CHAPTER – 4
RESEARCH METHODOLOGY

After having discussed review of work done by various researchers on employee engagement and its impact on employee retention in the previous chapter, this chapter attempts to describe the Research Process of the study, scope of the study, objectives of the study, hypotheses, the universe of the study, sampling plan, collection of the data, analysis of data and finally review of the work already done on the related aspects of the subject is discussed. This chapter has discussed the research approach adopted in the present study. The chapter is presented under the following heads:-

4.1 INTRODUCTION OF RESEARCH

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, research is an art of scientific investigation. The Advanced Learner’s Dictionary of Current English lays down the meaning of research as “a careful investigation or inquiry especially through search for new facts in any branch of knowledge.” Redman and Mory define research as a “systematized effort to gain new knowledge.” Some people consider research as a movement, a movement from the known to the unknown. It is actually a voyage of discovery. We all possess the vital instinct of inquisitiveness for, when the unknown confronts us, we wonder and our inquisitiveness makes us probe and attain full and fuller understanding of the unknown. This inquisitiveness is the mother of all knowledge and the method, which man employs for obtaining the knowledge of whatever the unknown, can be termed as research.

4.1.1 OBJECTIVES OF RESEARCH

The purpose of research is to discover answers to questions through the application of scientific procedures. The main aim of research is to find out the truth which is hidden and which has not been discovered as yet. Though each research study has its own specific purpose, we may think of research objectives as falling into a number of following broad groupings:
1. To gain familiarity with a phenomenon or to achieve new insights into it (studies with this object in view are termed as exploratory or formulative research studies);

2. To portray accurately the characteristics of a particular individual, situation or a group (studies with this object in view are known as descriptive research studies);

3. To determine the frequency with which something occurs or with which it is associated with something else (studies with this object in view are known as diagnostic research studies);

4. To test a hypothesis of a causal relationship between variables (such studies are known as hypothesis-testing research studies).

4.1.2 TYPES OF RESEARCH

The basic types of research are as follows:

(i) Descriptive vs. Analytical

Descriptive research includes surveys and fact-finding enquiries of different kinds. The major purpose of descriptive research is description of the state of affairs as it exists at present. In social science and business research we quite often use the term Ex post facto research for descriptive research studies. The main characteristic of this method is that the researcher has no control over the variables; he can only report what has happened or what is happening. Most ex post facto research projects are used for descriptive studies in which the researcher seeks to measure such items as, for example, frequency of shopping, preferences of people, or similar data. Ex post facto studies also include attempts by researchers to discover causes even when they cannot control the variables. The methods of research utilized in descriptive research are survey methods of all kinds, including comparative and correlational methods. In analytical research, on the other hand, the researcher has to use facts or information already available, and analyze these to make a critical evaluation of the material.

(ii) Applied vs. Fundamental: Research can either be applied (or action) research or fundamental (to basic or pure) research. Applied research aims at finding a solution for an immediate problem facing a society or an
industrial/business organisation, whereas fundamental research is mainly concerned with generalisations and with the formulation of a theory. “Gathering knowledge for knowledge’s sake is termed ‘pure’ or ‘basic’ research.” Research concerning some natural phenomenon or relating to pure mathematics are examples of fundamental research. Similarly, research studies, concerning human behaviour carried on with a view to make generalisations about human behaviour, are also examples of fundamental research, but research aimed at certain conclusions (say, a solution) facing a concrete social or business problem is an example of applied research. Research to identify social, economic or political trends that may affect a particular institution or the copy research (research to find out whether certain communications will be read and understood) or the marketing research or evaluation research are examples of applied research. Thus, the central aim of applied research is to discover a solution for some pressing practical problem, whereas basic research is directed towards finding information that has a broad base of applications and thus, adds to the already existing organized body of scientific knowledge.

