Chapter 3

METHODOLOGY

The foundation of this research is to look at the existence and causes of Absenteeism in Transformer industry in selected transformer companies in Agra region and further to explore the relation of absenteeism with Interpersonal Relations, Job behaviour and Employee turnover and finally it impact on productivity. The major purposes of this chapter are to

(1) Describe the research methodology of this study, (2) explain the need and rationale of the study, (3) describe the procedure used in designing the instrument and collecting the data, and (4) provide an explanation of the statistical procedures used to analyze the data.

3.1 RESEARCH METHODOLOGY

This chapter contains the research methodological and procedural aspects of conducting the research. It discusses the methodology adopted by the researcher for the study, that includes basic methods like taking responses from the targeted respondents via structured and a validated questionnaire. Apart from the questionnaire some discussion was held with the employer to get to know about their views regarding worker absenteeism. Further as a part of research the research design, data collection, sampling techniques and analysis tools were also observed and finalized.

The study with regard to Capital goods industry is carried out in transformer companies in Agra Region. As the Capital goods industry is divided into some major sub sectors like: Machine tools, Process plant machinery, Electrical machinery, Textile machinery and Earth Moving, Construction & Mining machinery.

To be very specific and clear and to bring genuine result, researcher need to be very specific. Therefore this research will be conducted in one of the sub sector and further in one type of product. As it is known to everyone that one most important capital good that is the heart of any industry is actually TRANSFORMER, so keeping this fact and some other facts about transformer industry in mind this research will be conducted in companies that are involved in transformer manufacturing in Agra region. This capital good comes under the sub sector known as Electrical Machinery.

Before going on for actual investigation, two major aspects have to be kept into mind: the company should be in a stable situation and everyone should be well aware about the survey that has to be carried on. What a researcher feel during the research is also very important. If one feels that research is conducted to get the result and that much is sufficient than this can prove to be a wrong assumption because this
thought process cannot bring genuine results. It becomes important for the researcher to make the organization and the respondents realize that research results are going to benefit them also.

3.2 OBJECTIVES OF THE RESEARCH

1) To investigate the prime causes of absenteeism in transformer companies in Agra

2) To study the relationship among absenteeism, interpersonal relationships, job behavior and turnover.

3) To identify the key indicators of organizational productivity in Transformer companies of Agra.

4) To figure out the relationship between independent and moderating factors of the study.

5) To establish and judge the impact of absenteeism on identified productivity indicators of Transformer companies in Agra region.

6) To recommend the practices for reducing absenteeism and enhancing the organizational productivity.

3.3 NEED OF THE STUDY

Absenteeism is a curse to any organization that leads to lot of deficiencies like unhealthy interpersonal relations; negative attitude, high labor turnover and most importantly may affect organizational productivity up to huge extent that may result in great losses. Now in that case as it is discussed in literature and introduction as well that manufacturing sector contributes in Indian economy and GDP as well and Capital goods sector covers a major portion of manufacturing sector and is essentially required to raise our economy, GDP and employment as well, it becomes essential to study those problems faced by capital goods sector which hinders or bring down its productivity.

Though there are many factors but in majority they are taken care by Indian government but some factors are internal and are related to core labor. Basically Absenteeism is one of the major factor that is becoming a quandary in production process in small and midsized companies in Agra region. In Agra there are some small and midsized transformer companies which are contributing in manufacturing and capital goods sector but they are facing this problem called absenteeism very frequently. This problem in midsized companies
The major impact of absenteeism on organization is that it affects the productivity in fact it leads to lower productivity. The repercussions of absenteeism do not end here further it results in understaffing in number or skill. It reduces the efficiency and efficacy of the department facing absenteeism as it is well understood, if any time any one is on leave his duties has to be arranged by some other employee and that employee is than over burdened.

If the productivity is decreased and the efficiency of employees is also reduced due to absenteeism, its ultimate result is the downfall in company’s goodwill. Due to this problem called absenteeism the company is unable to provide good quality products and has to do lot of compromises. Further absenteeism also affects the responsibility level of employees as the employees also get frustrated by engaging absent worker’s duties. Absence can lead to various interpersonal problems with those employees who have to work for the employees who are absent. Most of the times engaging others duties leads to frustration and dissatisfaction.

Hence this study is been undertaken:

• To find out the major causes of absenteeism in medium sized capital goods (Transformer) company as these midsized companies comparatively face more problems

• To investigate the relationship among absenteeism, IPR, behavior and labour turnover. Generally Absenteeism is both the cure and cause of good or bad interpersonal relations in the company. Further IPR is one of the major causes of employee attitude or behavior towards job.

• To understand the impact of absenteeism on productivity.

• In capital goods industry, order failures lead to huge penalty, which again makes this study more important as decreased absenteeism may lead to timely order delivery.

