CHAPTER I

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Since ancient times, it is recorded and available in the literature that physical exercises in the form of sports—recreational and competitive—is the most potent factor in keeping an individual physically healthy and mentally alert. Sports is essentially that aspect of human activity which strengthens the integration of the body and the mind. It is also pointed out in the literature that motor performance provides stimulation of the central nervous system to such an extent that the underdeveloped, dead or dying cells will either be rehabilitated or their functions assumed by other or newly generated cells. Van Dalen (1971) contends that the Greeks were the first civilized people to lay an equal emphasis on the cultivation of the "man of action" (physical persons) and the "man of wisdom" (mental soundness) through games, sports and vigorous activities. They were of the considered opinion that intellectual achievement could not be possible without physical efficiency.

Today man has become conscious of the role of sports in the pursuit of educational objectives. Learning through experience has been considered useful in preparing an individual for difficult situations. The experience to be acquired by the pupils at the school going age ought to be diverse in order
that an all-round personality emerges.

Sports and competitions have been analysed from the training and performance point of view in various research studies. The effort to explore the bearing of sports on traits which have been considered important for personality development and educational attainment seems to be worthwhile.

Researchers in education are constantly busy in devising and verifying methods of instruction. The research designs in such studies seem to have ignored the role of sports and games in our set-up.

In the United States a new concept in teaching termed as 'active learning' has emerged. Active learning emphasises on learning various cognitive skills through movement. Research in this area has revealed that cognitive development can be better acquired with the use of symbols that lead to the development of perceptions of children at the Kindergarten level. Cratty (1963) demonstrated the use of symbols and movement in improving perceptions of the children aged 4 to 9 years.

It has been observed that an individual becomes progressively different from his fellows with every maturational change and accompanying environmental experience. As in other spheres, the activity of an individual influences his personality and other characteristics. Hence it is logical to expect that the varied experiences of athletes will produce some physiological, social and psychological changes in them. It is also possible that the characteristics
that differentiate athletes from non-athletes, or different groups of athletes could be due to selectivity in the sense that certain types of persons are attracted to athletics. Both processes – selectivity and socialization – tend to have a reciprocal relationship.

Because of fast changes in society, the concept of sports has undergone a great change. Competitive sport is one of the outgrowths of modern society. It is a challenge which stimulates, inspires and motivates men and women to run faster, jump higher, throw farther and exhibit greater strength, endurance and skills to establish supremacy over others. Every individual or a team which participates in any sport/game wants to win as the society attaches a great significance to 'winning'. According to Renewr (1972), "performance is keynote of all sports - its basic principle. Since the sports have become prestigious aspect to prove one's superiority, the philosophy of participation in games and sports has undergone a great change".

"Sports", in the view of VanderZwag and Sheehan (1978) "is a higher order of playful games. The play spirit never completely disappears from sports. Sports retains a play-like quality as one of its characteristics. Sports in its purest and most complete form occurs in game situations. As games become more organised or formal - from jump rope to the world series - rules become
more codified and consequently more binding. Sports as known today fall more on the structured side of the game-rule continuum. By its very nature, sports is generic, referring to a type of activity rather than a specific activity. In the generic sense, sport compares to music, art, literature, science and religion. One outstanding feature of sports is its play-like nature as it owes its origins to playful attitudes. Similar views on the nature of sports have been expressed by Schmitz (1972), Alderman (1974).

Besides physical capabilities, Sheehan (1968) gives importance to cognitive and social dimensions in explaining the nature of sport. The author contends that "sport is the act of vying physiocognitive behaviour against an obstacle in a competitively structured, institutionalized situation."

The importance of viewing sports in a social context is quite obvious - man does not exist alone or unrelated to other people. He lives and functions as part of a group, and in that group his behaviour becomes a function of his interaction with other people.

