CHAPTER-III

METHODOLOGY

In the previous chapter described review of different studies on identification of factors for decline in sports participation of women. In the present chapter describes the methodology used to provide data to investigate them. This chapter aims to provide assurance that appropriate procedures were followed.

The methods and procedures applied for discovering answers to meaningful questions through the application of scientific method is known as methodology.

3.1 RESEARCH DESIGN

The term ‘Research Design’ refers to the procedural details of the study by which data is collected. It aims to develop the set of methods and procedures which help to test the research hypotheses with a high degree of confidence. In this study the collected data was used as evidence in decision-making and test of hypotheses. Each research has its own nature and specific objective. In the present study Descriptive Research Design is used. It involves collecting data in order to test hypotheses or to answer questions about the opinions of women on a particular issue. It is also called survey design.

In this research design aimed to ensure that the obtained results were done the factors under study and not to extraneous or irrelevant factors. It helped in achieving greater accuracy in the results and increased confidence in outcome of the research. The present research is an exploratory research. A few studies are at hand on women sports participation in India. Exploratory research is usually employed when one wishes to begin work on a little researched area, or is developing methods for a later more formal study. Exploratory research helps the researcher to define her research problem and formulate the hypotheses are
easily and accurately. The aim of exploratory research is to gain familiarity with the problem or situation or the community not known before. It also enables the researcher to choose the most suitable techniques for her research and to decide on the questions most in need of emphasis and detailed investigation. It is flexible enough to permit the consideration of many different aspects of a phenomenon.

3.2 PLACE OF RESEARCH

Selection of place is very important in a research study. It provides more accuracy and precision. The term place means the aggregate of persons or objects under study. Place is theoretical and hypothetical aggregation of all elements ad defined for a given research (Babbie, 2001). In the methodological language the place is defined as the place where relevant data is collected. The universe of the study is Degree students of various colleges of Bangalore University.

3.3 SAMPLE SIZE

A sample is a restricted part of a statistical population whose properties are studied to gain information about the whole. When dealing with people, it can be defined as a set of respondents (people) selected from a larger population for the purpose of a survey (Neuman, 1997).

Sample size is simply the number of people or units available to be studied. In order to make present study perfect, a stratified random sample of 480 respondents were drawn adopting the procedure of proportional allocation.

Selection of the sample is a crucial step in any research study. In order for the results to provide valid conclusion the sample should be adequate and representative. The adequacy of the sample is determined by the size, and the representativeness is determined by its similarity to the population of the study.

The study was conducted on 420 respondents of Degree College women studying in Bachelor degrees, 84 Physical Education Directors and 84 Principals
working in Degree colleges from various Women and Coeducation Degree colleges affiliated to Bangalore University randomly. The criteria of selection were factors for decline in sports participation.

3.4 SELECTION OF VARIABLES

The selected sample of degree college women was administered by the questionnaire for identification of factors for decline in women sports participation. This is done to examine the differences between the sample subgroups on sports participation. This will help to investigate and know the factors for decline in sports participation in inter collegiate women’s competitions of Bangalore University.

3.5 TOOLS OF RESEARCH

The study was undertaken to know the factors for decline in sports participation in intercollegiate women’s competition, the researcher is used the self prepared questionnaire for degree college women which measure the factors of decline in sports participation of women. Further the list of the factors for decline in sports participation of woman was also enlisted. The researcher has took all the necessary information from the respondents at the time of visit, to their colleges through questionnaire and interview and were put into the appropriate statistical treatment. To identify the factors for decline in sports participation in intercollegiate women’s competition of Bangalore University as the criterion measures of the present study.

3.6 RELIABILITY OF DATA

For the test of validity the researcher carried out survey by a pilot test. This test has been performed by observations, interviewing degree college women and discussion with few subject experts in order to check whether the questionnaire is precise or not. Researcher has convinced the users that how the results of this research will be helpful for them in handling the issues related to information security. The researcher personally interviewed each respondent
among 50 respondents of from 10 women degree colleges affiliated to Bangalore University, Bangalore, Karnataka.