• Help to suggest various strategies to combat absenteeism in transformer manufacturing companies.

3.4 PROBLEM STATEMENT & RATIONALE FOR THE RESEARCH:

Absenteeism is a common problem in many industrial units, small or big, private or Government. The high rate of absenteeism is at times due to lack of commitment to work. Absenteeism results in dislocation of work increase in labor costs, reduction in productivity and if unchecked, it causes an increase in indiscipline. Although some amount of absence will always be inevitable, most of it can be avoided. Largely, the rate of absenteeism is a gauge of employees moral, both in the
company as a whole and for specific individuals; therefore, employees and human resource professionals should be concerned when absence suddenly increases in length and/or frequency and they have to take whatever steps are necessary to alleviate the problem.

As there are many small and medium industries that are suffering from the problem of absenteeism and thus productivity graph in these organizations are gradually going down.

3.5 RESEARCH DESIGN

For the study descriptive and exploratory research designs are adopted. Descriptive research, also known as statistical research, describes data and characteristics about the population or phenomenon being studied. Descriptive research answers the questions who, what, where, when and how. Exploratory research provides insights into and knowledge of a problem or situation. Exploratory research is a type of research which is generally used when a problem is not clearly and as the objectives of the research are needed to be explored, exploratory research helps to determine the best research design, data collection method and selection of subjects. Thus, on the basis of the above, the two research designs were appropriate for the present study as it was important to determine the various causes of absenteeism in transformer companies in Agra region and further to figure out its impact on productivity and other related organizational factors.

3.6 INSTRUMENTATION

For effectual and flawless data gathering, survey, interview and observation methods were comprehensively used.

3.6.1 Survey Method

The term ‘survey’ is commonly applied to a research methodology designed to collect data from a specific population, or a sample from that population, and typically utilizes a questionnaire or an interview as the survey instrument (Robson, 1993). Survey research is used to quantitatively describe particular aspects of a given populace. These aspects often engross examining the relationships among variables. Second, the data required for survey research are collected from people and are, therefore, subjective. Finally, survey research uses a preferred portion of the population from which the findings can later be widespread back to the population. In survey research, independent and dependent variables are used to define the scope of study, but cannot be unequivocally proscribed by the researcher, Mitre (2005). The face-to-face interview is a principally lithe instrument that can incarcerate verbal expressions, gestures, and other body language.
A skilled interviewer can get hold of additional insights into the answers provided by observing the respondent’s body language and expressions, Isaac & Michael (1997). Face-to-face interviews are useful where the true population is not known or when respondents are unable or unlikely to respond to written surveys, Salant & Dillman (1994). Further participant observation technique was used to get accurate results as in this technique Participant observation is a common method within ethnographic research in sociology and anthropology. In this kind of observation, a researcher may interact with participants and become part of their community, Driscoll (2011). Thus, these methods have been widely used to extract the most relevant information and help in better analysis of the data.

3.6.2 Primary Data

Primary research is actually done and is useful for questions that can be answered only through asking targeted respondents and direct observation. Primary research is particularly useful when you want to explore or learn about a problem that does not have an abundance of published information. This may be because the problem is either a recent event or it is something not commonly studied, Discroll (2011). In order to proficiently use the survey method a questionnaire was designed and developed. The questionnaire was intricately designed to identify the existence and causes of absenteeism in Transformer industry and also to figure out its impact on IPR, Job related behavior, employee turnover and finally the impact on the most important and sensitive aspect that is productivity. The instrument was divided into six major parts.

The research questionnaire took into consideration certain variables responsible for absenteeism, its causes and its impact on productivity in transformer companies in Agra region. It consists of total 6 sections including total 70 questions. Basically Likert five point scales is used for the statements and a major open ended question is asked which is directly related to the study and is required to get answer to one of the objective of the study. A separate interview sheet was prepared for the employer of the company to get the views of the entrepreneur regarding absenteeism. This set included some statements from each variable i.e. Absenteeism, Interpersonal Relations, Job related Behavior, Labor turnover and Productivity. The questionnaire was constructed on the basis of literature collected and few statements solely related to the nature of industry were drafted by the researcher with the help of the employer. The questionnaire included items pertaining the basic demographic profiles of the respondents and information related to salary, leaves and working shifts(10 items), causes of absenteeism and work environment (16 items), Interpersonal relationships (10 items), Behavior (10 items), Turnover(7 items) and productivity (17 items).

