

**PERCEIVED STRESS OF TEACHERS IN RELATION TO
JOB SATISFACTION AND CERTAIN PERSONALITY
CHARACTERISTICS**

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Thesis
Submitted to the University of Calicut
for the Degree of
DOCTOR OF PHILOSOPHY
in
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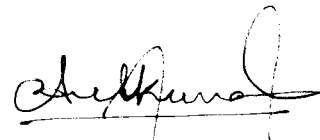
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UNIVERSITY OF CALICUT**

2002

DECLARATION

I, Anilkumar A.K., do hereby declare that this thesis *Perceived Stress of Teachers in Relation to Job Satisfaction and Certain Personality Characteristics* has not been submitted by me for the award of a Degree, Diploma, Title or Recognition before.

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CERTIFICATE

I, Dr. P.K. Sudheesh Kumar, do hereby certify that this thesis *Perceived Stress of Teachers in Relation to Job Satisfaction and Certain Personality Characteristics* submitted to the University of Calicut, is a record of bonafide study and research carried out by **Mr. Anilkumar A.K.**, under my supervision and guidance. The report has not been submitted by him for the award of a Degree, Diploma, Title or Recognition before.

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*C.U. Campus,
30.12.2002.*

Anilkumar A.K.

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I N T R O D U C T I O N

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Stress is considered as an unavoidable experience in human life. Parents, students, layman, politicians, rulers, workers from any field especially teachers etc. irrespective of caste, creed, colour, education and status are experiencing mild to chronic stress. Stress is basic to life - no matter how wealthy, powerful, attractive, or happy the person might be. It comes in many forms - a difficult exam, an automobile accident, waiting in a long line, problems in the work place, a day on which everything goes wrong. Mild stress can be stimulating, motivating, and sometimes desirable. But as it becomes more severe, stress can bring on *physical, psychological* and *behavioural* problems.

Interest in Occupational Stress has become widespread in recent years. However the experience of stress is certainly not new. The cave-dwelling ancestors of the human being faced stress every time they left their caves and encountered their enemy, the sabre-toothed tigers. The tigers of past years are gone, but they have been replaced by other predators - work overload, a nagging supervisor, time deadlines, lack of job security, poorly designed jobs, marital disharmony, financial crises, accelerating rates of change etc. These work and non-work predators interact and *create stress* for individuals on and off the job. Much of the stress experienced by people originates in organisations; much of the stress that originates elsewhere effects people's behaviour and performance in the same organisations.

The school is as *complex* in its functioning as any organisation. A large number of individuals assemble together everyday and work and play in a tightly scheduled environment. Tasks need to be performed, budgets to be balanced and

reports to be submitted like any organisation. Yet, there are some essential distinctions from business organisations. First, *profit* is not the motive for existence. Second, *growth of human beings* is the primary task and an ancillary one. In spite of these two fundamental differences, the educational institutions in the industrial society *struggles* with almost all the stressors which is prevalent in any organisation. The extra-organisational environment under which the teachers are working now is also a *stress inducing* one.

Ever since India opted for liberalisation and globalisation, almost all the sectors have been witnessing an upsurge in consumption, and in competition as well. The education sector is no *exception*. But, if one was to make an assessment of educational organisations, it can be realised that very few of them have changed and fully geared themselves upto capitalise on this opportunity. It is ironical that academicians who preach have seldom changed. Outdated syllabus, inability to attract quality personnel, lack of vision and future-oriented outlook and mismanagement are the various causes for the sorry state of affairs. In addition, the lack of financial support from the part of Government worsen the condition. Due to these reasons Government owned or Government funded private schools are witnessing a steady decline in terms of parameters like number of student admissions and quality of education imparted. In these situation, teachers may produce negative feelings like *dissatisfaction with the job, demotivation, lack of social recognition* and *social support* which will finally contribute to the creation of *job stress*.

