

CHAPTER I

INTRODUCTION

1.1 INTRODUCTION

The play instinct in man is as old as evolution of man itself. This instinct in man remained latent at the primitive stage and was not given full expression as man had other pressing problems to cater to. The settled life, and later the scientific advancements which created greater leisure paved the way for the full expression of this instinct. The ever increasing free time on an affluent society has generated an interest in sports and game, so vast and comprehensive that the era has already been nicknamed “The Golden Age of Sports”. Eventually there has been an addition to the list of games at the international level which in fact indicates the mood and need of the people.

Wilgoose (1974) is of the opinion that, “The rise in sports and sports-related activities has been nothing less than phenomenal since the end of world war II. Sports has become a way of life for whole families, with something readily available for the grandfather as well as pre-high school grand children”. **Celeste Ulrich (1968)** says that:

“The multifaceted contributions of sports and games made toward individual and societal developments have been patronized at all premises. **Ulrich (1968)** was of the view that “Games reflect the social processes and the value system of the society, it reflects and directs societies best endeavors. In a society where there is an increasing absence of discipline from

the primary and secondary groups, it could be that, play will effect one of the last modes of teaching and define the meaning of discipline. Through play it is possible to recognize the prospective leaders”.

According to **Martene(1975)**, the desire for sports and games is irresistible and any attempt that is made to check them will only be futile. This is evident in the following words of Martenes:

If sports could suddenly be blotted out from the world and from peoples’ consciousness, they would soon be born again and would perhaps even be recreated in the same forms as new, provided that the process of socialization and its influencing factors remained the same.

According to **Fait (1969)**, the value of sports as a beneficial way in which to occupy leisure time is now widely recognized. There is even evidence to indicate that physical activity, particularly sports, may provide an essential outlet for pent-up emotions and the worries and cares of the workday world. In the words of **Matreyer (1977)**, countries which embraced socialism have gone a step ahead in treating sports, as is evident.

As a many sided social phenomenon sport is an active factor in physical education, one of the basic forms of preparing a person for labour and other social necessary types of activity and alongside, this is one of the important means of the ethic and aesthetic education, satisfaction of the moral requirements of society, consolidation and expansion of international ties.

John Dewey (1915) says that “Such a valuable area of games and sports shall be given a prominent place in the society for its own good. Educational institutions which attempt to make social change and help individuals to be just in society are also required to provide for games and sports. As he puts it, play is for younger children, it has extremely deep meaning, play adds fresh meaning to the routine activities of life.

According to **Rice *et al.*,(1961)**, no place was given for athletic sports or physical education consequently, much of the students’ leisure time was taken up in boisterous pranks, drinking, gambling carousals and riots in the town which finally ended in serious fights between “town and goon”.

According to **Gunther (1961)**, exposure of children to competitive sports will cause these children to become achievement motivated. The earlier this exposure occurs, the more achievement motivated they become.

Sports give appreciation of not only the complexity of man’s struggle with himself and his opponents but also of the vastness of his feeling of toughness and love for others.

Sport has a prominent role in modern society. It is important to an individual, a group, a nation, indeed the world. Throughout the world sport has even reflected developments in society, sports indeed has been the mirror of society.

Sports is an institutionalized competitive activity that involves physical exertion or the use of relatively complex physical skills by individuals. Whole participation is motivated by a combination of the intrinsic satisfaction associated with the activity itself and the external rewards caused through participation.

Sport is true action requiring considerable psycho physical involvement, at times even almost total personal engagement or devotion. Sports as competitive games is found in almost all societies. If one accounts for rates of involvement in terms of participation in competitive sport, recreation sport, school sport, sport spectatorship and fellowship in the mass media, then sport in industrial societies has become one of the most important institutions of modern life.

Sports participation builds a lot of character if handled in the right way. They learn to work together as a team and not think of themselves first. They learn discipline and responsibility, they make friends.

Generally sports are very beneficial to those who participate. Participation in sports brings in many physical and psychological benefits. One of the psychological benefits of sports is that it can boost the self esteem of the people participating. The self-esteem of the children is boosted when parents give their child positive feedback and exhibit a sense of pride.

