Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

"Sports, by their very nature are enjoyable, challenging, all-absorbing and requires a certain amount of Skill and Physical Conditions."\(^1\)

With the rapid development of sports into a highly organised and intensely social phenomena, there is a clear cut classification of sports on the basis of goal and intensity of participation, namely the recreational sports, health and conditioning sports and competitive sports. Competitive sports are again ranked according to the level of competition in which the intensity of play raises the pulse rate of the player to approximately 180 beats per minute is designated as top sports.\(^2\) As the sports has developed into distinct scientific discipline in itself and each nation is vying with

\(^1\)Yee, ed. The Sports Book, p. 5.

the other to produce top class players to win laurels in international competitions, considerable research is devoted to identifying factors that will be predictive of achieving high level of skill in a given sport with proper coaching.

It is not given to everyone to achieve world fame. However, if one is destined to such height it will become evident in early stage itself that the athlete, person or sportsman, was born with certain attributes and gifts, without which a really great success is not possible.\textsuperscript{3}

Hereditary pre-disposition is estimated to be two-third of the basis of top performance.\textsuperscript{4} Certain anthropometric considerations, somatotype features, and racial traits are identified as advantageous for performance in a specific sport. Intelligence, divergent thinking (creativity), psychological characteristics of aspiration, persistence, personality traits, self-concept, etc.

\textsuperscript{3}Cerutty, \textit{Success in Sport and Life}, p. 23.

\textsuperscript{4}Homravella, \textit{The International Olympic Academy}, pp. 216-227.
are also important factors to reach category of top sports.\textsuperscript{5,6,7}

Therefore, besides monitoring physical fitness and functional ability as measured by arterial pressure, pulse rate, and coefficient of resistance, selected anthropometric and psychological characteristics and racial traits etc. will be of definite advantage in the selection of top level sportsmen.

Athlete for superior performance in sport is selected on the basis of physical structure and body size he possesses which have proved to be appropriate for high performance in the given sport.\textsuperscript{8}

\textsuperscript{5}Rao, Abstracts : International Congress of Sports Sciences, p. 27.

\textsuperscript{6}Misangy, The International Olympic Academy, pp. 151-157.

\textsuperscript{7}Misangy, The International Olympic Academy, pp. 173-181.

\textsuperscript{8}Tanner, The Physique of the Olympic Athlete, p.13.
Personality assessment has now been used in selection of athletes and also serve as a tool to evaluate sport gifted individuals. There has been a general premise that athletes possess unique and definable personality characteristics.

Many who support the personality performance relationship go so far as to state that all other things being equal, the personality of the athlete will determine the winner.

Some discrete set of personality factors, probably exists which is related to causing some people to select and participate in sports. Perhaps these people possessing the strongest and most fortuitous combination of these salient personality factors, tend to persist in sport and become successful as outstanding athletes.

But very little 'hard' evidence are in existence pertaining to participation in competitive sports that influences and modifies a competitor's personality structure.

On the other hand, some authors agree that in general, sports activities does not seem to affect
personality but vigorous exercise and programme that increase fitness levels may have positive effects on mood, self-concept and general mental health.

The game of soccer is the most popular game in the world. It requires physical and mental attributes to be in top gear to tackle all eventualities in a match situation. Today the level of performance of Indian Soccer Team at International stage has made their fans, coaches and experts to worry about India's being pushed back by astonishing appearance of nations like Korea, Iran, Iraq and China from almost no where. The functional changes have to be brought into the existing training path of Indian soccer squads.

Many reports in this area refer to anthropometric and psychological characteristics, that distinguish top class players in a specific sport, however, no study seems to have been conducted on analysing the size of selected anthropometric and psychological characteristics amongst the soccer players achieving high and low levels of physical
fitness. Thus a study was undertaken to analyze selected anthropometric and psychological variables of soccer players achieving fairly high level of physical fitness in comparison to those players, attaining low fitness proficiency.

This analysis is done by using 't' test on selected anthropometric and psychological (personality trait factors and self-concept dimensions) characteristics to determine the significance of differences between the group means of high and low fit soccer players.