(iii) Quantitative vs. Qualitative:
Quantitative research is based on the measurement of quantity or amount. It is applicable to phenomena that can be expressed in terms of quantity. Qualitative research, on the other hand, is concerned with qualitative phenomenon, i.e., phenomena relating to or involving quality or kind. For instance, when we are interested in investigating the reasons for human behaviour (i.e., why people think or do certain things), we quite often talk of ‘Motivation Research’, an important type of qualitative research. This type of research aims at discovering the underlying motives and desires, using in depth interviews for the purpose. Other techniques of such research are word association tests, sentence completion tests, story completion tests and similar other projective techniques. Attitude or opinion research i.e., research designed to find out how people feel or what they think about a particular subject or institution is also qualitative research. Qualitative research is especially important in the behavioural sciences where the aim is to discover the underlying motives of human
behaviour. Through such research we can analyze the various factors which motivate people to behave in a particular manner or which make people like or dislike a particular thing. It may be stated, however, that to apply qualitative research in practice is relatively a difficult job and therefore, while doing such research, one should seek guidance from experimental psychologists.

(iv) Conceptual vs. Empirical

Conceptual research is that related to some abstract idea(s) or theory. It is generally used by philosophers and thinkers to develop new concepts or to reinterpret existing ones. On the other hand, empirical research relies on experience or observation alone, often without due regard for system and theory. It is data-based research, coming up with conclusions which are capable of being verified by observation or experiment. We can also call it as experimental type of research. In such a research it is necessary to get at facts firsthand, at their source, and actively to go about doing certain things to stimulate the production of desired information. In such a research, the researcher must first provide himself with a working hypothesis or guess as to the probable results. He then works to get enough facts (data) to prove or disprove his hypothesis. He then sets up experimental designs which he thinks will manipulate the persons or the materials concerned so as to bring forth the desired information. Such research is thus characterized by the experimenter’s control over the variables under study and his deliberate manipulation of one of them to study its effects. Empirical research is appropriate when proof is sought that certain variables affect other variables in some way. Evidence gathered through experiments or empirical studies is today considered to be the most powerful support possible for a given hypothesis.

(v) Some Other Types of Research:

All other types of research are variations of one or more of the above stated approaches, based on either the purpose of research, or the time required to accomplish research, on the environment in which research is done, or on the basis of some other similar factor. Form the point of view
of time, we can think of research either as one-time research or longitudinal research. In the former case the research is confined to a single time-period, whereas in the latter case the research is carried on over several time-periods. Research can be field-setting research or laboratory research or simulation research, depending upon the environment in which it is to be carried out. Research can as well be understood as clinical or diagnostic research. Such research follow case-study methods or in depth approaches to reach the basic causal relations. Such studies usually go deep into the causes of things or events that interest us, using very small samples and very deep probing data gathering devices. The research may be exploratory or it may be formalized. The objective of exploratory research is the development of hypotheses rather than their testing, whereas formalized research studies are those with substantial structure and with specific hypotheses to be tested. Historical research is that which utilizes historical sources like documents, remains, etc. to study events or ideas of the past, including the philosophy of persons and groups at any remote point of time. Research can also be classified as conclusion-oriented and decision-oriented. While doing conclusion oriented research, a researcher is free to pick up a problem, redesign the enquiry as he proceeds and is prepared to conceptualize as he wishes. Decision-oriented research is always for the need of a decision maker and the researcher in this case is not free to embark upon research according to his own inclination. Operations research is an example of decision oriented research since it is a scientific method of providing executive departments with a quantitative basis for decisions regarding operations under their control.