Studies have shown that girls who participate in physical activity such as sports are more likely to have more positive feelings of self-worth /self-esteem, and greater academic performance than girls who are not participating in physical activities. Physical activity in many cases goes along with academic performance. High quality sports programs in public housing locations can significantly reduce the number of behavioural and emotional disorders in children.

Sports and games include many activities like Hockey, Handball, Basketball, Athletics, and Football etc. Each and every activity is popular in various levels like football is probably second popular sports in the world.

1.2 SPORTS AND PHYSICAL EDUCATION IN PRESENT SCENERIO

Today, almost every nation in the world attaches greater significance to the development of sports in order to improve the nation's health and for the well being of future generations. Certain nations like the U.S.A. and Russia even try to project the superiority of their political ideology and social systems through their achievements in the field of sports.

Sports has been increasingly organized and regulated from the time of the ancient Olympics up to the present century. Activities necessary for food and survival became regulated activities done for pleasure or competition on an increasing scale. For example: hunting, fishing and horticulture. The industrial revolution and mass production brought increased leisure which brought an increase in spectator sports, less elitism in sports, and greater accessibility. These trends continued with the advent of mass media and global communication. Professionalism became prevalent, further adding to the increase in sports' popularity. Not only has professionalism helped increase the popularity of sports, but additionally the need to have fun and take a break from a hectic workday or to relieve unwanted stress, as with any profession.

Because of the inherent values, which are in abundance in sports, all societies have granted approval for hosting competitive sports in some measure or the other.

According to **Slusher (1971)**, Sports as life, is a path for happiness as well as grief. Thorough activity builds anxieties, suffers pain, engages the tensions of life and frequently challenges actual death.

Sports is as old as human society and it has achieved a universal following in the modern times. It has now become an integral part of the educational process and social activities. Millions of sports fans participate in different events round the year. Many

of them participate in sports for fun, adventure, health, physical fitness and financial benefits linked with a high degree of popularity. Sports has a very prominent role in the modern society. Throughout the world, sports has a popular appeal amongst people of all ages and both sexes.

As new training and coaching techniques and facilities are developed the players are creating and breaking new records in today's competitive sports. The level of physical fitness and psychological ability is increasing day to day because of the development of science and technology. Today's Athletes are trained scientifically; the equipments of training are also developed scientifically. The '*dand-bethak*' and '*akhada*' activities have become out dated and hi-tech gymnasium and health centres' have taken their places. Nowadays, in training, the physiotherapist is merged with traditional 'gurus'. With the help of physiotherapist and psychologist the fitness of individual players is modified in a better way. The modern coaching methods are prepared for the development of physical fitness, psychological ability and anthropometry.

Hardyal Singh (1991) classified sport into several areas e.g., performance sports, physical education, rehabilitation sports, fitness and leisure sports, adventure sports etc. Each area of sports caters to the requirements and demands of a particular section of the society. Performance sports aim at high sports performances and for that the physical and psychic capacities of sportsmen are developed to extreme limits.

1.3 VOLLEYBALL

Volleyball is a physically demanding sport and success is based on aspects like speed, power, agility, endurance, rapid processing and focus.

Volleyball is a team sport in which two teams of six players are separated by a net. Each team tries to score points by grounding a ball on the other team's court under organized rules. It has been a part of the official program of the Summer Olympic Games since 1964. The complete rules are extensive. But simply, the play proceeds as follow: a player on one of the teams begins a 'rally' by serving the ball (tossing or releasing it and then hitting it with a hand or arm), from behind the back boundary line of the court, over the net, and into the receiving team's court. The receiving team must not let the ball be grounded within their court. The team may touch the ball up to 3 times but individual players may not touch the ball twice consecutively. Typically, the first two touches are used to set up for an attack, an attempt to direct the ball back over the net in such a way that the serving team is unable to prevent it from being grounded in their court. The rally continues, with each team allowed as many as three consecutive touches, until either (1): a team makes a kill, grounding the ball on the opponent's court and winning the rally; or (2): a team commits a fault and loses the rally. The team that wins the rally is awarded a point, and serves the ball to start the next rally. A few of the most common faults include:

- Causing the ball to touch the ground outside the opponents' court or without first passing over the net;
- Catching and throwing the ball;
- Double hit: two consecutive contacts with the ball made by the same player;
- Four consecutive contacts with the ball made by the same team.
- Net foul: touching the net during play.
- Foot fault: the foot crosses over the boundary line when serving

