Chapter I

INTRODUCTION

I took a piece of living clay
And gently formed it day by day
And molded with my power and art
The young child’s soft and yielding heart.

I came again when years were gone
It was a man I looked upon.
He still that early impress wore
And I could change him nevemore.

****** Unknown¹.

General Description

The long and difficult road from a budding schoolboy star to a top-line performer is littered with pitfalls, the paths are varied. Some players find it easy with no set-backs, others have many obstacles to overcome; for some the ‘light’ of the star emerges in their early days and only needs kindling by the development of their talent, but for others the road to success is a difficult process which may suddenly appear through the most unusual circumstances.²

² Dennis Law’s, Book of Soccer No. 4, (Great Britain: Pelham Books Ltd., 1969), p. 79.
To win a medal in the Olympics, World Cup and International competitions is not an easy task in the tough globalized world of sports competitions. This is long term plan in the elench of die-hard competitive training. "This has eventually compelled coaches, trainers and all those concerned with the development of sports to pick-up children at an early age in order to train them in long term planning for optimum results. This has posed a problem to the physical educationists and sports scientists to find out methods for selection of potential sportsmen at very early age. This has resulted in an increasing interest in talent spotting in all sports."  

The search and selection of potential athletes in specific fields based on scientific knowledge is a matter of routine in many developed countries. Unfortunately, in India this aspect has not been given serious consideration. Consequently athletes are selected from the "Available Pool" mainly on the basis of their performance records on various sports meets. It is often forgotten that such "talents" have already reached their peak performance with little scope for further spectacular improvement in spite of intense grooming schedules; therefore fresh look needs to be taken to improve upon the methods of selection of Indian athletes. The need is to be identified at a very young age.  

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Until recently physical talent was considered adequate recommendation for a future player, the development in sports technology has made available additional techniques for the assessment of a player’s potential and performance. Sports have undergone a tremendous change; in consequence, sports are now dominated by a new breed of coaches. The new coaches are interested in a combination of physical talent with other qualities—qualities that not only influence performance but also help to sustain the athlete in his or her commitment to sports.  

Good players do not become great without committing themselves whole-heartedly to improve their craft and ultimately their match performance. The extent to which the player does not want to be beaten will determine how hard he will work to polish his strength and to improve his weakness.

In performance sports, identification of talent is of immense importance. Several disciplines of sports science are of help in the identification of talent. But their approach is limited to one or a few components of talent. Talent finds full expression in physical activity during competition. During competition total personality of the sportsman is involved. As a result competitive performances are very good indicators of sports talent.

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Sports talent is the sum total of pre-requisites (and possibilities of their development) possessed by a person which will enable him to achieve high performance in a sport in future. The pre-requisites include motor abilities, technical skills, tactical efficiency, physique, personality traits, motives, interests etc.\(^6\)

The identification and selection of future elite athletes in childhood or adolescence has become a necessity. It takes years of intensive regular training for an international performance to be achieved. The children selected for elite sports activities require suitable conditions and sports facilities, equipments of high quality, a rational style of life and the service of experts, including a sports physician, a well educated and experienced coach etc. Such conditions can be created for selected children only. Therefore, correct identification, selection and placement of young talents is becoming important everywhere.\(^7\)

Talent selection earlier was based on personal experience, an intuition or ‘good eye’ of the coach or scout serving as a major tool. Few are the published studies, which offer a more scientific approach to prediction of future success. This lack of published information stems from the fact that the ultimate performance of the mature athlete is a


resultant of a large number of factors, such as genetic, sociological and psychological as well as the type of habitual activity and training one has been exposed to throughout the years. It is not simple for the researchers to isolate a single factor keeping all other factors constant, in order to learn more about these parameters.\textsuperscript{8}

The physical development of a sportsman at the peak of his performance has also become of prime interest to anyone involved in the cultivation of young sportsmen. In the recent past, in India also, there have been attempts to search for talent and to determine various factors, which could be responsible for ultimate success. The sports scientists working with the top coaches in the sport concerned are trying to find out the basic physical, physiological, and psychological characteristics that might be the performance limiting factors.\textsuperscript{9}

The poor performance of sportsmen at the higher competitions, not only concerns especially to the coaches, trainers, physical educationists and sports scientists, but it is also concerned directly to the player’s inborn quality. Numerous factors, like skill abilities, motor abilities, psychological factors, physiological factors, social and environmental

factors etc. are responsible as the performance limiting factors behind the sportsman on the marks of poor performance in competition. Natural ability is essential, but it needs to be combined with hard work, good coaching and challenging match experience. It is very difficult to define ability and to measure it.

