CHAPTER 5

SUMMARY, CONCLUSION
AND SUGGESTIONS
FOR FURTHER
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In this chapter, brief summary of the total investigation, problems, issues, hypothesis, design of the study and main conclusions are presented.

We are celebrating this year as 55th year of independence. We have many credits under our belly in the field of science, technology, etc. In the field of economic growth, we are still a developing nation. But when it comes to sports and physical education, there is not much about which we can feel proud of. No doubt, there has been creditable landmark achievements in the field of science, technology, education, etc. We have been able to roar into space and have manufactured atom bombs.

But as far as achievements in sports are concerned every Indian feel disgusted. We can not boast of many achievements to our credit. There is very little that we have achieved in sports and which are cooled feel proud of.

Whether it is the sports arena or in the sphere of sports administration, Punjab’s domination has been unsurpassed by any other communities in the country. Most of sporting legends have their roots in this land of five rivers and they have brought triumph and glory to the state and the country. Punjab has the credit of winning more than 60% country’s medals in various international competitions, including the Olympics, Common Wealth and the Asian games. Punjab has always been at the forefront of the sports scenario.

The history of Indian Sports is rich with Punjab contribution. In 1952, Dharam Singh, Raghbir, Balbir Singh and Udham Singh were selected to represent India at the Helsinki Olympic games. In 1954, once again Punjab got the top
most position by winning the national championship held at Hyderabad.

The period between 1956 and 1960 was quite eventful. The call of Olympic games in 1956 saw remarkable activity in the state and as many as five of Punjab players, Balbir Singh (Captain), Udham Singh, Rajbir Lal, Bakshish Singh and Gurdev Singh found a place in the Olympic team which defended the title at Melbourne.

Sound physiques, supple and flexible bodies, extremes of climate a good and balanced diet and spirit of adventurism make Punjab superb athletes. One of the reasons for the overwhelming success of Punjab both at the national and Asian levels has been the presence of a lower middle class and middle class in the pre-partition Punjab Society. It was this class that formed the backbone of the sportspersons in the state because it aspired for new levels of achievement. Whether it was Milkha or Ajmer, Praveen Kumar or Gurdip Singh (Athletics, throwers), Ajinder Kaur or Rajbir Kaur (Women's hockey) - all came from lower middle class or middle class families.

Unfortunately, Punjab has lagged behind in the organizational aspect. The Punjab state games e.g. have not been held for almost two decades now. That could be the major reason for the states failure to win the overall trophy in any of the five edition of the National Games held under the revised format. Moulding the sixth edition has afforded the state on opportunity to re-establish its supremacy.

The state can no longer boast of sports persons like Milkha Singh, Balbir, Ajmer, Praveen, Jarnail, Davinder Ahuja and Dinesh Khanna.

The sports programme of our country revolves around schools, colleges
and institutes. The physical education teacher posted in these colleges have a great role to play for the upliftment of sports. But despite the increase in the facilities and infrastructure as well as modern sports training methods. These schools and colleges are not able to give us the desired results. It looks like that the main purpose of school and colleges has become to participate rather then to inculcate positive attitude and to encourage competitiveness amongst the athletes as well as in the society.

The present researcher has firm belief that there is a need to find out the attitude of physical education teacher posted in various colleges towards the sports and physical education. As it is a fact that these individual are the pillar of physical education and it is advisable to check what they think about sport and physical education and about their contribution towards sports and physical education programmes.

The present researcher has made an attempt to construct an attitude assessment scale for male physical education teachers of Punjab so that remedial measures can be suggested.

There is probably none other than the physical education teachers working in the colleges who can contribute as much in raising the nation’s sports standards. In view of this prevailing situation, the present researcher feels that there is a need to assess the attitudes of male physical education teachers working in colleges of Punjab state. So that remedial measures can be taken to overcome the deep rooted problems, so that they can be motivated to contribute positively in raising the standard of sports as well as in introducing the college going boys and girls in various sporting activities to channelize their energies effectively in this direction.


Statement of the problem

The present investigator wishes to assess attitudes of male physical education teacher towards physical education and sports working in the colleges of Punjab state. For this purpose a reliable and valid scale to measure attitude of college male physical education teachers is to be developed. The study has been entitled as:

“Construction of attitude scale for male physical education college teachers of Punjab”.