1.4 HISTORY OF VOLLEYBALL

On February 9, 1895, in Holyoke, Massachusetts (USA), William G. Morgan, a YMCA physical education director, created a new game called Mintonette as a pastime to be played (preferably) indoors and by any number of players. The game took some of its characteristics from Tennis and Handball. Another indoor sport, Basketball, was catching on in the area, having been invented just ten miles (sixteen kilometers) away in the city of Springfield, Massachusetts, only four years before. Mintonette was designed to be an indoor sport, less rough than Basketball, for older members of the YMCA, while still requiring a bit of athletic effort. The first rules, written down by William G Morgan, called for a net 6 ft 6 in (1.98 m) high, a 25×50 ft (7.6×15.2 m) court, and any number of players. A match was composed of nine innings with three serves for each team in each inning, and no limit to the number of ball contacts for each team before sending the ball to the opponents' court. In case of a serving error, a second try was allowed. Hitting the ball into the net was considered a foul (with loss of the point or a side-out) except in the case of the first-try serve.

After an observer, **Alfred Halstead (1896)**, noticed the volleying nature of the game at its first exhibition match in 1896, played at the International YMCA Training School (now called Springfield College), the game quickly became known as Volleyball (it was originally spelled as two words: "Volley ball"). Volleyball rules were slightly modified by the International YMCA Training School and the game spread around the country to various YMCAs. The first official ball used in Volleyball is disputed; some sources say that Spalding created the first official ball in 1896, while others claim it was created in 1900. The rules evolved over time: in the Philippines by 1916, the skill and power of the set and spike had been introduced, and four years later a "three hits" rule and a rule against hitting from the back row were

established. In 1917, the game was changed from 21 to 15 points. In 1919, about 16,000 Volleyballs were distributed by the American Expeditionary Forces to their troops and allies, which sparked the growth of Volleyball in new countries.

The first country outside the United States to adopt Volleyball was Canada in 1900. An International Federation, the Federation Internationale de Volleyball (FIVB), was founded in 1947, and the first World Championships were held in 1949 for men and 1952 for women. The sport is now popular in Brazil, in Europe (where especially Italy, the Netherlands, and countries from Eastern Europe have been major forces since the late 1980s), in Russia, and in other countries including China and the rest of Asia, as well as in the United States.

Beach Volleyball, a variation of the game played on sand and with only two players per team, became a FIVB-endorsed variation in 1987 and was added to the Olympic program at the 1996 Summer Olympics. Volleyball is also a sport at the Paralympics managed by the Disabled. Nudists were early adopters of the game with regular organized play in clubs as early as the late 1920's. By the 1960's, a Volleyball court had become standard in almost all naturist clubs.

1.5 ANTHROPOMETRY

Anthropometry is the science of measuring the human body and its parts. It is used as aid to the study of human evaluation and variations.

Anthropometry is the study of human body measurement and usually included girth or circumference of limbs or segments, e.g., girth or calf breadths or diameter of bones, e.g., Width of the hips or pelvis and skin fold estimates of the thickness of subcutaneous fat, e.g., triceps skinfold.

According to **Clarke and Clarke (1984)** one of the uses of anthropometry is to determine relationships between body structure and motor performance observations of such relationship of wrestlers and Gymnasts, the superstructure of great basket ball competitions the solidarity of Top-flight foot ball athletes, the weariness of champion distance runners, and the massive builds of great shot putters and discus throwers.

1.6 IMPORTANCE OF ANTHROPOMETRY

In the sports field, study of anthropometric measurements play a vital role in determining the amount of various components, the sports persons possess with respect to their sports or game which will help to achieve success.

For many years it was believed that performance in sports and games depends on skill and psychological components, now it is believed that besides all these, anthropometric components are also needed for high level of proficiency, as it has been fully recognized by sports scientists and experts.

The anthropometric provides us with the foundations and the private information concerning the characteristics of motor, which contribute about the possibility of evolving to reach high level of performance and achievement, they are measurements on the components of fat, muscles and bones to give the coaches, during their processes of selection and training, a vision more deep and specialized of the effect of the compound operations and functional physical contributing to the high levels of athletic achievement. It also considers specifications for anthropometric grounds that must be rationalized through the selection in sports for its close association with the access of emerging and evolving the levels of sporting prowess and that because of their impact on the level of the emergence of the physical

characteristics and skill and functionality necessary to achieve those high levels of activity Sports Specialist.