While considering the situations in Kerala, it can be seen that its educational system has undergone a process of enormous and rapid change at Primary level and also at Higher Secondary level. At Primary level new curriculum and teaching methods are introduced. And now it is going to be implemented in the High Schools also. At Higher Secondary level plus two system is established in the place of pre-

degree. Qualified and senior teachers are promoted to Higher Secondary from Lower Primary, Upper Primary and High Schools.

Most of these teachers find it difficult to cope with the changes. It is not that the majority of the changes are intrinsically flawed, but rather that the individual teachers have been unable to cope with the extent of change. All these changes are taken place in a short period of time and without adequate preparation. Even the experienced and trained teachers find it difficult to adjust and to implement the new teaching and evaluation methods. At the same time Government failed to convince the parents about the merits of new curriculum which is implemented at the Primary and High School level. This is evident from the parent's attitude that many of them are shifting their wards to CBSE schools.

The promotion based on qualification and not on the basis of seniority affected the morale of some teachers. They are dissatisfied in their profession. In addition to that, many teachers to day have no full remuneration nor a job security. Many Primary Schools have already been closed being uneconomic. The teachers who had been teaching there are deprived of their salary and job. Added to this a list of schools that is facing the threat of closure has also been prepared by the authorities for the next academic year.

The appointments of many teachers in the plus two are still unrecognised nor are they given their salary. Granting of plus two courses in the unaided sector has also aggravated their apprehension in this regard. So most of the teachers are dissatisfied due to these prevailing conditions.

Dissatisfied person will normally under pressure. This will affect the teaching efficiency and mental condition. The vast changes at the Primary, Secondary and Higher Secondary level have created an environment ripe for *stress* among teachers. These extra organisational factors and various organisational factors created a feeling of inadequacy of resources, role ambiguity, over work load, lack of personal

freedom, status incongruency, over/under promotion, insecurity in the job, inadequate feedback about performance, unfair control system and lack of effective consultation. All these stressors influence the individual well-being in different degrees depending upon their Personality.

1.1. NEED AND SIGNIFICANCE OF THE STUDY

One is surprised at the attitude, when nearly 50 per cent of the students in schools and colleges fail in their examinations. The concerned authorities do not act to put a check on this colossal wastage. It is rather shocking that with the passage of time, the percentage of failure is mounting. The availability of innovative methods of teaching and innumerable teaching aids have brought down the pass percentage rather than giving it a boost. While talk about progress in education and express concern for quality and excellence, it forget that more than the infrastructure it is the teacher who can fulfil dreams and aspirations of a nation. The policy resolution of the Government of India, 1968 said explicitly: *of all the factors which determine the quality of education, the teacher is undoubtedly the most important*. It must be identified and re-energised to make it an asset in the overall dynamism of education, which alone can develop the vast human resources that are waiting to realise their potential in the hands of *enthusiastic teachers*.

On the Children's Day, 2000, NCERT presented the national curriculum framework for school education. The NCERT's recommendations mainly relate to ensuring a *stress free education* and a tension free evaluation. To facilitate stress free education, teachers must also feel their profession as *stress free*. But findings and conclusions stemming from studies on stress at the work place consistently and unanimously show that Occupational Stress is prevalent *among teachers*.

In a review of Occupational Stress and Burnout among teachers Kyriacou (1987) noticed that stress is a *widespread phenomena*. The profession of teaching is traditionally became as being one among the highly stressful occupation. During the

last few years the occurrence of stress among teachers has received a considerable amount of research attention in India and abroad.

Stress is a *subjective experience*, its intensity depends upon person's perception of the potential danger of an event and his or her perceived ability to cope with that event or stressor. Many factors contribute to Teacher Stress have been studied by previous researchers. This includes *student misbehaviour* (Brown & Ralph, 1994; Keiper & Busselle, 1996; Tang & Yeung, 1999), *work overload* (Gersten, 1995; Hardie, 1996; Thorsen, 1996), *inadequate salary* (Vance, 1989), *role conflict and diverse responsibilities* (Burns & Gmelch, 1992; Gersten, 1995), *poor working conditions* (Borg & Riding, 1991), *lack of recognition* (Laughlin, 1985; Vance, 1989; Tang & Yeung, 1999), *resource difficulties* (Borg, 1991; Gersten, 1995), *time management issues, lack of administrative support, poor student motivation* (Keiper & Busselle, 1996), *teacher accountability* for the child's educational outcomes, the child *physically attacking* others (Forlin, 1998), and serious *health problems* (Guglielmi & Tatrow, 1998).

