Chapter – 3
METHODOLOGY
3.1. INTRODUCTION:

Research is a systematic investigation resulting in some formal record of procedures and the report of conclusions and results. Research has been defined as “a formal systematic and scientific method of analysis”. Research has proved to be an essential and powerful tool in leading the human race towards progress. There would have been very little progress if not no progress in the world but for a systematic research endeavour.

Research has originally drawn its spirit and pattern from the Physical Sciences-wherein constant efforts were made to understand the physical world around us. Research marks the use of rigorous and structured type of analysis of observed phenomena. The secret of cultural development has been research, pushing back the area of discovering new truths, which in turn lead to better ways of doing things and better products and conveniences to live and enjoy life at large.

The purpose of this research study is to analyze the leadership skills, personal growth and development, gender discrimination, self assessment, working condition and
administrative strategies in women educational administrators of secondary schools in Andhra Pradesh and to suggest some skills and empowerment policies to enhance the leadership skills and empowerment in women educational administrators in secondary schools.

3.1. MEANING OF RESEARCH:

The term research consists of two words "Re" and 'Search'. "Re" means again and "Search" means to find out some thing new. Thus, research is a process of which a person observes the phenomena again and again, collects data and draws some conclusions on the basis of data through a process of systematic analysis.

Research in common parlance refers to a search for knowledge. One can also define research as a scientific and systematic search for pertinent information on a specific topic. In fact, it can be said that research is an art of scientific investigation.

The purpose of research is to discover answers to questions through the application of a scientific process. The main aim of research is to find out the truth which is hidden and which has not been discovered as yet. Another objective is to test a hypothesis formulated on the basis of a casual relationship between variables.
3.2. NATURE OF EDUCATIONAL RESEARCH:

Educational research is considered to be a "prominent key" which is essential to the opening up of new doors and vistas in education. Educational research must be aimed at finding solutions to unsolved problems; at devising new media to meet certain functional needs which have never been met before; at finding a better process and contents that there currently are in vogue.

3.3. TITLE OF THE STUDY:

The Title of the present study is stated as "Self Concept and Achievement Motivation among Sports Girls of Secondary School Students in Guntur District".

3.4. DESIGN OF THE STUDY:

The type of research undertaken by the investigator is descriptive in nature. It is a descriptive survey method of research. The word 'survey' has been derived from the two words 'sure' and 'veer' which means 'over' and 'see' respectively. Descriptive survey tells us 'what is'. This has a very wide scope. It describes and interprets what exists at present.

According to John W. Best (1995), descriptive survey research is concerned with condition or relationship that exists; practice that prevail; beliefs points of view, or attitude that are held;
process that are going on; effects that are being built; or trends that are developing.

The investigator followed the survey method of the descriptive research. It involves clearly defined imaginative planning, careful analysis and interpretation of data gathered and logical reporting on the investigation. To carry out the research of this type, for collection of data, for testing the hypothesis and for arriving at certain conclusions, it is necessary to choose the technique and the proper tools to be employed. Each data gathering device has both merits and limitations. For this investigation the questionnaire had been considered as a suitable tool for the collection of data.

3.5. OBJECTIVES OF THE PRESENT STUDY:

1. To find out the self-concept among sports girls and classify them.
2. To find out the achievement motivation among sports girls and classify them.
3. To find out the influence of the following variables on the self concept of sports girls.
   a) Type of school
   b) Location of school
   c) Participating event.
4. To find out the influence of the following variables on the achievement motivation of sports girls.
   a) Type of school
   b) Location of school
   c) Participating event

5. To find out the influence of the following variables on the academic performance of sports girls.
   a) Type of school
   b) Location of school
   c) Participating event

6. To find out the relationship between self concept and achievement motivation of sports girls and their relation to academic performance.

3.6 HYPOTHESES OF THE STUDY:

1. There would be no significant difference in the self-concept between the sports girls
   a) Studying in Govt. and private schools
   b) Studying in rural and urban schools
   c) Participating in sports and games.

2. There would be no significant difference in the achievement motivation between the sports girls
   a) Studying in Govt. and private schools
b) Studying in rural and urban schools  
c) Participating in sports and games.

3. There would be no significant difference in the academic performance  
a) Studying in Govt. and private schools  
b) Studying in rural and urban schools  
c) Participating in sports and games.

