CHAPTER - III

METHODOLOGY

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CHAPTER III

METHODOLOGY

Introduction:

In the previous chapter, the researcher has presented the review of related literature concerning the researches done in the area of Job Satisfaction in relation to number of independent variables. In this chapter, details of methodology, which includes discussion of variables, formulation of hypothesis, tools developed and used, mode of collection of data, statistical techniques employed for analysis the data are presented.

3.1 Design of the Study:

Method of research:

The descriptive method of research was employed which was intended to describe the relationship which exists between independent and dependent variable i.e., the relationship exists between occupational stress locus of control and job involvement on job satisfaction. Descriptive research describes recording, analyzing and interpreting conditions that exists.

The study has attempted to:

1. examine the relationship between the independent variables viz. Occupational Stress, Locus of Control, and Job Involvement and dependent variable viz. Job Satisfaction
2. assess the influence of the independent variables on the dependent variables
3. determine the interaction effect of the independent variables on the dependent variable
4. to predict the relative efficiency of predictor variables like Occupational stress, Locus of Control and Job involvement on Criterion Variable that is Job Satisfaction

5. to determine the direct and indirect effect of independent variables on dependent variable

3.2 Variables Used for the Study:

A “Variable” is a symbol to which numerals or values are assigned. According to Fox (1969) variable is a characteristic, which is given research project, can have more than one value. Tuckman (1978) defined variable as that factor, which is measured, manipulated and observed by the investigator.

Meaning of Variable:

- A concept that can assume any one of a range of values is called as variable.
- A variable is a property that takes different values.
- A variable is a symbol to which numerals or values are assigned.
- Variables are the conditions or characteristics that the experimenter manipulates or controls.
- A variable is that quantity which varies depending upon the situation.
- Variable means characteristics that in a given research study can have more than one value.
**Independent Variables:**

Independent variable is that variable which doesn’t depend on any other variable.

Independent variable is that factor which is measured, manipulated or selected by the experimenter to determine its relationship to an observed phenomenon. The variables that are used for making predictions are common referred to as independent variables of research.

Occupational Stress, Locus of Control and Job Involvement were regarded as the independent variables in the present study because they are ‘stimulus’ or ‘input’ variables operated within a person or within this environment to affect behaviour. They were factors selected by the researcher to determine their relationship to the observed phenomena.

1. Occupational Stress
2. Locus of Control and its dimensions
   a. Powerful Others
   b. Chance Control and
   c. Individual control and
3. Job Involvement

**Dependent Variable:**

A variable, which is a cause of any consequence or result then the former can be, understood as independent variable whereas the later one as dependent variable. According to Kothari (1985) “If one variable is a consequence of the other variable it is termed as a ‘dependent variable’ and the variable that is antecedent to the dependent variable is termed as ‘an independent variable’. Dependent variables are that factor which is observed and measured to determine the effect of the independent variables.
Dependent variable is the variable predicted to. The variable is to be predicted as dependent variable, because it is viewed as being dependent on a previously existing condition.

‘Job Satisfaction’ was considered as dependent variable in the present study and was observed and measured by the researcher to determine effects of the independent variables. In other words, they were ‘response’ or ‘output’ variables because they were the observed aspects of behaviour of the teachers who have been stimulated.

**Moderate Variable**:

The term moderate variable describes a special type of independent variable, a secondary independent variable selected for study to determine if it affects the relationship between the independent variable and the dependent variable.

The moderate variable is defined as that factor which is measured, manipulated, or selected by the experimenter to discover whether it modifies the relationship of the independent variable to an observed phenomenon.

**Moderate Variables of the study are**:

- Gender (Male/ Female)
- Locality (Rural/ Urban)
- Type of Management (Government, Aided and Unaided)
- Discipline (Arts, Commerce and Science)
- Age, 3 categories 22-30 yrs – (lower age group), 31-40 yrs – (middle age group) and above 40 yrs – (Higher age group).

