Chapter-4

Research Methodology
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Research Methodology

4.1. Introduction.

This chapter discusses the methods used in carrying out the present study. A fieldwork has been undertaken to establish contact with the hotels. The next step was to identify the research questions and identify the context of the study. This is followed by preliminary data gathering through review of literature. The researcher followed the conventional methods like Secondary Sources and Primary Sources of data collection. The secondary data has been collected through a comprehensive literature review (discussed in Chapter-3) of the cost of employee turnover, reasons for employees to stay on the job, reasons for employees to leave the job, employee preferred monetary benefits and non-monetary benefits, and employee preferred retention strategies. An in-depth literature review gave the researcher an insight into various empirical and theoretical researches that have been carried out in the fields of the above aspects. The generation of hypotheses and defining the variables was the next step. This is followed by developing the questionnaire and conducting reliability of the instrument through a preliminary study. The next step involves conducting the workplace survey and interviews. The next step was data analysis and interpretation, followed by the discussion on findings and arriving at the conclusion. The last stage was suggestions and recommendations.

Ghauri and Gronhaug (2005) in their book, “Research Methods in Business Studies: a practical guide”, describe research methodology as “a systematic, focused and orderly collection of data for the purpose of obtaining information from them, to solve or answer a particular research problem or question”.
Research issues such as the design, population, sample, sampling procedure, research questionnaire, and statistical analysis are presented.

4.2. Research Design

Mouton and Prozesky (2005), in their book, “The Participatory Research Paradigm”, stated that a research design is “a plan or a blue print of how a researcher intends to conduct a study”. This involves plans for data collection, the instrument for gathering information, how information gathered would be processed and analysed to give meaning to a research finding.

Research design can be quantitative or qualitative. The present study used the quantitative research design mainly and also interview techniques were used wherever required.

Shaughnessy and Zechmeister (1997), in their book, “Research methods in psychology”, locate the main difference between quantitative and qualitative researches in the procedure rather than quality. Ghauri and Gronhaug (2005) view quantitative research as an efficient way to represent information and meanings. He further noted that in quantitative research, analyses are conducted through the use of diagrams and statistics unlike in qualitative research which uses conceptualisation. He also asserts that a quantitative research design is more scientific than a qualitative research design. The choice of a quantitative research design for this study was informed by its primary strengths because, as stated by Blanche et al. (2006) in their book, “Research in practice” that “the findings are generaliseable and the data are objective”.

4.3. Research Strategy

The survey research strategy was used for the present study. Ghauri and Gronhaug (2005) refer to surveys as a method of data collection that utilizes questionnaires or interview
techniques for recording the verbal behaviour of respondents. Mouton and Prozesky (2005) also describe survey research strategy as involving the administration of questionnaire to a sample of respondents selected from some population. The survey is an effective tool to get opinions, attitudes and descriptions as well as getting cause-and-effect relationships. Ghauri and Gronhaug (2005) describe surveys and questionnaires as among the most popular data collection methods in business and social science research. Surveys are chiefly used in studies that have individual people as the units of analysis.

The present study used the survey strategy in order to study the Cost of employee turnover based on Position Level of Employees, Performance Level of Employees and Critical Level of Employees of Five Star Hotels in Karnataka.

The present study also used the survey strategy in to compare the gap between the reasons stated by employees to stay on the job and the reasons to stay on the job by employees perceived by the Heads of the departments, the reasons stated by employees to leave the job and the reasons to leave the job by employees perceived by the Heads of the Departments, order to study the Monetary Benefits and Non-Monetary Benefits preferred by the employees, to study the retention strategies preferred by the employees of Five Star Hotels in Karnataka.

