CHAPTER III
RESEARCH DESIGN & METHODOLOGY OF THE STUDY
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3.1 Importance of Research Design:

“Research design is a mapping strategy. It is essentially a statement of the object of the enquiry and the strategies for collecting the evidences, analyzing the evidences and reporting the findings”.

Research design is a choice of an investigator about the components of the project and development of certain components of the design. Decision regarding what, where when, how much, by what means, concerning an inquiry or a research study constitute a research design. A research design is an arrangement of conditions for collection and analysis of data in a manner that aims to combine a relevance to the research purpose with an economy and procedure. In fact the research design is the conceptual structure within which research is conducted, it constitutes the blue print” for the collection, measurement and analysis of data. As such the design includes an outline of what the researcher will do from writing the Hypotheses and its operational implications to the final analysis of data.

The term ‘design’ means drawing an outline or planning or arranging details. It is a process of making decisions before the situation arises in which the decision has to be carried out.
Research design is planning a strategy of conducting research. It plans as to what is to be observed, how it is to be observed, when/where it is to be observed, why it is to be observed, how to record observations, how to analyze / interpret observations, and how to generalize. Research design is, thus, a detailed plan of how the goals of research will be achieved.

3.2 Research Method:

The heart of research is the methodology the research has used. Here the entire research work design, which was adopted, and the logic which was followed while collecting the data has been methodically presented.

TYPES OF EDUCATIONAL RESEARCH:

There are different methodologies for research and these can be used according to the nature of the study. Once the researcher has picked up a particular problem for study and has become thoroughly familiar with its possibilities through a careful bibliographical survey of the field represented, it is very much essential on the part of the researcher to determine what methods or techniques of collecting data are suitable or appropriate in solving the problems or in verifying the Hypotheses formulated.
The method of conducting research are as follows:

1. Historical Method.
2. Experimental Method.
4. Case Study Method.

In the present study the researcher has adopted Normative survey method. Normative survey Method is concerned with conditions or relationships that exist, practices that prevail, belief points of view or attitudes that are held, processes that are going on, effects that are being felt or trends that are developing. The normative survey method is most widely used method of research by the researchers.

3.3 Population:

A population refers to all those people with the characteristics which the researcher wants to study within the context of particular research problem, the researcher has selected population for present study consist of all the head of institutions of English, Marathi and Urdu Medium Schools of Aurangabad district.
3.4 Sampling:

Sampling is fundamental to all statistical methodology of behaviour and social research. Sampling is the part of the strategy of research.

According to W.G. Cocharn “In every branch of science we lack the resources, to study more than a fragment of the phenomena that might advance our knowledge”.

The researcher has selected stratified random sampling method of sampling because the stratified random sampling is a combination of both random sampling and purposive sampling. According to this method the researcher has subdivided the entire population into many categories or strata according to certain conditions.

The researcher has taken Aurangabad district as a population and from that selected only English, Marathi, and Urdu medium schools from nine tehsil as a sample.

To make it more accurate researcher selected a sample of 118 headmaster of high school from which 12 headmasters were from English medium, 12 headmaster from Marathi medium, 12 headmaster from Urdu medium of Aurangabad tehsil. Similarly researcher selected sample from remaining 8 tehsil, 7 headmaster from Khultabad tehsil, 8 Headmaster from Phulambri, 11 headmaster from Kannad tehsil, 11 headmaster from Sillod tehsil, 8 headmaster from Gangapur, & 7 headmaster from Soagoan and 19 headmaster from Vaijapur tehsil.
### TABLE-1 : Sample according to medium of instruction:

<table>
<thead>
<tr>
<th>ENGLISH MEDIUM</th>
<th>MARATHI MEDIUM</th>
<th>URDU MEDIUM</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBAN</td>
<td>RURAL</td>
<td>URBAN</td>
<td>RURAL</td>
</tr>
<tr>
<td>12</td>
<td>08</td>
<td>12</td>
<td>63</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL</td>
<td>20</td>
<td>75</td>
<td>23</td>
</tr>
</tbody>
</table>

### TABLE – 2- Sample according to Gender:

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>74</td>
<td>44</td>
<td>118</td>
</tr>
</tbody>
</table>

### TABLE-3- Sample according to Experience:

<table>
<thead>
<tr>
<th>Less Experience</th>
<th>More Experience</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>102</td>
<td>118</td>
</tr>
</tbody>
</table>

### 3.5 Tool used in the study:

A standardized tool “Managerial Creativity Scale” developed by Sangeeta Jain, Rajnish Jain And Upinder Dhar was used. The scale
comprises of 25 items or statements which are to be responded by the head of the institutions on five point rating scale.

3.6 Validity:

Besides face validity, as all items of the scale are related to the concerned concept, the scale has high content validity. It is evident from the assessment and ratings of the judges/experts that items of the scales are directly related to the concept of Managerial Creativity. In order to determine validity from the coefficient of reliability (Garrett, 1981), the reliability index was calculated. The later was found to be 0.909.

3.7 Reliability:

The reliability of the scale was determined by split-half reliability method. On a sample of 200 subjects, the reliability coefficient is 0.826.

3.8 Administration of the Test:

As per the manual of the test it was administered on the head of institutions of the high schools of English, Marathi, Urdu medium schools present in Aurangabad district. The researcher first got acquainted well with the test by going through test manual, which contained general instruction about the administration of the test. The test consist of 25 statement based on Managerial Creativity.
The researcher visited personally to different school and administered the test to the headmaster’s of high schools of English, Marathi and Urdu medium of nine tehsil. No time limit was given, however, most of them finish it about 30 minutes and many took longer time to finish. The respondent was instructed to read all the 25 statement carefully and mark their choice statement by putting sign of (X) or (√) on any five alternatives.

3.9 Scoring Technique:

All items in the Managerial Creativity Test were positive statements. Each item awarded the score of 5, 4, 3, 2, and 1 respectively from strongly agree to strongly disagree. The respondent was allowed to complete the test and then score of their Managerial Creativity was calculated.

According to the following norms the mean of scores of Managerial Creativity is interpreted.
### TABLE NO. 04 : Norms for Interpretation of Managerial Creativity Scores

<table>
<thead>
<tr>
<th>Range</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Range</td>
<td>86-103</td>
</tr>
<tr>
<td>High Range</td>
<td>104 and above</td>
</tr>
<tr>
<td>Low Range</td>
<td>85 and below</td>
</tr>
</tbody>
</table>

### 3.10 Method of Statistical Analysis:

Statistics is a scientific process of collection, classification, tabulation, presentation and analysis of data for the present study researcher employed statistic is as follow,

1. Measures of central Tendency (Mean).
3. To assess the significance difference between means Critical Ratio and t-value was used.