CHAPTER - V

SUMMARY AND CONCLUSIONS
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A summary of the total investigation giving briefly the genesis of the problem, hypotheses, design of the study and findings is presented in this chapter.

INTRODUCTION

Himachal literally means the land of snowy mountains. The territory of Himachal Pradesh is mountainous with altitude varying from 350 to 7000 metres above the sea level (Singh, 1985).

Tribes occupy forty per cent of the total geographical area of the State while they constitute only 4-5 per cent of the total population, according to the 1991 Census.

In the present Himachal Pradesh, prominent tribes are Kannauras, Gujjars, Pangawalas, Bhots, Swangalas and Khampas. The largest and most dominating people of tribes is found in two districts: Lahoul-Spiti and Kinnaur.

Lahoul-Spiti is the largest district. This valley lies at an altitude of 10,000 to 16,000 ft. above the sea level. The summers are pleasant with rich crops. But
during the winters, due to heavy snowfall main entrance of the valley Rohtang Pass, at the height of 13,400 feet is closed to the outside world and the valley must live on its own resources.

Kinnaur is located at an altitude between 1,220 and 3,050 metres above the sea level on the international boundary between India and Tibet region of China, west of Nepal. Kinners have deep roots in Indian mythology, legends and literature and are considered a distinct race. On May 1, 1960, Kinnaur became the sixth district of Himachal Pradesh.

The tribal area has a long winter from October to May, the snowy season and a short summer from June to September. In winter, the temperature falls to -30°C and in summers it ranges from 20 to 23°C.

The people have adopted themselves to this environment. The daily routine is very strenuous. The environmental factors such as climate, topography, natural resources and social set-up play a vital role in determining the physical fitness and psychological make-up of the society. The tribal people are considered to be more physically fit and are spiritually healthy too.

Fitness is that state which characterizes the degree
to which the person is able to function, it is an individual matter. It implies the ability of each person to live most effectively with his potential ability to function which depends upon his physical, mental, emotional, social and spiritual components of fitness, all of which are related to each other, and are mutually interdependent (American Association of Health and Physical Education and Recreation, 1967).

Today, people in civilized communities are lacking in strength and endurance because of artificial life encouraged by modern civilization, in which life is made as soft and easy as far as possible with physical effort diminished to a minimum. The average man spends more time in attending his automobiles than attending his own machine - his body (Festherstone, 1965).

Regular exercise is necessary to develop and maintain a level of good health and physical working capacity by increasing muscle strength and endurance, enhancing the function of the legs, heart and blood vessels; increasing the flexibility of joints, and improving the efficiency or skill of movement. For many adults with sedentary occupation, physical activity provides an outlet for job-related tensions or mental fatigue. It is also helpful in weight control,
improved posture, contributes to a youthful appearance and increases general vitality.

Personality is one of the major factors which affect the performance of an individual. It is assumed that physical ability of an individual is related to the personality structure. The environment in which physical abilities are displayed (games and sports) constitutes an ideal setting for the development of desirable personality characteristics such as confidence, sociability, self-reliance, cooperativeness and general personal adjustment. Coffer and Johnson (1960) say that personality is the vital factor in the discriminating process, which singles out the champions from amongst those who seem to have similar gifts.

Adjustment is constant interaction between the person and his environment, each making demands on the other. Sometimes adjustment is accomplished when the person yields and accepts conditions which are beyond his power to change. Sometimes, it is achieved when the environment yields to the person's constructive activities. In most cases, adjustment is a compromise between these two extremes and maladjustment is a failure to achieve satisfactory compromise (Arkoff, 1968).

Desirable adjustment to various demands of life is
influenced by the different inherited characteristics and varying environmental conditions to which an individual is exposed.

Considering the above factors, the investigator being the resident of that area, felt there was need to compare physical fitness and psychological traits of tribal and non-tribal students.

STATEMENT OF THE PROBLEM

The investigator wishes to compare the physical fitness and psychological traits of tribal and non-tribal high school students of high altitude areas between the age group of 14 and 17 years. The study is entitled, "A COMPARATIVE STUDY OF PHYSICAL FITNESS AND PSYCHOLOGICAL TRAITS OF TRIBAL AND NON-TRIBAL HIGH SCHOOL STUDENTS OF HIGH ALTITUDE AREA ."

OBJECTIVES OF THE STUDY

This study was conducted keeping in view the following objectives:

1. To compare physical fitness and psychological traits of tribal and non-tribal (boys and girls) high school students of high altitude area .
2. To compare physical fitness and psychological traits of tribal and non-tribal (boys and girls) high school students residing at 5,000 to 10,000 ft. altitude.

3. To compare physical fitness and psychological traits of tribal and non-tribal (boys and girls) residing above 10,000 ft. altitude.

4. To compare physical fitness and psychological traits of tribal (boys and girls) residing at 5,000 to 10,000 ft. and tribal (boys and girls) residing above 10,000 ft. altitude.