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 skill becomes invariably necessary. The selection is usually based on experts' judgment or opinion or statistical analysis and these skill items are called test battery. The skill tests help their 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 students' performance and to evaluate his own teaching procedure and programme.\textsuperscript{10}

Normally a person starts taking part in a game or event without proper guidance. It is thus a sheer chance that his choice of the sport may be suitable to his inherent capabilities. Therefore, the failure to become a champion in most of the cases is inevitable. Thus there is an urgent need to provide counseling to those endowed with such suitable characteristics.

that form the basis of performance in a game or event. This may be one of the most important factors that can help in raising the standard of sports in most of the countries. In Japan, however, the system of selection keeping physique in view has been adopted in more than one thousand schools and was administered to some three hundred thousand subjects from the kindergartens to the universities. The consequent contribution made in awakening interest towards physical fitness and in the promotion of national programmes of physical training has been indeed remarkable (Hirata, 1979). However, physique is not the exclusive factor for selection. The other factors which determine performance also need due consideration. With this in view, it is desirable to focus attention of those who are connected with sports in one way or the other, for improving selection procedures particularly in childhood. "Catch them young" should be the aim and the selection of talent in this way will help utilizing the time and energy of the coaches and the athletes in a more effective manner. It will also be useful in improving the methods of training for children and give a new look to the system.\textsuperscript{11}

Genetic inheritance is also one of the indispensable factors affecting the talent of the individual that will contribute to higher

performance in future. "Careful examination of the individual's blood relatives may provide useful indications about the chances of one's development in the prerequisite sportive characteristics, thus avoiding the danger of wasting the time and effort that might only produce a misfit (Geda, 1971)."\(^\text{12}\)

For top level performance, it is very important to spot, select and nurture a budding sportsmen as it is recognized by all that athlete must possess some inherent qualities which can be developed by means of systematized and scientific training. For spotting and selecting a player, one must consider physique and fitness, as these qualities will help a long way towards better performance. Moreover, hard competition has eventually compelled sport authorities to pick-up children at an early age in order to train them over a long period for optimum results.

Cooper feels that some sort of complex of personality factors must be functioning that compel an individual to join and work with a team, with its regular practices, leadership, and peer involvement and continuity over time. He also states that such factors related to participation in competitive sport may well be different from the general psychological needs related to ordinary physical activity.\(^\text{13}\)

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\(^{12}\) Ibid, p. 6.

Motivation is one of the most essential attributes for effective performance. It is a driving force, which compels the athlete to accomplish difficult and challenging tasks. The urge to compete, excel and achieve is a universal phenomena, common to all human beings. The understanding of what motivates an individual to take part in sports is the first step towards effective performance. Motivation serves to energize, select and direct performance. It helps in setting tough goals and in directing the energy and effort to achieve those goals.\textsuperscript{14}

From the above descriptions, it is drawn out that talent search is designed to identify promising young athletes or players (12 years and older) and prepare them for participation in domestic, national and eventually international competition. The programme utilizes information across all disciplines of sports sciences to identify young athletes with characteristics associated with elite performance. Athletes are then guided to sports and games that best suit their attributes and provided with the opportunity to realize their potential in a high quality talent development programme.

Soccer Reputation

"Here is a round ball, just asking to be kicked. You kick it with natural facility aimlessly at first. Next you try to direct your kick so that the ball strikes a particular target. By trial and error you learn to adjust your kicking action to achieve better and more consistent results. Enter an opponent who attempts to defend the object you are trying to hit. Then, finding the ball at his feet, he seeks to kick it at a target of his own choosing. Soon you are involved in competitive test of skill."\(^{15}\)

"Football is like a religion to me. I worship the ball, and I treat it like a God."-Pele.

Goal, gola, gol! Whichever language is spoken. A game of football provides 90 minutes or more of adrenaline-pumping action, intense drama and breathtaking skills. Football is a game that can be played in a park, on a beach, or in a huge stadium watched on television by millions of people. But wherever it is played, football inspires powerful emotions and fierce loyalties like no other game on earth.

Nothing unites people, nations, societies, and individuals quite like Association Football. It is the modern opium of the masses: a lingua franca common to men and women, old and young, whose lives are

otherwise so different they might be living on different planets. First world, third world …….. at all extremes of the human spectrum, someone can be found kicking a football and imagining he- yes, or she- is scoring the winner in the World Cup Final.¹⁶

From political leaders to executives, housewives to journos; the passion it all. Scantily- clad cheer- leaders were not required. The spectators made their own tunes, and sang and danced to it. It was redundant tracing their roots. When soccer on the field is played with breath- taking simplicity, emotions automatically pour out.¹⁷

“One good reason for learning to play football the right way, and so making the most of your talents, is that you never know who is watching you. That fellow in the brown tribally hat, who watches all your school games from the touch line, may not be an uncle of one of the players or somebody who likes to get out of the way while the Saturday morning shopping is being done, he might be a scout looking for talent for a professional club.”¹⁸

No one can imagine exactly when the game of football began. However, people believe that it started in ancient time when man started

kicking on objects by chance and then became purposefully. Since that
time, he found some pleasure in kicking and the game started in its
crudest form.