Objectives of the study

As this investigation has to develop a new scale assessing attitude towards physical education, no hypothesis are being framed.

1. Construction of a scale for assessing the attitude towards different aspects of physical education.

2. To determine the nature and number of factors underlying the items framed for the attitude scale.

3. To determine the internal consistency (Cronbach’s alpha) and test-retest reliability of the obtained dimensions.

4. To compare the teachers of physical education from (i) the three universities from the region and the physical education teachers from the rural and urban areas on the different dimensions of attitude towards physical education.
Delimitation of study

The study will be delimited to the male physical education teachers of colleges of Punjab state.

Significance of the study

1. The study will be significant for the Punjab government sports department/officials in framing future sports policies and programs for the development of the sports activities in the state by taking remedial measures and to ensure, the full involvement of motivated physical education teachers in the future physical education programs.

2. The study will also be significant for the heads of the educational institutions so that they can also take remedial measure to involve the physical education teachers in college physical education program.

3. The study will be significant for various sports organizations and sports officials also because physical education teacher working in colleges are directly associated with such sports organizations as their trainees participate in various state and national competitions.

Participants

Data for this study were obtained from 100 male physical education teachers working in different colleges of Punjab and U.T. Chandigarh. Respondents were only those who indicated a willingness to complete the test instrument. Thus
the sample could be described as incidental. However, no known bias operated in the selection of the participants.

**Tools used**

In India, very little research work has been done in attitude assessment especially in the field of physical education. Therefore, it was felt as a need of the hour to assess teachers attitude towards physical education. Therefore, the purpose of this study was to develop a standard attitude scale designed to investigate teachers attitude towards physical education so that maximum possible requirements of the study could be fulfilled. The details of the procedure and techniques followed in developing and standardizing the scale have been given in this chapter.

The following physical education objectives were used for attitude scale:

1. Physical fitness development.
2. Emotional development.
3. Social development.
4. Personality development.
5. Value of subject.

**Physical education attitude scale for teachers**

In order to assess subjects attitude towards physical education, a five point Likert type scale was developed. The scale is an agree-disagree type and subjects were to indicate the intensity of their attitude. The scale was validated by a panel of judges who are physical education academic professionals and researchers. This scale is based upon physical education objectives.
**Procedure of data collection**

The physical education attitude scales were administered, supervised and explained personally. Physical education attitude scale was used in first phase of data collection. This was administered individually on the physical education teachers. On the first page of the scale introduction and detailed instructions were given.

Introduction included aim of the present study and purpose of this scale and the major areas covered in it. Instructions included a sample filled responses request to fill in all items, an appeal for free and frank opinion and assurance of confidentiality of responses and of their use only for research work. The entire data was collected personally by visiting the respondents in their respective colleges.

**Scoring of the scale**

Physical education attitude scale was scored by adopting Likert's method, that is, assigning each response category a numerical value from 5 to 1 for strongly agree, agree, undecided, disagree and strongly disagree for positive statement. For negative statement a reverse pattern was followed.

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Statistical technique used

Various statistical techniques were used for developing the attitude scale as well as for analyzing final data. These techniques are briefly reported below:

Techniques used in the development of the scale

1. Principal axes method of factorial analysis followed by the Scree test and varimax rotation was employed for identifying dimensions underlying the scale. The method followed allows the identification of factors on the basis of statistical procedures rather than on pre-conceived and subjective ideas about the dimensions of physical education.

Factor analysis was carried out to determine the number and nature of the dimensions underlying the 100 statements (Appendix A) covering different aspects of the attitudes towards physical education. The inter-correlation among the 100 statements are reported in Appendix C. The inter-correlations were subjected to the principal components analysis (Hotelling, 1936).

The scree test (Catell, 1966) was applied to select the principal component for further rotation. The select 1st six components with the loading of the statements are reported in tables from 4.4 to 4.9. The scree plot of the components is presented in figure 1. The scree test permitted the selection of six factors for rotation. The varimax rotated factors are presented in table 4.3.

The statements with high loadings on each factor were selected to form the dimensions on the scale for attitude towards physical education. From the result it can be seen that only 40 statements (Appendix B) from the scale could be selected out of the initial 100 statements. It is suggested that these
40 statements can be incorporated in the attitude questionnaire for further study, focusing on attitude of male physical education teachers within the following six dimensions:

1) Socially acceptability  
2) Team Spirit  
3) Emotional stability  
4) Physical fitness development.  
5) Personality development  
6) Good effects v/s ill effects of participation in physical education.

