RESEARCH DESIGN AND METHODOLOGY OF STUDY

3.1 INTRODUCTION:-

A research design is an arrangement of conditions for collection and analysis of data in manner that aims to combine relevance to the research purpose with economy in procedure.

It was very much essential on the part of the researcher to determine appropriate method of research in solving the problems and in verifying the hypothesis formulated.

The researcher was very much careful about the wasteful expenditure of money, time as well as energy, and designing was the process of making decisions before the actual situation aroused.

The researcher anticipated before conducting the research inquiry, that she cannot hold all the decisions in her mind.

Therefore to overcome this difficulty, the researcher recorded her decisions by making use of certain relevant concepts, such a symbolic construction, termed as ‘Research Design.’ Research design made it possible for an overall evaluation of the total plan.

A Research-Design is thus an arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose
with economy in procedure. In fact the present research design is the conceptual structure within which the research is conducted. It constituted a sort conceptual structure within which the research is conducted. It constituted a sort of blue-print for the collection, measurement and analysis of data.

3.2 Important Features of the Research Design:-

This research design is characterized by adjectives like flexible, appropriate, efficient, economical, etc, these important features are as follows.

1. This research design minimized bias and maximized the reliability of the data collected and also analyse it.
2. This design yield maximum information and provided an opportunity for considering different aspects of a problem.
3. This design specified the sources and types of information relevant to the research problem.
4. This design brought about its own strategy in specifying which approach will used for gathering as well as analyzing the data.
5. This design included in its planning the proper time as well as appropriate cost and budget.
In this chapter, an attempt is made to present the design and plan of the study including hypothesis to be tested, sample design and the tool of data collection etc. keeping in view the aim of the project, design of the study was made to measure to investigate the academic Anxiety in Students of IX std. belonging to Urdu Medium & English Medium schools of Aurangabad city.

The researcher’s finding of the survey are very exact and precise, since the very nature and concept of anxiety is subjective. At the same time the researcher has no hesitation in stating that a sincere and honest attempt has been made to find out the measure to investigate the academic Anxiety in Students of IX std. belonging to Urdu Medium & English Medium school of Aurangabad city.

3.3 NEED FOR METHODOLOGICAL RESEARCH-DESIGN:-

Just as for better, economical and attractive construction of a building an architect needs a good design or plan in advance, so also in this study the researcher needed a research design or a plan in advance for data collection and analysis of the research project.

Simply, it can be stated that the research design was needed because it facilitated the smooth sailing of the various research operations, thereby making research as
efficient as possible yielding maximum information with the minimum of time effort and money.

Finally, it is stated that this research design helped the researcher to organize the ideas in such a way wherein it will be possible for the researcher to look for flaws and inadequacies, According to E.A. Schumrn Research design in not a highly specific plan to be followed without deviations, but rather a series of guide posts to keep one headed in the right direction.

3.4 SELECTION OF THE PROBLEM AND DEFINITION:-

The Problem selected for study was “To investigate the academic Anxiety in Students of IX std. belonging to Urdu Medium and English Medium School of Aurangabad city.”

The investigation wanted to know the level of academic of anxiety of IX std. students and went it investigation into the difference between the academic anxiety of Urdu and English Medium Students. If there academic anxiety them how far it was and upto what level further researcher want to differentiate any gender difference in the academic anxiety of Urdu and English Medium Students.

There was very possibility that many factors will affect the measurement of academic anxiety. Therefore
researcher used standard tool for the assessment of academic anxiety.

Further researcher delimited the students upto IX grade of 2 major medium of instruction i.e. Urdu and English instead of Marathwada region researcher took Aurangabad city. The factors like time limit and the money were also important for researcher to limit her study to the district of Aurangabad. Moreover the criteria of validity and reliability of the results was very importance and to undertake the area within limit i.e. Aurangabad city. Because of above said factors the researcher has limit her study to only 2 medium of instruction that is English and Urdu.

3.5 Nature of The Study:-

The nature of the research was to find out the academic anxiety among the students of English and Urdu medium and to find out the reason for their high or low anxiety further more the researcher also want compare the academics of Urdu and English medium students. The researcher also want to know the impact of teachers teaching on anxiety of students and to know the effect of social situations on the academic anxiety.

To draw the inferences the researcher applied various statistical measure such as mean, S.D. and critical ratio (C.R) therefore these statistical measure were very simple
in calculation but they are very effective to know the difference between various aspects undertaken.

3.6 EXPLANATION OF THE TERM:-

1) **Academic**: - Academic is a term which means relating to education.

2) **Anxiety**: - Dictionary meaning of Anxiety is a feeling of doubt and fear, or mental uneasiness. Psychologically Anxiety is a block to an activity. A person who suffers from anxiety may not be able to devote his full energy in the performance of a task.

