Chapter III

PROCEDURE

In this chapter the description of subjects, criterion measures, procedure for administration of questionnaires, collection of data and statistical procedure applied for the analysis of data have been described.

Selection of Subjects

A total of two hundred and fifty subjects were drawn from the different States of the country. There were one hundred and twenty-five physical education teachers (who have not done any of the coaching diploma/training course in any game) and one hundred and twenty-five coaches (who have not undergone any of the physical education degree or diploma courses).

Criterion Measures

The criterion measures adopted in this study were to the following:

1. The criterion measures in present study were the scores of the subjects on the questionnaires of knowledge of human structure, health knowledge and practices.

2. Comparison of the two groups on both the questionnaires was made using the Mean Difference Method (t-test).
3. Factor analysis a specialized mathematical techniques was used to find the determinant factors of the test item.

**Method Used**

Survey method was used and the questionnaires were administered to collect the relevant data regarding the knowledge of human structure, health knowledge and practices of physical education teachers and coaches.

Turner’s personal and community appraisal form by Brooks and Brooks¹ (supplied by Health Education Department, Laxmibai National College of Physical Education, Gwalior) was modified to assess the knowledge of human structure of subjects. Few items relating to community appraisal were deleted in consultation with the guide and other knowledgeable persons in the field of health and physical education. The questions relevant to study about personal appraisal and knowledge of human structure were retained in the final form of questionnaire after discussion and taking into consideration the expert opinion of the professionally sound people. Though the questionnaire was a standard one, but as it was modified for the purpose of study, the reliability of the same was ascertained.

To determine the health knowledge and practices of the subjects, the questionnaire prepared by the Singh's² and supplied by the Department of Psychology, Hungarian University of Physical Education, Budapest, was used. The reliability of the same questionnaire was also established on the physical education teachers and coaches of India.

Reliability of the Data

The reliability of both the questionnaires was computed using the split-half method. The questionnaires for the assessment of knowledge of human structure and health knowledge and practices were administered on one hundred and fifty coaches and one hundred and fifty physical education teachers assembled at the time of different competitions, seminars, sport meets, conferences, workshops and few questionnaires were mailed by post with a request letter and self addressed stamped envelop to return the same. After getting the responses of the subjects, the split-half method was used to compute the reliability. The total responses were divided into two equal halves, putting performance on odd-numbered items in one half and performances on the even-numbered items in other half. The Correlation

co-efficient were computed between the resultant two sets of scores for each of the variables. The obtained half test co-efficients were converted into co-efficient of reliability for the whole test using Spearman Brown Prophecy formula. For the questionnaire of knowledge of human structure the reliability established on physical education teachers was .81 and on coaches the reliability was .83. The reliability for the questionnaire of health knowledge and practices on Physical Education Teachers was .85 and on coaches was .82.

These values of reliability coefficients are quite high and confirm to the range for effective measurement.

**Administration of the Questionnaires**

The questionnaires were administered to physical education teachers and coaches by the research scholar with the help of her colleagues.

Delhi Administration from educational point of view has divided into four Districts. Each District has approximately an equal number of schools under its territorial jurisdiction. The researcher visited different schools of each District to collect the data from Physical Education Teachers. Here the

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help from colleagues was taken after thoroughly acquainting them with the procedure, each school has two to four Physical Education Teachers. Care was taken to see that the Physical Education Teachers serving as subjects of the study should not have undergone any of the coaching course or training. Wherever possible their qualification was confirmed from the official records of the schools.

The respondents were given instructions regarding the procedure to be followed in answering the questions. Items on the questionnaire has to be answered as per their level of knowledge. For the questionnaire of knowledge of human structure 3 choices were given, ‘none’, ‘some’ and ‘adequate’. ‘None’ has to be answered if the subjects have no or little knowledge of topic, if the subject feels he knows something about the topic, but would find it helpful to have more information he should answer ‘some’ to answer ‘adequate’ the subject should have knowledge on the topic extensive enough and sufficient.

For the second questionnaire of health knowledge and practices, again 3 choices were given to answer the questions. ‘None’ indicates a low level of knowledge, ‘some’ indicates medium level of knowledge, ‘adequate’ indicates high level of knowledge about the given item. It was emphasized that they should tick ( ) the response after careful reading of the question and avoid over writing.
The research scholar assured the respondents that the information given by them would be kept strictly confidential and will be utilized only for the purpose of research. They were also requested to afford the true response in the matter, as otherwise it adversely affect the result of the study undertaken by the researcher.

To collect the data from the coaches, the researcher visited different stadiums in New Delhi, i.e., Jawaharlal Nehru Stadium, Indira Gandhi Indoor Stadium, National Stadium, Talkatora Stadium, Tennis Stadium Shivaji Stadium. The researcher also visited the Health Clubs and Sports Complexes running in different parts of the capital. The data was also collected from the coaches at the time of sports meets and competitions at different levels (zonal, state, national level). Few questionnaires were mailed with request letter, full instructions about answering the questions and self addressed stamped envelop. About 80% respondents sent back the filled up questionnaires in first attempt only. From the remaining 15% respondents after first or second follow up. Rest 5% have not responded even after the third reminder.

In collecting the data from the coaches against most care was taken that the coaches serving as subjects of the study have not done any physical education course or training.
Statistical Procedure Employed

Comparison of two groups on both the questionnaires was made using the Mean Difference Method (t-test). Factor analysis a specialized mathematical technique was used to find the determinant factors of the test item, in terms of more general 'factors' or trait categories and to determine which test items are most emphasized by the subject. Further ANOVA has been computed to see the differences of two means of a group to statistically verify the result obtained through t-test. All the statistical procedures were computed on IBM 486 computer using the Microsoft and Statograph programmes.