CHAPTER III
RESEARCH METHODOLOGY

3.1 STATEMENT OF THE PROBLEM

This study is undertaken in order to understand the reciprocal relationship between stress and its effect. The problem was stated as “Stress Management among Working Women with Specific Reference to Higher Education Sector in Rajasthan”

The education industry has undoubtedly helped in the growth of Indian economy, but it has also caused dents by the quality of its employees. Most of the working women in education nowadays complain of not being able to balance their personal life to their professional life. They cannot enjoy their hobbies or other leisure activities due to workload, low salary and so many other factors. Thus the teachers get both physiologically and psychologically sick, resulting in increased stress and tension. The emotional support from family, friends and colleagues is very much required to have a stress free life, but unfortunately it is gradually missing among the teachers in the education field. It affects both their physical and organizational health. Family role stressors and work role stressors have been studied to understand the relationship between the stress-effects experienced by working women and the role stressors.

3.2 RESEARCH: AN OVERVIEW

Educational research is the process of arriving at a dependable solution to the problems through planned and systematic collection, analysis and interpretation of data. Research methods have the most important role in any research process. It occupies a decisive role in all kind of research, because it is a determinant of reliability and validity which depends upon the adopted research method. The success of any research depends largely upon the availability of the data and the suitability of the method. [1] Indicating the significance of methodology, Barr (1953) pointed out that ‘the vehicle of the research cannot perform its function without it, since it is methodology which lays out the way in which research is to be carried out and outlines the details and description of research variables and procedures’.
This chapter deals with the research framework and the hypotheses of the present study. Primary and Secondary Data are collected for the study. Primary data is collected from respondents; it deals with the stress experienced by them at the workplace and at home. The family and social expectations from these respondents and their own beliefs and values are examined. The secondary data is collected from refereed journals, magazines, newspapers and websites etc. An overview of the research design, sample design, calculation of sample size, details of pilot study and statistical tools used for analysis are included in this chapter.

3.3 REVIEW OF LITERATURE

Review of literature is an essential part to plan and execute any research work. The present chapter embodies a brief review of the researches done in the area related to the present investigation. A particular thing should not be neglected because it is of past and a new one should not be accepted because of its novelty. A new thing can be initiated only, when a researcher has something related to the past data. Alternatively, it is essential to connect with the previous studies and knowledge, with the new learning and ideas of present study. Thus, review of literature is the most important part of the research, without this, a researcher cannot understand the depth of his/her topic, of what has been done in past and where s/he can contribute towards this research in future.

Various relevant references were collected from research articles, books, and research papers from specific journals. In addition, several libraries were also visited to collect every related review of literature and numerous websites were also surfed on internet for retrieval of the related literature.

Travers, C and Cooper, C. (1998) stated that stress has always been a major cause of lower performance among teachers and nowadays it is increasing. This consistency will affect their physical and psychological health more in future. [2]

Rana Baljit Kaur, et al. (1998) observed that South Asian professional women may find it difficult to balance between work and same as white professional in British countries. Thus, it is clearly indicated that the culture of women professionals may be different but the extent of stress they are experiencing is the same. [3]
Chapter 3 Research Methodology

Susan Field and Ros Bramwell (1998) collected data from 821 female university faculty. Result showed that married women felt more stress than unmarried female faculty. On the other side, a full time faculty felt herself under more pressure than their full time colleagues.[4]

Gillispie, Walsh, Winefield, Dua and Stough,(2001) reported that various studies conducted in USA, UK, Australia and New Zealand and identified many key factors commonly associated with stress among academic staff such as long working hour, work overload, lack of promotional opportunities, low salary and inadequate resources etc.[5]

Philip E. Graves, James. K. Marchand and Robert. L. Sexten (2002) found that women in higher education sector feel stress due to low salary. Higher education sector demands high degree and continuously new research and publication activities from the faculty. But as per the workload of this highly intellectual demand they are getting very low salary which de-moralizes them to work. [6]

John Robst, Jennnifer Van Gilder and Solomon Polacheck(2003) examined perception of women faculty in higher education sector and found that men getting higher wages are treating better than low wages women faculty. There is a need to hire women faculty and treat them equally to their male counterparts. [7]

Winefield (2003) concluded that stress is not limited to geographical boundaries, rather it is becoming a universal problem among teachers who are working in higher education institutions across the globe. [8]