From the research evidences cited earlier, it is to be agreed that more than any other public service professionals, teachers are affected by *continued stress* leading to *burnout*. This inturn result in a negative attitude towards student and a loss of idealism, energy and purpose (Schamer & Jackson, 1996). For productive outcomes from the schools Teacher Stress must be controlled. Although stress cannot be completely eliminated, it can be reduced and managed.

The results of uncontrolled stress of teachers are serious and costly to the individual, pupils and the institution. Of course, some effects are positive but many stress consequences are disruptive, counterproductive, and even potentially dangerous. Stress can produce *psychological* consequences on Teachers. These would include anxiety, frustration, apathy, lowered self-esteem, aggression and depression. Some consequences may be *cognitive*. It includes poor concentration, inability to make sound decisions or any decisions at all, mental blocks, and

decreased attention spans. Other consequences may be *behavioural*. Such manifestations as impulsive behaviour, alcohol and drug abuse, and explosive temper etc. Among the *organisational* consequences most important is the wastage of money and reputation of the institution. *Pupil's* consequences include lack of motivation, support, guidance, disruptive classroom environment, etc. In a single sentence it can be said that a Teacher working under stress deny what pupils deserve from a Teacher.

Excessive stress increases *job dissatisfaction*. Job dissatisfaction can be associated with a number of dysfunctional outcomes, including increased turnover and absenteeism, and reduced job performance. Newspaper headlines that emphasize teacher strikes, teacher burnout and stress, and assaults on school employees suggest that many teachers are not satisfied. A satisfied teacher can use all his potentials for the development of the students. They will become interested in undertaking new innovations in teaching and will try to improve their own professional abilities.

Factors driving *Stress* and *Job Satisfaction* varied over time (Olsen, 1993). Causes of Teacher dissatisfaction include *questioning* and *criticizing* of school goals and policies, lack of *enthusiasm* for teaching, *rejection* or lack of follow-up on administrative directives (Cook, 1979), *workload* and *leadership support* (Billingsley & Cross, 1992; Starnaman & Miller, 1992), students' *misbehaviour* and *undesirable attitudes* of supervisors (Tang & Yeung, 1999) etc. Employee stress is also frequently perceived to be *strongly related* to job satisfaction (Borg & Riding, 1991a; Billingsley & Cross, 1992; Olsen, 1993; Heston, 1996).

The relationship of *Stress* and *Job Satisfaction* is world widely studied (Juil & Repa, 1993; Olsen, 1993; Heston, 1996; Adams, 1999, etc.). In many studies it was found that stress is related to Job Satisfaction to a greater extent (Borg, 1991; Borg & Riding, 1991a; Billingsley & Cross, 1992; McCormic & Solman, 1992; Starnaman & Miller, 1992; Olsen, 1993; Heston, 1996).

Although stress and burnout are typically viewed as related to *job satisfaction*, it should be emphasized that this relationship may not be *too strong*. Among the studies reviewed, in one study it is found that two-thirds of teachers reported that their jobs were stressful but 86 per cent said that they usually or always liked their work (American Academy of Family Physicians, 1979). Results of another study conducted by Fimian and Santoro (1982) show that many of the teachers surveyed enjoy and are satisfied with their jobs regardless of the moderate to high stress that may be incurred. Thus some studies revealed inconsistent findings.