Now there is a growing realization among the educators that teaching in physical education and sports should be an educational objective of priority.
The introduction of physical education as compulsory subject in the educational curricula of schools and colleges in some of the states in India is a testimony to this fact. The new education policy has also stressed the need for introducing physical education from the primary level. Commenting on the utility and purposefulness of physical education and sports, Bucher (1975) remarked, "It is not merely a 'Frill' or an 'ornament' that has a means of keeping the children busy. It is instead a very important and an integral part of the total educational process. Through well-directed programmes, children develop skills for the worthy use of leisure time, engage in activities that are conducive to healthful living and all these endeavours lead to their physical, social, mental and emotional health".

Recognising the value of physical education and sports in the education of an all round developed individual, students in educational institutions are provided with a host of opportunities to participate in these activities. Physical education teachers usually assume this responsibility and disseminate the knowledge and skills associated with sports. They also assume responsibility for such other educational objectives as health and hygiene, physical fitness, posture, movement skills, recreational skills and dance skills which necessitate systematic research efforts on the part of physical education teachers and researchers.
so that these educational objectives are realized adequately and the physical education programme in the educational institutions is carried out on a more systematic and scientific line.

Sports entreats man to stretch for something beyond mere reality. Sports often reveal concrete ways the potential in man for greatness. It dramatizes commendable acts of integrity, self-discipline and resiliency. Sportsmen are people striving for perfection. It is a fertile field for the study of human behaviour.

Sports touches the lives of different people in different ways. It is pervasive in the sense that it spreads throughout society. Only in rare instances does one aspect or another of sport not appeal to almost everyone. Stone (1969) says, "If a man in our society does not have at least some conversational knowledge of sports, he's viewed as suspect".

A study of available literature shows that motives, emotions, personality characteristics, attitudes, interests and many other psychological and physiological changes are affected to a considerable extent by the nature of activities one participates in. Each type of activity has a divergent influence. It is also clear that factors like family, school, peer groups and participation in groups of different activities have a great influence in the development
and shaping of one's personality characteristics. Recently it has been found that certain types of athletes, players and physical activity groups have behavioural and personality traits which differentiate them from certain other types of athletes, players and non-participants. Johnson (1960) points out, "It is commonly assumed that specific groups of athletes have some behavioural characteristics that distinguish them from other athletes as well as non-athletes". Scientific efforts have been made to determine whether there are measurable differences in personality characteristics, attitudes, interests and many other factors among the participants in various physical and recreational activities, including games, and how they differ in the above factors from the non-participants. Considerable evidence is available to show that athletes and players tend to be dominant, energetic, tough, socially mature well-versed in leadership etc. Persons in the field of physical education and sports have empirically noticed that the participation in physical activities, including games, develops desirable characteristics and personality traits in athletes which differentiate them from one another and also from non-athletes.

More specific experiments in relation to personality characteristics of specific groups of individuals participating in various athletic events and games have been conducted by
a number of investigators and they have found separate personality profiles in activities of varying nature.

Havel (1958) conducted a study and reported the difference between the scores of basketball players and non-athletes on the variable of Edward's personality preference schedule.

Slusher (1964) in a different study selected high school athletes participating in various physical activities, including games, and non-athletes from the same population in personality characteristics as measured by MMPI. He found that personality traits varied between athletic and non-athletic groups. Research studies reveal an equivocal nature of the finding in psychological traits of sports and non-sports populations. There is a need to probe this field at the high school level when the athlete is in the early years of his career.

Sports today is much more than recreation or play. It has definite rules, roles, and behaviours which are established formally and traditionally. Sports requires extensive preparation to fulfill the requirements of structured time, space and goals. Sports is a business of serious purpose. Aventi (1976) suggested that participation in sports provides an additional criterion for social prestige. Wilensky (1960) pointed out that sport can provide compensation for deprivations experienced within the work sphere. Kenyon (1969) defined sports participation in terms of behavioural,
affective and cognitive dimensions. Those separate dimensions are likely to be mutually reinforcing, but it may be valuable to separate them for analytical purposes. Robinson and Shaver (1969) had shown that sports participation in general is positively correlated with psychological well-being and that people who are active in a variety of ways in such activities tend to report a higher degree of emotional well-being, life satisfaction and perceived happiness. Kenyon (1968) pointed out that the following functions of physical activities and sports as a social experience, as a means of providing thrills through relatively controlled risk-taking, as a mode of aesthetic expression, as a physical and as a context for self-denial and building self-discipline. In general, these functions indicate that the participation in sports brings various changes among the participants.