Jennifer Hart (2005) states that in higher education sector, often the role of women is not considered seriously when they suggest anything on significant issues. It is concluded that misbehavior by students, excess teaching loads and research demands create more stress among women faculty. [9]

Saul Neves de Jesus and Willy Lens (2005) states that at present, women in education sector are more stressed than other professional women and this is very pathetic situation when it becomes a reason of de-motivation amongst them. Thus, they suggested that sufficient coping up strategies are needed to eliminate stress. [10]
G. M. Steyn and G. D. Kamper (2006) in their paper titled ‘Understanding Occupational Stress among Educators’ found that the result of lower performance of women faculty may be harmful for them. Because it is directly associated with their stress and it may affect their personal life, learning capacity and most importantly their teaching aptitude. [11]

Monique Valcour (2007) has stated that generally women employees devote more time to perform domestic as well as occupational duties. Their families always expect them to take leave on sudden events such as staying home with a sick child or to take an ailing parent to the doctor. It can give a negative impact on women’s satisfaction with work-life balance. [12]

Sen, Kakoli (2008) in his paper titled as “Relationship between Job Satisfaction and Job Stress amongst Teachers and Managers” concluded that there are many similarities among managers and teachers in terms of workload, work pressure and low salary. These are common factors which create stress in their occupational life. [13]

Korotkov, Fraser, Houlihan, Fenwick, McDonald and Fish, (2008) have found that perception of people towards education sector has now changed as they think that it is the most convenient job for a woman. Rather, to join higher education sector as a profession is a more challenging job than other professions. [14]

Deshmukh N.H. (2009) concluded that there is no significant difference in physical and family stress, but role stress is higher among working women as compared to non working women. Along with stress, he stated that women who are working are also more satisfied than non working women. [15]

M. Chaturvedi and T. Purushothamanan (2009) in their paper titled ‘Coping Behaviour of Female Teachers’ concluded that women faculty, who have more than five years of work experience, face more stress than those who have less than five years of work experience. Along with this, they suggested there is a need to work on demographic determinants which can be really helpful to reduce stress among them. [16]
Shilpi Goyal and Ruchi Goel (2009) states that, however a teacher plays several roles such as a tutor or instructor/guide/coach/counselor/social worker and even sometimes a nurse and a mother, every time she has to give an answer to stakeholder for her responsibilities and this is becoming a major reason of stress among those, who join the education sector as a profession. [17]

Fan Wei, Feng Ying and Wu Liangliang (2009) has classified their study on the basis of their results such as (1) Role conflict between self roles perceived and social perceived roles of a professional woman (2) Professional experience and level of education affected by the stress (3) Spouse stress, family activities, work devotion and work load are the major cause of stress among professional women regards work-family conflict. [18]

Sabitha Rao (2010) states that most of the working women are guilt ridden such as notdevoting sufficient time to their family, neglecting their health, ignoring friends and relatives and so on. Educated women, who are not working, also have guilt about wasting their professional degrees. Thus, stress is becoming a common problem and increasing day by day among all women. [19]

R.Ganapathi, S.Malathi and R.Kanniah (2010) state that due to the transition in the role performance of women school teachers, they face practically many adjustment problems when they play a dual role at their school as well as at their homes. Though a majority of school women teachers live in nuclear family, they prefer a joint family system, because their family work will be shared and they could concentrate on their school work. Women teachers in school work under different managements either as government aided or private schools, as their working conditions differ, they are likely to face some adjustment problems. When they have stress and strain due to their workload in some schools, they face certain emotional and psychological problems. [20]

P.K. Dutta and Sumana Mukherjee (2010) have examined the harmful physical and emotional responses that occur, when the requirements of the job, do not match the capabilities, resources or needs of the worker. [21]

Tara Kuther (2010) found women experience biases in recruitment, selection and promotional opportunities. On the other side, multiple demands and expectations at
home and workplace arouse role conflict among them. This is the reason why women are suffering from higher level of psychological problems than men, because of not getting the equal opportunities as men. [22]

P.S.Swaminathan and S.Rajkumar(2010) states that working women in the education sector experience greater stress. Due to role overload, sometimes they suffer from tension and anxieties, frustration and anger. In fact, in the education sector, women face greater stress due to role overload. [23]

J. Vijayadurai and S.Venkatesh (2012) in their paper titled ‘A Study on Stress Management among Women College Teachers in Tamilnadu, India’ studied that working conditions should be positive as per the work culture in any institution. They suggested that by adopting good ethic policies, instead of rigid policies the working environment can be made healthy. [24]