The game of soccer is pronounced – Association Football, Soccer,
Calcio, Fussball, Futbol, Futebol or any of dozens of other linguistic
variants. This is greatest game in the world and much more. This is
people’s highest passion. It includes the common denominator between
nations of political and armed antagonism and makes an alternative or an
accompaniment to the smile, which breaks down barriers. People with no
other social or cultural connection like- Pele, Maradona, Zidane,
Beckham, Figo, Ronaldo etc. who works a charm or spell.

Tracing the origin of soccer is a daunting task and it seems to be
the forerunner of all ball games – Hockey, Basketball, Handball,
Volleyball, Cricket, Tennis etc. It is believed as far as ancient China,
around 1697 BC; Emperor Huang Ti devised a game called “Tsu-Chu”
based on military strategy in which warriors kicked a leather ball-like
pebble stuffed with cork and hair between two bamboo posts. It is also
said about 500 to 600 BC a type of circular football game known as
“Kemari” was played by Japanese for religious ceremony. History
recorded the first international match was played between China and
Japan in the year 50 BC. The ancient Greeks played a similar game called “Episkyros.” Romans also had the modification of this game and called as “Harpastum.” The aim of these versions of the game was to win the ball from all of one’s opponents. Julius Caesar brought the Roman game to Britain.

The game began in England in the 12th century. The English version evolved the football was originally a human skull but later an inflated animal leather bladder substituted. According to English legend, the skull of a captured Dane served as the first soccer ball. The game was played as a way of preparing for war and quite similar to military battles.

Centuries brought changes on the game through different corners of the world. J. C. Thring put forward a set of ten rules for “The Simplest Game”, based on the Cambridge University rules in 1862 and was revised in 1863. The same, the Football Association (F.A.) England was formed in and new rules were formed in 1864. The first international match was staged between England and Scotland in 1872. Professionalism in soccer started from 1885 and talented players from Scotland were among the first professional players who had high pioneers of the passing and dribbling game. Two Darwin Club’s players- Scots John Love and Fergus
Suter, were reported as being the first players ever to receive remuneration for their football talent.

The spread of football outside of Great Britain, mainly due to the British influence abroad, started slowly. Nevertheless, it soon gathered momentum and spread rapidly to all the parts of the world. The next countries to form Football Associations are the Scottish FA (1873), the FA of Wales (1875), the Irish FA (1880), Netherlands and Denmark (1889), New Zealand (1891), Argentina (1893), Germany and Uruguay (1900), Hungary (1901), and Finland (1907).

When Fédération Internationale de Football Association (FIFA) was founded in Paris on 21st May 1904, it had seven founder members—France, Belgium, Denmark, Netherlands, Spain, Sweden, and Switzerland. The German Football Federation cabled its intention to join on the same day.

The international football community grew steadily, although it sometimes met with obstacles and setbacks. In 1912, 21 National Associations were already affiliated to the Fédération Internationale de Football Association (FIFA). By 1925, the number had increased to 36. In 1930, the year of first World Cup it had 41. In 1938, 51 and in 1950, after the interval caused by the Second World War, the number had
reached 73. At present after the 2004 ordinary FIFA Congress, FIFA has 204 members covering every part of the world. This figure exceeds the number of members of UNO.

If football did not have stars, someone have to invent them. Euro 2004, where only European nations played, attracted a global viewer-ship of 8 billions. In 2002, the World Cup soccer played in South Korea and Japan had a staggering 29 billion eyeballs following every feint, tackle, dribble and shot at goal. With that kind of attention, it’s inevitable that football will create stars – individuals who stand way above teams and nationalities and command global mass adulation. Arguably, Brazilian superstar, Pele was football’s first and greatest international icon. Today, thirty years after he quit playing competitive international football, he is still football’s most recognizable face and icon of corporate sponsors. Argentina’s Diego Maradona had no such luck, all he could do was probably better than ever, but his off-field antics, including a disastrous drug habit, made sure few companies would make a brand ambassador out of him. Never mind, corporate wariness, million of fans from Buenos Aires to Naples to Kolkata, will die for a glimpse of Maradona. Nobody in recent football history comes close to these giants, every football subculture and there are as many as there are teams have its own idols.
Ronaldo and Ronaldinho, Zidane and Henry, Nedved and Koller, Beckham and his Posh wife whatever your tribal affinity to club, region or national side, there’s a star for you.\(^\text{19}\)

It is a fact that professional soccer talent is comparable with the talented actor in that hour of practice or rehearsal and performing on the stage in front of billion eyes of the world. A critical huge audience or attendance of the public event judges their expertise of the talent largely on a subjective basis. The craft of great players like Johann Cruyff or Ramario, the guile of Diago Maradona’s “Hand of God”, Pele the “King of Football” etc. exemplify that the game soccer is highly composed of talent. Zinedine Zidane’s dazzling dribbling and accurate passing; David Beckham’s precise long passes, deadly free kicks and modeling style; Ronaldo’s 99% goal scoring shot and others pin-up in the talent market of modern soccer scenario.