4.4. Target Population

A research population according to Ghauri and Gronhaug (2005) relate to the total universe of units from which the sample is to be selected. Since Bangalore has the maximum number of Five Star Hotels, the study was conducted in Bangalore, though the title of the study states Karnataka as the place of study. The study was conducted on managerial level, supervisory
level, and lower level employees belonging to the Food and Beverage Production, Food and Beverage Service, Front Office, Housekeeping and Others (Sales and Marketing department, HR, Engineering & Maintenance, Security, Accounts, Purchase, Stores, etc) of the Five Star Hotels in Bangalore. The present study has taken into account 9 Five Star Hotels out of the 13 Five Star Hotels which are in operation prior to 2009 and completed more than two years of operation in Bangalore. The hotels are coded alphabetically and for identity reasons the names of these hotels are not disclosed in the report as per the request by the management of these hotels and the promise made by the researcher to them in this regard. The total employee strength of these 9 hotels is 3010 comprising of 426 managerial level employees, 631 supervisory level employees and 1953 lower level employees. Of these around 30% - 37% employees belong to other departments which includes Sales and Marketing department, HR, Engineering & Maintenance, Security, Accounts, Purchase, Stores, etc.

4.4.1. Sample Frame

Sample frame, according to Mouton and Prozesky (2005) is the actual list from which the final people are selected. This is the specific list of all members of the population from which the sample will be ultimately selected. The organisations surveyed for this study consisted of 9 Five Star Hotels in Bangalore with an employee number of 3010 comprising of 426 managerial level employees, 631 supervisory level employees and 1953 lower level employees.

4.5. Sample

Bless and Higson-Smith (2000) in their book, “Fundamentals of social research methods: An African Perspective”, defines a sample as “a sub-set of a population which must have properties which make it representative of the whole”. Similarly, Bryman and Bell (2003) in
their book, “Business research methods”, refer to samples as the population that is selected for investigation. Samples involve collecting information from a portion of the larger group, and on this basis, infer something about the larger group (population). A representative sample is crucial to quantitative research and must reflect the population accurately so that inferences can be drawn. Shaughnessy and Zechmeister (1997) argue that the ability to generalise from a sample of the population depends critically on the representativeness of the sample; otherwise, the sample becomes biased. Mouton and Prozesky (2005) describe a sampling bias to mean that those selected are not typical or representative of the larger population they have been chosen from. This could be as a result of overrepresentation of some segment of the population or the exclusion or underrepresentation of a significant segment. Shaughnessy and Zechmeister (1997) contend that a sample will be representative of the population from which it is selected if the aggregate characteristics of the sample closely approximate those same aggregate characteristics in the population.

4.5.1 Sample Size

The main concern in sampling is representativeness. Another concern mentioned by Blanche et al. (2006) is the sample size. The sample should be large enough to allow inferences to be made about the population. A very small random sample, Blanche et al. (2006) note may be quite unrepresentative, and the same is true for a large non random sample. Sample size is determined in part by practical constraints such as the number of the population, finance and the time available. Struwig and Stead (2001) in their book, “Planning, designing & reporting research”, provide some factors that should be taken into consideration when deciding on a sample size:
The basic characteristics of the population

A small sample will be sufficiently representative in a homogenous population. In such a case, a sample of one respondent would be enough to measure the characteristics of others. Conversely, a large sample will be required in a heterogeneous population. The researcher should therefore enlarge the sample in a heterogeneous population and contend with a small sample size where the population has the same characteristics.

Objective(s) of the research

The objective(s) of the research play(s) a role in deciding the sample size that produces the right quality and quantity of information needed. Thus, in drawing a sample, the researcher must ensure that the characteristics of the population are well represented in order to make meaningful inferences.

Data analysis, credibility, time and financial constraints

Time and financial constraints often limit the sample size to a manageable proportion even though a larger size is recommended. Struwig and Stead (2001) suggest a sample size of 150 – 200 regardless of the study population provided a correct and reliable sampling procedure has been followed. This also allows for a meaningful statistical analysis.

Non – response factor

This, according to Bryman and Bell (2003) occurs whenever some members of the sample refuse to cooperate, cannot be contacted or cannot supply the required data. When the non – response rate is high, it is recommended that a larger sample size be used.