- Teaching experience – 3 categories: Less than 10 yrs – (less experienced), 10 - 20 yrs – (average experienced) and above 20 yrs – (High experienced)

- Marital status (Married and Unmarried)

- Type of Family (Nuclear / Joint)

3.3 Definitions of the Technical Terms Used:

Job Satisfaction:

According to Saxena (1994), Job Satisfaction is the result of various attitudes possessed by an employee (teacher) towards his teaching profession. These attitudes are related to different areas of job as interesting, chance for progress, use of ability, authority, co-workers, chance to be creative independence, social status, security, relation with the principal as well as to management, variety in teaching work, service conditions, personal recreation, moral values, social prestige and identification. So Job Satisfaction may be defined as “the result of various attitudes possessed by the teachers who are employed on an employee in higher secondary schools”. So we can say in nut shell that the Job Satisfaction may be defined as an attitude which results from a balancing and summation of many specific likes and dislikes experienced in connection with the job (Bullock, 1952)
**Occupational Stress:**

Occupational stress is defined as a condition of mental and physical exertion brought about as a result of harassing events or dissatisfying elements or general features of the working environment. (Camp, 1985; Claxton, 1989; Fletcher and Payne, 1982; French, 1988; Galloway et al. 1984; Kyriacou and Pratt, 1985).

**Locus of Control:**

According to Rotter (1966), Locus of Control is not a typological and people are not internally or externally controlled type. Locus of Control is a continuum and people can be ordered along that continuum. For the same of convenience, we will refer people as internals or externals, but it should be emphasized that the behaviour of an individual in any given situation is determined by many converging factors.

**Job Involvement:**

It is the extent to which an individual's self esteem is affected by his performance at work (Lodhal and Kejner, 1965). It is the degree of which an individual identifies psychologically with his persons work holds a very important position in his life and is very much personally affected by the whole job situation.

**3.4 Research Hypotheses:**

1. Male and Female teachers of Pre-University Colleges do not differ significantly with respect to their job satisfaction.
2. Rural and urban Pre-University College teachers do not differ significantly with respect to their job satisfaction.
3. Government, Aided and unaided Pre-University College teachers do not differ significantly with respect to their job satisfaction.

4. Arts, Science and Commerce Pre-University College teachers do not differ significantly with respect to their job satisfaction.

5. Teachers of Pre-University College with 22-30 years, 31-40 years and above 40 years of age do not differ significantly with respect to their job satisfaction.

6. Teachers Pre-University College with Less than 10 years, 11-20 years and above 20 years of teaching experience do not differ significantly with respect to their job satisfaction.

7. Married and unmarried teachers of Pre-University Colleges do not differ significantly with respect to their job satisfaction.

8. Teachers of Pre-University Colleges belonging to nuclear and joint family do not differ significantly with respect to their job satisfaction.

9. Teachers of Pre-University Colleges with low and high occupational stress do not differ significantly with respect to their job satisfaction.

10. Teachers of Pre-University Colleges with low and high locus of control do not differ significantly with respect to their job satisfaction.

11. Teachers of Pre-University Colleges with low and high powerful others do not differ significantly with respect to their job satisfaction.

12. Teachers of Pre-University Colleges with low and high chance control do not differ significantly with respect to their job satisfaction.

13. Teachers of Pre-University Colleges with low and high individual control do not differ significantly with respect to their job satisfaction.

14. Teachers of Pre-University Colleges with low and high job involvement do not differ significantly with respect to their job satisfaction.

15. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of Pre-University College teachers.
16. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of Pre-University College male teachers.

17. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of Pre-University College female teachers.

18. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of rural Pre-University College teachers.

19. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of urban Pre-University College teachers.

20. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of government Pre-University College teachers.

21. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of aided Pre-University College teachers.

22. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of unaided Pre-University College teachers.

23. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of Pre-University College arts faculty teachers.

24. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of Pre-University College science faculty teachers.
25. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of Pre-University College commerce faculty teachers.

26. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of 21-30 years of aged Pre-University College teachers.

27. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of 31-40 years of aged Pre-University College teachers.

28. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of less than 10 years of teaching experienced teachers of Pre-University College.

29. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of 10-20 years of teaching experienced teachers of Pre-University College.

30. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of above 20 years of teaching experienced teachers of Pre-University College.

31. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of Pre-University College married teachers.

32. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of Pre-University College unmarried teachers.
33. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of Pre-University College teachers belonging to nuclear family.

34. There is no significant interaction effect of occupational stress (low, high), locus of control (low, high) and Job involvement (High and Low) on job satisfaction of Pre-University College teachers belonging to joint family.

35. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of Pre-University College teachers (total).

36. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of Pre-University College male teachers.

37. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of Pre-University College female teachers.

38. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of rural Pre-University College teachers.

39. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of urban Pre-University College teachers.

40. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of government Pre-University College teachers.

41. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of aided Pre-University College teachers.
42. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of unaided Pre-University College teachers.

43. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of Pre-University College arts faculty teachers.

44. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of Pre-University College science faculty teachers.

45. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of Pre-University College commerce faculty teachers.

46. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of 21-30 years of aged teachers of Pre-University Colleges.

47. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of 31-40 years of aged teachers of Pre-University Colleges.

48. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of above 40 years of aged teachers of Pre-University Colleges.

49. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of Pre-University College teachers with less than 10 years of teaching experience.

50. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of Pre-University College teachers with 10-20 years of teaching experience.

51. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of Pre-
University College teachers with above 20 years of teaching experience.

52. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of Pre-University College married teachers.

53. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of Pre-University College unmarried teachers.

54. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of Pre-University College teachers who lives in nuclear family.

55. There is no significant relationship between job satisfaction with occupational stress, locus of control and Job involvement of Pre-University College teachers who lives in joint family.

56. Occupational stress, Locus of control and Job involvement factors are would not be significant predictors of job satisfaction of Pre-University College teachers.

57. Occupational stress, Locus of control and Job involvement factors are would not be significant predictors of job satisfaction of Pre-University College male teachers.

58. Occupational stress, Locus of control and Job involvement factors are would not be significant predictors of job satisfaction of Pre-University College female teachers.

59. Occupational stress, Locus of control and Job involvement factors are would not be significant predictors of job satisfaction of Rural Pre-University College teachers.

60. Occupational stress, Locus of control and Job involvement factors are would not be significant predictors of job satisfaction of Urban Pre-University College teachers.
61. Occupational stress, Locus of control and Job involvement factors are would not be significant predictors of job satisfaction of government Pre-University College teachers.

62. Occupational stress, Locus of control and Job involvement factors are would not be significant predictors of job satisfaction of aided Pre-University College teachers.

63. Occupational stress, Locus of control and Job involvement factors are would not be significant predictors of job satisfaction of unaided Pre-University College teachers.

64. Occupational stress, Locus of control and Job involvement factors are would not be significant predictors of job satisfaction of Pre-University College arts faculty teachers.

65. Occupational stress, Locus of control and Job involvement factors are would not be significant predictors of job satisfaction of Pre-University College science faculty teachers.

66. Occupational stress, Locus of control and Job involvement factors are would not be significant predictors of job satisfaction of Pre-University College commerce faculty teachers.

67. Occupational stress, Locus of control and Job involvement factors are would not be significant predictors of job satisfaction of less than 10 years of experienced teachers of Pre-University Colleges.

68. Occupational stress, Locus of control and Job involvement factors are would not be significant predictors of job satisfaction of 10-20 years of experienced teachers of Pre-University Colleges.

69. Occupational stress, Locus of control and Job involvement factors are would not be significant predictors of job satisfaction of above 20 years of experienced teachers of Pre-University Colleges.

70. There is no significant direct and indirect effect of occupational stress, locus of control and job involvement on job satisfaction of Pre-University College teachers (total).
3.5 Sample:

The teachers who are working in PU Colleges of Shimoga district in the academic year 2008-2009 constitutes the population of the study.

Stratified random technique was used to select the PU colleges from Shimoga district. There are 7 Taluks in Shimoga district. The total colleges existing in Shimoga district are 104, out of which 50 - Government, 37 - Unaided and 17 - Aided colleges, out of which 73 colleges were selected (covers 70% of the total colleges) in the ratio 3:2:1 respectively. The total number of teachers working in PU Colleges in Shimoga district are 760 out of which 400 teachers were selected by simple random technique from the Arts, Science and Commerce disciplines in the ratio 5:2:1 respectively as follows.

Table 3.1 Details of PU College Teachers selected for the Study.