3) **Urdu Medium Schools**: - The schools in which the medium of instruction is Urdu.

4) **English Medium Schools**: - The schools in which the medium of instruction is English.

5) **Aurangabad City**: - The area lying within the jurisdiction of Aurangabad Municipal Corporation in Aurangabad District.

3.7 OBJECTIVE OF THE STUDY:-

The objectives of the study are as follows:

1) To know the level of academic anxiety of the students.

2) To find out the reasons for their high or low anxiety.

3) To compare the anxiety of Urdu medium and English medium students.
4) To know the impact of teacher's teaching on anxiety of the students.
5) To know the effect of social situation on the academic anxiety.
6) To suggest ways and means for the teachers to cope with the students having high or low anxiety.

3.8 Hypotheses:-

The following hypotheses are framed for this study:
(1) Academic anxiety in the students of IX std is low.
(2) There is no significant difference between academic anxiety of boys and girls IX std of Aurangabad City.
(3) There is high anxiety in English medium students of IX std.
(4) There is no significant difference between academic anxiety of English medium boys and English medium girls of IX std.
(5) There is low anxiety in Urdu medium students of IX std.
(6) There is no significant difference between the academic anxiety of Urdu medium boys and Urdu medium girls of IX std.
(7) There is no significant difference between academic anxiety of English medium boys and Urdu medium boys of IX std.
There is no significant difference between the academic anxiety of English medium girls and Urdu medium girls of IX std.

3.9 Area of The Study:-

Choice of Aurangabad city for this research project was based on several reasons. Firstly it is the Dist. Headquarter of Marathwada region and at is one the Educational center of the state. It is easily accessible to the researcher.

Thus the mediums selected for the researcher was representative in all respects like Urdu and English and students of both gender.

3.10 Methodology of Research:-

Types of Educational Research:-

There are various methodologies for research and these methods can be used according to the nature of the study.

There is no absolute method by which research can be classified into mutually exclusive groups. But in practice, it is found that different researchers do fall into different types in terms of goals, search for data, interpretation, analysis and area of application. Attempting to classify the Educational Research into various types, poses a difficult
problem. However, to systematize a method of presentation some pattern or the other is definitely desirable.

In fact, all researcher involve an element of observation, description and analysis of what happens under certain circumstance. Generally, a rather three point analysis is used to bring about and particularly, all studies fall under one or a combination of the following types:

1) Historical Research
2) Descriptive Research or Survey Research
3) Experimental Research

Research had gone deep to study all the above methodologies of research, in brief say:

**Historical Research:**

Describes ‘WHAT WAS?” The process involves investigation, recording, analyzing and interpreting the events of the past for the purpose of discovering the past, understanding the present, and to a limited extent, in anticipating the future.

**Descriptive Research or Survey Research:**

Describe ‘WHAT IS?”, it involves the descriptive recording, analyzing and interpretation of conditions that exit. It also involves some type of comparison or contrast and attempts to discover relationship between existing non-manipulated variables.

**Experimental Research:**

Describes “WHAT WILL BE”? When certain variables are carefully controlled or manipulated. The
focus is on variable relationships. The researcher finally selected the Normative Survey Method for her studies.

**The Normative Survey Method:**

The term Normative implies the determination of normal or typical condition or practices. The term Normative-Survey is generally used for the type of research that one intends to consider here i.e. the research, which propose to ascertain what is normal or typical condition or practice at the present time. While historical studies discover, describe and interpret what existed in the past.

Normative Survey Method is concerned with conditions or relationships that exist, practices that prevail, beliefs, point 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 types of research is not peculiar to education or to other social sciences, but it is a significant mode of attack in any field of knowledge, where geographic distribution is involved, or where the objects of any class vary among themselves.

Normative-Survey Research is thus directed towards ascertaining the prevailing conditions. It seeks to answer the question, “What are the real facts with regard to the existing condition?”

The normative-Survey Method is also called as Descriptive Research. Normative or descriptive studies are
designed to determine the facts of current situations and thereby to clarify status. **John Best** has preferred to used terms “Descriptive Research” whereas the terms “Descriptive Survey Studies”. The compound adjective Normative-Survey is applied in order to suggest the two closely related aspects of study –‘survey’ and ‘normative’. The word ‘survey’ indicates the gathering of the data regarding the current conditions and the word normative is used because survey are frequently made for the purpose of ascertaining which is the normal or typical condition or practice.

**Importance of Normative Survey Method:-**

The researcher has selected Normative Survey Method because:

1) Normative Survey Method served as a stepping stone to more precise investigation.