Sandeep Kumar Lath (2012) in his paper titled ‘A Study on Occupational Stress among Teachers of Privately Managed Schools and Government Schools in Relation to Age, Gender and Experiences’ concluded that govt. school teachers are stressed, especially on scales i.e. role conflict, role ambiguity, role overload and physical environment.[25]

Abbas, Roger and Ali Asadullah (2012) in their paper titled ‘Impact of Organizational Role Stressors on Faculty Stress and Burnout’ suggested that it is necessary to introduce stress management interventions at the primary and secondary level. It could be done by providing resources to reduce burnout like: research associates can be hired to help senior faculty in completing research assignments and to ease their workload pertaining to traditional teaching and administrative assignments. [26]

The research problem is formulated on the basis of a broad study of literature review, which provides a sound theoretical background along with the conceptual framework to the study. The research takes the lead from the following dimensions; the impact of stress on body, mind, behaviour and emotions on the basis of review of literature.
TABLE 3.1: IMPACT OF STRESS

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Worrying</td>
<td>• Headaches</td>
<td>• Apathy</td>
<td>• Insomnia</td>
</tr>
<tr>
<td>• Impaired judgement</td>
<td>• Skin irritations/allergy</td>
<td>• Apprehensions</td>
<td>• Accident prone</td>
</tr>
<tr>
<td>• Negative thinking</td>
<td>• Fatigues</td>
<td>• Depressions</td>
<td>• Loss of appetite, drinking and smoking more</td>
</tr>
<tr>
<td>• Hasty decisions</td>
<td>• Breathlessnes</td>
<td>• Irritability</td>
<td></td>
</tr>
<tr>
<td>• Night Mares</td>
<td>• Muscular twiches</td>
<td>• Loss of confidence</td>
<td></td>
</tr>
</tbody>
</table>

(Source: Review of Literature)

TABLE 3.2: COMPARISON OF STRESS

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>Women</td>
<td>Stress is higher amongst women as compared to men</td>
</tr>
<tr>
<td>Working women</td>
<td>Non-working women</td>
<td>Stress is higher among working women</td>
</tr>
<tr>
<td>More than five years of work experienced women faculty</td>
<td>Less than five years of work experienced women faculty</td>
<td>Stress is higher amongst those, who have more than five years work experience</td>
</tr>
<tr>
<td>Women in education sector</td>
<td>Women in other professions</td>
<td>Stress is higher amongst those, who are in the higher education sector</td>
</tr>
<tr>
<td>Women who exist between 20-40 age group</td>
<td>Women who exist between 40-60 age group</td>
<td>Stress is higher among those, who exist between 40-60 age group</td>
</tr>
</tbody>
</table>

(Source: Review of Literature)

3.4 RESEARCH GAP

Researcher has identified following few research gaps, which are based on presenting review of literature:

1. Most of the earlier research on stress had focused on managerial and professional groups, neglected occupations related to teaching, specifically in higher education. The present study identifies the different factors which influence occupational stress amongst working women in higher education.
sector. It would be useful and socially relevant to the present problem of work and family role balance and the stresses arising therein.

2. Most of the research was basically focused on various factors of stress but this study clarifies the impact of occupational stress on physical and psychological health of working women.

3.5 OBJECTIVES OF THE STUDY

1. To compare the stress amongst working women in private education institutions vis a vis government education institutions.
   (a) To determine the factors that contribute the most towards stress among women faculty in education sector in Rajasthan.
2. To identify the relation of stress among working women in terms of age, gender and seniority.
3. To find out the causal effect of salary, job security, transfer and workload on stress among working women.
4. To determine the relation between role conflict at work place and family front and psychological and physical health of working women.
   (a) To identify the coping strategies adopted by working women, to reduce stress.
5. To develop an integrated model of distress for working women.

3.6 HYPOTHESIS OF THE STUDY

A hypothesis is the assumption that we make about the population parameter. A hypothesis is a specific statement of prediction. It describes in concrete (rather than theoretical) terms what researcher expect will happen in his/her study.

Based on the above objectives, the following hypotheses are formulated as given below:

**H0 (1)** - There is no significant differences between the stress level of working women in private education institution vis a vis government education institution.
H$_a$ (1) - There is significant differences between the stress level of working women in private education institution vis a vis government education institution.

H$_0$ (2) - There is no significant difference in the occupational stress of working women in terms of age, gender and seniority.

