CHAPTER-IV

OBJECTIVES AND RESEARCH METHODOLOGY

4.1 INTRODUCTION

This chapter discusses and describes the objectives of the study and research methods used in collecting data and how the data were analyzed. It describes the research design employed, target population, sample size, sampling procedure, research instruments, data collection procedures and data analysis. Kothari (2004) defines that the research is an original contribution to the existing stock of knowledge making for its development. The systematic approach concerning generalizations and formulation of a theory is also research. As such the term ‘research’ refers to the systematic method consisting of enunciating the problem, formulating a hypothesis, collecting the data, analyzing the facts and reaching certain conclusions either in the form of solutions(s) towards the concerned problem or in certain generation for some theoretical formulation.

4.2 OBJECTIVES OF THE STUDY

- To analyses the causes of absenteeism among the employees of higher educational organizational in Uttarakhand.
- To understand the organizational environment and its impact on employee absenteeism.
- To study relationship between the factors of absenteeism and employee performance in higher educational organizations of Uttarakhand.
- To study the measures undertaken by organizations of higher educational institutes to control absenteeism.
- To draw conclusions and suggestion on the basis of study.

4.3 Hypothesis for this Study

Hypothesis is a predictive assumption about the certain characteristics of a population and which is capable of being tested on the basis of the observation. According to Bailey (1978) Hypothesis is a proposition in testable form and predicts a particular relationship between two or more variables. If a researcher thinks that a relationship exists, he should first state it as a hypothesis and then test the hypothesis in the field.
There are two types of hypothesis:

I. Null Hypothesis

Null hypothesis is the negative statement of a working hypothesis and it attempts to nullify the differences between two samples means. That means, according to null hypothesis there is no relationship between dependent and independent variable. The symbol \( H_0 \) is used to represent the null hypothesis.

II. Alternative Hypothesis

The alternative hypothesis is the researchers believe to be true or what researchers are trying to prove is true. An alternative hypothesis is considered be alternative or opposite of the null hypothesis. The symbol \( H_1 \) is used to represent the alternative hypothesis.

Following are the hypotheses to be tested which are based on the objectives of this study.

**Hypothesis No 1**

\( H_0: \) There is no significant relationship between organizational environment and absenteeism.

\( H_1: \) There is significant relationship between organizational environment and absenteeism.

**Hypothesis No 2**

\( H_0: \) There is no significant relationship between absenteeism and employees performance in higher educational institutes.

\( H_1: \) There is significant relationship between absenteeism and employees performance in higher educational institutes.

**Hypothesis No 3**

\( H_0: \) Absenteeism does not differ significantly across different demographic profiles of employees.

\( H_1: \) Absenteeism differs significantly across different demographic profiles of employees.

**Hypothesis No 4**

\( H_0: \) Important measures undertaken by organization have no significant impact on employees absenteeism
H1: Important measures undertaken by organization have significant impact on employees absenteeism

4.4 Statement of the Problem
As we enter the 21st century, work complexity has become an essential concern of most of the organizations. In the present information age, the greatest assets of most companies are now on its composition of work force. Faculty member in an academic organization is essential for the organizational momentum. In spite of the various incentives and control mechanism opted by the management to check the absenteeism among the faculty, rate of absenteeism is high. In this context it has become essential to investigate the various issue related to the nature of absenteeism, amount of absenteeism and control mechanism to manage absenteeism. With this in mind, the present research work to bring out the underlying reasons and solutions to the problem of absenteeism among the employee engaged with higher educational organization.

4.5 Research Design
This study was a case study which was specifically conducted in some selected higher educational organization in Uttarakhand. Both qualitative and quantitative methods were used in the data collection process and analysis. Analysis of qualitative data involved arranging material in themes and making explanations while quantitative data involved analyzing the statistics and expressing the data in numerical terms.

4.6 Target Population
The study population consisted of employees associated with university and institutes of higher educational organizations in Uttarakhand. It targeted all employees including academic as well as administrative staff engaged with higher educational organization. The Target population consist of both academic and administrative staff associated with higher educational’ organizations in Uttarakhand.

4.7 Study Sample
The study sample was made up of employees of Private Sector University, Government University, and institutes of higher educational organization. Samples include 150 teachers’ from government universities as well as colleges and 350 from private universities and colleges of Uttarakhand.
4.8 Sampling Frame
Basically, a sampling frame is a complete list of all the members of the population that the researcher wishes to study. In the present study, we wish to study the employees’ absenteeism and its different outcome. The list of academician and administrative staff was taken out from the main office of the various universities and colleges and frame was prepared. From the list of these names, appropriate number of representatives of the population sample was selected and taken for the research.