In Part A, the respondents were requested to provide their demographic details viz. Age, gender, salary, experience etc. the respondents were asked share their
current and overall experience. They were also asked to provide us with number and types of leaves they usually take in a year so that the existence of absenteeism could be fetched without any measurement. Moving further

In Part B total 16 statements were included that were framed in a way so as to extract complete information regarding why employees take frequent leaves, what are the major reasons and situations in which employees take frequent leaves and also to find out the work environment provided to the workers as it may be one of the causes of absenteeism. Part C includes statements related to Interpersonal relationships. As mentioned in the literature the problem itself is the cure. If absenteeism will persist it will become problem for other workers as they will be overburdened and this will further increase the level of absenteeism parallely spoiling interpersonal relations. If absenteeism will be low it will help in building good interpersonal relations in the organization and thus decreasing absenteeism.

This set of questionnaire is trying to find out the nature of IPR in midsized transformer companies in Agra Region. Part D comprises of statements that actually depict employee’s behavior or job related attitude which is indirectly or directly affected by absenteeism. Flow of the study says that absenteeism affects IPR and further poor IPR affects Job related behavior of employees which actually reflects job satisfaction level of employees. A natural phenomenon is that if employees are satisfied with their jobs they will hold positive attitude towards it and if not than in an obvious manner negative. Negative behavior results in increased absenteeism and here also it’s vice versa that decrease in absenteeism will result in decrease in negative attitude up to a great extent. These statements can easily figure out that absenteeism is affecting behavior or not so as to come up with suitable solutions.

In questionnaire part E have the statements related to labor turnover. Huge literature on previous researches shows and proves that absenteeism affects retention of employees in organization. The chain effect of absenteeism in core and wholesome relation to personnel clearly reflects that absenteeism is the root cause and affects IPR that further puts an impact on behavior of the workers which lead to labor turnover. This section of questionnaire includes statements related to labor turnover that can help in finding out if the companies are suffering from this problem or not. Last part of the questionnaire is the heart of the study that includes statements which are related to the productivity of the organization. In transformer companies, the manufacturing work is solely depended on the labors. This set finds out the whether the productivity is fine or not and how it is affected by Absenteeism. The basis of questionnaire was the discussion with the employer and observation of manufacturing process.
3.6.3 Secondary Data

Primary research process can be complete and accurate only with the help of secondary (library) data. It helps to understand more about what is already known and what gaps you need to fill with your own data. As you learn more about the topic, you can narrow down your interest area and eventually develop a research question or hypothesis, just as you would with a secondary research paper. The secondary data is the backbone of the study; this is the pool of articles, research papers, chapters that are collected via good research journals, magazines, books and reports of related organizations.

For the study the huge amount of literature was collected in the form of research papers, articles from magazines and reports from related organizations like DSIR, DIPP, DHI, Exim banks reports etc. The study aims at suggesting the strategies and solutions to overcome absenteeism and its impact on productivity in transformer companies.

3.7 POPULATION

The targeted population for the study was small and midsized transformer companies in Agra region that are listed in ITMA and NCIC. There are total six transformer manufacturing companies in Agra region. All six are taken for the study so as to get the accurate and fair result because the study is sector specific and not company specific. The data taken from several companies of same nature will show the consistency in the result. For the population at glance have a look at the table below:
### Sampling Method and Sample Size

Sample was selected by taking some percentage of total population of a specific company. The sample percentage taken was more than 10% of the total population. The companies selected for the study were small and medium sized companies, involved in transformer manufacturing in Agra region. The target respondents were the workers involved in core manufacturing process of transformers. There are total 6 medium and small sized transformer companies in Agra. All six are selected for the research. The questionnaire was distributed by the researcher and was taken care that they are being filled in an appropriate manner. Total of 600
questionnaires were distributed and 450 came out to be relevant to yield a response rate of 90%. The method used for sampling was judgemental sampling.

3.8 RESEARCH TOOLS

The research has been worked out with the help of acknowledged statistical tools. The reliability and validity of the variables is tested through Chronbac’s Alpha Test. The reliability of the sample is tested through KMO and Bartletts’s Test of sphericity. The factors responsible for absenteeism, IPR, Behaviour, Labour Turnover and Productivity are worked out with the help of factor analysis. The relationship among variables is found out by correlation analysis. Finally the impact is calculated through Regression analysis. All analysis is done via SPSS.

3.9 HYPOTHESIS

- Ho Personal factors and work environment do not have any significant relationship with absenteeism.
- Ho Moderating factor interpersonal relationship do not have any impact on productivity
- Ho Moderating factor Behavior do not have any impact on productivity
- Ho Employee turnover has no significant impact on productivity
- Ho Absenteeism has no impact on organizational productivity

3.10 Variables

There are three types of variables in the study

- Independent
- Dependent
- Moderate

The Independent variable of the study is

- Absenteeism

The Dependent variable of the study is

- Productivity

The essential moderate factors of the study are
• Interpersonal Relations
• Job Related behaviour
• Labour Turnover