H$_a$ (2) - There is significant difference in the occupational stress of working women in terms of age, gender and seniority.

H$_0$ (3) - There is no causal effect of salary, job security, transfer and workload on stress level among working women.

H$_a$ (3) - There is causal effect of salary, job security, transfer and workload on stress level among working women.

H$_0$ (4) – There is no significant impact of role conflict at work place and family front on psychological and physical health of working women.

H$_a$ (4) - There is a significant impact of role conflict at work place and family front on psychological and physical health of working women.

3.7 SIGNIFICANCE OF THE STUDY

The most important aspect of this study, which makes it different, as it studies and highlights the elements of stress among working women both at the workplace and home. Emerging trends in the education sector created interest in researcher to take up research on this topic. The study is a step forward to the aim of understanding the psychology of working women and coping up strategies for stress.

In India, highest numbers of women are employed in education sector. They often choose education sector because this profession allows them to equate their working day and years with their childrens. Now a days women in Rajasthan have the opportunities to be highly successful in this sector; a world that previously excluded them. At times, they feel that they are not giving time and energy to their family. The working women in education sector are struggling for work verses-family conflicts, which is causing role conflict among them. It is commonly observed that women faculty from private sector suffer higher level of stress than women faculty working in
government sector. The present study describes this assumption in the context of working women in Rajasthan.

Working women are facing a crisis in the education sector. Low morale in the workplace and intentions to quit from the profession, job insecurity, low salary, dissatisfaction, and job stress are strongly associated with a number of absenteeism, being unproductive or unwell at work. This study briefed that stress among working women is increasing and efficiency of working women is reducing simultaneously.

3.8 SCOPE OF THE STUDY

Stress management is becoming the most significant factor in higher education sector. There are many factors exist, enhancing the degree of stress at workplace. The working environment at the workplace and lack of support from family is another important factor. However, the institutions have started to focus on working conditions which can affect the level of stress on their employees, but the impact of personal stressor, arises from family and society, is not taken into consideration by the institutions. Thus, the study is extended to include personal source of stress too. Stress arising from role conflict at home and workplace is also included in the study. In addition, the consequences are also taken into considerations which are affecting physical, behavioural and emotional part of an individual. This study focuses on the identification of major stressors, along with few coping up strategies for the women faculty to enable them to overcome stress and manage their work-life well.

3.9 RESEARCH DESIGN

The study of research methods provides the knowledge and skills to solve the problem and meet the challenges of today’s modern pace of development.

There are two basic types of research designs:

- **Research design in case of descriptive /diagnostic research studies as:**
  The descriptive research is conducted to define, describe, analyze and interpret the present condition. The major purpose of a descriptive research is to evaluate and analyze a phenomenon, occurred at a specific time and place. This is connected with present conditions, framework, practices, relationship, differences, similarities that exist.
• **Research design in case of explorative research studies as:**

The exploratory research is most commonly “informal” or unstructured research which is studied to collect the fundamental knowledge or information about the common problem. The main purpose of such a study is to formulate a problem for a precise investigation or for developing a working hypothesis from an operational point of view.

Hypothetically, a research design is a major detailed part of any investigation which works as a blueprint for the research. It helps to test the hypothesis and analyze the collected data. This chapter seeks to outline the procedure followed, design employed, sample selected, the tools used, the sequence of events that occurred, the procedure adopted for data collection and statistical analysis conducted to realize the objectives of the study.

**METHOD OF RESEARCH DESIGN**

The method adopted for the present study can be categorized as descriptive and statistical in nature. Descriptive research describes systematically the facts and characteristics of a given population or area of interest, factually and accurately (Isaac & Michael, 1995). Descriptive research studies describes the characteristics of a particular individual, situation or a group; and may be focused to investigate ‘what exists’ with respect to variables or conditions in a present situation. The descriptive research attempts to determine, describe, or identify what is, more than just a collection of data. This involves measurement, classification, analysis, comparison, and interpretation. The major purpose of descriptive research is a description of the state of affairs as it exists at present. This kind of research uses description, classification, measurement, and comparison to describe the phenomena.

Descriptive research answers the questions ‘who, what, where, when, why and how’. It examines the quantitative and qualitative data collected from various written documents and correspondence, direct or indirect interviews, surveys, test results and so on. The main feature of descriptive research is to provide an analysis of a given sample or population, where inference is drawn to explain quantitative and qualitative data or a combination of both, by using the hypothesis to find the answer to the present question.
The present study describes the professional and domestic life of women faculty in higher education sector and to find out the factors, which lead to dual role conflict; it can be appropriately referred as a descriptive research design. As the present study focus on stress, which arises due to various family and job related factors among working women, the descriptive research design is selected as the most suitable one for the present study.