2. To determine the internal consistency, reliability coefficient (Cronbach's alpha) for the six dimensions of the physical education are reported. The reliability coefficient ranged from .69 to .90. Indicating that six scores have a fair degree of internal consistency. The test-retest reliability coefficient for the six dimensions of physical education were quiet satisfactory. The correlation between test scores and re-test scores on all the dimensions are highly correlated. Their test retest reliability coefficient ranges from .568 to .908.

3. Descriptive statistics where mean, standard deviation, measures of skewness and Kurtosis were computed.

Overall, the trend of the scores on the six dimensions of the physical education indicated negatively skewed distribution. The scores were generally congregated on the higher side. The attitude towards physical education was on favourable side. It would be desirable to change the loading of items and also to include new items, so that the distribution of the scores shift towards normality.
The distribution of scores on different dimensions of attitude towards physical education indicated somewhat leptokurtic distribution. This may be partially linked to the higher frequencies towards the upper end of the distributions.

4. The t-test was applied to compare the attitude of teachers from rural and urban background.

From the result out of six dimensions in four dimensions, social acceptability, physical fitness development, emotional stability and personality development, there was no difference in the mean for the urban and rural male physical education teachers but in two dimensions - team spirit and good effect v/s ill effect of participation in physical education, it was found that mean of urban teachers as compared to mean of rural teachers was significantly higher.

5. ANOVA (F-test) was applied to compare the attitude of physical education teachers of Panjab University, Chandigarh; Punjabi University, Patiala and Guru Nanak Dev University, Amritsar.

From the result it can be seen that all the F-values attain the level of significance so the null hypothesis that there are no differences in the means of the attitude scores among the physical education teachers from different universities of Punjab and U.T. Chandigarh.

CONCLUSIONS

An attitude scale towards male physical education teachers was constructed, initially considering five objectives, i.e., social development, emotional development, personality development, physical fitness development, value of subject, of physical education.
After data was collected on 100 such statements under the above mentioned objectives, factor analysis was done using the principal component method with varimax rotation. From this, 40 statements were retained out of the 100 statements. With these 40 statements the male physical education teachers’ attitude towards physical education were clustered in six revised dimensions namely, social acceptability, team spirit, physical fitness development, emotional stability, personality development and good effect v/s ill effect of participation in physical education.

Thus, data spotting was used to construct attitude scale towards male physical education teachers in six dimensions instead of initial five dimensions.

- First dimension social acceptability, lay emphasis on social acceptance of players, for example, extra coaching gives more importance to sports related aspects, respectful attitude towards sports officials, better adjustment in society, and better adjustment with his/her team mates to achieve performance.

- Second dimension, i.e., to develop team spirit so as to enhance the performance of the team as a whole and promote the game.

- Third dimension, viz., physical fitness development, lays stress on the personal fitness of sportspersons, good health and overall development of sportspersons. It demands more attention to be paid to the weaker player so as to raise the level of physical fitness and help to achieve his/her goals.

- Fourth dimension, i.e., emotional stability, stresses on physical education which helps the players to overcome his or her psychological weakness
during competitions and exhibit mental stability, both in winning and losing situations.

- Fifth dimension, i.e., personality development, having a positive impact on the sportsperson's self-confidence, self-decision making process, and maintain overall physical and mental attitude.

- Sixth dimension lays stress on some bright and dark aspects of physical education as a sportsperson sometimes get a lot of benefits from physical activity and sometimes gets certain setbacks from it.

It is important to note that the imperically determined (based on factor analysis of obtained responses) dimensions of attitude towards physical education turned out to be somewhat different from the theoretically based dimensions, which initially guided the formulation of statements for the scale for attitude towards physical education.

SUGGESTION FOR FURTHER RESEARCH

1. Similar study may be conducted on the college female physical education teachers.

2. Similar study may also be conducted on the college physical education teachers of different states, different universities, etc.

3. Similar study may also be conducted to assess attitude of physical education teachers towards more objectives of physical education.

4. Similar study may also be conducted to investigate and assess the attitude of coaches, sports managers, and other personnels attached with different games and sports.