A satisfied teacher should have a sound Personality in order to fulfil all his duties in the desired manner. A comprehensive review of literature by the investigator shows that almost all the studies conducted to analyse the relationship between *Personality* and *Teacher Stress* indicates a relationship between certain factors of Personality and Teacher Stress (Arney, 1989; Orpen & King, 1989; Mo, 1991; Joshi & Singhvi, 1997). Some of the personality traits which related to stress are *dispositional optimism* (Scheier & Carver, 1987; Scheier, *et al.*, 1994; Wiebe & Smith, 1997), *pessimism* (Peterson, *et al.*, 1988; Scheier & Carver, 1992), *power motivation* (McClelland, 1993), *Type A behaviour pattern* (Orpen & King, 1989; Mo, 1991), *locus of control* (Stern, *et al.*, 1982; Arney, 1989; Wiebe & Smith, 1997), *negative emotions* such as anger, hostility, rage, fear or anxiety (Arena, *et al.*, 1997; Gullette, *et al.*, 1997; Wiebe & Smith, 1997); *hardiness* (Maddi & Kobasa, 1984; Kobasa, *et al.*, 1985; Wiebe, 1991; Wiebe & Smith, 1997) etc. Although recent studies have reported equivocal findings (Lee, 1991; Wiebe, 1991).

From the literature, it is highly evident that the nature of relationship between *Teacher Stress* and *Job Satisfaction* and between *Teacher Stress* and *Personality Characteristics* are far from clear, especially in Indian context. The investigator felt that more studies are needed in this area to attain a valid generalisation about the relationship of Teacher Stress, Job Satisfaction and Personality Characteristics. It is

in this context the investigator designed a study that deals *Teacher Stress in relation to Job Satisfaction and Personality Characteristics of Teachers*.

1.2. STATEMENT OF THE PROBLEM

The study is entitled as *PERCEIVED STRESS OF TEACHERS IN RELATION TO JOB SATISFACTION AND CERTAIN PERSONALITY CHARACTERISTICS*.

1.3. DEFINITION OF KEY TERMS

The key terms in the title of the study are defined and given in the following sub-sections.

1.3.1. PERCEIVED STRESS

The term *Perceived Stress* means physiological *arousal*, subjective feelings of *discomfort* and the *behavioural changes* people experienced when they confronted situations that they appraise as *dangerous* or *threatening* (Auerbach, 1996).

1.3.2. JOB SATISFACTION

Job Satisfaction is defined as an *affective* or *emotional response* toward various facets of one's job (Kreitner & Kinicki, 1998). It means job satisfaction is not a unitary concept. Rather, a person can be relatively satisfied with one aspect of his/her job and dissatisfied with one or more other aspects.

1.3.3. PERSONALITY CHARACTERISTICS

In the present study, *Personality Characteristics* refers to the personality factors measured by *Cattell's 16 PF Questionnaire* (Form C). And the definition given by Cattell (1970) is that, personality permits a prediction of what a person will do in a given situation.

1.3.4. TEACHERS

The term Teachers in the present study means the Teachers who are teaching

in *Primary, Secondary and Higher Secondary* schools recognized by the Government of Kerala.

1.4. VARIABLES OF THE STUDY

Present study is designed with *Job Satisfaction and Personality Characteristics as Independent Variables* and *Perceived Stress of Teachers as Dependent Variable*.

1.5. OBJECTIVES OF THE STUDY

The objectives of the present study were,

- 1.5.1. To study the *extent and levels* of Perceived Stress and Job Satisfaction of Teachers (Total sample and relevant Subsamples).
- 1.5.2. To study whether *gender difference* exists in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers for Total sample and Subsamples based on Type, Locale, and Management of Schools.
- 1.5.3. To study whether *significant difference* exists in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers with regard to the Type, Locale, and Management of Schools.
- 1.5.4. To study whether *significant difference* exists in Perceived Stress and Job Satisfaction of Teachers with regard to the Biographical variables (Age, Educational Qualification, Marital Status, Teaching Experience, Number of Dependents, and Type of Career of the Couples).
- 1.5.5. To estimate the *nature and degree of association* between Perceived Stress (Stressor wise and Total Stress), Job Satisfaction and Personality Characteristics for Total sample, Higher Secondary, High School, and Primary School Teachers.