3.10 SAMPLING DESIGN

| Population | The first step in research is to clearly define the set of objects, technically called the universe/population, to be studied. For proposed study the universe was working women of selected educational institutions in Rajasthan. |
| Sampling Element | Women faculty |
| Sampling Unit | The sampling unit for the study was working women of selected higher educational institutions in Rajasthan. The sample was selected keeping in view the needs and objectives of the study. |
| Sampling Technique | The convenience sampling technique has been used to select working women. |
| Sample Size | The overall sample size for the study included 400 working women from different selected education institutions in Rajasthan. These teachers have been chosen from different higher educational institutions of Rajasthan in India and the institute selected belong to different categories, some of them are privately owned while some of them are managed partially or fully by the government |
| Extent | Rajasthan State, India |

The final study was conducted on women faculty of the government and private sector, educational institutions of Rajasthan state.
Table 3.3 : Types of Institutions

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Type of Institution</th>
<th>Govt. Women Faculty</th>
<th>Private Women Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Arts</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>Commerce</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Science</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>Law</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>Management</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>6</td>
<td>Engineering</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>7</td>
<td>Computer Science</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>8</td>
<td>Medical</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>9</td>
<td>Agriculture</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>10</td>
<td>Others</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td><strong>Total Respondents</strong></td>
<td><strong>200</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>

**Universe of the Study:** The state of Rajasthan has approx 24422 women faculty in higher education sector.

**Determination of Sample Size:**

Sample size-Infinite population

\[ \text{Sample size} = \frac{Z^2 \times p \times (1-p)}{C^2} \]

Sample size- Finite Population

\[ \text{New sample size} = \frac{\text{Sample Size}}{1+\left[\frac{\text{Sample size}-1}{\text{Population}}\right]} \]

Where

\[ p = \text{Proportion of Population} \]

\[ C = \text{Confidence Interval} \]

\[ Z = \text{Z-Value (Cumulative Normal Probability Table) represents that a sample will fall within a certain distribution} \]
Krejcie & Morgan (1970) formulated an easy table using sample size formula for finite population (27). It has designed to make easier the procedure of determining the sample size for a finite population. According to the table, the required sample size is 384 for the population which is approx 24422. Here the population is finite including various educational institutions of Rajasthan. The sample size is calculated at 95% confidence level (28). The final study was conducted on women faculty of the government and private sector, educational institutions of Rajasthan state.

Parameters of choosing these higher educational institutions for the research are:-

- Location and type of educational institutions
- The number of women faculty employed here

3.11 SOURCES OF DATA COLLECTION

- **Primary Data**
  Questionnaire method has been used for primary data collection to identify the behavior of women, while comparing their level of stress. Respondents were women employees who are directly or indirectly affected due to workload, pressure, and dual responsibilities.

- **Secondary Data collected through**
  - Journals/Research Publications
  - Magazines
  - Web sites/Internet
  - Newspaper etc.

3.12 CONSTRUCTION OF TOOLS

**Interview**
The variables which have been studied were identified by the researcher with the help of the supervisor, statistician, principals, Heads of the Department and experienced teachers working in colleges in the study area. The available literature in the area of the study had also been consulted. Preliminary interviews were conducted with few experienced women faculty and two heads of the departments working in the sample area.
Questionnaire
After identifying the variables, the researcher started preparing the questionnaire. With the help of such women faculty, the draft of the questionnaire was prepared and it was circulated among the fellow researchers and women faculty for their opinion and suggestions. The questionnaire was revised and re-drafted in the light of criticisms and suggestions put forth by them.

A questionnaire has been prepared by the researcher for collecting necessary primary data. Before preparing the schedule, the researcher made a comprehensive review of previous studies directly and indirectly connected to the topic of the study, discussed the problems with some senior and experienced women faculty working in different educational institutions in Rajasthan.