1.7 ANTHROPOMETRIC CHARACTERISTICS OF VOLLEYBALL PLAYERS

Optimal physique is apparently an advantage to volleyball performance. Only when a volleyball team is collectively equipped with the entire ideal anthropometric characteristics can the team win the dominance in a game (Chen, 2005). Height has been reported to be a discriminating factor between successful and non-successful teams in a collegiate tournament (Morrow et al., 1979), correlating significantly with the final standings of an open national tournament (Gladden and Colacino, 1978). The rivalry in modern volleyball games focuses on the dominance over the net, and the best way to win this dominance is to recruit athletes who are taller with greater jumping ability. Previous investigations indicated that elite volleyball players did demonstrate advantageous physique characteristics (Li, 1995). The major characteristics of volleyball players include high stature and standing reach height, low Katoly index ($= \text{mass/height} \times 1000$), long arm span, long Achilles' tendon and long lower-limb and calf. As a result, in the recruitment, high stature should not be the only criterion, other characteristics should also be considered (Tian, 2006). Body mass correlates well to muscle size and power in elite athletes. It has been reported that Katoly index correlates well to the quantity and strength of muscles (Gai and Li, 2002; Li, 2002).

Arm span and standing reach height have also been suggested as essential factors for higher spiking and blocking (Zeng, 1992). Arm span is closely related to most of the volleyball techniques, especially in attacking. To make full use of the

spiking speed of a waving arm, a long arm is an advantage. Jin and colleagues suggested that standing reach height should be used as an essential criterion in recruitment of volleyball players (Jin et al., 2007). You and Huang (2000) suggested that arm length had a significant correlation with the performance over the volleyball net, especially in attacking (You and Huang, 2000). Longer arm is important in defence. The length of the arm span of elite volleyball players has been found to be approximately 5 cm longer than his/her height. The arm span and the standing reach height are found to be closely related (Zeng, 1992).

In summary, the anthropometric characteristics of volleyball players have been reported as high stature, and relatively longer limbs, shorter sitting height, higher lean mass, larger girth difference between the relaxed and flexed-and-tensed arm, wider hand, narrower pelvis, longer calf, slimmer ankle, longer Achilles' tendon, and wider but not longer feet (Tian, 2006).

1.8 PHYSIQUE CHARACTERISTICS OF VOLLEYBALL PLAYERS AT DIFFERENT POSITIONS

An athlete's anthropometric characteristics represent important prerequisites for successful participation in any given sport (Gualdi-Russo and Zaccagni, 2001b). Indeed, it can be assumed that an athlete's anthropometric characteristics can in some way influence his/her level of performance (Carter and Heath, 1990; Rienzi et al., 1999). However, although studies have examined the anthropometric and physiological profiles of athletes from a variety of sports (Cardinal, 1993; Gabbett, 2000b; Rienzi et al., 1999; Zabukovec and Tiidus, 1995a) it appears that few studies have examined the anthropometric or physiological profile of elite volleyball players, particular in relation to their positional role within the sport (Duncan et al., 2006). It

has been suggested that volleyball players at different positions have different anthropometric characteristics, especially in height. Nowadays, among the prominent volleyball players in the world, the average height of setters is about 180~185 cm, spikers is about 185~190 cm, second spikers is about 190~200 cm, and second setters is about 185~195 cm (Ling, 2007b).

1.9 IMPORTANCE OF ANTHROPOMETRY TO VOLLEYBALL PLAYERS

Volleyball is a sport where tallness and explosiveness strongly influence the level of play. Success in sport competitions has been associated with specific anthropometric characteristics, body composition and somatotype (Bayios et al., 2006; Duncan et al., 2006; Hakkinen, 1993).

Volleyball players usually begin their training at the age of 11-12 (Guo, 1999). The reliability of the prediction for volleyball players' future height has been thought as a key factor of a successful recruitment (Huang, 1992).