<table>
<thead>
<tr>
<th>Location</th>
<th>Type of Institution</th>
<th>Male</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Female</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
<th>G.Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td></td>
<td></td>
<td>Arts</td>
<td>Science</td>
<td>Com</td>
<td>Total</td>
<td>Arts</td>
<td>Science</td>
<td>Com</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Government</td>
<td></td>
<td>27</td>
<td>7</td>
<td>9</td>
<td>43</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td>3</td>
<td>2</td>
<td>20</td>
<td>63</td>
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<tr>
<td>Aided</td>
<td></td>
<td>30</td>
<td>8</td>
<td>4</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unaided</td>
<td></td>
<td>35</td>
<td>25</td>
<td>5</td>
<td>65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td>5</td>
<td>4</td>
<td>24</td>
<td>89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>92</td>
<td>40</td>
<td>18</td>
<td>150</td>
<td></td>
<td>33</td>
<td>10</td>
<td>7</td>
<td>50</td>
<td>200</td>
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<tr>
<td>Government</td>
<td></td>
<td>39</td>
<td>15</td>
<td>8</td>
<td>62</td>
<td></td>
<td>14</td>
<td>10</td>
<td>2</td>
<td>26</td>
<td>88</td>
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<td></td>
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<tr>
<td>Aided</td>
<td></td>
<td>26</td>
<td>11</td>
<td>4</td>
<td>41</td>
<td></td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>9</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unaided</td>
<td></td>
<td>34</td>
<td>6</td>
<td>7</td>
<td>47</td>
<td></td>
<td>9</td>
<td>3</td>
<td>3</td>
<td>15</td>
<td>62</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
<td></td>
<td>99</td>
<td>32</td>
<td>19</td>
<td>150</td>
<td></td>
<td>26</td>
<td>18</td>
<td>6</td>
<td>50</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Grand Total</td>
<td></td>
<td>191</td>
<td>72</td>
<td>37</td>
<td>300</td>
<td></td>
<td>59</td>
<td>28</td>
<td>13</td>
<td>100</td>
<td>400</td>
<td></td>
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</tbody>
</table>

The above table shows that the sample consists of 400 teachers, 200 teachers from rural and 200 teachers from urban colleges, where 300 male teachers and 100 female teachers were selected based on availability.
3.6 Tools used for Collection of Data:

The researcher has used the following tools for collection of relevant and required data for the study,

- Job Satisfaction Scale for Teachers developed by Saxena (1994)
- Levinson's Locus of Control Scale developed by Sanjay Vohra (1992) which is based on tool constructed by Hall and his associates (1980)
- Job Involvement Inventory constructed by Lodahl and Kejner (1965) revalidated by Kulsum (1985) to measure Job Involvement of teachers
- Occupational Stress Inventory developed by the researcher

The brief description of the tools are procured below:

(i) Job Satisfaction Inventory: To quantify the Job Satisfaction of teachers working in PU colleges, Job Satisfaction scale was constructed and standardized by Saxena (1994) was used. The questionnaire consisted of 29 highly discriminating “Yes-No” type items.

Administration: The Job satisfaction Questionnaire is self-administering questionnaire. The purpose of the questionnaire is frankly explained to the subjects. It is assured that their replies would be kept confidential. The subject is requested to read the instructions carefully and to ask the tester, if there is any difficulty in the understanding of these instruction, it is empathized that no items should be omitted and there is nothing ‘right’ or ‘wrong’ about these questions. There is no time limit for the questionnaire. However, it takes approximately 20 minutes to complete it.
**Scoring**: All the items except 4 and 29 are positively awarded. All these items are given a score of “1” for positive responses except for items 4 and 29 in which case reverse is applicable (i.e. 0). The sum of these values gives the job satisfaction scores for the subject. The total score varies from 0 to 29, showing lowest job satisfaction to highest job satisfaction for the subject.

**Reliability**: The Split Half reliability of the test applying Spearman–Brown formula is 0.86. Only highly discriminating items are included in the questionnaire. The face validity of the measure is very high and content validity is ensured as the items for which there has been 100 percent agreement among judges regarding their relevancy.

Details of Job Satisfaction Scale for Teachers developed by Saxena (1994) was given in the Appendix No. 6

(ii) **Locus of Control Scale**: Researcher has used Sanjay Vohra (1992) adapted Levinson’s Locus of Control Scale, which is based on the tool constructed by Hall and his Associates (1980). The purpose of the scale was to study internal and external Locus of Control of teachers.