Coakley (1973) summing up the importance of sports said, "It is popularly believed that sports builds character and provides outlets for aggressive energy. Sports teams serve as the basis for group unity and solidarity. Sports opens the doors for the formation of amicable relationships between players, communities, racial groups and even nations". Hence one may expect different characteristics among participants in different sports groups as well as non-participants.

The ability of a person to perform in any athletic
event is obviously limited by his physical characteristics. But beyond these broad restrictions psychological factors play a decisive role. Many coaches and physiologists believe that existing records will be broken primarily because of the increased attention to the psychological features of the personality.

Researchers in physical education in general and sports psychology in particular have repeatedly suggested and emphasised socio-psychological factors as a major area in terms of research enterprise and the important role these factors play in the ultimate performance of a sportsman (Singer and Kane, 1974).

An individual is affected not merely by his physical, technical and tactical qualities but also by his psychological considerations (Wein, 1973, 1981; Lanning, 1982; Strkes and Allard, 1983). It will depend, to a large extent, on his personality structure, how much motivated he is to succeed, and how much emotional control he possesses. Therefore, in order to explain and analyse man's fervent interest and competitive behaviour in sport we must examine his psychological and sociological dimensions in the movement context (Alderman, 1974).

Psychological factors have their own importance in the field of physical education and sports. In this regard Tutko and Tosi (1976) comment, "psychological tendencies can
help or hinder our performance depending on how much we possess them or they possess us". Wein (1981) contends, "Psychological factors can decisively affect, either way, the performance of individual players and whole team". During a game each player must reach decisions under conditions of psychological stress and time pressure (Vallerand, 1983). There are so many socio-psychological factors like attitudes, personality characteristics, audience or spectators, group cohesiveness, self-concept, intelligence, creativity, socio-economic background, achievement motivation, adjustment, etc. which influence the participation and performance of sportsmen in competitive sports. However, the investigator has selected only three psychological variables i.e. self-concept, adjustment and creativity factors for the present investigation. Considerations like availability for appropriate tools, the relevance and importance of these variables in sport and academic situations, inadequate research on these variables in India etc led to the selection of these variables. A brief discussion of each of these variables in terms of their relevance and importance in sports is being attempted in the pages to follow.

Most research conducted in the past deals with the personality traits of adult athletes and non-athletes. The cause of personality differences found at the adult level between athletes and non-athletes could not be ascertained. Although the study of school athletes and non-athletes
cannot fully establish the cause that why athletes differ from non-athletes, yet it might support that such differences in personality structures continue to exist from the school age.

**SELF-CONCEPT**

As a general rule, serious emotional problems are associated with deeply hidden self-concepts involving guilt feeling for real or fancied acts. A clearer knowledge of self-concept will lead a student to change or to develop a more comfortable acceptance of the roles he is having. The need to build a more dynamic self-image in order to succeed in class-work is more likely to motivate the students to work. Once an individual has developed the ability to see himself with a degree of objectivity, changes become possible.

Self-concept is the means by which we create our image and identity (Chauhan, 1978). Therefore, self-concept is the core of the personality pattern. It determines the kind of adjustment the person will make. A change in the self-concept will bring changes in the entire personality. Changing one's self-concept requires tremendous insight. This means that a person must be able to see himself as he actually is, not as he would like to be or as others perceive him.