By a careful study of kinesiology, mechanical analysis of various skills, kinanthropology, and sport psychology, the following anthropometric characteristics namely, standing height, leg length, foot length, foreleg length, thigh length, calf girth, thigh girth, hip width and shoulder width and psychological characteristics namely, personality trait factors and self-concept dimensions were selected as they are likely to contribute to the development of required fitness and skills in soccer.
Conclusions

1. Developing good muscles of the thigh and calf and improving thigh girth and calf girth is a distinct advantage in developing higher level of proficiency in soccer.

2. A longer lower limb in comparison with overall standing height is of advantage in developing soccer proficiency.

3. Larger foot length and greater hip width and shoulder width are distinct advantages in developing higher level of proficiency in soccer.

4. Certain anthropometric variables namely, standing height, foot length, foreleg length, calf girth, thigh girth, hip width and shoulder width have distinct potential for achieving higher level of fitness and skill proficiency in specific sport, however, the advantage is realized only when the potential candidate utilizes the advantage in developing fitness and skills. Further, it is evident from the world class sportsman like Bob Hayes, that a highly motivated individual may even overcome relative disadvantage of anthropometry which is not
specifically investigated in this study. Thus, anthropometric characteristics of top level sportsman are just an indicator for adopting conditioning to achieve excellence with the native endowment, one is born with. ⁹

5. The personality trait factors, studied as psychological characteristic dependent on levels of physical fitness in soccer, (a) reserved - warm-hearted, (b) less intelligent - more intelligent; (c) affected by feelings - emotionally stable; (e) humble - assertive; (i) tough minded - tender minded; (m) practical - imaginative, (n) forthright - shrewd; (o) placid - apprehensive; and (Q₃) undisciplined - self-conflict - controlled where as other factors are independent of levels of physical fitness and soccer proficiency.

6. The high fit soccer players are significantly more outgoing, intelligent, emotionally stable, dominance, tough minded, practical, shrewd, self-assured and controlled than low fit soccer players.

7. The low fit soccer players are significantly more reserved, less intelligent, emotionally less stable, humble, tender minded, imaginative, sentimental, worrying and undisciplined self-concept than high fit soccer players.

8. High and low fit soccer players are alike being sober, neither weaker nor stronger super-ego strength, neither shy nor venturesome, neither trusting nor suspicious, neither conservative nor imaginative, neither group dependent nor self-sufficient, and neither relaxed nor tense.

9. The high fit soccer players were superior in physical, social, temperamental, educational, moral, intellectual and total self-concept in comparison to the low fit soccer players who were rather inferior in these dimensions.

**Recommendations**

1. An experimental study may be conducted on soccer players, belonging to the same community, who are receiving same training, living in same environment and habituated with the same quality of food etc.
2. An experimental study may be done by selecting the subjects on the basis of assumed anthropometric and psychological advantages and measuring the proficiency on teaching and coaching for a fairly longer duration.

3. An attempt may be made to investigate whether other anthropometric and psychological variables not used in this study such as chest girth, trunk length, sitting height, anxiety level, goal setting effect etc. respectively will show significance for identifying potential to develop proficiency in soccer.

4. A similar study of comparing various racial groups such as Latin Americans, Caucasians, Africans, Mongoloids etc. to find out racial anthropometric and psychological traits that may give advantage for proficiency in soccer.

5. A similar study of women players as well as comparative study of men and women soccer players may be attempted.

6. A correlational study may be conducted with the fitness and sports proficiency to anthro-
pometric and psychological characteristics of various levels of soccer proficiency.

7. Studies may be conducted on anthropometric and psychological characteristics of the players of other team games like, hockey, volleyball, basketball and handball etc.

8. An experimental study may be done on the subjects who tend to be reserved, shy, tender-minded, tense, less intelligent, humble, having low self-concept, in order to investigate the effects of these psychological traits on physical fitness and soccer proficiency.

9. A study maybe conducted on psychological considerations in successful soccer players.

10. A study may be conducted on morphological, psychological and physiological characteristics of college soccer players.