\(^{19}\) Edit Page, “New Soccer Stars will replace the old.” \textit{The Times of India}, (Hyderabad), Monday, July 5, 2004, p. 12.
Dominant Factors of Soccer Talent

Youth team management cannot be divorced from the recruitment of young players. In this, one must work closely with the Chief Scout of the club and be involved in his scouting network so that the supply of young players is both an effective and continuous one. Though the Chief scout and his associates there must be established good relationship with the local schools and with the teachers directly involved with schoolboy football in the area. A club which fails to recruit the best of the local schoolboy talent creates difficulties for itself. The correct image of a professional football club must be presented to parents and Head teachers and relationships between young players and the club must be of such a nature that the Youth Team aspect of that club becomes an advertisement in itself. This can only stem from the correct handling of young players and affording them the time for their effective development.²⁰

The search for talented schoolboy footballers by the professional clubs has been intensified in recent years, largely because of the spiraling transfer fees required for established players. Most clubs now have a Youth Development Policy. However, without the necessary staff, carefully selected of how to handle and develop young players can

obviously be a criminal waste of talent. If would seem sensible, that clubs should be very selective in their recruitment of young players, thereby ensuring a higher success rate.\textsuperscript{21}

The constant desire to raise the standard of performance poses the question—how to help junior players to develop their game to the level of really great performances later in their careers. Although we have cited the need for specialization to begin as early as possible, it must be understood that we cannot just decide on when such specialization will begin arbitrarily. Specialization can only begin when we have already prepared the young player’s system, in other word—given it a physical foundation, and when he is capable mentally too, of consciously mastering the specific practical and theoretical knowledge of football.\textsuperscript{22}

Generally, from the age of ten onwards young players can be started to teach, those technical elements for which he is already acquired the physical basis that will enable him to carry them out effectively and correctly. Under no circumstances he should be taught movements that are beyond his ability. In the selection of the special material also, correct consideration must be given to the mental capacity of the ten to twelve years old boys. For this reason, it is still too early to teach tactical

knowledge at this age. Shorter explanation should be given and important thing is to give good demonstrations of the movements we want to grasp; this is indispensable.

The game of soccer is most coordinated game and develops many fine qualities in a boy. It is the game which, when played right, demands and develops stamina, coordination, strength, speed, agility, courage, determination, initiative, resourcefulness and many other basic qualities. Every situation offers a boy a chance to develop originality and keen judgment. Every move in soccer once it gets in a boy’s blood, it will be sheer pleasure and delight. The boy learns to sacrifice, to blend his individual ability in wise, purposeful and effective combination of play with his teammates. He learns to recognize the job he has to do the best in the field with good coaching and diligent practice. Therefore, he can call on every bit of strength, when the pressure is on, and usually meets the challenge effectively. He uses the ability he has for team’s advantage making up courage, clever ball handling, and subtle combination of play. The boy must learn all the fundamentals and practice earnestly to execute with intelligence and purpose, fairly and effectively, and different tricks to outwit the opponents.

Whilst elements of soccer skills, such as dribbling and passing, have been incorporated into field tests, the assessment of soccer skill has
received only little attention. Reilly and Holmes (1983) validated a series of skills tests, which included a wall-volley test, a shooting test, a slalom dribble test and a straight dribble test. The tests were designed primarily as an aid in identifying and screening for young talent.\textsuperscript{23}

The game of football contains physical challenge. Though two players may be equal in their skill, but because of different physical and mental response, there can be much of difference in their performance. A player must be quick in assessing a situation and in his response. A forward has to decide between a pass and a shot, defender between marking and covering and a goalkeeper whether to defend, keep standing at the goal or run forward or sideways.\textsuperscript{24}

In order to become a winning team, the players must master the fine art of fundamentals of dribbling, kicking, receiving, shielding, feinting, heading and others. The team made up of players well schooled in these skills, is the foundation of team play, and a team made-up of players well schooled in these maneuvers will be a winners. Above all, the attitude of the player, his emotional control, desire to improve, personality development, intelligence, group cohesiveness, will to win,

the contribution he makes to team morale, etc. are important factors in selecting fresher who will make up the good team.