4.9 Sample size
Sample size is the number of employees chosen for the study from the total population of employees associated with different educational organization. The number of employees had chosen among whom questionnaire was distributed in educational organization such as government and private university and colleges Total 500 respondents from different university and colleges was taken (150 government university and 350 employees from private university and colleges were chosen conveniently.

4.10 Sampling technique
Sampling is a very important issue in research as the respondents chosen have a significant impact on the results. The sample is the subset of people to whom the questionnaire is administered.

Sampling means selecting units (e.g., events, people, groups, settings, artifacts) in a manner that maximizes the researcher’s ability to answer research questions that are forthcoming in a study.

Sampling techniques is the method by which the researcher chooses samples from the total population. The categorization of the sampling is also important. In this particular study, researcher has selected sample of selected respondents from government university and colleges in Dehradun, Rishikesh, Haridwar, Uttarkashi, Nainital and Srinagar. Similarly some private university and colleges located at Dehradun, Rishikesh Haridwar, Srinagar, Uttarkashi and Nainital were selected. This is done in order to analyze the nature of absenteeism and its outcome. Non probability sampling techniques specifically convenient and justified sampling method was used to select appropriate sample from the population.
<table>
<thead>
<tr>
<th>S.no</th>
<th>Geographical area</th>
<th>Name of institutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dehradun</td>
<td>Doon University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Uttaranchal University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Graphic Era University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Uttarakhand Technical University (UTU)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IMS Unison University (IUU)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dehradun Institute Of Technology University (DITU)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>University Of Petroleum Energy Studies (UPES)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Himgiri Zee University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dayanand Anglo Vedic Post Graduate College (DAVPG)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mahadevi Institute Of Technology (MIT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shri Guru Ram Rai Institute Of Technology &amp; Science (SGRRITS)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JB Institute Of Technology (JBIT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shivalik College of Engineering &amp; Technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dev Bhoomi Institute Of Technology (DBIT)</td>
</tr>
<tr>
<td>2</td>
<td>Rishikesh</td>
<td>Pandit Lalit Mohan PG Degree College</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Doon Institute Of Engineering Technology (DIET)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Modern Institute Of Technology (MIT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Omkaranand Institute Of Management &amp; Technology (OIMT)</td>
</tr>
<tr>
<td>3</td>
<td>Haridwar</td>
<td>Devsanskriti University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gurukul Kangri University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>College Of Engineering Roorkee (COER)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quantum University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phoenix Institute of Engineering and Technology</td>
</tr>
<tr>
<td>4</td>
<td>Uttarkashi</td>
<td>Ram Chandra Uniyal Government PG College</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nehru Institute of Mountaineering</td>
</tr>
</tbody>
</table>
4.11 Research Instruments

The instruments used were; Questionnaires, Focus Group Discussions, Interview schedule etc. The focus group member include the selected academician and administrative staff associated with the educational institutes of Dehradun area. Well structured questionnaire was developed on the basis of past studies contributed by the researchers on the similar topic. As the study is related to the absenteeism among the faculties of higher educational institution, the work of the researchers like Natividad Crespo, Maria Teresa Palomo, Mariano Méndez (2012), Ashhan Alyuldza İbrahim HayriKuğuoğlub (2010), D Naughton - (2005), Dr. B. S. Gupta(2012), Komoni Isaac Musyoki (2015), KD Scott(1991), NK Basiru - (2013), Z Pehlivan (2011), P McKenzie (2014) were referred for preparing the questionnaire.

4.12 Data Collection

Questionnaires were the main research instruments used to collect quantitative data. These were given to academicians and administrative staff. They were personally administered by the researcher so that she could clarify any queries raised and get back the filled ones the same day. Face to face interviews were held with teaching and non-teaching staff of selected higher educational sectors. Some of the responses were collected on-line through google docs by sending questionnaire to the respondents from the address received from the respective organizations. The researcher personally conducted these interviews to ensure that information was obtained first hand. Qualitative and quantitative techniques were used in data analysis. Quantitative data were analyzed using the Statistical Package for Social Sciences (SPSS) with the
help of an expert. This helped in generating graphs, tables and percentages. Manual analysis of qualitative data was done through forming categories, themes of the data that emerged and making explanations of them. The data from Focus Group Discussion responses and existing documents were used to validate the data from questionnaires. The researcher has developed the construct of the study with the help of secondary literature and further conducted the focus group discussion. As the study is related to the absenteeism among the faculties of higher educational institutions. The focus group of the study includes teachers, administrative staff and employees engaged with managing absenteeism.

4.13 Reliability and Validity Test

- **Validity of Questionnaire**
  The validity indicates the degree of which an instrument measures what it supposed to measure. The content validity is the extent to which the measuring instruments represents the factor under study. The content of the questionnaire designed with theoretical inputs taken from published materials and further it was validated with experts and peer group.

