, may be considered a compromise between the T-scale and the 6 - zigma scale, and the occurrence of an extreme score falling outside the scale is more remote than for the 6 - zigma scale. However, an exceptional score can fall outside this scale. In constructing Hull scales for Medford boy’s growth study data, a check was run on the number of scores that were sufficiently extreme as to extend above 0 point and below 100 points in the distribution. In one study, a total of 412 boys of six age groups ranging from 9 to 14 were tested, with eight anthropometric tests. Thus for the eight scales, 3.296 entries were made (412 boys x 8 scales = 3.296) for all scales, only seven entries (.02%) were above 100, and only one entry was below.

1.16. SPECIFICATION OF THE PROBLEM

In order to update the forms of new norms the investigator has taken up this problem. It is not a standard test but simply a modification in the existing test. The investigator is confident this form of modification and constructed norms will certainly help for selecting players in the college volleyball team, sports hostels and sports excellence. He is hopeful that it will also provide to rank the students in the admission of the students at the college level teams.
1.17. STATEMENT OF THE PROBLEM

The main purpose of the present study is modified skill tests for college men volleyball players in Tamilnadu.

The second purpose of the study is to construct the standard norms for the college men volleyball players in Tamilnadu.

1.18. HYPOTHESIS

It is hypothesised that,

1. The modified test for the service and overhead pass skills may be valid for college men volleyball players in Tamilnadu.

2. The modified test for the service and overhead pass skills may be reliable for college men volleyball players in Tamilnadu.

3. The modified test for the service and overhead pass skills may be objective for college men volleyball players in Tamilnadu.

1.19. SIGNIFICANCE OF THE STUDY

1. The study may help to classify the volleyball player’s ability on the basis of their performance in service and overhead pass skills by using these new norms.

2. The results of this study may help the coaches and the physical education teachers to identify the individual efficiency in service and overhead pass skills.
3. The study may help the coaches and physical education teachers to construct a sound training programme for the beginners in volleyball by giving more important to the service and overhead pass skills.

4. This study and the computed norm will provide an opportunity to identify the right type of individuals to be trained as volleyball players.

5. The findings of this study may contribute to the body of knowledge in the specialized area of test modification and norms of computation.

6. This study would stimulate the interest of the trainees in two skills namely service and overhead pass through their self evaluation from the performance what they made.

7. This study may help to provide clear guidelines in selecting potential talents to be groomed for higher level of competition.

8. The results of this study may be helpful to have uniformity in coaching the beginners throughout the country.

9. This study would further motivate others for further research studies on other skills in volleyball and for norm construction of related skills.
10. The norm construction may be used as a measuring scale for testing the young volleyball players for the selection.

11. This study may be significant in providing feedback mechanism and will add to the critical literature in the field of sports.

1.20. DELIMITATIONS

The study is delimited in the following aspects.

1. The selected modified test items for the present study are delimited to two skills in volleyball namely overhead float service and overhead pass.

2. The present study is confined to 30 men volleyball players to establish the reliability on modified test items.

3. To establish the validity on most appropriate test items the men volleyball players are delimited to 120 only.

4. To establish the objectivity on most appropriate test items the men volleyball players are delimited to 30 only.

5. To construct the norms for the modified test the men volleyball players were delimited to 1000 who were the participants at intercollegiate level and spread over Tamil Nadu state.

6. The range of the age of the players used as subjects in the present study is from 18 to 25 years only.

7. This study is conducted only on male players.
1.21. LIMITATIONS

The study is limited to the following aspects and these limitations were taken into consideration while interpreting the results.

1. The external factors like diet, lifestyle, climatic conditions and other environmental factors which may have an effect on the results of this study were considered as limitations.

2. The impact of training schedules, motivational factors and various physical activities on the subject’s playing ability were not taken into account.

3. The differences that might exist among the subjects due to varied social, cultural, economical, religious activities, and the participation in the intramural and other physical activities by the subjects were considered as the limitation.

1.22. DEFINITION OF THE TERMS

Though the key terms employed are general and refer to the field of games, they are defined for the purpose.

1.22.1. TEST

“A 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 quality or quantity or elements such as fitness, skill, knowledge and values”. (Harold M. Barrow and Rosemary McGee., 1986)
1.22.2. NORMS

“Norms are performance standards based on the scores of a group of people”. (Ted A. Baumgartner and S. Jackson., 1987)

1.22.3. SKILL TEST

“It requires an environment similar to the game environment and standardized procedure of administration. The validity of the skill test is judged to some extent on the consistency between testing and performance environment”. (Ted A. Baumgartner and Andrew S.Jackson., 1987).

1.22.4. VOLLEYBALL

“Volleyball is the team game that can be played between two teams consisting of six players in each side, playing on either side of the court which is divided by a net. The ball is played by batting or hitting with arm over the net. The teams try to score a point by downing the ball in opponent’s court”. (Sue. Gozansky., 1987)

1.22.5. PASS

The pass is the fundamental skill required for effective team play. The purpose of the pass is to direct the ball to the team setter, who in turn initiates the team’s attack from the various zones. There are two types of passes in volleyball. One is overhead pass and the other is underhand pass. The overhand pass is the most preferred pass for the free ball provides longer contact period on the ball for better accuracy and control.
The underhand pass is used to receive the balls which is too low and too far from volleying, such as service and opponent’s attack hit.

“The Success of the pass depends on the grip, status of the fingers, shoulder and elbow position with wrist flip”. (Sue. Gonzansky, 1987)

1.22.6. SERVICE

“Service is the first to start a game or a rally. Today the service becomes an offensive tactics to score a point directly or to disturb the opponents receiving capacity. It starts in the toss of the ball in the air and hitted or batted by one hand”. (Robert J. Lamarache, 1980).