High level soccer performance is the result of a multiple factors such as physical, motor abilities, constitutional mental abilities, high physiological work output, technical and tactical efficiency etc. The performance of world-class soccer players is the result of interactions of a number of these factors, which includes high psychological and physiological demands. Therefore, soccer is a game of psycho-physio-physical activity. It has both psychological and physiological parameters besides physical, social and technical aspects. In this modern era of competitions the psychological preparation, physiological and physical fitness of players are as important as training the different skills of the game on the scientific lines. These players are prepared not only to play the game, but also to win the game, and for winning the game, it is not only the proficiency in the skills, which brings victory, but more important is the psychological, physiological and physical prowess of the players.

In the modern sports world, sports psychology has become one of the most important aspects of sports sciences that deals with the improvement of sports performance. Psychological pep-up during
training and competition is the most important factor for achieving high performance of the sportsman. It is therefore, in this high competitive modern soccer world, psychological preparation of a player or a team is as much important as technical preparation of the game with the proof of scientific authenticity. It is very important that the players or team is prepared not only to play the game but also to win. Therefore, to win the game, psychological proficiency i.e. mental alertness, the spirit and attitude of the players and team play the vital role in competition. It brings victory to the players or the team.

The game of soccer needs high level of psychological balance, which absolutely controls the mental, physical, motor-coordinative activities and physiological work-outputs under high intensive conditions. “It is a game of continuous action with mental pressure requiring continuous adaptation to the changing situations by the team as well as the individual players. Although it is a team game, there is ample room for the players to display their brilliance with and without ball using intelligent and technical knowledge. It is a game that sends people all over the world into a frenzy; creates national heroes and millionaires”25

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Only the players who possess stamina and playing skills do not always mean successful team and usually, it is merely the beginning. It is true, champion teams always have good personnel, but a check will uncover that the players possess the right attitudes, the ability to control their emotions and morale. It is difficult to single out or even list all the qualities, which go into the development of the victory spirit, which makes a winning team. Loyalty, discipline, desire, aggressiveness, hustle, concentration, intelligence, group dynamics, cohesiveness and coachability are also important factors of success. An overwhelming urge for victory, the guts to work long and hard, and to push themselves a little farther when they are tired; the ability to develop mentally to a degree where they recognize the importance of tactical situations and strategical opportunities are other factors. All these qualities should be welded together in the future champions.

A good soccer player is psychologically fit for the game, if he possesses the required personality, intelligence, motivation, perception, quality of cohesion, emotional stability and educability to accomplish the task. Competition tension elevates heart rate, blood pressure and respiratory rate; restlessness and anxiety becomes the barrier to
performance. No soccer player is without anxiety, but some can manage the stress better and are more psychologically fit for arduous work.

In competition, the players, who maintain high psychological consistency for long time, can achieve high performance. Maintenance of psychological consistency (motivation, intelligence, personality traits, team spirit, competition anxiety, etc.) to improvement performance in sports has received greater attention in these days. It is important to estimate the various psychological parameters and the role of emotional phenomenon, like achievement motivation, incentive motivation, and state and trait anxiety of the players as early as possible at the time of selection, training and competitive situations.

The characteristics of soccer, which every player wishes to possess, range from high personality traits, such as the sense of responsibility, to highly specific neuromuscular, kinesthetic and proprioceptive qualities, such as the feel of the ball (ball sense) and ground situations. Players must be self-confident, responsible, persistent, independent, decisive, impulsive and level-handed, over all the high psychological stability. Over and above, the players must possess cohesiveness, able to bear hardship, handle spectators’ disruptions, monitor game activity and pace, anticipate, tactful and intelligent, focus and distribute attention, good
observation and judgment, and reasoning. Great demands are placed on the behaviour of players, individual and group risks, and person-to-person, team-to-team compact, and by the continuous alternation of success and failure characteristic of the team.

The game ‘soccer’ as the team game, team performance is the most pressing practical issue. It is commonly assumed that cohesion is a positive force within a group something to strived for team. This is the extent to which players of the soccer team exhibit a desire to achieve common goals and team identity. On this basis research tends to support the view that high interaction teams need high task cohesion to be consistently successful, whereas for moderate or low interaction teams cohesion is less important to success. Team cohesion develops the longer a group is together with the same numbers and team members are pleased with each others performance, behaviour and conformity to the norms of the team.