It consists of 24 items with five choices ranging from Strongly Agree (SA) to Strongly Disagree (SD). Twelve of the 24 items are oriented towards external Locus of Control and 12 towards internal Locus of Control.
In the five-point scale, the responses are given weight from 1 to 5 as shown below:

5. Strongly Agree  
4. Agree  
3. Undecided  
2. Disagree  
1. Strongly Disagree

The total score of the scale ranges from 24 (internal) to 120 (external). Higher scores indicate an External Locus of Control and the lower scores indicate an Internal Locus of Control.

Co-efficient alpha internal consistency of this scale as 0.85 as reported by Hall et. al. (1980) and co-efficient alpha internal consistency of reliability was 0.78 when the tool was used by ‘Glennele Halpin and Associates (1985)’ in their study.

**Reliability:** The results were highly satisfactory and the reliability co-efficient of this tool was found to be very high i.e. 0.76.

Details of Levinson’s Locus of Control Scale developed by Sanjay Vohra (1992) was given in the Appendix No. 4

(iii) **Job Involvement Inventory:** This inventory was developed by Lodahl and Kejner (1965) with a purpose to assess the extent of Job Involvement of teachers. This inventory contain items which bear on: concern about one’s work, importance of work activities, concerned about their quality of work, preparing oneself for job activities, job activities as a source of gratification, lack of heightened time
consciousness, working hard and doing extra work. Job Involvement Inventory consists of 20 items with five alternatives namely Strongly Agree, Agree, Undecided, Disagree, Strongly disagree.

**Reliability and Validity**: The authors have reported that this inventory displayed validity of two kinds. Convergent and discriminate and the inventory had the test-retest reliability ranging between 0.72 and 0.89.

The 20-item Job Involvement Inventory developed by Lodahl and Kejner (1965) has been widely used in India and regarded as a 'reliable and valid tool' for assessing Job Involvement.

Kulsum (1985) adopted this Job Involvement Inventory and established the reliability and validity on a sample of 180 Higher Secondary school teachers working in Bangalore City. Both the 'test retest' and 'spilt half' methods were used and reliability was found to be 0.75 and 0.82 respectively.

Details of Job Involvement Inventory constructed by Lodahl and Kejner (1965) was given in the Appendix No. 5.
(iv) Occupational Stress Scale for PU College or higher secondary teachers: (This Occupational Stress scale was constructed by the researcher).

Construction - Validation of Occupational Stress Scale: (For PU College or higher secondary teachers):

Item Analysis: (Validation Of Tool):

Modern society gives stress to everyone in various forms all employees, workers, professionals including teachers are experiences stress in their different working situations and in their life. Stress influences all people including teachers at one time or the other. The physical, psychological, professional, intellectual, social and economical factors not only cause stress but also influence the efficiency of the teachers (From Primary to Higher).

The stimuli of occupational stress (Job Stress) originate from both outside & inside of the organization besides being present within the individual himself. A review of Indian test materials indicates that, less number of inventories were developed on occupational stress. Therefore investigator decided to construct new scale on occupational stress for P.U College teachers.
This scale was developed on the basis of four dimensions of occupational stress concept of teachers.

Dimensions and its sub components:

1. **Organisational Stressors**: *Stress created due to organizational factors*
   [Sub Components: - Workload, Occupational hazards, Management, Department, Principal / Head etc.]

2. **Extra organizational Stressors**: *Stress created due to Extra organizational factors*
   [Sub Components: - Social, Family, Economic, Financial, Residential Conditions, Political, Race and class etc.]

3. **Group Stressors**: *Stress created due to Group factors*
   [Sub Components: - Student Stressors, Student Behavior, Colleagues, Groupism etc.]

4. **Individual Stressors**: *Stress created due to Individual factors*
   [Sub Components: - Role Conflict, Ambiguity, anger-depression, anxiety, Individual dispositions, Personal control, Professional Growth, Learned helplessness etc.]

This occupational stress scale consists of 60 items. The items were constructed on the basis of description of the concept in the Psychological literature and existing scales.

All the items were relevant to the situations close to the teachers while preparing the statements Age, Sex, Salary teaching experience, mental status and other dimensions etc., were kept in mind. The statements were direct, simple and unambiguous and directly related to occupational stress scale of teachers.
Statements were edited and scrutinized with the help of subject experts, according to their suggestions. Constructive suggestions of the experts were incorporated while preparing the tool for tryout purpose.