5. To compare physical fitness and psychological traits of non-tribal (boys and girls) residing at 5,000 to 10,000 ft. and non-tribal (boys and girls) residing above 10,000 ft. altitude.

HYPOTHESES

The study was pivoted around the framework of the following hypotheses:

1. There would be significant difference between tribal and non-tribal (boys and girls) high school students of high altitude area on all variables.

2. There would be significant difference between tribal and non-tribal (boys and girls) high school students residing at 5,000 to 10,000 ft. altitude on all variables.
3. There would be significant difference between tribal and non-tribal (boys and girls) high school students residing above 10,000 ft. altitude on all variables.

4. There would be significant difference between tribal (boys and girls) residing at 5,000 to 10,000 ft. and tribal (boys and girls) residing above 10,000 ft. altitude on all variables.

5. There would be significant difference between non-tribal (boys and girls) residing at 5,000 to 10,000 ft. and non-tribal (boys and girls) residing above 10,000 ft. altitude on all variables.

**METHODOLOGY**

A sample of 1200 students between the age group of 14 to 17 years of tribal and non-tribal (boys and girls) was taken randomly from six districts of Himachal Pradesh namely: Kullu, Shimla, Sirmour, Chamba, Lahoul-Spiti, and Kinnaur. Height and weight of the subjects were measured by using an upright plain wall and portable weighing machine.

The Fleishman's Physical Fitness Test Battery consisting of seven items namely: Extent flexibility, Dynamic flexibility, Explosive Strength, Dynamic Strength, Agility, Speed and Cardiovascular Endurance was used to measure physical fitness.
For measuring Personality, High School Personality Questionnaire (H.S.P.Q. by S.D. Kapoor and K.K. Mehrotra, 1967 Form-B) was used.

Adjustment Inventory for school students (AISS, 1980) was used to measure three dimensions of Adjustment: Emotional, Social and Educational.

The data thus collected were statistically treated keeping in view the objectives of the study. Means and SD's were calculated so as to describe and compare results for each variable separately. To determine significant difference between tribal and non-tribal subjects 't'-test was used.

CONCLUSIONS

Some of the major general conclusions drawn from the present study are:

Physical Fitness

1. The tribal (boys and girls) were found superior in explosive strength than the non-tribal (boys and girls).

2. The non-tribal (boys and girls) were better in extent flexibility than the tribal (boys and girls).
3. The tribal boys were found superior in agility and
dynamic flexibility to the non-tribal boys.

4. The non-tribal boys were better in endurance than the
tribal boys.

5. The tribal girls were better in speed and endurance
than the non-tribal girls.

6. The non-tribal girls were better in their height and
agility than the tribal girls.

7. The tribal (boys and girls) of lower altitude were
superior in their height and endurance to the tribal
(boys and girls) of higher altitude.

8. The tribal (boys and girls) of higher altitude were
better in dynamic flexibility than the tribal (boys
and girls) of lower altitude.

9. The non-tribal (boys) of lower altitude were better
in dynamic flexibility than the non-tribal boys
of higher altitude.

10. The non-tribal (boys) of higher altitude were better
in endurance than the non-tribal boys of lower
altitude.

11. The non-tribal girls of lower altitude were better in
agility than the non-tribal girls of higher altitude.
12. The non-tribal girls of higher altitude were better in their height and extent flexibility than the non-tribal girls of lower altitude.

**Personality**

1. The tribal boys were found reserved, affected by feelings, excitable, shy, uncontrolled and tense.

2. The non-tribal (boys) were found warm-hearted, emotionally stable, undemonstrative, adventurous, controlled and relaxed.

3. The tribal girls were found less intelligent, affected by feelings, excitable, disregard of rules, controlled and tense.

4. The non-tribal girls were found more intelligent, emotionally stable, undemonstrative, conscientious, controlled and relaxed.

5. The tribal boys of lower altitude were less intelligent, excitable, tender-minded and self-sufficient.

6. The tribal boys of higher altitude were more intelligent, undemonstrative, tough-minded and socially group dependent.
7. The tribal girls of lower altitude were shy whereas tribal girls of higher altitude were adventurous.

8. The non-tribal boys of lower altitude were shy and tough-minded whereas non-tribal boys of higher altitude were adventurous and tender-minded.

9. The non-tribal girls of lower altitude were warm-hearted, more intelligent, emotionally stable, undemonstrative, conscientious, adventurous and tough-minded.

10. The non-tribal girls of higher altitude were reserved, less intelligent, affected by feelings, excitable, disregard of rules, adventurous and tender-minded.

Adjustment

The non-tribal (boys and girls) were better adjusted in all the three areas of Adjustment: Emotional, Social and Educational than the tribal (boys and girls).

RECOMMENDATIONS

On the basis of the study, the investigator makes the following recommendations:

1. The study will be significant to coaches and physical education teachers in selecting the best suitable players for a sports discipline.
2. The study will highlight some of the important areas where tribal students can excel.

3. The study will motivate other researchers to undertake similar studies on other age groups keeping in view the adverse climatic and environmental conditions.