An operational definition for this study given by Sarswat Gaur (1931) reads, "The self-concept is an individual's
way of looking at himself". It also signifies his way of thinking, feeling and behaving. Although self-concept is highly complex, most of the researches done to-date have concerned themselves with two dimensions of self-concept. These dimensions are (a) positive-negative self-concept, (b) perceived self and ideal self-discrepancies. It has been suggested that self-description reflects a self-concept which has direct effect on behaviour. Sports psychologists and coaches are interested in an athlete's personality and other psychological aspects which play an important role in the improvement and development of his performance. Very few studies have been conducted on an athlete's self-concept. It has been revealed that persons with good self-concept are less anxious, generally better adjusted or more effective for groups. They are also more honest with themselves and less offensive. A currently popular hypothesis that human behaviour in any particular context is largely determined by one's perception of oneself and not the actual situation as it is. "As a man thinks in his heart, so he is". If the person understands why he needs to behave as he does and how his behaviour affects others, he will be in a better position to change his behaviour. The study of self-concept is very important both from the educational and performance point of view.

Sarbin (1953) looks upon the self as a cognitive structure which consists of one's ideas about various aspects
of his being. One may have conceptions of his body (the somatic self) and of his social behaviour (the social self). These selves which are substructures of the total cognitive structure are acquired through experience. Consequently, Sarbin speaks of them as empirical selves. He uses the terms ego and the self interchangeably.

The self awareness that the child develops in the process of interaction with people and environment leads to comparing himself with his peers in competition and also the feelings of confidence and courage as a result of success or failure in his endeavours. According to Kane (1968), it should be noted that it is the success that develops the positive self-concept and in physical education especially in developing or improving physical fitness, there is a large repertoire of activities for experiencing success and thus enhancing self-concept.

According to Kirchner (1975), self-image is one of the most important factors in learning motor skills. He recommends that physical education activities must be presented in such a way that every child must have some success. As success in motor skills depends upon physical fitness as reflected through successful learning, it may be hypothesised that there might be positive relationship between self-concept and physical fitness. There is adequate evidence presented through research to show that positive
self-concept can be enhanced by personalising educational experiences and creating activities where success can be achieved by every student.

**Self-Concept and Sports**

More recently, a body of research is beginning to appear that indicates a high relationship between the concept a person has of himself and his achievement in life, especially school and sport achievement (Holmen and Parkhouse, 1981). The major premises underlying the information are that the manner in which a person sees himself is a product of how others view him and that these perceptions are the major products in his achievement behaviours. That is, if you think you are good, and you perceive others as thinking you are good, then you will be good (Alderman, 1974, Sarbin, 1952).

Several kinds of identifiable personality traits revolve around what could be considered the sportsman's self-concept. Traits such as self-confidence, self-assurance, self-assertiveness, self-esteem, self-regard, self-consistency, self-enhancement and self-respect all evolve out of this elaboration of a person's self-image or self-concept (Alderman, 1974).

With a strong self-concept base, an individual will be more confident, assured and assertive in his actions with other people and in the endeavours he undertakes. This is fairly obvious in the self-confidence and self-assurance
displayed by athletes and in the results of evaluation of their self-concepts. Self-confidence, for example, has been identified as being high in athletes by Johnson, Hatton and Johnson (1954), Kroll (1967), Brunner (1969), Reid and Hay (1979), Pestonjee et al (1981), Schendal (1965, 1970), in addition. They found athletes to have high sense of personal worth and high self-concepts. The results of several investigations conducted in the field of education by Shaw (1960), Campbell (1966), Coopersmith (1967), Bachmann et al. (1972), Gordon (1975), Brophy (1967), and Hamockek (1978) indicate that there is a relationship between positive self-concept and high achievement and negative self-concept and under achievement.

But Bash (1972), Richard (1979) found no relationship between self-concept and sports participation. By using a multiple discriminant analysis, Darden (1972) noticed significant differences on self-concept among team-sports and individual sports but not between the combined team-sports and the combined individual sports.

Self-concept is, therefore, important both from the educational and sports performance point of view. The present study may bring to the surface the level of self-concept of school athletes and non-athletes on the one hand and on the other, the relevance of self-concept to performance
in sports. Further attempt has been made to find out the relationship of self-concept with adjustment and creative thinking of school students.

**ADJUSTMENT**

Although most persons resemble the average of the group in many characteristics, there are those who deviate widely from the average in certain traits. These deviations create certain problems of adjustment.

Every person, man or child, spends twenty-four hours a day satisfying or attempting to satisfy his physical, social and personality needs. Whenever a pupil is restless, aggressive, impudent, cooperative, delinquent, or in fact doing anything, he is making an adjustment to life. The adjustment he makes may not be a good one so far as society is concerned, but it is an adjustment just the same, and its purpose is to satisfying organic or personality need of the individual.

The maintenance of home adjustment may be considered general adjustment. The healthy person seems to live smoothly, taking in his stride even when conditions are difficult and less healthy. Unadjusted persons become upset easily and require considerable time to get back their stride again. Each society has some value. However, because of personal inadequacies, being the member of the society,
some individual cannot live up to these standards and ideals they are expected to conform to. In that case, they do not fit themselves to the society as their actions do not conform to the expectations of the same society. Thus adjustment can be defined as a process of affecting a satisfactory adaptation to one's environment. Some physicians, psychologists and educationists too have long supported the contention that physical education and sports encourage healthy emotional functioning and the acquisition of acceptable social values.

A well adjusted person uses his knowledge and skill to act wisely on his environment. Excessive timidity, aggressiveness or other faults of personality prevent him from making this contribution. Adjustment is a means to the end of accomplishment.

Some investigations have revealed personal and social adjustment and group status to leadership qualities and the establishment of friendships.

Bidulph (1954) reported that superior athletes showed higher levels of personal and social adjustment than that of less skilled athletes... Therefore, adjustment is positively related with sports performance. Kroll and Carlson (1967) have reported no differences between superior and inferior participants. Almost no study has reported a negative correlation between adjustment and sports performance.
In the light of the above discussion a need to assess differences of personality adjustment between athletes and non-athletes was realised and included in this study. The hypothesis was that sports girls would be found better in different sub-scales i.e. Emotional, Social and Educational compared to the non-sports girls which is based on the premise that participation in sports satisfies the needs of the individual leading to better adjustment.

**CREATIVITY:**

Creativity is a mysterious force which carries with it the willingness to dream and to fantasize. The creative process is a struggle for the modernization of an old concept. By this process, fantasy is transformed into the practical application of existing, realistic concepts resulting in organisational achievement. Stage one is the dream in which ideas are born, stage two takes place in the mind can't be described in a waiting, the ideas become clarified and a workable approach to the original dream is provided.

The occasion for thinking arises when one meets a problematic situation for which one has no readymade solution and he has to find a solution by working on the problem. Creativity has aroused interest throughout man's history but it is only in recent years that systematic and scientific
interest has been shown in the subject. Perhaps the most significant contribution of the last two and a half decades of research on human abilities is the growing emphasis being laid on creativity as a subject of empirical study.

The term creativity, till a few years ago considered to be a part of intelligence, is now believed to represent an aspect of thinking which is as important to assess in its own right as is intelligence. There is an increasing popularity of creativity as a desired goal espoused by the culture at large and in circles that extent from educational to business institutions.

Nature has given intelligence and creativity as gifts to each child. Once it was believed that intelligence and creativity are inseparable, but the studies conducted by Getzels and Jackson (1962), Cicisell (1964) and Perry (1966) have established a low correlation between the two and indicated a substantial difference between the two. Though much research has been done in the field of intelligence during this century, yet the field of creativity remained unexplored for a fairly long time. It is only in the recent past that psychologists have taken a fancy to this subject.

Creativity is decidedly an attribute possessed by an individual who surely manifests originality. It may not be confused as it has been done, with a kind of rarefield, intelligence. Despite enormous psychological research in
creativity in recent years there is little conceptual agreement as to what creativity precisely is. It is most often conceived as the ability to bring something new into existence. Some people think of creativity as a psychological process or processes by which novel and valuable products are created. According to Baquer Mehdi (1973), creative thinking is a multidimensional attribute (Verbal and non-verbal) differentiability distributed among individuals, involving the abilities of fluency, flexibility, originality and elaboration. The definition given by Mehdi has operationally been accepted for the purpose of this study.