3.6.1 Instrument Reliability

A questionnaire, which has been prepared in consultation of the experts in order to collect the information related to identification of factors for decline in sports participation in inter collegiate women’s competition, the areas of questionnaire includes, encouragement, sports facility, financial assistance, medical benefits, importance of sports, problems facing during practice and tournaments, special grants for sports and counseling

3.6.2 Tester Competency

The present study is to identify the factors for decline in sports participation of women in intercollegiate women’s competitions of Bangalore University. A questionnaire to trace out the purpose of the study has been prepared and thorough inquiries in this regard had been recorded and presented in the tables accordingly.

3.7 DATA COLLECTION PROCEDURE

In the present study research executing the structured questionnaire has been used. This method was found suitable because they provided the researcher the reliable data. Interview schedule is also based upon the questions to be filled in by the interviewer in a face-to-face situation with the respondents. In the present study, the structured questionnaire for sportswomen, physical education directors and principals separately with different aspects and sports information was got filled from the respondents. The researcher get the questionnaire filled directly from the respondents with the help of research assistants were hired who helped the researcher to finish her job successfully. The method was considered to be the most suitable method of data collection for the present study due to the various reasons. In order to create and establish rapport with the respondents which is very essential for the collection of such a
personal type of data. Moreover the researcher has to establish a direct and personal contact with the respondents in order to get personal information and their opinion regarding decline in sports participation at intercollegiate competitions. Most of the questions were close-ended according to the situation, but certain questions were open-ended. By this method it is easier for the researcher to explain the meaning and content of the questions and remove misunderstanding and misinterpretation.

The sample selected for the study has been approached and the questionnaire was distributed. The purpose of the study explained to the sample and only after their consent for taking the test, all the related information has been collected by the researcher. The relevant data obtained from the subjects using the personal data schedule and the questionnaires were consolidated in a coding sheet, in the following way: each subject was given an identification number and against that number the data relating to personal information like name, age, sex, institutional type, experience etc. and the scores obtained for different variables were entered in a single line. The data thus consolidated are subjected to analysis.

The data for the present study were collected from sports women, physical education directors and college principals of degree colleges affiliated to Bangalore University, Bangalore, Karnataka. The researcher met each college individually to collect the required information, due to find out the factors for decline in sports participation at intercollegiate competitions.

3.8 STATISTICAL TECHNIQUE

The responses given by the samples were subjected to statistical method. Computer facilities were used for analysing the data. The main statistical techniques used for analysis was Chi-square.

The chi-square test is used to check the significance of a variable and to see the relationship between different variables. The collected data fulfill the
basic assumptions of Chi-square i.e. randomness, independent sample, nominal data and enough sample size. Chi-square is one of the important tests for checking the statistical significance. It is well known and widely used in the social sciences literature. Oladeji et al. (2006) used the chi-square formula for testing the significance. For checking the significant of percentages and average of different household characteristic the following formula of Lind et al. (2006) is used for calculation of the chi-square values.

Researcher has presented the output of data analysis in the form of cross tabulations. A cross-tabulation table represents the joint frequency distribution of two discrete variables. Rows and columns correspond to the possible values of the first and the second variables, the cells contain frequencies (numbers) of occurrence of the corresponding pairs of values of the 1st and 2nd variable. Cross-tabulation tables can be also used for more than two variables.

A frequency distribution is a tabular summary of a set of data showing the frequency (or number) of items in each of several non-overlapping classes (or bins). This definition is applicable to both quantitative and categorical (qualitative) data. For quantitative data, the classes are typically contiguous and of equal width.

\[ x^2 = \sum \left[ \frac{(fo - fe)^2}{fe} \right] \]

where

\( x^2 \) is Chi-square,

\( fo \) is an observed frequency in a particular category

\( fe \) is an expected frequency in particular category

If the calculated value of \( x^2 \) is equal to or exceeds the table value, the difference between the observed and expected frequencies is taken as significant,
but if table value is more that the calculated value of $x^2$, then difference is considered as insignificant.

Degree of freedom plays major role in case of chi-square distribution and calculated as follows: d.f. = (c-1) (r-1) Here ‘c’ represents number of columns while ‘r’ represents number of rows.

If the calculated value of chi-square is equal to or greater than the tabulated value for a selected level of alpha and degree of freedom, means that there is a relationship or association between the two variables and reject the null hypothesis. If the chi-square calculated value is less than the tabulated value for a given level of alpha and degree of freedom, means that there is no relationship or association between the variable and null hypothesis are accepted.