- **Pilot study**

This research explores the marketing activities undertaken by the higher educational institutions in creating a brand of their institution. Pilot study permits the preliminary testing of the hypotheses that lead to testing more precise hypotheses in the main study. Pilot study provides with the idea, approaches, clues that not have foreseen before conducting the pilot study. A pilot study of this research helps to make needed alternations in the data collecting methods and therefore analyze data in the main study more efficiently. A sample size of 40 was taken for a pilot study. A pilot study was therefore conducted by the intercepting respondents who are engaged in higher education institutions and administering a questionnaire to those amongst them who are willing to respond. Cronbach’s alpha test was carried out to check the reliability of the scale items. It is used to determine the response is reliable or not. The scores obtained for each construct exceeded the minimum requirement 0.70 as given below in the table.
Table 4.2 Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha Based on Standardized Items</th>
<th>No. of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.937</td>
<td>.938</td>
<td>26</td>
</tr>
</tbody>
</table>

With the help of (SPSS 22) the reliability of the construct is tested. Cronbach’s alpha is .937 hence the scale is reliable. Thus it is found fit to move forward for the further analysis. Based on the validity and reliability of the questionnaire gathered during pilot survey and on the completion of the data analysis of the data obtained from the pilot study, highest accuracy was obtained. Therefore no changes were being made and the same questionnaire was used for the final data collection.

4.14 Data Analysis Tools:

After collection of questionnaire responses the data will be systematically arranged, tabulated and appropriate analysis will be done. Univariate and bivariate data analysis techniques will be used to analyze the data. Following statistical technique will be used to analyze the data.

- Descriptive Statistics
- Percentage analysis
- Chi-square test.
- Factor Analysis
- ANOVA

Descriptive Statistics

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data.

Percentage Analysis:

Data collected are edited and coded by using the tally bars. This helps in converting the gathered data into a tabulated grouped data. Percentage Analysis is applied to create a contingency table from the frequency distribution and represent the collected data for better understanding.
**Chi-square test:**
A statistical method assessing the goodness of fit between a set of observed values and those expected theoretically. Chi-Square analysis is used to compare the observed data of the debt market investors with the data expected to obtain according to a specific hypothesis formulated in this study.

There are two types of chi-square tests. Both use the chi-square statistic and distribution for different purposes:

A chi-square goodness of fit test determines if a sample data matches a population. For more details on this type, see: Goodness of Fit Test. A chi-square test for independence compares two variables in a contingency table to see if they are related.

In a more general sense, it tests to see whether distributions of categorical variables differ from each another. A very small chi square test statistic means that your observed data fits your expected data extremely well. In other words, there is a relationship.

A very large chi square test statistic means that the data does not fit very well. In other words, there isn’t a relationship.

The formula for the chi-square statistic used in the chi square test is:

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

The subscript “c” are the degrees of freedom. “O” is your observed value and E is your expected value. It’s very rare that you’ll want to actually use this formula to find a critical chi-square value by hand. The summation symbol means that you’ll have to perform a calculation for every single data item in your data set. As you can probably imagine, the calculations can get very, very, lengthy and tedious.

**Factor Analysis:**
Factor analysis is a method for explaining the structure of data by explaining the correlations between variables. Factor analysis summarizes data into a few dimensions by condensing a large number of variables into a smaller set of latent variables or factors. It is commonly used in the social sciences, market research, and other industries that use large data sets.

**The ANOVA Test:**
An ANOVA test is a way to find out if survey or experiment results are significant. In other words, they help you to figure out if you need to reject the null hypothesis or
accept the alternate hypothesis. Basically, you’re testing groups to see if there’s a difference between them. Examples of when you might want to test different groups:
A group of psychiatric patients are trying three different therapies: counseling, medication and biofeedback. You want to see if one therapy is better than the others.
A manufacturer has two different processes to make light bulbs. They want to know if one process is better than the other.
Students from different colleges take the same exam. You want to see if one college outperforms the other.

One Way ANOVA
A one way ANOVA is used to compare two means from two independent (unrelated) groups using the F-distribution. The null hypothesis for the test is that the two means are equal. Therefore, a significant result means that the two means are unequal.

When to use a one way ANOVA
Situation 1: You have a group of individuals randomly split into smaller groups and completing different tasks. For example, you might be studying the effects of tea on weight loss and form three groups: green tea, black tea, and no tea.
Situation 2: Similar to situation 1, but in this case the individuals are split into groups based on an attribute they possess. For example, you might be studying leg strength of people according to weight. You could split participants into weight categories (obese, overweight and normal) and measure their leg strength on a weight machine.
REFERENCES:


