Chapter - II

METHODOLOGY
Edward (1968) reflecting his view regarding research says that "in research we don't haphazardly make observation of any and all kinds, but rather our attention is directed towards those observations that we believe to be relevant to the questions we have previously formulated. The objective of research, as recognised by all sciences, is to use observation as a basis for answering questions of interest". Edward contended that every scientific investigation starts with the identification of problem and formulation of hypotheses before undertaking operative of research. In fact for testing hypotheses researcher has to carefully adopt appropriate research design, make the choice of standardized tests and tools, select sample through appropriate sampling technique and thereafter, to adopt sound procedures for collecting data and finally having tabulated the data, appropriate statistical treatments are given to the data for obtaining results.

The enumerated steps are inherent in all scientific study which enhance the objectivity of research endeavour. Therefore, the findings obtained through scientific procedure may be generalised to predict the relationship between the variables and also to predict cause - effect relationship of the observable and sometimes inferred entities or phenomenon present in the universe.

The present endeavour being an empirical investigation was aimed at studying organisational development as a function of OC and QWL - A comparative study of Hindu-Muslim entrepreneurs, therefore, following steps were taken for undertaking the task.
SAMPLE

A sample is a small group or a fraction of a population representing to the entire population. Mohsin (1984) contended that "sample is a small part of the total existing events, objects or the information". Kerlinger (1983) believed that sample is a portion of population or universe as to be the representative of that population or universe. Thus, sampling is a process for drawing a small portion of population representing to the entire population, selected for the observation. The purposive random sampling technique was used to select sample for the study. By making observations on the appropriate sample, it is possible to draw reliable inferences or make generalisation specially on the population as a whole from where the samples are drawn.

The problem of the present investigation had made us bound to only make a comparative study of Hindu-Muslim entrepreneurs, therefore, it was decided to conduct survey on powerloom entrepreneurs from Bhiwandi - a well known textile manufacturing city situated near Mumbai in Maharashtra state. Bhiwandi has a very long history of being a textile centre of India, where technology for textile manufacturing have been modernizing from handloom (Kargha) to the present installation of automatic looms passing through the phase of powerlooms. Similarly, there has always been change in the quality and the type of yarn used in manufacturing the textile products. In fact, competitions in the textile world have been forcing the entrepreneurs to bring changes - specially in technology, design and quality of product to meet the market demands and winning the consumers expectations.
The sample of the present study consist of \( N = 275 \) entrepreneurs comprising Hindu entrepreneurs \( (n = 130) \) and Muslim entrepreneurs \( (n = 145) \). The rationality behind this composition is that population of Bhiwandi is mixed and around 55% are Muslim entrepreneurs and 45% are Hindu entrepreneurs. The break of the sample is given in Table 2.1.

**Table 2.1**

<table>
<thead>
<tr>
<th>Sample Group</th>
<th>Number of Entrepreneurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muslims</td>
<td>145</td>
</tr>
<tr>
<td>Hindu</td>
<td>130</td>
</tr>
<tr>
<td>Total</td>
<td>275</td>
</tr>
</tbody>
</table>

And sample characteristics have been shown in Table 2.2.

**TOOLS USED**

In order to have a clear cut understanding of human behaviour, psychological tests are developed and used. As we know that human behaviour is very complex which vary because of the composition of the interaction of the complex outer environment with the complex psycho-physical make-up of the individual being. It is, indeed, true that psychological tests have the power to understand personality attributes and in predicting behaviour of an individual. The level of reliability in understanding human-being depends upon the fact that how much reliable and valid the psychological tool is.

There are different types of psychological tests, e.g., projective, questionnaire etc. The questionnaire method has been considered as the
most convenient and favourable instrument which have also been used in the present investigation. A questionnaire consist of number of statements/questions and the respondents are required to answer each statement/question according to the instruction given to the subjects. The description of the questionnaire/scales used in this study follow:

**Organisational Development Scale (OD Scale)**

Organisational development scale was developed by researchers. The scale consists of 26 items, based on 10 dimensions (Appendix-I). Item analyses of the scale which was done on the sample of N=250 justifies the efficacy of all the statements incorporated in the scale as the items correlation with the composite score ranges from $r = .19$ to $r = .69$ are found significant beyond .01 level (Appendix-II). These dimensions which have been the basis for measuring OD are:

1. Turnover (TO)
2. Employees Satisfaction (ES)
3. Employees Participation (EP)
4. Mutual Trust (MT)
5. Concern for Consumer Satisfaction (CCS)
6. Discipline in Organisation (DO)
7. Quality Control (QC)
8. Government Trade Policy (GP)
9. Political Uncertainties (PU)
10. Awareness Campaign Strategy (ACS)

All the statements given in the questionnaire are positively phrased, therefore, the scoring of the scale is very simple. Higher score on the scale
refers to very high or highly satisfactory OD whereas, low score refers to very low or highly unsatisfactory OD. The scale is found highly reliable as obtained value of Cronbach alpha .85 is substantially very high (Appendix-III).