2) As its most elementary stage, the survey was concerned with determining the immediate status of a given phenomenon.

3) Although the major purpose of Normative or Descriptive research in education to tell “What is”, many surveys do not go beyond a more description of the existing situation.

4) Normative type of survey was often carried out as preliminary step. Which is followed by research
employing more vigorous, controlled and objective methods.

5) It secured historical perspective through a series of cross-sectional pictures of similar conditions at different times.

6) Normative or Descriptive study served as a direct source of valuable knowledge concerning human behaviour.

7) It contributed to the advancement of knowledge in many ways. For example, by studying children of standard IX. The researcher obtained some picture of the academic Anxiety and its level male and female students.

8) Its purpose was to prepare a background for a constructive programme of educational research as also the removal of evil thinking.

9) It suggested the course of future development and gave pertinent data to the planning for the future. Normative Survey helped the researcher in planning various educational programmes.

3.11 SELECTION OF POPULATION:

The present study intended to obtain information about the academic Anxiety of IX grade condition in different media schools of Aurangabad city. To draw inferences about the research problem a well specified and identifiable group is required which will be selected on the
basis of some selected nature and this entire group is know as population or universe.

According to J.C. Aggarwal (1991) Population means aggregate or totally of objects Subjects or individuals regarding which inferences are to be made. The present attempt is to find out the academic Anxiety of IX class students. Here all the IX class students taken from different media schools of Aurangabad city were taken as population. As the researcher wanted to find out the academic Anxiety of children of English and Urdu Medium students and to compare the academic Anxiety in male and female students. There are about 40 secondary school of different media in Aurangabad city.

3.12 SAMPLING:-

One of the most important problem relating to the practical formulation of research is concerned with the estimation of characteristics of Universe or population and the method of selecting for study a portion of the Universe is know as sampling.

Population in this research was very large. There are near about 5000 students studying in standard 9th in English medium schools of Aurangabad city. Sampling was selected to some part of an aggregate on the basis of which a judgment or inference about the aggregate was made. There are about 40 secondary schools of different media in Aurangabad city.
**Need for sampling:-**

As it was difficult to the researcher to include all the students, therefore a small portion of the total population was taken as sample. The reasons for taking sample by the research was as follows.

1. Sampling can save time and money.
2. Sampling may enable more accurate measurements.
3. Sampling enables to estimate the sampling error and thus, assist in obtaining information concerning some characteristics of the population.

**Sample Size:-**

One way to increase the precision of a results in this study was to increase the size of the sample, therefore greater precision the larger but manageable size of the sample, the researcher emphasise on the degree of precision as an important factor rather than size.

The prime concern in the selection of the sample was to assure its representative ness. The sample used in this study was selected to make representation to the population.

The researcher after defining the population has also determined the size of the sample. Out of this population, about 1078 students of standard 9th were taken as ample from English and Urdu Medium schools. This sample size has been taken to increase the precision of results in this study.

**Sample Method:-**
Ballock (1960) categorized sampling methods into two:

1. Probability Sampling Methods
2. Non-Probability Sampling Methods

Probability sampling methods are those that clearly specify probability or likelihood of inclusion of each element or individual in the sample.

Major probability sampling methods are the following:

1. Simple Random Sampling
2. Stratified Random Sampling
3. Area or Cluster Sampling

Non-Probability sampling is one in which there is no way of assessing the probability of the elements or group of elements. Important techniques of non-probability sampling methods are follows:

1. Quota Sampling
2. Accidental Sampling
3. Judgement or Purposive Sampling
4. Systematic Sampling
5. Snowball Sampling
6. Saturation Sampling
7. Dense Sampling

After studying different methods of sampling the researcher has selected the stratified sampling for this research.

Stratified Sampling:-
The researcher has selected stratified method of sampling because the stratified 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.

Out of different media schools the researcher has selected only English and Urdu Medium Secondary schools, to get more appropriate comparative results.

3.13 VARIABLES:

Variables are the condition and characteristics that the experimenter manipulates, controls or observers. Variables are also referred to attributes, properties or characteristics which can change from one individual to another.

In this research project variable is the level of academic anxiety i.e. high and low variable.

3.14 TOOLS USED FOR DATA COLLECTION:

For collecting unknown data required for the study of any problem, it is necessary to adopt a systematic procedure and this can be done by using various devices, these devices, thus employed, are called as tools. There are different types of research tools and each of them utilizes in distinct ways of describing each quantifying the
obtained data. Some of the common tools are questionnaire, opinionnaire or attitude scale, interview, observation, content analysis, sociometry psychological test, etc.

To obtained the measure of the Anxiety of an individual or a group of individuals is necessarily done indirectly. Anxiety can be measured only on the basis of inferences drawn from verbal or written statements regarding Academic Anxiety.