The tryout version of occupational stress scale is given in Appendix No. 1

**Dimension wise distribution of 60 items in occupational stress scale is as follows:**

<table>
<thead>
<tr>
<th>Name of the dimension</th>
<th>Sl.No. of items</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational Stressors</td>
<td>1-15</td>
<td>15</td>
</tr>
<tr>
<td>Extra organizational Stressors</td>
<td>16-25</td>
<td>10</td>
</tr>
<tr>
<td>Group Stressors</td>
<td>26-34</td>
<td>09</td>
</tr>
<tr>
<td>Individual Stressors</td>
<td>35-60</td>
<td>26</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

The researcher followed the item analysis procedure. 60 items constructed by the researcher were stenciled with suitable instructions to the PU College teachers on the front page. The teachers were asked to record their responses in the tool provided to them. This tool was distributed to 100 teachers working at different PU College of Shimoga district. After collecting the questionnaires form the teachers the scoring was done manually.

**Scoring** : The responses are scored according to the key for all the items. Score 1, 2, 3, 4 & 5 for the possible responses such as, No stress, Low stress, Moderate stress and High stress respectively. The maximum possible score indicates high stress and low score indicates low stress.
Statistical analysis report of item analysis:

Reliability and Validity

<table>
<thead>
<tr>
<th>Summary</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Split-half reliability</td>
<td>0.9616</td>
</tr>
<tr>
<td>Guttman split-half</td>
<td>0.9571</td>
</tr>
<tr>
<td>Standardized alpha</td>
<td>0.9383</td>
</tr>
<tr>
<td>Correlation 1st and 2nd half</td>
<td>0.9261</td>
</tr>
<tr>
<td>Cronbach alpha 1st half</td>
<td>0.8975</td>
</tr>
<tr>
<td>Cronbach alpha 2nd half</td>
<td>0.8653</td>
</tr>
</tbody>
</table>

Validity = 0.9806

% of validity = 98.0612

Reliability: The reliability of the scale is calculated by using split half technique. Reliability is found to be 0.96. Hence the occupational stress scale constructed by the researcher is found to be highly reliable.

Validity: Occupational stress scale establishes concurrent validity. It shows the validity 0.98. From this it is concluded that the occupational stress scale constructed by the researcher possesses high concurrent validity and also possesses content and face validity.
Distribution of retained Items in the occupational stress scale is as follows:

<table>
<thead>
<tr>
<th>Name of the dimension</th>
<th>Sl.No. of items</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational Stressors</td>
<td>1-15 (all the items were retained)</td>
<td>15</td>
</tr>
<tr>
<td>Extra organizational Stressors</td>
<td>16-25(all the items were retained)</td>
<td>10</td>
</tr>
<tr>
<td>Group Stressors</td>
<td>26-34(all the items were retained)</td>
<td>09</td>
</tr>
<tr>
<td>Individual Stressors</td>
<td>35, 37, 39, 41, 43, 45, 47, 49, 50, 52, 54, 55, 56, 57, 58, 59</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>50</td>
</tr>
</tbody>
</table>

The final occupational stress scale consists of 50 items based on 4 dimensions. This is Likert Type of Scale with five point scale. 1. No Stress 2. Low Stress 3. Moderate Stress. 4. More stress and 5. High stress with 1,2,3,4,5 scores respectively. This scale indicates the extent to which each of the items shows how teachers are stressful in their occupation. The total scores varied from 50 to 250 showing ‘No Stress’ to ‘High Stress’.

The constructed final occupational stress scale was given in the Appendix No. 5

3.7 Data Collection:

To collect the data, required for the study, the researcher used booklet consisting of four scales namely Occupational Stress, Locus of Control, Job Involvement and Job Satisfaction along with Information Blank.
The researcher obtained the permission from the Management, Principals and Researcher handed over the booklet to 600 PU College Teachers. The teachers were requested to respond freely and frankly and were cursed that the responses provided by them would be kept confidential and used only for research purposes. The researcher was able to get 400 completely filled booklets in the end.

Information about gender difference, age, qualifications, experience, marital status etc. was collected on the information blank and data relating to teachers Job Satisfaction, Locus of Control, Occupational stress and Job Involvement were collected by using questionnaire.