Football personality – using this method, training is based on the plan; players no longer have to wait for the trainer’s whistle. They can also practice the different techniques independently. This will give rise to a new generation of footballers, who do not leave everything to the trainer but think about, talk about and work at developing their own
potentialities. Football personalities reveal themselves as such in difficult situations; they make decisive moves. Trainers, therefore, must demand the young players that they make use of possession every time with the help of the technique they have learned and that they make as many decisive moves as possible.\textsuperscript{26}

Development of intelligence – anyone who trains in accordance with this plan knows exactly what he is doing. He is learning the techniques of the best footballers. He is no longer engaged in unrealistic exercises, which jump from one thing to another. Every component is gone through systematically and the player knows precisely what its purpose is. Developing morale – all top footballers have flair, a match mentality, self-confidence, nerve and high morale. They have required these things through their natural abilities.\textsuperscript{27}

An intelligent player has technical skill, tactical efficiency and high motor qualities as speed, strength, agility, good reflex action, coordination, explosive power, good ball control and sense, and dribbling ability etc. He can produce those deceptive body swerves and destructive runs, which can turn a loosing game to a winning one.

\textsuperscript{27} Ibid. p. 20.
Intelligence or high mental development is directly related to the formation of the rational foundation of soccer players’ will, motivations, interest and other special psychic preparedness, techniques and tactics, and perfectioning the soccer skill. To become a talented soccer player, the mental growth and development is responsible for cognitive, mental or intellectual abilities – intelligence, reasoning, memory, sensation, perception, imagination, understanding, generalization, interpretation, conceptual ability, problem solving and quick decision making ability etc. Successful performance in the game of soccer directly links to the motivational level of the players and the coach. Motivational factors are as important in the development of a player in his early stages as they are in maintaining his skill in future. Therefore, to make-up and trace out the psychic quality on youngsters is essential to nurse for future team quality.

It is perhaps highly evident that there is growing realization of importance of physiological parameters that enhance the fitness and performance of soccer players. The physiological factors such as blood pressure, heart rate, respiratory rate, vital capacity, lean body mass, aerobic and anaerobic capacity etc. are all responsible for high level performance. These are all special consideration and important physiological pre-requisites for outstanding caliber.
In the modern world, soccer is the most popular and truly a dominant game almost all the countries. It is taken as a part of life in the developed countries. Soccer is considered as the most coordinated game that carries the high motor qualities as well as major dominant psychological and physiological parameters. It is one of the strenuous activities with maximum motor abilities, high psychological maintenance and physiological work capacity up to 90 minutes or more.

Modern soccer training gives greater emphasis in preparing the players psychologically than physically, as well as the effects on the physiological parameters. Psychological, physical and physiological factors are affected by various training load under constructed plan, and the results lead towards significant performance level. Sports scientists view the motor fitness, psychological and physiological basis to measure the fitness category and performance level. Therefore, to create a perfect soccer player, achievement of the high motor qualities, psychological preparation and physiological investigation are indispensable and vital areas.

It has been demonstrated that the total distance covered by high-intensity exercise during a match is related to the standard of soccer, with top-class players covering the most distance. It is therefore important that
players are capable of exercising at high intensities for prolonged periods of time. Thus, a player needs a relatively high maximum oxygen uptake during a soccer match can be as high as 70% of VO₂max. An increase in VO₂max and the ability to sustain exercise for a prolonged period can be obtained by aerobic training.²⁸

The maximum oxygen uptake (VO₂max) is perhaps the physiological parameter most evaluated in elite soccer players. The average level of VO₂max is about 60ml.kg⁻¹.min⁻¹, but individual figures as high as 76 ml.kg⁻¹.min⁻¹ has been reported. Maximum oxygen uptake has been observed to be higher for midfielders than for players in other positions and this has been associated with a longer distance covered in the game.²⁹

Soccer players frequently perform different rapid and sudden movements as quick development of force, sprinting, jumping, changing direction, high power shooting, different body impacts etc. Therefore, the players require high-intensity anaerobic capacity to perform various burst actions in actual situations. Anaerobic capacity is the ability to perform at maximal capacity for short periods of time and to minimize the amount of

lactic acid production in the working muscle at a level of insufficient oxygen availability.

Elite players must possess a good capacity to produce energy rapidly during the high intensity periods of the match. In those instances, the anaerobic energy delivery pathways are primarily utilized. In order to assess the maximal anaerobic power of the players different methods have been utilized during which the players have performed anaerobic activities similar to those performed during soccer play, such as sprints, jumps, and ball kicks.\(^{30}\)

Now-a-days systematic scientific research works are developing for spotting talent and in determining the combination of factors, and various parameters responsible for achieving the ultimate goal in competitive sports field. Sports scientists, top coaches and trainers are dedicating in constructing variety of tests battery to trace out and spotting talented players earlier. Spotting of talented players is difficult task. It involves physical, psychological, physiological, social and total motor variables. These are the performance limiting factors responsible for talent identification.
General and special preparations for young soccer players start at the early age with informal ball play and physical movements. Around ten years of age children start to learn the fundamental skills – various types of kicks, ball receiving, dribbling, tackling, heading, goal-keeping techniques etc. They apply the skills in friendly and competitive matches. At this age, the inborn and partly developed pre-requisites of the game, possessed by the individuals to achieve the high performance in future, can be objectively spotted.