The recent trend is to accept creativity as a multidimensional ability which is a complex universal human attribute manifested by the cognitive empirical process.

**Creativity and Sports**

Creativity has long been recognised as a distinguishing characteristic of outstanding individuals in almost every field. Creativity appears to be important even in jobs which appear to be quite routine, such as selling in a departmental store (Wallache 1961). People have started understanding and appreciating the vital role of mental abilities in physical activities in general and competitive sports in particular. Sports is much more than a mere physical interaction between human beings. The intellectual and
creative processes contribute to the total concept of the 
highly skilled athlete, the winning athlete or the winning 
team (Singer 1972). Creativity is exercised in the 
comprehension, performance and analysis of a skilled movement. 
Creativity is exercised more frequently in the tactics and 
strategies involved in various games and sports. Given a series 
of athletic tests administered under the same conditions 
and with all other factors influencing athletic achievement, 
the same two individuals comparable otherwise but different 
in creativity, it is reasonable to believe that the more 
creative will prove superior.

During recent years there has been an increasing 
tendency to discover objectively the relationship between 
creativity and sports performance with the result that a 
considerable collection of data has become available. The 
new thought of a positive correlation, however, is still 
in the hypothetical stage in as much as there is no conclusive 
evidence to the effect that physical fitness and athletic 
ability are positively related with scholarship and creativity.

Almost all researchers found a positive relationship 
between creativity and high performance in all spheres of 
human life. Mehdi (1973) found a significant relationship 
between creativity and school achievement. Paramesh (1973) 
found no significant relationship between creativity and 
performance.

The importance of creativity in all walks of life, 
including games and sports, may be explained in terms of
functioning capacity, educational achievement and vocational success of a person. Toynbee (1962) considers human activity as one of the greatest assets of mankind. Getzel's and Jackson's (1962) regard creativity as a highly valued quality. It is thus the need of the day to attempt a probe into the learning climate obtaining in educational institutions in which creative talent of the nation is nursed and nurtured.

While creativity has already been declared an educational objective, it may be useful to find out whether sports and the competitive environment have some positive impact on the development of creativity among school girls and whether creativity can be included in the personality profile of a sports performer.

The review of theoretical perspectives presented in the preceding pages pertaining to the significance of psychological factors like self-concept, adjustment and creative thinking is a pointer to the fact that the interest and curiosity of researchers in the athlete's psycho-social predisposition has increased in recent years.

However, much remains to be explored regarding the contribution of psychological variables toward sports performance. There are inconsistencies in theoretical explanations advanced by certain authorities and a coherent picture of the sportsman is still to emerge. In India, personality research has brought to light the differences between the sports and non-sports populations on some
variables. What can be the possible contribution of self-concept, adjustment and creativity of an individual toward performance indifferent sports? This question seems to remain unanswered in a conclusive manner so far.

Kane (1970) comments, "... the research has still a long way to go. More probing on the basis of sound speculation is still required before clear-cut hypothesis can be tested and verified. Only after that may serious theoretical models be proposed".

Thus, after having penetrated into the importance and relevance of selected psychological factors - self-concept, adjustment and creative thinking variables - in sports performance some questions are likely to arise in an inquisitive mind. For example, are sports girls higher on self-concept than the non-sports girls? Do sports girls have better adjustment than the non-sports girls? Are sports girls more creative than non-sports girls? Do factorial structure differences underlying psychological variables exist between girls and non-sports girls? Such questions are frequently asked by coaches, counsellors, teachers, parents, sport writers and sports enthusiasts. The answers are no doubt complex and often elusive and need an insight into the role of these factors in sports performance.