Statistical precision

Research designs that are less concerned with statistical accuracy (e. g. qualitative, interpretative, exploratory etc) typically do not draw large or random samples. However, the
right size of the sample must be amenable to mathematical calculation especially in the case of random sampling techniques.

- Sample size on the basis of judgment

Previous researches provide a researcher with an empirical and comparative benchmark upon which the researcher can base his/her judgments. The sample size previously used by a researcher can serve as a guide as to the sample size that will be adequate for the purpose of a research.

Stratified sampling ensures that at least one observation is picked from each of the strata, even if probability of it being selected is far less than 1. Hence the statistical properties of the population may not be preserved if there are thin strata. A rule of thumb that is used to ensure this is that the population should consist of no more than six strata, but depending on special cases the rule can change - for example if there are 100 strata each with 1 million observations, it is perfectly fine to do a 10% stratified sampling on them. (Wikipedia)

The sample size of the present study consists of 450 employees of managerial, supervisory and lower levels from Food and Beverage Production, Food and Beverage Service, Front Office, Housekeeping and Others (Sales & Marketing, HR, Engineering and Maintenance, Security, Accounts, Purchase, Stores, etc.), and 54 Heads of the departments of 9 Five Star Hotels in Bangalore. The sample size was determined by the researcher using stratified random sampling method. The following table shows the sample size of the present study.
Cost of Employee Turnover - A Study Based on Various Levels of Employees of Five Star Hotels in Karnataka

<table>
<thead>
<tr>
<th>Department</th>
<th>Managerial Level</th>
<th>Supervisory Level</th>
<th>Lower Level</th>
<th>Head of the Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food &amp; Beverage Production</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Food &amp; Beverage Service</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Housekeeping</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Front Office</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Others (Sales &amp; Marketing, etc.)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Human Resource</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10</td>
<td>10</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL FOR NINE HOTELS</td>
<td>90</td>
<td>90</td>
<td>270</td>
<td>54</td>
</tr>
</tbody>
</table>

Table 4.1 - Department-Wise Position Level Employees Sample for the Study from each Hotel

4.6. Sampling Error

Errors are always associated with using sample properties to estimate population parameters. A repeated random sample of the same population size may likely to give a somewhat different sample. A sampling error is therefore defined by Bryman and Bell (2003) as “the difference between a sample and the population from which it is selected even though a probability sample has been selected”. Mugo (2007), in his book, “Sampling in research”, identifies the two types of sampling errors as non – sampling and sampling errors. Non – sampling errors occur when respondents give different interpretations to questions, definitional difficulties and inability of respondents to remember information on the subject matter. A sampling error on the other hand occurs when estimates are derived from the sample rather than the population. Samples are selected by chance and any member of the population has the chance of being selected. Samples would therefore never be the same and would always produce some degree of differences even when the same questionnaire and instructions are given, the results would still be different. Sampling errors cannot be completely eliminated but can be minimised by researcher.
4.7. Sampling Procedure

Sampling procedure according to Blanche et al. (2006) refers to the process of selecting elements to be observed. Ghauri and Gronhaug (2005) broadly divide sampling procedure into probability and non–probability sampling. Probability sampling is a sample that has been selected using random selection so that each unit in the population has a known chance of being selected for the sample. That is, each element in the sampling frame has an equal and independent chance of being selected for the sample. The aim of probability sampling is to keep sampling error to a minimum. This aspect of probability sampling procedure permits statistical inferences. Blanche et al. (2006) give examples of probability sampling to include systematic sampling, stratified sampling, cluster and simple random samplings. In systematic sampling, Blanche et al. (2006) note that after a random start, the \( n \)th element is selected and thereafter, every other \( n \)th element is systematically selected on the list to be included in the sample (sampling interval). The list can be a register of all employees of an organisation. For example, the sampling interval of a sample of 1000 out of a sample frame of 10000 is calculated as \(-\frac{10000}{1000} = 10\). Therefore, after selecting the first element randomly, every other 10th element is selected until a sample of 1000 is achieved. Struwig and Stead (2001) give one of the disadvantages of this method to include a situation where a faulty member appears after a certain interval; this can lead to a defective sample. The method is however easy to understand and apply but a complete sampling frame is required and this may be costly to obtain especially in a geographically dispersed population.