3.13 VARIABLES

Variable is a value that varies or change accordingly. It can be changed from one person to another person, one group to another group, and also several times within a person. It is the most significant part of any research. It is used to describe the scale or a value of quality and these variables assume or carry different numerical values. Variables may be classified into various categories in a research study, but there are two significant categories of variables including dependent and independent variables are classified, which are as follows:

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td>Workload</td>
</tr>
<tr>
<td></td>
<td>Job insecurity</td>
</tr>
<tr>
<td></td>
<td>Salary</td>
</tr>
<tr>
<td></td>
<td>Transfer</td>
</tr>
<tr>
<td></td>
<td>Age</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
</tr>
<tr>
<td></td>
<td>Seniority</td>
</tr>
<tr>
<td></td>
<td>Working Environment</td>
</tr>
<tr>
<td></td>
<td>Long Working Hours</td>
</tr>
<tr>
<td></td>
<td>Overtime</td>
</tr>
<tr>
<td></td>
<td>Strict Policies</td>
</tr>
<tr>
<td></td>
<td>Conflicts</td>
</tr>
<tr>
<td></td>
<td>Lack of appreciation</td>
</tr>
</tbody>
</table>
3.14 SCALING

The questionnaire comprises both optional type and statements in Likert’s five-point scale. Hence, **LIKERTS 5 points (FIVE) scale** has been used to measure the opinion of the respondents to explore the determinants of occupational stress, the coping strategies adopted by the Sample.

The reason for selecting this scale while measuring the level of stress was to gather an accurate response; consequently we choose a scale of five point rating and categorize the factors.

3.15 PILOT STUDY

In carrying out any research, the validity of the tool is very important because answer to the research problem depends on the research tool. To find out the results, the researcher has collected data from the universe and analyzed this first-hand or fresh information for the pilot study. This preliminary study of the universe enabled the researcher to have an idea about the different variables involved, the nature of the problem studied response to the research, difficulties in carrying out the study and so on. The pilot study helped the researcher to have a summarized form of the study and also facilitated in the selection of samples. In order to ensure more clarity and validity, a pilot study has been conducted among 76 government women faculty and 76 private women faculty in different educational institutions through the questionnaire method and personal discussion method was conducted to bring to the limelight the weaknesses of the questionnaire in order to understand the credibility of the statements. Thus the loopholes in the questionnaire were mitigated to some extent and a modified questionnaire was then administered.

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sector</strong></td>
</tr>
<tr>
<td>Government women faculty</td>
</tr>
<tr>
<td>Private women faculty</td>
</tr>
</tbody>
</table>

Result stated in pilot study that among government sector women faculty Cronbach's alpha value is 0.901 and among private sector women faculty is 0.912, which indicates a high level of internal consistency of our scale with this specific sample.
3.16 STATISTICAL TOOLS FOR DATA ANALYSIS

The processing, tabulation, analysis and interpretation of data have been done by using statistical package for the social sciences developed by SPSS. The collected data has analyzed and interpreted using statistical tools such as Correlation analysis, Regression Analysis, Factor analysis, Percentage and some other appropriate statistical tools were applied.

FACTOR ANALYSIS

Factor analysis is a part of multivariate analysis which is designed to indicate a sharp relationship between the variables. A number of variables generally used in a multi type item scale, which also utilizes to find the approximately value of each factor.

CORRELATION ANALYSIS

Correlation is widely used by researchers in almost every part of the globe. It denotes as single number which is used to identify the degree of relationship between two variables. The relationship, which describes through a single value, called as coefficient. The correlation coefficient “r” is a number which indicate the level of relationship between any two variables. The range of the value “r” exists between +1 to -1, depending on the nature of the correlation.

MULTIPLE REGRESSION ANALYSIS

A regression is a statistical tool used to find out the relation between two or more variables. In simple regression only two variables exist; one variable indicates the dependency on another one. The independent variables are former variable and latter one is dependent. When there are more than two independent variables, the analysis describes such relationship as multiple regressions. The major objective of using this technique is to predict the variability of the dependent variable and independent variable which is based on co-variants.

INDEPENDENT ‘T’ TEST

An independent samples t test is used to compare the means of two independent groups. It also helps to determine whether there is any evidence which proves that the population means are significantly different from each other. This is a parametric test.
and probably the most widely used statistical tests of all time and certainly the most widely known.

For measurement of the relationship between “workload, job security, salary, transfer, age, gender and seniority, correlation analysis have been used to find out the relationship. Regression analysis is also carried out to study the impact of different variables on stress. This is one of the most useful tool for all the statistical measures as it provides a reliable base for accurate interpretation. Calculation of percentages helped to assess the intensity, frequency and the nature of the impact of stress as perceived by the sample respondents. Table and figures also have used for graphical presentation.
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