The present investigation has been taken up to seek answers to these questions. Therefore, an investigation into the psychological make-up of sports girls, especially in the
Indian culture context, acquires great significance. It is with this background that a comprehensive study of psychological factors such as self-concept, adjustment and creative thinking variables of school sports girls is proposed to be undertaken. This study neither seems to have been conducted nor proposed to be undertaken to the best of the present investigator's knowledge and search. The investigator, therefore, feels fully justified in undertaking the present research project. More specifically, the following is the statement of the study undertaken.

**STATEMENT OF THE PROBLEM**

The study seeks to discover and examine whether sports influence the development of school girls with regard to self-concept, social, emotional and educational adjustments and creative thinking. The present study reads as:

"A COMPARATIVE STUDY OF SELF-CONCEPT, ADJUSTMENT AND CREATIVE THINKING OF SPORTS AND NON-SPORTS SCHOOL GIRLS OF HIMACHAL PRADESH"

The study was further spelled out as, "Comparison of non-sports girls and sports girls belonging to the urban and rural areas."
DEFINITIONS OF TERMS:

A few terms have been used in the present study. Their concepts and operational definitions are given below:

1) Adjustment:

The process of changing activities or environment to satisfy needs; the changes which an individual undergoes in order to fit environmental conditions; social adjustment usually refers to changes in habits or behaviour which must be made by individuals with some deviation or conflict in association with others.

According to Lazarus (1976), "Adjustment consists of psychological process by means of which individual manages to cope with various demands and processes of life".

2) Cognitive:

It is concerned with intellectual abilities and skills such as Knowledge and Comprehension.

3) Data:

Facts or figures from which conclusions can be drawn.

4) Hypothesis:

A guiding idea, a temporary explanation, or a statement of probability, used to begin and guide an investigation for relevant data and to predict certain results consequences.
(v) **Intelligence:**

The general capacity of an individual consciously to adjust his thinking to new requirements.

The power of readjustment to relatively novel situation by organising new psycho-physical combination.

Wechsler (1943) has defined intelligence stating, "Intelligence is the aggregate or global capacity of the individuals to act purposefully to think rationally and to deal effectively with his environment".

(vi) **Sports-girls:**

Many experts and investigators have used the term athlete sportsman or player for sportsgirl and the term non-sports girls have been referred to by many as non-athlete (Alderman, 1974; Nideffer, 1981; Singer, 1972; Tutko and Tosi, 1976; Weiss and Knoppers, 1983; Wescott, 1979; Wooden, 1980). Keeping this in view, some definitions of the sportsman are given here:

According to Alderman (1974), a commonsense or intuitive approach to defining the term athlete is: "Any person who engages in competitive athletics". This definition has been accepted operationally for the purpose of this study.

Here, it seems pertinent to mention that in the present investigation there is a interchangeable use of
vii) **Non-sports girl**:

According to Wescott (1979), "Non-athletes are students who have no participation on any formal athletic team while in school".

An individual who never participated in any organised and structural competition at any level i.e. zonal, inter-zonal, district, inter-districts, state, inter-state, national etc.

(viii) **Personality**:

Cattell (1950): "Personality is concerned with all behaviours of the person, overt or covert, under variety of environmental situations that it will permit a prediction of what a person will do in a given situation".

(ix) **Self-concept**:

An individual's perception of himself is known as self-concept.

Sutherland (1956) defines self-concept as, "The attitudes, perceptions, traits, thoughts, feelings and other characteristics which an individual perceives to be a part of himself". This perceived self is more often called the self-concept of an individual. It is, as Sutherland calls it, "the individual known to individual".
It is this definition of self-concept which has been adopted for the present investigation.

x) **Urban:**

Urban area is a place where there is population congestion. It has rapid means of communication, a cultural heritage of its own and a complex economic system. Urban population means those who are city dwellers and is associated with modernised jobs in the public sector related to manufacture and trade.

In India the following definitions have been accepted for urban area in the 1971 census:

(1) All other places which satisfy the following criteria:
   a) Atleast 75% of male working population is not engaged in agriculture.
   b) Minimum population of 5,000 people.
   c) Density of population at least 400 square k.m.