Various studies have emphasized the relative importance of spotting soccer talented children. However, practical applicability of talent search test on the basis of selected soccer skills, motor abilities, psychological and physiological parameters had not been done so far. Hence, the research scholar intended to develop or construct a criterion for objective measurement of spotting talented soccer children based on soccer skills, motor abilities, psychological and physiological parameters.
Statement of the Problem

In every sport and game there is a search and catch young individuals with the potential for achieving excellent results in future. In the early age, youngsters show suitability for training and ability to learn more successful basic trainings. The purpose of identifying talent is to predict with a high degree of probability whether or not a young athlete will be able successfully complete the training programme in a given event.

The soccer standard of India, in the recent past and present scenario, due to the poor performance at the international competitions, a great concern has been shown to develop a very concrete criterion for objective measurement, and selecting the younger schoolboys earlier to draw out long term plans and training them in every performance limiting sphere like specific skills, motor abilities, psychological and physiological parameters. Such specific criterion would help the coaches, trainers and physical educators to predict the hidden potentiality among the youngster schoolboys who would be the potential champion of tomorrow. Hence, screening of potential talent for early identification at the younger age group has become a national urgency in Indian context.
On this basis, talent identification and its development in the early young age has become an important area of research. In this global soccer world, soccer scientists view to spot the talented players hardly on the fitness and performance areas – fundamental skills, motor abilities, psychological and physiological parameters.

Therefore, the research scholar decided to set up the study as “Construction of Talent Search Test in Soccer.”

**Objective of the Study**

The objective of the study was to construct reliable talent search test battery to trace out and spot the soccer talent among schoolboys on the basis of selected soccer skills, motor abilities, psychological and physiological parameters.

**Delimitations of the Study**

1. The study was delimited to young boys between 12 and 14 years of age of High Schools and Senior Secondary Schools who were playing soccer at least at Inter-school or District level, and local tournaments.

2. The study was delimited on the following fundamental soccer skills, motor abilities, psychological and physiological parameters.
(A) **Fundamental Soccer Skills**

(i) Passing for Accuracy

(ii) Kicking for Distance

(iii) Shooting in the Goal

(iv) Dribbling

(v) Receiving

(vi) Feinting

(vii) Heading

(viii) Tackling

(xi) Ball Sense

(x) Playing Ability

(B) **Motor Abilities**

(i) Muscular Strength

(ii) Muscular Endurance

(iii) Flexibility

(iv) Speed

(v) Agility (Coordinative abilities)
(C) Psychological Parameters

(i) Personality Inventory
(ii) Group Test of Intelligence
(iii) Sports Achievement Motivation Test
(iv) Test for Group Cohesion

(D) Physiological Parameters

(i) Resting Heart Rate
(ii) Vital Capacity
(iii) Aerobic Capacity
(iv) Anaerobic Capacity

Limitations of the Study

1. Variations in performance due to climatic condition, ground condition, players' physical factors and motivational factors, which might affect the study, were considered as limitations of this study.

2. Inaccuracy in serving the ball to the testee was also considered as limitation of the study.
3. Error in measurement of distance and timing to be recorded due to human performance and perception, which might affect the study, were also considered as limitations of this study.

4. Unavailability of highly sophisticated equipments or instruments was also considered as limitation of this study.

5. Any bias that might exist due to insincere responses from the subjects was also considered as another limitation of the study.

**Definition and Explanation of the Terms**

**Soccer**

Soccer is a team sport, combination of eleven players in each side using a rounded football. It is derived from Association Football as distinguished from American Football, Rugby and others in the **Fédération Internationale de Football Association (FIFA)**. “Soccer”, University slang for Association Football i.e. “ASSOC” – short for Association. Hence, ‘Soc’ plus the ‘er’ suffix in the normal formation of an agent noun. The word dates from (c) 1891 (c = circa- approximate).”

Soccer is a passing and running game of an unpredictable and constantly changing pattern, demanding an acute awareness of other players and an ability to make quick decisions and act upon them without delay.

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Talent

Sports Talent is the sum total of pre-requisites (and possibilities of their development) possessed by a person which will enable him to achieve high performance in a sport in future. Talent is the product of heredity and environment and consists of motor abilities, technical skills, tactical efficiency, physique, personality traits, motives, interests etc. from childhood.

Aerial Ball

A ball moving above the ground or in the air is called aerial ball. Without touching the ground is said aerial ball.

Ball Sense

It is the ability of the player to control the ball at will by using any part of body except hands and arms.