- 1.5.6. To study the *main* and *interaction effects* of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers (Total sample, Higher Secondary, High School, and Primary School Teachers).
- 1.5.7. To identify the *best predictors* of Perceived Stress and Job Satisfaction of Teachers
- 1.5.8. To identify the *latent factors* underlying in the Teacher Stress Inventory (TSI) and Scale of Job Satisfaction (SJS).

1.6. HYPOTHESES

The major hypotheses formulated and tested for the study are as follows:

- 1.6.1. There will be *significant gender difference* in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers for Total sample and Subsamples based on Type, Locale and Management of Schools.
- 1.6.2. There will be *significant difference* in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers with regard to the Type, Locale and Management of Schools.
- 1.6.3. There will be *significant difference* in Perceived Stress and Job Satisfaction of Teachers with regard to the Biographical variables (Age, Educational Qualification, Marital Status, Teaching Experience, Number of Dependents and Type of Career of the Couples).
- 1.6.4. There will be *significant correlation* between Perceived Stress (Stressor wise and Total Stress), Job Satisfaction and Personality Characteristics for Total sample, Higher Secondary, High School and Primary School Teachers.

- 1.6.5. There will be *significant main* and *interaction effects* of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers (Total sample, Higher Secondary High School, and Primary School Teachers).
- 1.6.6. Best predictors of Perceived Stress and Job Satisfaction of Teachers can be identified from a set of predictor variables.
- 1.6.7. The *latent factors* underlying in the Teacher Stress Inventory (TSI) and Scale of Job Satisfaction (SJS) can be identified.

1.7. METHODOLOGY

The present study is designed as a descriptive survey. The methodology adopted for the survey is the following:

1.7.1. THE SAMPLE

The study is carried out on a representative sample of 300 Teachers from the Primary, Secondary and Higher Secondary schools of Kerala State. Proportionate Stratified sampling technique was employed. In selecting the sample, due representation is given to the category of *Teachers, Gender, School Locale, Type of Management of Schools* (Private or Government) and also to the *Biographical aspects* (Age, Educational Qualification, Teaching Experience, Marital Status, Type of Career of Couples and Number of Dependents) of Teachers. The sample is drawn from the three districts of Kerala, viz., Kannur, Kozhikode and Malappuram, 100 each from Primary, Secondary and Higher Secondary schools.

1.7.2. TOOLS USED FOR THE STUDY

The tools used for measuring the variables are the following :

1.7.2.1. Teacher Stress Inventory (Kumar & Kumar, 2001)

Teacher Stress Inventory (TSI) developed by Kumar and Kumar (2001) was used to quantify the Perceived Stress of Teachers of various categories. TSI

contains 50 items and these come under six major stressors namely, *Intrinsic to the Job, Role of Teachers, Relationship at Work, Career Development, Organisational Structure, and Home-Work Interface*. The tool is constructed in the Likert Format. Sum of the responses for all the 50 items, give an indication of one's Perceived Stress.

1.7.2.2. Scale of Job Satisfaction (Kumar & Kumar, 2001).

Scale of Job Satisfaction (SJS) prepared by Kumar and Kumar (2001) was used to assess the Job Satisfaction of a Teacher. The Scale comprises of eight major components. These are *Relationship with Parent and Students, Pay and Fringe Benefits, Working Conditions, Opportunities for Advancement, Personal Worth, Co-Teachers, Principal and Job Itself*. Eight components altogether contains 41 positive items and 33 negative items. That is, a total of 74 items. Likert Format is adopted for the construction of the Scale.

1.7.2.3. 16 PF Questionnaire - Form C- Malayalam Version (Rema & Raveendran, 1989).

There are six forms of the 16 PF and from these, Form C (Malayalam Version) was adopted for the present study, in order to identify the *Personality Characteristics* of the sample studied. It consists of 105 items, each provided with three alternatives of answering. Sixteen functionally independent factors with two dimensions at the extremes are measured by this test. Majority of questions in the questionnaire are indirect asking about interests, which the persons would not necessarily perceive to be related to the trait in question, so that faking is minimised. Completion of Form C requires 25 to 35 minutes. In the present study a composite score on the 16 PF is utilised.