Stratified sampling involves dividing a population into a mutually exclusive and exhaustive subset whereby a simple random sample of units is chosen independently from each subset (Ghauri & Gronhaug, 2005). The advantage of stratified sampling is that every part of the
population (i.e. every stratum) gets a better representation. There is a smaller sampling variation which means that more stable results in repeated samples would be obtained as against using simple random sampling. Cluster sampling is mostly used when a large population is involved and a sampling frame is not available. The population in cluster sampling (Ghauri & Gronhaug, 2005) is divided into mutually exclusive subsets and then a random sample of the subsets is selected. The major advantage of cluster sampling is that a complete frame of the sampling unit is not required as in simple random sampling thereby minimizing costs. However, the method can yield poor precision if there is large variation between clusters in the variables to be examined.

Blanche et al. (2006) define non – probability sampling as “any kind of sampling where the selection of elements is not determined by the statistical principle of randomness”. Examples of non random sampling include convenience, purposive and snowball sampling. In convenience sampling, the researcher uses volunteers who are willing and available to participate in the research. This is most useful in a homogeneous population. This method is economical and does not require the population list. The main disadvantage is that variability and bias of estimates cannot be measured or controlled. In purposive sampling, dependence is not only on availability and willingness to participate, but on cases that are typical of the population are selected. This process of gradually accumulating a sufficiently large sample through contacts and references is described by Blanche et al. (2006) as snowball sampling. The advantages of purposive and snowball sampling methods is that they are economical and do not require a list of the population.
The present study used the probability sampling procedure using stratified random sampling method because of its merit that every part of the population (i.e. every stratum) gets a better representation.

4.8. Data Collection

Data collection is the process of gathering relevant information about the subject from research participants. According to Martins, Loubster and Van Wyk (1999), in their book, “Marketing Research: A South African Approach”, the data gathering process may vary from relatively simple observation at a specific location to an extensive survey of large corporations across the world. Various methods used in data gathering, especially in the social sciences and business include questionnaires, interviews, focus group discussions and observation of participants (www.answers.yahoo.com). Each of the methods of data collection has its own, unique advantages and disadvantages. Some of the advantages of the questionnaire method include cost efficiency, easy administration and easy analysis especially in a quantitative study. The present study used the questionnaire method of data collection because of its numerous advantages and its ability to yield the most satisfactory range of reliable data.

In order to ascertain the cost of employee turnover at various levels of employment, the researcher wanted to provide weightage to these levels. For this purpose the researcher conducted separate personal interviews with the HR managers of all the hotels to find out the weightage range they would assign to the various position levels, performance levels and critical levels of employment. From the discussions had with HR managers the researcher derived the following weightage for the various levels of employment (Table 4.2).
Cost of Employee Turnover - A Study Based on Various Levels of Employees of Five Star Hotels in Karnataka

<table>
<thead>
<tr>
<th>Employee Classification</th>
<th>Levels of Employment</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Position Level</strong></td>
<td>Lower Level Employees</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Supervisory Level Employees</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Managerial Level Employees</td>
<td>4</td>
</tr>
<tr>
<td><strong>Performance Level</strong></td>
<td>Low Performing Employees</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Medium Performing Employees</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>High Performing Employees</td>
<td>4</td>
</tr>
<tr>
<td><strong>Critical Level</strong></td>
<td>Low Critical Employees</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Medium Critical Employees</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Highly Critical Employees</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 4.2- Weightage of Employees based on Levels of Employment

4.8.1 The Research Questionnaire

Vogt (1993) cited in Blanche et al. (2006) defines a questionnaire as “a group of written questions used to gather information from respondents” and it is regarded as one of the most common tools for gathering data in the social sciences and business. According to Struwig and Stead (2001) questions asked in questionnaires come from a review of available literature on the subject matter and interviewing people. Ghauri and Gronhaug (2005) suggest that the questions and design of the questionnaire should be adapted to the educational levels and background of the respondents.