In the world, various methods and approaches have been utilized in the selection of players, such as performance based, by experience of coaches, use of qualitative and quantitative indices, and scientific testing. Talent identification for players always includes certain anthropometric measurements. Among the anthropometric indices, some of them are highly attributable to heredity (e.g., stature, length and width), but some others are with very low heredity, such as the nutrition indices like body mass.

Huang (1992) also suggested that, in the recruitment of volleyball players, "the anthropometric characteristics include stature, body mass, relative length of the limbs, the length of the limbs/stature ratio, palm and foot length, body and limbs

girths and widths, mass/stature, etc., we should pay attention not only on the indices of girths and mass/height ratio, but also the relative length of limbs and Achilles' tendons, the stature and the height of feet arches" (Huang, 1992).

In summary, volleyball is a team sport which requires specific anthropometric characteristics of players for elite performance, particularly in relation to dominance over the net. Volleyball coaches have been paying greater attention on anthropometric characteristics in recruitment of potential players. However, according to the literature we collected, at present there are few reports on the anthropometry profile of elite volleyball players.

1.10 IMPORTANCE OF PSYCHOLOGY

A sport is a systematic preparation of an individual for an achievement. Sports psychology is a branch of psychology. Sports psychology is a study of human behavior in sports situation. It is individual behavior acting individually and acting in a group.

Psychology is the systematic study of behavior and mental processes as the study of humans is the primary focus of much of the field of psychology. Sports psychology is a specialization within the brain psychology and kinesiology that seeks to understand psychological/ mental factors that affect performance in sports, physical activity and exercise and apply these to enhance individual and team performance. Sport psychology is the scientific study of people and their behaviors in sport. It deals with increasing performance by managing emotions and minimizing the psychological effects of injury and poor performance.

1.11 PSYCHOLOGY AND PERFORMANCE

The sports performance is greatly influenced by psychological factors of the players of any game. The psychological parameters of the players studied in this research are self confidence, anxiety, aggression, self perception and mood state.

1.12 SELF CONFIDENCE AND SPORTS

Self confidence is the belief that one can successfully perform a desired behaviour. A distinguished sports psychologist Stolz quoting George (1994) states that over the past three decades, the construct of self confidence has received a lot of attention from sport science researchers. Self confidence is one of the most frequently cited psychological factors thought to affect athletic performance and it has also been called the most critical factors in sports.

Sports psychologists propose classification of sports based upon psychological demands inherent in each, like hand-eye co-ordination, steadiness and aiming, aesthetic expression, total mobilization of energy, anticipation of another's movement, self defence and others. It is also prudent to classify sports activities as individual and team events. Each of this category develops in their pursuers definite psychological qualities, one among them was self-confidence. Self-confidence is the belief that one can successfully perform a desired behaviour.

Self-Confidence is enhanced by good preparation, planning and sense of optimism. Conversely, negative thinking and pessimism can undermine performance and limit progress. Achievement in sport is possible when sports persons prepare for the contests diligently. During the arduous training sessions, tryouts and mock competitions. The sportspersons attempt to achieve mastery over skills, acquire the strategies and knowledge of technical intricacies as they continued to participate in

preparation and participation. Self-confidence is situational not absolute. It is important to remember that self confidence is always relative to the task and situation. Since each task demands varying degree and nature of confidence, it is worthwhile to investigate the nature of confidence among women sportspersons.

Self confidence is one of the most important psychological factors for volleyball players. It reflects one's assessment of self worth. It allows individual to take risks since one is confident enough about his abilities, to be sure that if things do go wrong he /she can always put back the things or put it right. Self-confidence which drives the individual to venture out often times draws the unimaginable feats from the individual, and more so from the sports persons. Sports coaches try to fully exploit this psychological trait to draw the best from the individuals. Self-confidence was observable at three levels-under confident, confident and over confident. Sportspersons who were under confident commonly suffer from fear of failure and refrain from taking risks; the overconfident sportspersons get themselves to the swamp like situations and will lack the ability to get out of it. They face severe setback and serious failures which will devastate self confidence; on the other hand the confident sportspersons who have measures of their own ability try to achieve success by realistic goal setting.

Now-a-days, in the training for competitive volleyball, confidence building techniques occupy a prominent place. A vast majority of elite athletes recognize the importance of psychological training for competition. The latest emphasis is on the development of psychological skills such as building confidence. It appears that the more competitive the individual, the more self confident he/she will be in a competitive situation.