4.2 PRESumptive ANALYSIS OF THE PROBLEM

The very basic for any research work is the occurrence of any problem, and in order to find a solution for the noticed problem a new research is done. The challenge today is not just retaining talented people, but fully engaging them, capturing their minds and hearts at each stage of their work lives. Employee engagement has emerged as a critical driver of business success in today’s competitive marketplace. Further, employee engagement can be a
deciding factor in organizational success. Not only does engagement have the potential to significantly affect employee retention, productivity and loyalty, it is also a key link to customer satisfaction, company reputation and overall stakeholder value. Thus, to gain a competitive edge, organizations are turning to HR to set the agenda for employee engagement and commitment. Employee engagement is defined as “the extent to which employees commit to something or someone in their organization, how hard they work and how long they stay as a result of that commitment.” Research shows that the connection between an employee’s job and organizational strategy, including understanding how important the job is to the firm’s success, is the most important driver of employee engagement. In fact, employees with the highest levels of commitment perform 20% better and are 87% less likely to leave the organization, which indicates that engagement is linked to organizational performance. This thesis concerns an investigation on impact of employee engagement on employee retention in service sector.

4.3 OBJECTIVES:

The study is a descriptive research aimed at assessing the impact of employee engagement on employee retention. To achieve this purpose the following objectives must be achieved.

1. To study the job satisfaction among employees in an organization.
2. To assess the level of employee commitment towards an organization.
3. To study the welfare and health policies in an organization.
4. To study the retention policies of an organization and suggest the ways to improve it
5. To study the gender differences related to engagement program.
6. To study the motivational practices of an organization.

4.4 MAJOR HYPOTHESES:

The study proposes to test following hypotheses:

1. Employee engagement program has positive effect on retention of employees in an organization
2. There is no significant impact of motivation on employee engagement
4.5 IMPORTANCE OF THE STUDY

It is the need of the hour that, Organizations should increasingly convert from traditionalism to the contemporary learning and individualized corporations. With growing opportunity and greater flow of information, employees today want to be in the best workplaces handling the best suited responsibilities and enjoy greater autonomy. Therefore, engaging the employees to the work as per their competency level must occupy the centre stage not only for the HR department but also for the immediate bosses. The extent that an employee believes in the mission, purpose and values of an organization and demonstrates that commitment through their actions and their attitude towards the employer (both internal & external) will determine the employee satisfaction towards his/her work. Employee engagement is high when the statements and conversations held reflect a natural enthusiasm for the company, its employees and the products or services provided. Employee engagement is the level of commitment and involvement an employee has towards their organization and its values. An engaged employee is aware of business context, and works with colleagues to improve performance within the job for the benefit of the organization. So it all projects the importance of the employee engagement in ensuring employee retention.

4.6 SCOPE OF THE STUDY

Employee engagement means to be psychologically as well as physically present when occupying and performing an organizational role. Engaged employees work with passion and feel a profound connection to their company. They drive innovation and move the organization forward. In contrast to this, not-engaged employees are sleepwalking their workday, putting time but not energy or passion into their work. They don’t have productive relationships with their managers or with their co-workers. Actively disengaged employees aren’t just unhappy at work; they are busy acting out their unhappiness. Every day, these workers undermine what their engaged co-workers accomplish.

The study includes the identification of existing status of employee engagement and employee commitment. It also covers the study of welfare & health policies and motivational practices. The study is confined to service
organizations of Udaipur. There is a great scope to extent the study to whole corporate field for better inferences and this study can be used as a secondary source for the studies. It can be used as a base study for further research on growth, expansion and modernization.

4.7 RESEARCH DESIGN

A research design is purely and simply the framework of the plan for a study that given the collection and analysis of data. The function of the research design into ensures that the required data are collected accurately and economically. Descriptive research design was adopted for this study because the study is concerned with describing level of employee engagement and employee retention.

4.8 SAMPLING

The Universe of the study consists of all the service organizations of the Udaipur city. 120 employees of banking & education sector were taken into the sample by using purposive sampling method.