1.7.3. STATISTICAL TECHNIQUES USED

The following statistical techniques were employed to analyse the data for the present study. Analysis of data was done for the Total sample and relevant Subsamples wherever appropriate.

1.7.3.1. Percentage Analysis

Percentage analysis was undertaken to study the extent and levels of *Perceived Stress* and *Job Satisfaction* of Teachers.

1.7.3.2. Mean Difference Analysis

Test of significance of difference between means was used to study Gender Difference in *Perceived Stress, Job Satisfaction, and Personality Characteristics* of Teachers of different categories. This technique was also used to compare the variables based on Type, Locale, Management of Institutions and Biographical Variables.

1.7.3.3. Pearson's Product Moment Coefficient of Correlation

To estimate the extent and degree of association of Independent Variables viz., *Job Satisfaction* and *Personality Characteristics* with Dependent Variable *Perceived Stress* of Teachers, Pearson's Product Moment Coefficient of Correlation was used.

1.7.3.4. Two-way Analysis of variance with 3×3 factorial design

This technique was used to study the *main* and *interaction* effects of the Independent Variables (*Job Satisfaction* and *Personality Characteristics*) on the Dependent Variable *Perceived Stress* of Teachers.

1.7.3.5. Scheffe' Test of Post-Hoc Comparison

In Analysis of Variance where significant F-values are obtained, further analysis as a Post-hoc comparison was done between the pairs of different levels of the Independent Variables viz., *Job Satisfaction* and *Personality Characteristics* on the Dependent Variable *Perceived Stress* of Teachers using Scheffe' Test of Post-hoc comparison.

1.7.3.6. Multiple Regression Analysis – Step wise

Multiple Regression Analysis was carried out to identify the major predictors of *Perceived Stress* and *Job Satisfaction* and to arrange them in the descending order of their importance.

1.7.3.7. Principal Component Factor Analysis

Factor analysis was used to identify the underlying factors with Teacher Stress Inventory (TSI) and Scale of Job Satisfaction (SJS).

1.8. SCOPE AND LIMITATIONS OF THE STUDY

The present study covered the investigation about the following aspects. a) Extent and levels of Perceived Stress and Job Satisfaction and Gender difference in the variables for various subsamples, b) Comparison of variables for different subsamples formed on the basis of demographic and biographical aspects c) Assess the extent and degree of association between Independent and Dependent Variables d) Find out the main and interaction effect of Independent Variables on the Dependent Variable *Perceived Stress* of Teachers e) Identify the best predictors of *Perceived Stress* and *Job Satisfaction* in the descending order based on their magnitude of contribution f) Identify the latent factors underlying in the Teacher Stress Inventory (TSI) and Scale of Job Satisfaction (SJS).

The study is conducted on a representative sample of 300 Teachers (100 each from Primary, Secondary and Higher Secondary) from three district of Kerala State viz., Kannur, Kozhikode and Malappuram, using proportionate stratified sampling technique. The schools were selected from within the stratified categories and by giving due representation to factors like Locale of the schools (Urban/Rural), Gender of the Teachers (Male/Female), Type of School Management (Government/Private) and also to the Biographical Aspects (Age, Experience, Qualification and Marital Status) of Teachers.

From the review of related literatures, it is found that studies on Perceived Stress of Teachers and Job Satisfaction, and also between Perceived Stress of Teachers and Personality Characteristics are rare in Indian context and that standardised tools to measure Perceived Stress of Teachers in Kerala context is scarce. So the investigator hopes that tools developed for the study will be of much use to assess the Perceived Stress of Teachers, for those who wish to develop stress management techniques and coping strategies. The *Scale of Job Satisfaction* constructed by the investigator can be used for all levels of Teachers and it has very relevance in the existing educational situations in Kerala.

To study every possible relationships between Independent Variables, *Job Satisfaction* and *Personality Characteristics* on Dependent Variable *Perceived Stress* of Teachers, the investigator had used the sophisticated statistical techniques viz., Pearson's Product Moment Correlations, Two-way ANOVA, Multiple Regression and Factor Analysis.

