Methodology

Chapter Scheme

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3.2 Research Objectives
3.3 Statement of Hypotheses
3.4 Primary and Secondary Data
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3.1 Introduction

Definitions of Research

Acc to Rusk \(^{110}\) : “Research is a point of view, an attitude of inquiry or a frame of mind, it asks questions which have hitherto not been asked, and it seeks to answer them by following a fairly definite procedure. It is not a mere theorizing, but rather an attempt to elicit facts to face them once they have been assembled”. Research is likewise not an attempt to bolster up pre-conceived opinions, and it implies a readiness to accept the conclusions to which an inquiry leads, no matter how unwelcome they may prove. When successful, research adds to the scientific knowledge of the subject.

Acc to George. J. Mouly \(^{65}\) “He defines research as – The systematic and scholarly application of the scientific method interpreted in its broader sense, to the solution of social studies problems; conversely, any systematic study designed to promote the development of social studies as a science can be considered research”.

Acc to Francis G Cornell : “The best research is that which is reliable, verifiable and exhaustive, so that it provides information in which we have confidence. The main point here is that research is, literally speaking, a kind of human behavior, an activity in which people engage. By this definition all intelligent human behavior involves some research.” (Yogesh Kumar Singh, 2006). \(^{110}\)

Keeping in view the day to day increase in organizational stress for the employees and ignorance about coping strategies by individuals, the following topic was selected for the study : “A Study of Organizational Stress and HR Interventions for its Reduction”.
3.2. Research Objectives

1. To identify the causes of stress.
2. To study the industrial and professional work life and how it is affected by stress.
3. To identify the symptoms at early stage / detection of stress levels.
4. To identify factors which are directly responsible to create severe stress at the workplace.
5. To study whether there is any existence of auto built mechanism to overcome stress.
6. Suggestion of different techniques which are useful in stress reduction.
7. To identify whether the manufacturing or service sector faces more stress.
8. To study the role of HR Policies and Interventions for employees.
9. To give recommendations for a stress free organization.

3.3 Statement of Hypothesis

A hypothesis is a proposition made as a basis of reasoning without the assumption of its truth. Since it is a supposition, it can only be the starting point of an investigation based on known facts and a hypothesis has to be validated empirically. Every Hypothesis can thus be proved or disproved.

For the present study, the following hypotheses were formulated:

1. Employees have perception that industries do not intervene in stress reduction.
2. H.R Interventions can play vital role in Stress reduction.
3. Individual Strategies will facilitate Coping with stress.
4. There is existence of stress in the organization and hence there is poor quality of performance.

Scope and Limitations of the study

- Employees were selected from only the manufacturing and service industries.
- The study was limited to the city of Pune.
3.4 Primary and Secondary Data

Primary Data

This is data which is collected afresh and for the first time, and thus happens to be original in character. Primary data is first hand information collected through various methods such as observation, interviewing, mailing etc. Primary data is directly collected by the researcher from their original sources. The researcher can collect the required data precisely according to his research needs.

The primary data was collected through questionnaire method by distributing and collecting data from the executives and managers of various industries comprising of manufacturing and service sectors in Pune city. The researcher was proactive enough to spend some time with the respondents before the respondents actually filled up the questionnaire and could gather some information and reactions of the respondents which were very useful for the research as a whole.

Secondary data

These are sources containing data which have been collected and compiled for another purpose. It is data that already exist and do not have to be collected by the researcher. This is data which have already been collected by someone else and which have already passed through the statistical process. Other types of written information, such as company policies, procedures and rules can be obtained from the organization’s records and documents.

a. Secondary data:

This was collected from

i. Various articles which are published in journals, magazines, research papers published in research journals.

ii. Publications of renowned institutions who work on stress management, employee welfare and Holistic health.

iii. Web sites were also picked up as a major source to provide valuable and important data for research and literature review.
3.5 Research Design

1. Identifying the Problem

Deciding for a Research Proposal, Research Objectives and Hypotheses

2. Actual Experience of Stress (Observation, Listening)

3. Collection from Literature

4. A Designing Questionnaire

4 B. Conducting Pilot Survey on 20 people

5. Deciding Sample

6. Data Analysis of Pilot Survey

Results and Inferences

7. Final Design of Questionnaire

Approved

8. Implementation of Questionnaire

Actual Collection of Data

9. Data Tabulation and Classification

Using Ms Excel and SPSS-15 and 16 Version

10. Data Analysis Detailed Analysis

11. Results Descriptive Statistics & Inferential Statistics

12. Summary and Conclusions

13. Recommendations and Suggestions

14. THESIS REPORT
3.6 Questionnaire Design

The questionnaire used for the study was divided into four parts as follows:

Set 1A - Causes of Stress – Organizational,
   B- Causes of Stress – Personal

Set 2A - Consequences of Stress – Physical
   B- Consequences of Stress – Psychological
   C- Consequences of Stress – Behavioral

Set 3- Coping with Stress - Relaxation techniques, Yoga, Meditation, Recreation,

Set 4- A- Role of HR in Combating Stress - Counseling
   B- Role of HR in Combating Stress - Policies.

The questionnaire comprised of a total of 119 items/questions. The Likert scale was used to collect responses throughout. This ranged from 1 to 5, it had choices from (Strongly disagree =1, Disagree= 2, Neutral =3, Agree =4, Strongly Agree =5). Employees were given the choice to select their preferences and mark accordingly.

The detail of the questions asked under each set was as follows:

Set 1A- Causes of Stress – Organizational. This asked the respondents questions about causes of Stress (Organizational) in which the employees were asked to answer/ comment on twenty six statements, all of which were closed ended.

Set 1B- Causes of Stress – Personal which had sixteen statements which emphasized on personal / individual stress concentrating on knowing whether individuals suffered from stress and what situations they were in, and to what extent the organization is responsible etc.

Set- 2A- Consequences of Stress- Physical in which the employees were asked to answer/ comment on twelve statements. All the statements were again closed ended. Set- 2B- Consequences of Stress- Psychological which had eleven statements and Set-2C- Consequences of Stress- Behavioral which had ten statements. The intention was to
find out whether the employees were suffering from stress, and whether the stress level was taking a toll and other related illnesses and outcomes.

**Set-3- Coping with Stress – Relaxation, Yoga , Meditation , Recreation** which had fifteen statements and employees were asked to fill up the same. The researcher intended to find out whether stress coping is possible and which technique would be more useful and productive such as Yoga or Mediation or simply some relaxation techniques or whether the organization should provide some recreation making it available in the premises so that the environment itself is stress free.

**Set-4A- Role of HR in Combating Stress– Counseling.** This had twenty statements and employees were asked to fill up them as per the above mentioned Likert scale. The researcher intended to find how HR is intervening in employees health and well being, what is the level of HR as a mentor and facilitator, how HR can help reduce stress, what type of strategies are being implemented by the HR department etc.

**Set-4B- Role of HR in Combating Stress – Policies.** The questions under this were nine and the same scale was used to collect the data. Here the intention of researcher was to find out how the HR Policies were designed and whether they were accepted by employees, what is degree of acceptance and how HR can really create a stress free atmosphere.

**3.7 Reliability and Validity**

All social research involves measurement or observation. And, whenever we measure or observe we are concerned with whether we are measuring what we intend to measure or how our observations are influenced by the circumstances in which they are made. The content validity was tested by giving the questionnaire to three experts in the field of Organizational Behavior, Human Resource Management and Industrial Psychology and their feedback has been used to finalize the questionnaire.
As mentioned earlier, the questionnaire was divided into four parts Set-1, Set-2, Set-3 and Set-4. To test the reliability of the questionnaire Cronbach’s alpha test for all the sets of questionnaire was carried out.

**Reliability Statistics**

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s alpha based on Standardized items</th>
<th>N of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set 1-A Causes of Organizational Stress</td>
<td>.652</td>
<td>.634</td>
<td>26</td>
</tr>
<tr>
<td>Set1- B Causes of Stress – Personal</td>
<td>.937</td>
<td>.938</td>
<td>16</td>
</tr>
<tr>
<td>Set2- Consequences of stress – physical</td>
<td>.929</td>
<td>.931</td>
<td>12</td>
</tr>
<tr>
<td>Set2- Consequences of stress – psychological</td>
<td>.929</td>
<td>.930</td>
<td>11</td>
</tr>
<tr>
<td>Set2- Consequences of stress – Behavioral</td>
<td>.912</td>
<td>.912</td>
<td>10</td>
</tr>
<tr>
<td>Set3- Coping with Stress – Relaxation, Yoga, Meditation</td>
<td>.842</td>
<td>.852</td>
<td>15</td>
</tr>
<tr>
<td>Set4- Role of HR in combating Stress- Counseling</td>
<td>.944</td>
<td>.944</td>
<td>20</td>
</tr>
<tr>
<td>Set4- Role of HR in combating Stress- Policies</td>
<td>.906</td>
<td>.907</td>
<td>9</td>
</tr>
</tbody>
</table>

Hence the questionnaire which stood the test for internal validity of the questionnaire.