A questionnaire has its advantages and shortcomings. Answers international (www.answers.yahoo.com) states that questionnaires are easier to administer thereby making it possible to reach a large population. Questionnaires are also easy to analyse especially in quantitative studies. A researcher is able to design questionnaires in a way that will simplify analysis (e.g. Likert scale format, open or closed ended format, multiple choice and others). A poor return rate can negatively affect the findings of the research. Open ended questions may generate a large volume of data that can take a long time to process and analyse.
4.8.2 Description of the Research Questionnaire

The questionnaire for the current study has been designed after reviewing various existing models of questionnaire of related research like, David A. DeCenzo, Stephen P. Robbins (2007), in the book, “Fundamentals of Human Resource Management”, & Adrian Mackay (2007), in the Trade Series “Recruiting, Retaining and Releasing People-Management redeployment, return, retirement and redundancy”. In the present study to collect data from the respondents two questionnaires were prepared, (1) Hotel Profile questionnaire which tries to collect the financial and cost information about the hotel and employee turnover and (2) Hotel Employee Profile questionnaire seeking information from the employees and heads of the departments. The employee profile questionnaire was divided into two sections. Section A sought demographic information from respondents. Section B comprised questions that enabled respondents to state the reasons for staying in their present job (16 items), reason to leave their present job (16 items), employee preferred retention strategies (11 items) and employee preferred monetary benefits (25 items) and non-monetary benefits (32 items). The respondents were asked to rate these items on a modified version of Likert scale of 1 to 7. A normal Likert’s scale is modified to seven point scale as this would reduce the time taken by each respondent to complete the questionnaire (Ryder and Southey, 1990).

4.8.3. Dependant Variables and Scale of Measurement

- **Reasons to Stay on job (16 items) were measured as follows**: 1 is Not Very Highly Important, 2 is Not Highly Important, 3 is Not That Important, 4 is Neutral, 5 is Somewhat Important, 6 is Highly Important, 7 is Very Highly Important.
• **Reasons to leave the job (16 items) were measured as follows** - 1 is Not Very Highly Important, 2 is Not Highly Important, 3 is Not That Important, 4 is Neutral, 5 is Somewhat Important, 6 is Highly Important, 7 is Very Highly Important.

• **Monetary benefits (25 items) and non-monetary benefits (32 items) were measured as follows** - 1 is Not Very Highly Preferred, 2 is Not Highly Preferred, 3 is Not That Preferred, 4 is Neutral, 5 is Somewhat Preferred, 6 is Highly Preferred, 7 is Very Highly Preferred.

• **Preferred retention strategies (11 items) were measured as follows** - 1 is Not Very Highly Preferred, 2 is Not Highly Preferred, 3 is Not That Preferred, 4 is Neutral, 5 is Somewhat Preferred, 6 is Highly Preferred, 7 is Very Highly Preferred.

The questions were short and simple to understand in line with the recommendations of Blanche *et al.* (2006) that a short and simple questionnaire is preferred because it yields a high response rate.

**4.8.4. Reliability of the Questionnaire**

Reliability of the questionnaire is measured through reliability co-efficient. The reliability of the scales used in the study was measured using Cronbach’s alpha. Cronbach Alpha is a test of the consistency of responses to all the items in a measure. It is a widely used measure of reliability (*Sekaran, 1992*), in his book *“Research methods for business”*.