4. There would be no significant relationship between  
a) self-concept and academic performance of sports girls.  
b) self-concept and achievement motivation of sports girls.  
c) achievement motivation and academic performance of sports girls.

3.7. METHOD OF INVESTIGATION:

Survey method is to be adopted for this study.

3.8. SAMPLE AND SAMPLING:

By adopting stratified random technique, 600 sports girls in secondary schools are to be selected from various schools in Guntur district.

3.9. POPULATION AND SAMPLE:

Sample is the representation of a set of things or population.

By studying the samples of a defined population, the researcher aims at making generalizations which can be applied to the population. Borg outlines the importance of research design as
“Perhaps the most important factor in determining the generalization of research results in the selection of sample used in collecting the research data”. There will be wastage of time, money and energy, if the research data are not generalized to some degree beyond the sample used in the research.

In the present study all the Sports Girls studying in Secondary Schools of Guntur District in Andhra Pradesh were considered as population for the study. A representative sample of 600 Sports Girls were chosen as sample for the study.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the Variable</th>
<th>Category</th>
<th>No. of Frequency</th>
<th>Total</th>
</tr>
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<tbody>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>Urban</td>
<td>300</td>
<td>600</td>
</tr>
<tr>
<td>2</td>
<td>Management</td>
<td>Government</td>
<td>300</td>
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<td></td>
<td>Private</td>
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<td>Sports</td>
<td>518</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Games</td>
<td>82</td>
<td>600</td>
</tr>
</tbody>
</table>
3.10. VARIABLES SELECTED FOR THE STUDY:

The following variables were incorporated in the sample drawn from the administrators for the present investigation.

1. Participating Sports events:
   or games
2. Type of School: 1. Govt. 2. Private
3. Location of the School: 1. Urban 2. Rural
4. Academic Performance
5. Self concept

3.11. TOOLS OF THE STUDY:

The instruments that are employed to gather new facts are called as tools, which are of vital importance to the researcher, to collect information related to her research. The researcher may use any number of tools in combination depending on the purpose of the study. The selection of the tool can be done in two ways. The first one is to construct a tool independently by the researcher for her own study, or select a standard tool. Achievement motivation scale was prepared by the researcher keeping in mind the sports environment and sports event i.e., on 1) extent of interest in sports, 2) nature of practice of event 3) preferential treatment given to the sports compared to the academic learning 4) nature of attention paid to sports activities 5) self standards of practice 6) the industrious nature on the field of interested events 7) the way they face the
3.12. DATA COLLECTION PROCEDURE:

The source of data for this study was the responses made by the participants on the "Self Concept and Achievement Test" a standard tool developed by motivation scales. The researcher had taken prior appointment from the concerned secondary school Head Masters / Head Mistress. After a brief explanation about the purpose of the study, the survey questionnaire was distributed to the respondents with a request that the answered questionnaire be kept in the school office till the researcher collected them. The researcher made several trips to the schools in order to collect the responses.

3.13. STATISTICAL TECHNIQUES USED:

The present study used the following statistical techniques for data analysis.

Statistics is the body of Mathematical techniques or processes for gathering, describing, organizing and interpreting numerical data. Since, research often yields such quantitative data, statistics is a basic tool of measurement and research. The research worker who
uses statistics and statistical methods which are fundamental for the purposes of manipulation of data and analysis. Research in Education may deal with two types of statistical analysis of data.

1. Descriptive Statistical Analysis

2. Inferential Statistical Analysis

In this study, the investigation has been carried out by the Descriptive Statistical Analysis such as calculating measures of central tendency like Mean and calculating measures of dispersion like Standard deviation. For testing the null hypothesis (Significance of the difference between means) the t-test and Analysis of variance (ANOVA) has been used by the investigator.

3.14. LIMITATIONS OF THE STUDY:

The instrument used to gather data for this study was a standard tool developed by Dr. Lalitha Sharma, Prathibha Deo and Asha Mohan to find out “Self Concept and Achievement Motivation self constructed scale. Research based on this type of instrument, usually depends on the voluntary co-operation of the respondents, who may differ in their perceptions, concentration and their attitude towards the research. The study was limited to the assessment of Self-Concept and Achievement Motivation among Sports Girls in secondary schools.