Even though every attempt has been made to make the study as precise and generalisable as possible, certain limitations have crept into the study due to practical considerations. These are given in the following:

- 1.8.1. A number of Personality variables (Cognitive/Perceptual Style, Teaching Style, Social Power and Influence etc.) and Organisational characteristics (Leadership, Communication, Morale etc.) are seem associated with Job Stress. Those variables are not taken into consideration of the present study.
- 1.8.2. Six major stressors in teaching profession are utilised for the Teacher Stress Inventory. There are another sets of societal, individual and institutional factors as stressors. Those are not considered in the study.
- 1.8.3. Relationship between total Personality Characteristics and Perceived Stress were only studied. It would have been better if all the 16 Personality factors

were taken into consideration and studied each one's effect on Perceived Stress.

1.8.4. The study were not covered all the Teachers of Kerala State. Due to practical reasons it is limited to a representative sample of 300 teachers (100 each from Primary, Secondary, and Higher Secondary Schools).

1.8.5. The sample of the study is not a state wide one, but confined to three districts in Kerala viz., Kannur, Kozhikode and Malappuram.

1.9. ORGANISATION OF THE REPORT

Report of the present study is organised into Five chapters. Various aspects in each chapter is arranged under the following scheme.

CHAPTER I INTRODUCTION

Need and Significance of the Study

Statement of the Problem

Definition of Key Terms

Variables of the Study

Objectives

Hypotheses

Methodology

Scope and Limitations of the Study

Organisation of the Report

CHAPTER II REVIEW OF RELATED LITERATURE AND META ANALYSIS

Theoretical Perspectives of the Variables

Occupational Stress

Teacher Stress

Job Satisfaction

Personality

Review of Related Studies

Studies on Teacher Stress

Review of Foreign Studies - Stress and Job Satisfaction

Studies on Stress and Personality

Studies on Stressors

Studies on Other Aspects of Stress

Review of Indian Studies - Various Aspects of Stress

Meta Analysis

CHAPTER III METHODOLOGY

Variables of the Study

Objectives

Hypotheses

Procedure

Tools Employed for Data Collection and Psychometric Details

Selection of Sample

Data Collection Procedure Scoring and Consolidation of Data

Statistical Techniques Used in the Study

Summary of Methodology

CHAPTER IV ANALYSIS AND INTERPRETATIONS

Preliminary Analysis

Extent and Levels of Perceived Stress and Job Satisfaction of Teachers

Gender Difference in Mean Scores of the Variables

Major Analysis

Investigation of Difference in Perceived Stress, Job Satisfaction and
Personality Characteristics of Teachers

Extent and Degree of Association of Job Satisfaction and Personality

Characteristics with Perceived Stress of Teachers

Investigation of the Main and Interaction Effects of Job Satisfaction and
Personality Characteristics on Perceived Stress of Teachers

Prediction of Perceived Stress and Job Satisfaction of Teachers
Identification of Latent Factors Underlying in the Teacher Stress
Inventory (TSI) and Scale of Job Satisfaction (SJS)

CHAPTER V SUMMARY FINDINGS CONCLUSIONS AND SUGGESTIONS

Study in Retrospect

Restatement of the Problem

Variables

Objectives

Hypotheses

Methodology

Major Findings

Extent and Levels of Perceived Stress and Job Satisfaction of Teachers

Gender Difference in Mean Scores of the Variables

Difference in Perceived Stress, Job Satisfaction and Personality

Characteristics of Teachers

Extent and Degree of Association of Job Satisfaction and Personality

Characteristics with Perceived Stress of Teachers

Main and Interaction Effects of Job Satisfaction and Personality

Characteristics of Perceived Stress of Teachers

Prediction of Perceived Stress and Job Satisfaction of Teachers

Identification of Latent Factors Underlying in the Teacher Stress

Inventory (TSI) and Scale of Job Satisfaction (SJS)