Reddy (1997) conducted a study on a total sample of forty subjects, drawn from the 46th senior national volleyball championship for men and women 1997, held at Vizag. The subjects were selected at random and divided into two groups, men and women for the purpose of data collection. Robin's self-confidence and Kamalesh's achievement motivation questionnaire were employed. They helped to evaluate psychological factors of the players.

The study reveals that men and women senior national volleyball players were highly determined. The means of men's confidence and achievement motivation and women's confidence and achievement motivation were not equal.

1.13 ANXIETY AND SPORTS

Anxiety is an arousal state of mind which has both negative and positive effects on sports performance. Anxiety plays a paramount role in sport. It is the challenge in sports participation which produces anxiety. How an athlete handles the anxiety determines how successful he would be. Anxiety may be positive motivating force or it may interfere with successful performance in sport events. The degree of anxiety also varies with a number of different conditions. Anxiety is likely to be greater in higher competitive sports than in relatively non-competitive sports, because in the competitive sports, participants are expected to win and great demands are made upon them to succeed.

The complexity of competition in the modern life has heightened the anxiety in these days. In light of this, the twentieth century is termed as the 'Age of Anxiety'. In modern competitive sports also the anxiety in Sportsmen has affected their performance. As the physical load during training of Sports men for international competition is being increased day by day, the psychic stress during competition is

also intensified. The players and athletes like other human beings, apparently, are anxiety-prone while participating in competitive sports.

Anxiety is a psychological and physiological state characterized by somatic, emotional, cognitive and behavioral components. Anxiety invokes a feeling of fear or a perception of threat and which may be specific to and particular situation.

In sport psychology, anxiety refers to an unpleasant emotion which is characterized by vague but persistent feelings of apprehension and dread (**Cashmore, 2002**).

Anxiety consists of two subcomponents, namely cognitive and somatic anxiety, which influence performance before and during competition (Weinberg and Gould, 1999; Lazarus, 1991; Anshel, 2003; Martens et al., 1990; Jarvis, 2002). Meanwhile, cognitive is the mental component, which is characterized by negative expectations about success or self-evaluation, negative self-talk, worry about performance, images of failure, inability to concentrate, and disrupted attention (Martens et al., 1990; Jarvis, 2002). The somatic is the physiological element which is related to autonomic arousals, and negative symptoms such as feelings of nervousness, high blood pressure, dry throat, muscular tension, rapid heart rate, sweaty palms, and butterflies in the stomach (Martens et al., 1990; Jarvis, 2002). One approach is that increases in competition anxiety, and particularly cognitive symptoms, always have a detrimental effect on performance. At the same time as providing challenge and stimulation, sport also provides considerable uncertainty. At the precise moment the Olympic archer releases an arrow, or the rugby fly-half kicks for goal, the outcome is unknown. The stress that sport provides therefore is inevitably linked with its inherent uncertainty. Sport is a cultural focal point because it

is a theatre of unpredictability. While stress and uncertainty may motivate some athletes, they induce anxiety in others. There are some distinct factors that can increase athletes' level of anxiety. For example, the more important the contest the greater the stress, and the more likely it is that a competitor will be prone to anxiety. Sport is littered with the broken dreams of those who wavered when they most needed to be in control of themselves and focused on the task at hand. When a competitor 'freezes' in the big moment or commits an inexplicable error, anxiety, in one of its many guises, is very often the root cause. The precise impact of anxiety on sporting performance depends on how you interpret your world. Unfortunately, far too many athletes accept high levels of anxiety as an inevitable part of the total sporting experience and fail to reach their potential.

1.14 AGGRESSION AND SPORTS

Aggression is defined as the infliction of an aversive stimulus either physical verbal or gestural, upon one person by another. Aggression is not with the intent to physical harm.

Aggression is a term that is used extensively in sport. The volleyball player who dives to the floor to attempt an apparently impossible save is playing aggressively. In these and other examples from sports, aggressive acts can be defined as those in which the athlete (1) is highly motivated, (2) demonstrates a great release of physical energy and /or (3) is not inhibited by fear of potential failure or injury. Aggressive athletes seem to be desirable athletes.