In this study the Cronbach Alpha value for the instrument was calculated using SPSS. The Cronbach Alpha value for the questionnaire was as follows:
### Reliability Test- Cronbach’s alpha results

<table>
<thead>
<tr>
<th>Responses on</th>
<th>No. of Items</th>
<th>Cronbach’sAlpha(α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position Level Based Cost of Turnover of Employees</td>
<td>3 items</td>
<td>0.8571</td>
</tr>
<tr>
<td>Performance Level Based Cost of Turnover of Employees</td>
<td>3 items</td>
<td>0.8619</td>
</tr>
<tr>
<td>Critical Level Based Cost of Turnover of Employees</td>
<td>3 items</td>
<td>0.8188</td>
</tr>
<tr>
<td>Employee Preferred Monetary Benefits</td>
<td>25 items</td>
<td>0.9502</td>
</tr>
<tr>
<td>Employee Preferred Non-Monetary Benefits</td>
<td>32 items</td>
<td>0.9586</td>
</tr>
<tr>
<td>Reasons stated by employees to stay on the job</td>
<td>16 items</td>
<td>0.8912</td>
</tr>
<tr>
<td>Employee reasons to stay on the job perceived by Heads of Departments</td>
<td>16 items</td>
<td>0.8458</td>
</tr>
<tr>
<td>Reasons stated by employees to leave the job</td>
<td>16 items</td>
<td>0.8909</td>
</tr>
<tr>
<td>Employee reasons to leave the job perceived by Heads of Departments</td>
<td>16 items</td>
<td>0.8759</td>
</tr>
<tr>
<td>Retention Strategies Preferred by Employees</td>
<td>11 items</td>
<td>0.8441</td>
</tr>
</tbody>
</table>

**Table 4.3 – Reliability Co-efficients as per Cronbach Alpha test**

George and Mallery (2003) provide the following rules of thumb: “\( \_ > .9 \) – Excellent, \( \_ > .8 \) – Good, \( \_ > .7 \) – Acceptable, \( \_ > .6 \) – Questionable, \( \_ > .5 \) – Poor, and \( \_ < .5 \) – Unacceptable”, hence the alpha values derived for questionnaire of this study was considered highly reliable.

**4.8.5. Administration of the Questionnaire**

Different methods of administering questionnaires are open to a researcher. According to Shaughnessy and Zechmeister (1997) questionnaires can be administered through postal mail, telephone interviews, internet or self–administered. Whatever method the researcher uses places a responsibility on the researcher who bears the costs of getting the questionnaires across to the respondents. Each of these methods also has its strengths and weaknesses. For example, Shaughnessy and Zechmeister (1997) give some of the disadvantages of the postal mail to include a low response rate because some respondents may be too busy or not interested enough in the study to return a completed questionnaire. The questionnaire must be completely self explanatory because the respondent may not be able to seek clarifications from the researcher. As a result of response bias, the typical return rate estimated by Shaughnessy and Zechmeister (1997) is only 30%. Costs of postage can also be a problem to
the researcher. In telephone administration, a possible selection bias exists as respondents are limited to those who have a telephone. Apart from this, there is a limit to how long respondents are willing to stay on the phone and respondents may respond differently when they are talking to a faceless interviewer. There is also the problem of costs especially for a student researcher. The Self administered questionnaire which is the most popular amongst student researchers, requires the respondent to be literate. It also requires some form of reasoning as the researcher may not be available to make clarifications when respondents are responding to the questionnaires (www.ukmi/nhs.uk). However, self – administered questionnaires are known to have a high return rate since the researcher, in some instances, personally distributes the questionnaire to respondents. In some instances also, the researcher can distribute the questionnaires through a responsible unit of the organisation (e.g. the human resources department). In either of the cases, the researcher or the HR employee can follow up constantly to make sure respondents return the questionnaires.