**ANXIETY SCALE:**

Anxiety scale usually consists of large no of statements towards object. An anxiety scale is also sometimes termed as opinionnaire. The inquiry from the items to know to the end of anxiety of an individual is known as anxiety scale.

The present is Academic Anxiety Scale for Children (AASC), devised by Dr. A.K. Singh & Dr. A. Sen Gupta of Patna University.

The Academic Anxiety scale has been developed for use with school students of class VIII, IX, and X (age ranging from 13 to 16 years). The test consists of 20 item statements having ‘Yes’ and ‘No’ options. The test scale were available in English and Hindi. The investigator got the test translated into Urdu by experts who were having mastery over the language. This Urdu test was then circulated among the experts who knew both the language.
The scale was then administered on the selected sample of 1100 students of both the mediums i.e. Urdu and English.

**Reliability of the Test:-**

The reliability of the AASC test was computed through the two methods, that is, test-retest method and the split-half method. In order to compute the test-retest reliability, the test was administered twice on a sample of 100 pupils with 14 days gap. Subsequently, Pearson r was computed between the two sets of scores. The obtained Pearson r was 60 which was significant beyond o1 level. For the split half reliability of the test, it was administered on a fresh sample of one hundred. Subsequently, the test was splited by the odd-even method. The resulting odd-even correlation coefficient was 433 which after being corrected for full length, became 65.

**Validity of the Test:-**

The present test (AASC) has been validated against the Sinha-anxiety test. Neuroticism scale of MPI and CAAT. Former two tests are the measures of general anxiety and the latter intends to measure academic anxiety among school children.

**3.15 Administration of The Test:-**

As per the manual of the test it was administrated on the students of IX std of English and Urdu medium schools located in A’bad City. The researcher personally visited
each and every selected school, and administered the test to the students, before administration of the scale, the researcher got herself acquainted with the test by reading the test manual carefully. Which contained general instructions. There was no fixed time limit for the test, but ordinarily the pupil takes 10-15 minutes in completing the test. The test was conveniently administered to a group of 40-60 students at a time. Every student was a separate response sheet of Academic Anxiety Scale for children.

3.16 SCORING TECHNIQUE:-

The maximum possible score of the test was 20. in Academic Anxiety scale for children, each item of the test was scored as either +1 or 0. There are two types of items positive and negative. All positive items which were endorsed by the subjects as ‘Yes” and all negative items no 4, 9, 16, and 18 which were endorsed by the subjects as ‘No’ was given a score as +1. A score of zero was awarded to all other answers. Therefore, high score on the test indicated high academic anxiety and low score on the test indicated low academic anxiety.
3.17 Method of Statistical Analysis:-

Mean, S.D & T-test (Critical Ratio) are used for Statistical Analysis

List of Schools Selected For the Test:-
The following are the names of the schools of Aurangabad city where the test was administered:

English Medium Schools of Aurangabad City:-

1. Saint Francis De-sales High School, Jalna Road.
2. Little Flower High School, Cantonment.
4. BFCI English School, Himayat Bagh.
5. Burhani National English High School, City Chowk.
7. Model High School, Navkhand Palace.
8. Vidalankar English School, Himayat Bagh.
9. Sri GTB High School, Osmanpura.
10. Milind Multipurpose High School, Cantonment.
11. New Apostolic English School, Juna Bazar A’Bad.

Urdu English Medium Schools of Aurangabad City:-

1. Maulana Azad High School, Town Hall.
3. Zia-Ul-Uloom Girls High School, Buddi Lane.
5. Talat High School, Baroodgar Nala.
6. Iqra Urdu Girl’s High School, Kat Kat Gate.
9. Mustafa Night School, Roshan Gate.
10. Akbar Khan Urdu High School, Osmanpura.
12. Raziya Sultana Urdu School, Baijipura.

**Scoring for Anxiety:**

Qualitative Description of the obtained percentile Rank:

<table>
<thead>
<tr>
<th>Percentile Rank</th>
<th>Academic Anxiety Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentile 80 Above</td>
<td>17-20</td>
<td>Very Anxious</td>
</tr>
<tr>
<td>Percentile 60 to 79</td>
<td>13-16</td>
<td>Anxious /Above Average</td>
</tr>
<tr>
<td>Percentile 45 to 59</td>
<td>9-12</td>
<td>Average</td>
</tr>
<tr>
<td>Percentile 25 to 44</td>
<td>5-8</td>
<td>Less Anxious /Below Average</td>
</tr>
<tr>
<td>Percentile 24 and below</td>
<td>1-4</td>
<td>Very Less Anxious</td>
</tr>
</tbody>
</table>