(2) All places with municipality or cantonment or a notified town area.

xi) **Rural:**

A universally accepted definition of the concept "Rural" is crucial if scientific analysis is to result in valid generalisations. Rural refers to population which is primarily settled in villages engaged in agriculture.
Recent research has found that some characteristics once advanced as typical attributes of rural society may also be found in the city now. There is a general consensus that the term "rural" refers empirically to population living in areas of low density and to small settlements.

The methodical and theoretical problems in the definition of the concept "rural" are similar to those in the definition of "urban". Occupational demographic, ecological, social, organizational and cultural characteristics have all been used as defining attributes. The general practice is to use the demographic variables - absolute size and density of settlement in defining rural. The term rural implies the area with a population below 5000 people.

xii) Creative thinking:

The kind of thinking that discovers new relationships achieves new solutions to problems, invents method or devices, produces new artistic objects or forms.

According to Mehdi (1973) creative thinking is a multi-dimensional attribute (verbal and non-verbal) differentially distributed among individuals, involving the abilities of fluency, flexibility, originality and elaboration.

OBJECTIVES OF THE STUDY
1) To ascertain whether there are significant differences in self-concept between school sports girls and non-sports girls.
2) To ascertain whether there are significant differences in adjustment between school sports girls and non-sports girls.

3) To ascertain whether there are significant differences in creative thinking between school sports girls and non-sports girls.

4) To find out differences in self-concept, adjustment and creative thinking between rural and urban girls.

5) To find out independent and interactive effects of sports, non-sports and residence (rural, urban) on self-concept, adjustment and creative thinking.

DELIIMITATION OF THE STUDY

This study has been delimited in the sense that only three psychological variables that is adjustment, self-concept and creative thinking were studied. These variables were selected keeping in view their impact on the behaviour of the athlete and non-athlete as well as their impact on the personality. Further this work was confined to the school girls in the age group of 14 to 16. The sample of sports girls was also confined to four major team games viz. Basketball, Volleyball, Badminton and Hockey. This was also confined to the region of Himachal Pradesh only from where the subjects were selected.
HYPOTHESES

On the basis of review and empirical observations, the following hypotheses were formulated:

1) Sports and non-sports girls will differ significantly on self-concept.

2) Sports and non-sports girls will differ significantly on adjustment.

3) Sports and non-sports girls will differ significantly on creative thinking.

4) Rural-urban residence will differ significantly on self-concept, adjustment and creative thinking.

5) Independent effects of sports, non-sports girls and girls with rural, urban residence account for significant variations in respect of self-concept, adjustment and creative thinking among girls.

6) The interactive effect of sports, non-sports girls and girls with rural, urban residence will account for significant variations.

SIGNIFICANCE OF THE STUDY

A major issue in the present day physical education and sports is the question of how a physical education teacher/coach can prepare a good or winning athlete, what are the characteristics of a good or winning athletes and how characteristics differ between participants and non-participants, especially in case of female population.
The literature search has revealed that major obstacle to the improvement of sports activities has been lack of understanding of an athlete's personal, behavioural and social characteristics.

Thus, it would be of great theoretical as well as practical interest and importance to investigate the personality and social variables like self-concept, social, emotional and educational adjustments and creative thinking of participants in sports and their difference from non-participants, especially female athletes. If all these variables related for the present study are found to go together to determine the difference in school sports girls and non-sports girls, it would be possible to select these female students for participation in sports who possess these attributes in greater measure to bring more efficiency in performance to prepare winning teams in sports, especially those of females.

The problem of selecting students for sports who would have all the above characteristics would be solved and selection would become more objective. Moreover, the review of the literature on the sports and its problems suggests a need for such investigations. Such research may have potential significance in the field of sports and physical education decision-making, guidance and placement of female students in sports.
It is because of this need and importance that Indian and foreign studies available were reviewed which showed that most of the studies had been conducted on foreign athletes with the help of foreign tests and on the male subjects. Very few, rather negligible studies were found to be related to sports girls. No study on school sports girls was conducted by taking into consideration all different variables included in the present study. Hence there is also a need for this investigation.