The successful athletes are relatively more aggressive than dominant, adventurous, conservation, tense and enthusiastic than the less successful athletes and non-athletes (**Singer 1969**).

1.15 SELF PERCEPTION AND SPORTS

Self-perception encompassing the values, attitudes and behavior towards one-self in relation to environment.

Self Perception body image relates to an individual's perceptions, feelings and thoughts about one's body and in corporate body size estimation, evaluation of Body Attractiveness, and emotions associated with body shape and size (**Grogan, 1999**).

Self concept is a multidimensional construct that refers to an individual's perception of self in relation to any number of characteristics, such as academics, gender roles, racial identity etc. The self concept is an internal model which comprises self assessments.

1.16 MOOD STATE AND SPORTS

Mood state is sometimes defined as a feeling state that is not clearly linked to some event. One may not know why he is in a good or bad mood, but he does know that he feel happy or sad (**Baumeister and Bushman, 2008**).

Mood is a state of mind that differs from emotion in that it is less specific, less intense, and less likely to be triggered by a particular stimulus or event. Moods either have a positive or negative valence. Although both mood and emotion are affective states, moods lack a clear referent, may come about gradually, may last for an extended period of time, and are often of low intensity (1) Mood is a part of our everyday life. Our overall behavior can change and be affected by our physical health (2, 3). Mood and physical health interact with each other (2).

Mood has been shown to be an important variable in a variety of performance environments. Indeed, mood management is increasingly being recognized as

fundamental to many of our common daily activities. Whether you're preparing for an important sales pitch, a presentation, an important examination, a sporting competition, or any other type of performance, mood plays an important role in these situations. As such, getting in the right mood may be seen as a crucial part of mental preparation before an important performance.

1.17 REASON FOR SELECTING THE STUDY

Anthropometric dimensions morphological characteristics and psychological qualities play an important role in determining the success of volleyball playing performance. But so far, scientifically very little, if any, has been done to establish relationship of these aspects in volleyball and certain aspects assumed to be related to the game of volleyball. Not many studies are found with regard to the relationship of An Anthropometric, psychological Parameters and Playing Ability among volleyball players at inter-university level. Hence, the investigator is interested in undertaking a study to assess the Anthropometric, psychological Parameters and Playing Ability in relation to their achievements of South Zone Inter University volleyball players.

1.18 OBJECTIVES OF THE STUDY

1. To assess the anthropometric status of south-zone inter-university men volleyball players.
2. To speculate the psychological status of south-zone inter-university men volleyball players.
3. To find out the relationship among anthropometric, psychological parameters and playing ability of different level of achievers of south-zone inter-university men volleyball players.

4. To predict the predominant factors among selected anthropometric and psychological parameters in determining playing ability of south-zone inter-university men volleyball players.
5. To assess the role of anthropometric and psychological parameters in selecting the volleyball players at inter-university level.

1.19 STATEMENT OF THE PROBLEM

The primary purpose of this study was to assess the relationship among Anthropometric, psychological Parameters and Playing Ability of different level of Achievers of South-Zone Inter-University Men Volleyball Players.

1.20 SIGNIFICANCE OF THE STUDY

This study would constitute to the field of knowledge in the following ways.

1. This study would be helpful in selecting the players for the team game under study, where demand of anthropometry is a major issue to address.
2. This study would be helpful in selecting the players for the team game under study, where demand of Psychological variables is a major issue to address.
3. This study would help the professionals for the screening, assessing and classifying the players.
4. This study would be helpful in understanding the status of anthropometric measurements in selected team game players, which in turn formulates the knowledge of physique, shape and size demanded for the selected games.
5. Further an attempt was made to compare the anthropometric and
6. Psychological parameters among different level of achievers of South-Zone Inter-University Men Volleyball Players.

1.21 HYPOTHESES

For the purpose of the study, the following hypotheses were formulated;

1. It was hypothesized that anthropometric and psychological variables would influence the playing ability of south-zone inter university volleyball players.
2. It was hypothesized that there would be significant difference among low, medium and high achievers of South Zone Inter University Volleyball players on selected criterion variables.