3.8 **Statistical techniques used for the analysis of the data:**

The following statistical techniques were used in the analysis of the data.

_i. Descriptive Analysis:_

_a) Mean:_ Mean is a relatively stable measure of central tendency. It has importance in the further statistical analysis and quite amendable to algebraic treatment.

_b) Standard Deviation:_ Standard Deviation is most widely used and popular measure of variability. It is understood as a very satisfactory measure of dispersion.

_ii. Differential Analysis:_

The analysis of variance (ANOVA) is a good technique to ascertain whether two or more than two groups differ significantly in their means in the simplest possible manner, whereas the Multiple Classification of Analysis of Variance verifies the significance of combined effect of two or more variables on one dependent variable.
Multiple classifications ANOVA helps the researcher to determine the relationship between one dependent variable and two or more independent variables. The researcher can test the relationship between the dependent variable and various interactions of the independent variables (Popham, 1967).

**Main Effects**: In the present investigation the independent variables Occupational Stress, Locus of Control, and Job Involvement are taken as main effects (at two level high and low) on Job Satisfaction and its dimensions.

**Interaction Effects**: When two or more set of variables have got the combined effect on the criterion variable, it is said that interaction effect exist on criterion variable.

**iii. Correlation Analysis**:

When for each measurement of one variable (X) there is a corresponding value of a second variable (Y), then it is said that there is a correlation between these two variables (X and Y).

When the relationship between two sets of measures is “linear” that is :, can be described by a straight line, the correlation between scores may be expressed by the “product moment” coefficient of correlation, designated by the letter ‘r’ Garrett; (1981).

**Coefficient of Correlation**: Coefficient of correlation is the ratio, which shows the extent to which changes in one variable are accompanied or dependent upon changes in a second variable.
The product moment coefficient of correlation is also known as Karl Pearson’s coefficient of correlation and represented by letter ‘r’. ‘r’ can take the values numerically from -1 to +1. The numerical value of ‘r’ shows the strength of relationship whereas sign indicates the direction of relationship.

In the present study the Karl Pearson’s Coefficient of Correlations (r) have been computed between Job Satisfaction along with its dimensions Occupational stress, Locus of Control and Job Involvement of the subjects taken for the study.

iv. Regression Analysis:

The term ‘regression’ means the act of returning or going back. The term ‘regression’ first came into use when Francis Galton was studying the relationship between height of fathers and sons.

Regression is the determination of a statistical relationship between two or more variables in which one variable (defined as independent) is the cause of the behaviour or another one (defined as independent variable) (Kothari; 1985).

The correlation coefficient merely measures the degree of relationship between two variables (X and Y) whereas the nature of relationship that is; cause and effect relation can be ascertained by regression analysis only.

When two or more than two variables are having correlations, then by using the known values of the variables, the unknown value of another variable can be predicted and estimated by regression. In this prediction the most probable value of unknown variable can be estimated.
V. Path Analysis:

In simple, multiple regression analysis, empathizes is on the study of the extent to which the dependent variable(s) get affected by the contribution of the independent variable(s) on original scales measurements being standardized for comparison of the scores with the studies being carried out by others with the same variables(s). The regression coefficients obtained carrying out simple, multiple regression analysis are found to get affected by the unit of measurement. In other words, the values of the regression coefficients of the variables get affected with the change of unit of measurement of the variable(s). In order to understand the true relation between the dependent and independent variables it becomes necessary to have regression coefficients independent of the unit of measurement of the variables.

Thus, the regression coefficients in the regression models of the standardized variables have come to be named path (directional) coefficients, with the path (direction) being from an independent variable towards the corresponding dependent variable. Hence the regression analysis carried out with the help of standardized variables have come to be known as path analysis. It is worth noting that, one value of the path coefficients as regression coefficients of the standardized variables, are the same in their values as those of the corresponding correlation coefficients. In the magnitude, the path coefficients are directional, but correlation coefficients are not directional. Though both are independent of the units of measurement of the corresponding variables.

In this chapter, the researcher presented the details of the methodology followed in the present study which included discussion of variables, hypotheses of the study, description of tools and instrumentation, sampling procedure and statistical analysis of the data. The succeeding chapter deals with analysis and interpretation of the data.