The computer assisted electronic method of administering questionnaire is fast becoming popular among researchers. The major setback of this method is a response bias as respondents will be limited to people who have access to computers and are computer literate. Internet facilities are available mainly in urban areas and many people who have access to internet facilities may not want to spend their money responding to questionnaires more especially when there are no direct benefits to be derived. The method is however fast and anonymity of respondent is better assured. This encourages respondents to be as honest as possible when responding to the questions. Internet method enables the researcher to collect information from any part of the world within a short time and limited costs (www.ukmi/nhs.uk).
The questionnaires in this study were self–administered. The researcher, with the help of employees from the HR departments of the hotels randomly administered the Employee Profile questionnaires to employees. The researcher explained all questions on the questionnaire to the HR employees who in turn explained them to the respondents. Several follow–up telephone calls were made by the researcher to the HR employees who assisted in administering the questionnaires. In order to collect the financial and costing information related to the employee turnover, a Hotel Profile questionnaire was administered to the HR Manager of all the 9 hotels. All the 9 hotels returned the duly filled in questionnaires by the HR department. A total of 450 questionnaires 54 questionnaires were administered to employees and Heads of the Departments of the 9 Five Star Hotels in Bangalore respectively. A total of 371 (response rate of 82.44%) and 51 (response rate of 94.4 %) completed valid questionnaires were returned by employees and heads of the departments of these 9 Five Star Hotels respectively. The response rate of 82.44% and 94.4% achieved in the present study is adequate in line with the 30% estimated response rate recommended by Shaughnessy and Zechmeister (1997).

4.9. Statistical analysis

The main objective of data analysis, according to Blanche et al. (2006) is to transform information (data) into a meaningful form in order to answer the original research question(s). Data analysis procedure can be divided into two: quantitative and qualitative techniques. Qualitative data analysis uses subjective judgment based on non-quantifiable information like the intuition of the researcher. On the other hand, quantitative data analysis relies exclusively on the analysis of numerical or quantifiable data (www.answers.com). Blanche et al. (2006) stated that a quantitative data analysis transforms data statistically to help the researcher to
describe the data more succinctly and make conclusions about the characteristics of populations on the basis of data from samples. A quantitative data analysis technique was used for the present study since the research design was quantitative.

The Statistical Package for Social Sciences (SPSS) and MS Office Excel were used in analysing the data of the current study.

- Data Analysis has been done using the basic parametric tools such as **percentage, Mean, Standard Deviation, Co-efficient of Variation, Co-efficient of Correlation**, etc.

- In order to test the hypothesis that there is no significant difference in the cost of employee turnover based on the Position Level, performance level and critical level of employees of Five Star Hotels in Karnataka an **F-test using ANOVA** has been undertaken. A **Post Hoc Test** using Tukey’s **HSD** (Honestly Significant Difference) has been done for multiple comparisons wherever needed.

- Similarly, to test the hypothesis that there is no significant difference between the reasons stated by employees to stay on the job and the reasons for employees to stay on the job perceived by the Heads of the Departments of Five Star Hotels in Karnataka, an **F-test using Levene's method and a t-test for equality of means** have been done.

- So also, to test the hypothesis that there is no significant difference between the reasons stated by employees to leave the job and the reasons stated by employees to leave the job perceived by the Heads of the Departments of Five Star Hotels in Karnataka, an **F-test using Levene's method and a t-test for equality of means** have been done.
• The **Chi-square test** has been done to test hypothesis that there is no significant difference in the monetary benefits and non-monetary benefits preferred by the employees.

• Similarly **Chi-square test** has been done to test the hypothesis that there is no significant difference in the retention strategies preferred by the employees of Five Star Hotels in Karnataka.

• **Factor Analysis** has been done to analyse the principal components in relation to the monetary benefits and non-monetary benefits preferred and retention strategies preferred by employees of Five Star Hotels in Karnataka. The suitability of the data for Factor Analysis was assessed using **Kaiser Meyer Olkin Measure of sampling adequacy (KM)** and **Bartlett’s Test of Sphericity** to test the null hypothesis that the variables in the population correlation matrix are uncorrelated.

### 4.10. Summary

The present chapter discussed the methodology used in answering the main research question and testing research hypotheses. A quantitative research design was used and the research strategy was also discussed. The reliability of the questionnaire, sample procedure and tools of data analysis was discussed.