1.22 DELIMITATIONS

1. The study was restricted to 144 male Volleyball players who represent different universities in south-Zone Inter-University championship.
2. The study was confined to the level of participation of the players, experience of the players was not taken into consideration and training.
3. The study is further delimited to eleven anthropometric variables viz., Height, Weight, Arm Length, Chest Girth, Leg Length, Arm Span, Forearm Length, Forearm Circumference, Thigh Girth, Upper Arm Girth, Calf Girth
4. The study was further delimited to five psychological variables viz., self confidence, sports competition anxiety, aggression, perception and mood.

Anthropometrical Variables– Body Weight; **Length Measurements**- Height, Arm Length, Leg Length, Arm Span, Forearm length, Forearm Circumference. **Girth Measurements**- Chest Girth, Thigh Girth, Upper Arm Girth, Calf Girth.

Psychological Variables– Self Confidence, Sports competition anxiety, Aggression, Self Perception, Mood state.

1.23 LIMITATIONS

2. To get the best out of the players during the test period, no special motivational techniques were employed which is considered as another limitation.
3. Certain factors like food habits, life style, climatic condition and other environmental factors could not be controlled which may influence the results and hence they may be considered as one of the limitations of the study.
4. The variance in playing experience among players due to the participation in tournaments will be considered as a limitation of the study.
5. Similarly the playing ability differ due to their participation in the coaching programme, if any, will also be added to the limitations.
6. The subject's socio-economic status, health habits and family background were not taken into consideration.
7. The response of the subjects to the statements in the questionnaires would depend upon various factors such as understanding of the statements, seriousness and sincerity of the subjects.

1.24 OPERATIONAL DEFINITIONS

1.24.1 ANTHROPOMETRY

Anthropometry is the study of the human body in the terms of the dimensions of bone, muscle and adipose tissue. It is the measurements of the human body to discover its exact dimensions and the proportion of its parts. **(Surinder, 1993)**

1.24.2 STANDING HEIGHT

The perpendicular distance between the transverse planes of the planes of the vertex and the inferior aspects of the feet. **(Michael, 2006)**

1.24.3 BODY WEIGHT

Mass is the quantity of matter in the body. Mass is calculated through the measurement of weight, .i.e. the force the matter exerts in a standard gravitational field. **(Michael, 2006)**

1.24.4 LENGTH

The linear extent or measurement of something from end to end, usually being the longest dimension or, for something fixed, the longest horizontal dimension. **(Stewart.A et al., 2011)**

1.24.5 GIRTH

The girth of an object, a person's or an animal body, is its width or thickness, considered as the measurement around its circumference. **(Stewart,A., et al., 2011)**

1.24.6 WIDTH

The linear extent or measurement of something from side to side. **(Stewart,A., et al., 2011)**

1.24.7 LEG LENGTH

The vertical distance between the Trochanterion lateral site to the standing surface. **(Michael, 2006)**

1.24.8 ARM LENGTH

The linear distance between the Acromial and Dactylion sites of the lateral view. **(Michael, 2006)**

1.24.9 ARM SPAN

The linear horizontal distance between the dactylion sites (tip of the middle fingers) with the arms extended laterally and at shoulder level. It includes the width of the shoulders and length of both the upper limbs. **(Michael, 2006)**

1.24.10 PSYCHOLOGY

Psychology is the scientific study of the human mind and its functions. It is a science of behaviour or science study of the behavioral activities and experiences. **(En.Wikipedia.org (2018)**

1.24.11 Anxiety

Anxiety is a multisystem response to a perceived threat or danger. It reflects a combination of biochemical changes in the body, the patient's personal history and memory, and the social situation. **(Gabriele et al. 2004)**

1.24.12 .Aggression

Aggression is any behavior intended to hurt someone, either physically or verbally. **(Weiten and Lloyd, 2007)**

1.24.13 SELF-CONFIDENCE

Self Confidence is the belief that you can successfully perform a desired behaviour. **(Weinberg et al., 2003).**

1.24.14 MOOD STATE

Mood State refers to a person's experience of emotion, the way the person feels 'inside'. Some examples of emotions are depression, elation, anger and anxiety. **(Richard et al., 2007)**

1.24.15 SELF PERCEPTION

“Perception is the process by which organisms interpret and organize sensation to produce a meaningful experience of the world. Self-Perception, on the other hand, better describes one’s ultimate experience of the world and typically involves further processing of sensory input” (**Semerjian *et al.*, 2007**).