Motor Abilities

It is defined as one's present innate and acquired ability to perform motor skills of a general and fundamental nature excluding specialized sports skills. In other words - it is synonymous with general motor ability.\(^\text{34}\)


Muscular Strength

“Muscular strength may be defined as the maximal muscular force or tension used in the creation or prevention of the movement in one maximal effort of a muscle group.”\(^{35}\) It is the ability to apply required force against the resistance or to overcome the resistance implies its importance to performance.

Muscular Endurance

“It is the ability of a muscle to maintain a certain level of tension or to repeat identical movements or pressures over the maximal period of time with one’s maximal effort.”\(^{36}\) It is the ability to withstand a resistance for a period of time. It is also thought of as resistance to fatigue and quick recovery after fatigue. A level of endurance implies that a given level of performance can be continued for a relatively long time.

Muscular Flexibility

“Flexibility may be defined as the range of motion around a joint as determined by the elasticity of the muscle tendons and ligaments associated with the joint under consideration.”\(^{37}\) It is the property of muscles, bone structures and connective tissues that allows full range of motion.

\(^{35}\) Ibid, p.122.
\(^{36}\) Ibid, p.134.
\(^{37}\) Ibid, p. 192.
Speed

“Speed is defined as one’s ability to perform successive movement of the same pattern at a fast rate (Barrow and McGee, 1971). It is the quickness of movement of limb, whether it is the leg or arm, or total body of the athlete and refers to the total distance traveled per unit of time.

Agility (Coordinative Abilities)

“Agility defined as one’s controlled ability to changer body position and direction rapidly and accurately.” It is the ability to change directions of the body or its parts rapidly in a series of explosive power movements.

Achievement Motivation

Achievement Motivation is an effective arousal state directing behaviour in an achievement oriented activity cognitively appraised as potentially satisfying. It is an athlete’s pre-disposition to approach or avoid a competitive situation.

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38 Ibid., p. 247.
39 Ibid., p. 221.
Group Cohesion

"Cohesion" is the resistance of the group to destructive force. This is the extent to which members of a group exhibit a desire to achieve common goals and group identity. Cohesion is associated with the extent to which team members are pleased with each others performance, behaviour and conformity to the norms of the team. Cohesion is considered as the total field of forces causing members to remain with the group or team.

Resting Heart Rate

Best and Taylor have stated that the resting heart rate is pressure change transmitted as a wave through the arterial wall and blood column to the periphery while the person is at rest.\textsuperscript{41} It is one of the simplest and most informative of the cardiovascular system.

Vital Capacity

It is the lungs capacity. The Volume of the air that can be forcefully exhaled from the lungs following a maximal inspiration is termed as Vital Capacity.\textsuperscript{42}

Aerobic Capacity

Physical activity in which metabolic demands can be met by the oxygen transport i.e. oxygen supplied by respiration during activity provides sufficient energy for executing the activity.\textsuperscript{43}

Anaerobic Capacity

Anaerobic Capacity is a person’s total capacity for a single sustained bout of anaerobic work whether it is a longer intermittent series or a shorter continuous effort, where $O_2$ is insufficient for energy production.\textsuperscript{44}

Factor Analysis

Factor Analysis is a statistical technique used to reduce a set of data by grouping similar variables into basic components (Factors). It is an approach to reducing a set of correlated measures to a smaller number of latent or hidden variables (Tinsley and Tensley, 1987)\textsuperscript{45}. Factor analysis is a technique or more accurately a family of techniques which aim to simplify complex sets of data by analyzing the correlation between them\textsuperscript{46}.

Significance of the Study

The present study may help to suggest a criteria that will scientifically developed and have relevance to the soccer in which the schoolboys are to be selected. The findings of this study, by bringing forth the adequate, and inadequacies of a talent identification programmes for schoolboys may provide pragmatic guidelines for the development of soccer. The result of this study would reveal the following consequences.

1. The study would develop a specific talent search test battery on the basis of soccer skills, motor abilities, psychological and physiological parameters and help in spotting and trace out talented young soccer players.

2. The study may provide guidelines to soccer coaches to develop a specific talent identification programme for young soccer players.

3. The constructed test items may help the coaches and physical education teachers evaluate the effectiveness of their training and coaching programme.

4. This study may serve as a motivational force and enthusiasm to young soccer players to improve their level of playing ability.
5. The study may yield norms to be used for the evaluation, classification and selection of the talented soccer players among the young enthusiastic schoolboys.

6. The study would develop a criterion for objective measurement of soccer talent search on the basis of soccer skills, motor abilities, psychological and physiological parameters.

7. The constructed test battery would help the coaches, trainers and soccer promoters to prepare suitable training items for developing talented young soccer players.

8. The findings of the study would provide a guideline to the future researchers, investigators and soccer scientists to find out the factors that limit the performance of soccer.