4.9 SOURCES OF INFORMATION

The study conducted with the primary, secondary and other qualitative inputs that identify effectiveness of employee engagement in employee retention. Research has to rely hereby on the field survey techniques, i.e. questioners, interviews and observations as well as published and unpublished reports & records, journals, periodicals, newspapers and magazine to collect primary and secondary data. Information regarding sources is given below in detail:

4.9.1 Primary sources of information
4.9.2 Secondary sources of information

4.9.1 Primary Sources

The primary information has been gathered from employees’ of the service companies. The employees of the companies include operational, supervisory and managerial level employees. A well structured questionnaire was administered to collect the information about the impact of employee engagement on employee retention.
4.9.2 Secondary sources-

Adequate secondary sources have been searched for the study. The secondary sources of information have been gathered from the following:
A. Annual reports of various industries
B. Journal, magazines, newspapers
C. Books written by eminent authors on training and development.
D. The secondary data about the company profile and other details were collected from the company web site.

4.10 TECHNIQUES OF GATHERING INFORMATION

The survey has been conducted with the help of questionnaire specially designed for the study. The questionnaire contains two parts i.e. Part A and Part B. The part A of the questionnaire contains personal information of the respondents. It includes questions on age, gender, position level, income, education etc because they have individual influence on the study. Part B of the questionnaire contains questions seeking opinion or responses from the employees in order to evaluate effectiveness of employee engagement on employees’ retention.

The questionnaire was administrated on employees of all categories i.e. Operational, supervisory and managerial level of employees to gather information. The major part A of the questionnaire was based on nominal scale, in some case a simple dichotomous scale was also used. In part B 5-point likert scale starting from strongly agree to strongly disagree has been used to ask the employees about the impact of employee engagement on employee retention.

A pilot study has also been conducted for improving the questionnaire and sample design. Final shape to the questionnaire was given after pre-testing on 30 samples for ensuring the validity of the data. Researchers commonly use the cronbach’s alpha coefficient for establishing scale reliability. The cronbach’s alpha coefficient is an indicator of internal consistency of the scale. A value of cronbach’s alpha above 0.60 can be used as a reasonable test of scale reliability. In pilot testing the questionnaire was filled by 30 respondents and reliability results for questionnaire are presented as follow
Case Processing Summary

<table>
<thead>
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<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valid</td>
<td>30</td>
<td>100.0</td>
</tr>
<tr>
<td>Excluded</td>
<td>0</td>
<td>.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
</tr>
</tbody>
</table>

a. List wise deletion based on all variables in the procedure.

Reliability Statistics

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Number of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing status of employee engagement</td>
<td>17</td>
<td>0.919</td>
</tr>
<tr>
<td>Satisfaction with HRM practices</td>
<td>18</td>
<td>0.895</td>
</tr>
<tr>
<td>Opinion about Employee retention practices</td>
<td>15</td>
<td>0.765</td>
</tr>
<tr>
<td>Opinion about Employee commitment</td>
<td>07</td>
<td>0.651</td>
</tr>
<tr>
<td>Opinion about welfare &amp; health policies</td>
<td>07</td>
<td>0.612</td>
</tr>
<tr>
<td>Opinion about motivational practices</td>
<td>08</td>
<td>0.724</td>
</tr>
</tbody>
</table>

Results shows that the values of the Cronbach’s alpha ranges from 0.612 to 0.919. As suggested by previous researchers that an acceptable level of reliability for psychometric test is starts from 0.60. This indicates a good internal consistency of the items in the scale.

4.11 ANALYSIS OF DATA

These primary data so gathered has been tabulated analyzed and interpreted with the help of appropriate analytical methods. Editing was done for having complete, accurate and consistent data. After this, the data was coded numerically so that groups could be made with similar characteristics. Once the data had been checked, they were arranged in a form that enabled it to be analyzed. Quantifiable data from the questionnaires was coded into the Statistical Package for Social Sciences (SPSS 21.0) for analysis. SPSS 21.0 was selected because it was considered to be user-friendly. Statistical techniques were then employed to analyze the data collected from the survey.
Both descriptive and inferential statistics were used as tools of evaluation in the data analysis. The sample frequency was used to make statistical inferences about views of respondents. The data was analyzed using different methods i.e. Mean, standard deviation, trend analysis, t-test etc. Chi square and ANOVA tests were used to test the hypotheses. A brief discussion on the statistical techniques chosen for this research and the rationale behind them is presented below.