**3.8 Sampling**

All the items under consideration in any field of inquiry constitute a ‘universe or population’. The items selected constitute what is technically called a sample. The researcher must decide the way of selecting a sample or what is popularly known as the sample design. In other words a sample design is a definite plan determined before any data are actually collected for obtaining a sample from a given population.

**Simple random Sampling**

This type of sampling is also known as chance sampling or probability sampling where each and every item in the population has an equal chance of inclusion in the sample and each one of the possible samples, in case of infinite universe, has the same probability of being selected.
Stratified Sampling

If the population from which a sample is to be drawn does not constitute a homogeneous group, then stratified sampling technique is applied so as to obtain a representative sample. In this technique the population is stratified into a number of non overlapping sub populations or strata and sample items are selected from each stratum. If the items selected from each stratum is based on simple random sampling the entire procedure, first and then simple random sampling is known as stratified random sampling.

All the industries were selected on random basis in Pune city. The total executives who were part of the strata were 120, out of which some executives and managers did not give valid responses, hence only 100 were considered for the research. The executives and managers were from the manufacturing and service sectors. The details of the two types of industries are as follows:

**List of Industries:**

<table>
<thead>
<tr>
<th>No.</th>
<th>Manufacturing</th>
<th>No.</th>
<th>Service Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bharat Forge Ltd</td>
<td>1</td>
<td>AXA Business solutions ltd</td>
</tr>
<tr>
<td>2</td>
<td>Jubilant Organosys</td>
<td>2</td>
<td>Cognizant Technologies Ltd</td>
</tr>
<tr>
<td>3</td>
<td>Lumax Ltd</td>
<td>3</td>
<td>Cybage Software</td>
</tr>
<tr>
<td>4</td>
<td>Mercedez Benz India Ltd</td>
<td>4</td>
<td>Du Pont</td>
</tr>
<tr>
<td>5</td>
<td>Praj Industries Ltd, Pune</td>
<td>5</td>
<td>Geometric Solutions</td>
</tr>
<tr>
<td>6</td>
<td>Suzlon Energy</td>
<td>6</td>
<td>Hotel Industry</td>
</tr>
<tr>
<td>7</td>
<td>Minda Ltd</td>
<td>7</td>
<td>Indian oil Corporation ltd</td>
</tr>
<tr>
<td>8</td>
<td>TVS</td>
<td>8</td>
<td>IT Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>Quick Heal Technologies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>Suzlon Energy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
<td>Symantec</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>TCS, Pune</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13</td>
<td>Wipro Technologies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
<td>Xed Intellect</td>
</tr>
</tbody>
</table>
Thus, executives and managers from a total of 8 manufacturing and 14 service sector industries have participated in the research.

### The Demographics of Sample

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>42</td>
<td>11</td>
<td>53</td>
</tr>
<tr>
<td>Service Sector</td>
<td>32</td>
<td>15</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>26</td>
<td>100</td>
</tr>
<tr>
<td>Age in Years</td>
<td>22 min</td>
<td>22 min</td>
<td></td>
</tr>
<tr>
<td></td>
<td>55 Max</td>
<td>42 Max</td>
<td></td>
</tr>
</tbody>
</table>

#### 3.9 Statistical Tools used for Data Analysis

The method used for data analysis was Microsoft excel using Windows XP version for sorting of data, sequential data arrangement, listing of industries, sorting the list of male and female categories separately. After entering the data for descriptive data analysis, the researcher used an advanced package for more professional approach for data analysis i.e SPSS package 15 version where data was entered for selection of variables and their correlates.

For testing hypothesis Spearman’s rank correlation coefficient was applied. It was taken as the most appropriate tool for analysis between the concerned variables for statistical testing.