**Organisational Change Scale (OC Scale)**

This scale was also developed for using in the present study. The scale comprises of 6 dimensions incorporating 21-items in all (Appendix-IV).

The dimensions concerned in the scale are as follow:

1. Technological Change (TC)
2. Human Aspect (HA)
3. Structural Change (SC)
4. Organisational Policy (OP)
5. Supervisory Style (SS)
6. Compensation System (CS)

The item analysis of the scale were made by obtaining correlation value of each individual item with the composite OC score which ranged from $r = .44$ to $r = .72$ were found significantly very high beyond .01 level (Appendix-V). The reliability of the scale was ascertained by obtaining the value of Cronbach alpha 0.91 which is highly significant even beyond .01 level that confirms the reliability of OC scale (Appendix-VI).

The respondents were required to rate each item of the questionnaire on a 5-point scale. All items were positively phrased where very high score denotes to high effort being taken for change and contrary to it low score refers to very low effort being undertaken for change.
Quality of Work Life Scale (QWL Scale)

For measuring entrepreneurs quality of work life the scale was also developed by the researchers. This scale has 20 items covering three dimensions which are given below:

1. Personal Factors (PF)
2. Organisational Factors (OF)
3. Environmental Factors (EF)

On this scale the respondents were required to rate each statement on a 5-point scale by giving a score of '1' when they felt highly dissatisfied with the conditions and the score of '5' when they felt highly satisfied with the conditions (Appendix-VII). Here, also like OD scale, summing up of the scores of each dimensions indicated entrepreneurs level of QWL with regard to each facet. Moreover, the summation of the total scores of the scale irrespective of dimensions indicate overall picture of the level of entrepreneurs QWL perception.

Item analyses correlation value of each item with the composite scores of QWL found to be ranging between $r = .37$ to $r = .71$ which were highly significant even beyond .01 level of confidence (Appendix-VIII). The reliability of the scale also found confirmed on the basis of obtained Cronbach alpha value = .89 which is highly significant (Appendix-IX).

Biographical Information Blank (BIB)

For recording background information of entrepreneurs - biographical information blank (BIB) was prepared that includes respondents age, sex, religion, marital status, number of dependents, name of the firm, total work experience, educational qualification, training received, general health, yearly turnover of last five consecutive years and percentage of profit (Appendix-X).
STATISTICAL ANALYSIS

Multiple regression analysis which is considered as a powerful statistical technique that allows to assess the relationship of several independent variables (IVs) simultaneously with one dependent variable (DV), was used to give statistical treatment to data. Multiple regression technique has three methods namely, multiple, hierarchial and stepwise. The difference between these methods involve the way variables enter the equation. The terms regression and correlation are used more or less interchangeably. The regression is generally used when the intent of analysis is for prediction, whereas, correlation is used when the intent is to measure degree of association.

The multiple regression analysis was used to establish a relationship, expressed via an equation, for predicting typical values of one criterion variable given the values of a set of predictor variables.

In this study stepwise method for isolating the predictors, was used. Using this method through computer SPSS package the first predictor variable entered in the equation on the basis of having highest partial correlation with the criterion variable. If the predictor variable passes the criterion, the second variable is selected on the basis of highest partial correlation. The process continues until no more useful information can be gleaned from further addition of variables. The main variable predicting dependent variable are confirmed by significant 't' value.

The proficiency of stepwise multiple regression analysis is found to be very high as it successfully isolated predictor variables that fulfilled the very objective of the present endeavour and ascertained to significance of the proposed null hypotheses.
Table 2.2

Sample Characteristics At A Glance

<table>
<thead>
<tr>
<th>Groups</th>
<th>Age (Year)</th>
<th>Total Work Experience (in Years)</th>
<th>Yearly Approximate Turnover (in Lacs)</th>
<th>Profit %age</th>
<th>No. of Dependents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td>Mean</td>
<td>Range</td>
<td>Mean</td>
<td>Range</td>
</tr>
<tr>
<td>Muslim Entrepreneurs</td>
<td>24-70</td>
<td>42.04</td>
<td>6-40</td>
<td>15.43</td>
<td>32-70</td>
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<td>1-6</td>
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<td></td>
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<td></td>
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<td></td>
<td>2-20</td>
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<tr>
<td>Hindu Entrepreneurs</td>
<td>28-68</td>
<td>43.37</td>
<td>7-38</td>
<td>16.55</td>
<td>35-79</td>
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<td></td>
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<td>1-5</td>
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<td>2-20</td>
</tr>
<tr>
<td>Total</td>
<td>24-70</td>
<td>42.67</td>
<td>6-40</td>
<td>15.96</td>
<td>32-79</td>
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