### 4.11.1 Mean relevance rating

The mean is utilized as a measure of central tendency. A high mean relevance rating would mean that the factor under consideration is important. The mean of the n numbers $x_1, x_2, ..., x_n$ is

$$X = \frac{(x_1 + x_2 + ... + x_n)}{n}$$

### 4.11.2 Standard deviation

The standard deviation is defined as a measure of variability that indicates how much all the values in a distribution typically deviate or varies from the mean. Standard deviation is computed by taking the square root of the variance, that is, the mean of the squared differences between the value of each case in the distribution and the value of the mean. It provides information on the dispersion or spread of values around the mean in the sample. The standard deviation of a set of n numbers, $x_1, x_2, x_n$, with mean $\bar{X}$ is given by $S$, where

$$S = \sqrt{\frac{\sum_{k=1}^{n} (x_k - \bar{X})^2}{n}}$$

Where

- $x_k =$ the value of each response,
- $\bar{X} =$ the sample mean,
- $n =$ the sample size.
4.11.3 Student’s t-test

In order to study the difference between the employee engagement on the basis of gender, Independent Sample t-test was applied. The Independent Samples t Test is a parametric test which compares the means of two independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. All the hypotheses were tested using Independent Sample t-test assuming unequal variance at 5% level of significance (2 tailed). The Independent Samples t-Test is computed using the following steps the following formula:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

Where,

$\bar{X}_1$ = Mean of first sample

$\bar{X}_2$ = Mean of second sample

$N_1$ = Sample size of first sample

$N_2$ = Sample size of second sample

$\sigma_1$ = Standard deviation of first sample

$\sigma_2$ = Standard deviation of second sample

State Decision Rule & Conclude: The calculated value of t statistic (t) is then compared with the critical t value from the t distribution table at 5% level of significance (2 tailed) with the calculated degrees of freedom. The t-critical is a number that represents the size of the mean difference required for the alpha level selected. The decision rule for Independent Sample t Test is stated below:

- If $|t_{\text{statistic}}| \geq |t_{\text{critical}}|$, then reject the null hypothesis and accept the alternate hypothesis.
• If the \(|t_{\text{statistic}}| < |t_{\text{critical}}|\), then accept the null hypothesis.

The value of t statistic \(t\) can be both positive and negative. Therefore absolute values are used while comparison.

4.11.4 ANOVA (F-Test)

Analysis of variance (ANOVA) is a collection of statistical models used to analyze the differences among group means and their associated procedures (such as "variation" among and between groups), developed by statistician and evolutionary biologist Ronald Fisher. In the ANOVA setting, the observed variance in a particular variable is partitioned into components attributable to different sources of variation. In its simplest form, ANOVA provides a statistical test of whether or not the means of several groups are equal, and therefore generalizes the \(t\)-test to more than two groups. ANOVAs are useful for comparing (testing) three or more means (groups or variables) for statistical significance. It is conceptually similar to multiple two-sample t-tests, but is less conservative (results in less type I error) and is therefore suited to a wide range of practical problems.

The one-way ANOVA compares the means between the groups you are interested in and determines whether any of those means are significantly different from each other. Specifically, it tests the null hypothesis:

\[ H_0: \mu_1 = \mu_2 = \mu_3 = \cdots = \mu_k \]

4.11.5 Chi-square test

The chi-square was performed to determine the association between employee engagement & employee motivation. To test the hypothesis following formula is applied

\[ \chi^2 = \sum \frac{(O_i - E_i)^2}{E_i} \]

Where:

- \(O_i\) = Observed Frequency
- \(E_i\) = Expected frequency
REFERENCES


2. KOTHARI, C.R. “Research Methodology –“Methods and techniques” Wishwa Prakashan, New Delhi, 1997, p.18