Tenability of Hypotheses

Conclusions and Suggestions for Improving Professional Efficiency of
Teachers

Future Research Directions

Chapter TWO

REVIEW OF RELATED LITERATURE AND META ANALYSIS

Theoretical Perspectives of the Variables	2.1
Occupational Stress	2.1.1
Teacher Stress	2.1.2
Job Satisfaction	2.1.3
Personality	2.1.4
Review of Related Studies	2.2
Studies on Teacher Stress	2.2.1
Review of Foreign Studies –	
Stress and Job Satisfaction	2.2.1.1
Studies on Stress and Personality	2.2.1.2
Studies on Stressors	2.2.1.3
Studies on Other Aspects of Stress	2.2.1.4
Review of Indian Studies –	
Various Aspects of Stress	2.2.1.5
Meta Analysis	2.2.2

REVIEW OF RELATED LITERATURE AND META ANALYSIS

2

Literature related to the basic *theoretical* and *empirical* aspects of the variables undertaken for the study are reviewed in this chapter of the report. The reviewed literature has been presented under the following major and sub themes.

2.1. THEORETICAL PERSPECTIVES OF THE VARIABLES

- 2.1.1. OCCUPATIONAL STRESS
- 2.1.2. TEACHER STRESS
- 2.1.3. JOB SATISFACTION
- 2.1.4. PERSONALITY

2.2. REVIEW OF RELATED STUDIES

- 2.2.1. STUDIES ON TEACHER STRESS
 - 2.2.1.1. Review of Foreign Studies-Stress and Job Satisfaction
 - 2.2.1.2. Studies on Stress and Personality
 - 2.2.1.3. Studies on Stressors
 - 2.2.1.4. Studies on Other Aspects of Stress
 - 2.2.1.5. Review of Indian Studies - Various Aspects of Stress
- 2.2.2. META ANALYSIS

2.1. THEORETICAL PERSPECTIVES OF THE VARIABLES

An overview of the literature in the field of Psychological, Social-Psychological and Educational research concerned with the variables selected for the study is presented in this section. The extensive review helped the investigator to formulate a strong theoretical footing for the study.

The major focus of this part of the review is to draw out the conceptual, theoretical and empirical development of the variables and assessment.

2.1.1. OCCUPATIONAL STRESS

Stress is the *negative emotional and physiological process* that occurs as individuals try to adjust to or *deal with* environmental circumstances that disrupt, or threaten to disrupt, their daily functioning (Lazarus & Folkman, 1984; Taylor, 1995). Thus stress involves a *transaction* between people and their environments. The *environmental circumstances* that cause people to make adjustments are stressors. Stress reactions are the *physical, psychological, and behavioural responses*, that people display in the face of stressors.

2.1.1.1. The Concept of Stress in General

The term stress is used to connote *a variety of meanings* both by the common man and psychologists. Psychologists of different persuasions have given (a) stimulus-oriented, (b) response-oriented (both physiological and behavioural) definition of the term, and (c) psychologists have also treated the concept from the etiological and psychodynamic view points. It appears that under these circumstances the essential features of the stress experience have not received the attention they deserve (Asthana, 1983).

A *stimulus-oriented* approach regarded stress as an *external force* which is perceived as threatening. Some view threat itself as stress. According to Selye

(1956), any *external event* or any *internal drive* which threatens to upset the organismic equilibrium is stress.

The *response-oriented approach* describes how stress is reacted to, and how people function under stress. The way it is presumably experienced is inferred from the *response made to it*. Psychiatrists have identified four phases in the reaction to stress—the initial phase of *anticipatory threat*, the *impact of stress*, the *recoil phase* and the *post-traumatic phase*.

The *psychodynamic approach* considers *events* (both external and internal) which pose a threat to the integrity of the organism leading to the disorganisation of personality as stress. Stress presages loss of ego strength and loss of ego support. Stress may be induced by interpersonal or intrapsychic (between own impulses and ego) factors resulting in anxiety.

In order for an action, situation, or event to result in stress, it must be *perceived* by the individual to be a source of threat, challenge, or harm. If there are *no perceived consequences* - good or bad - there is no potential for stress. Three key factors determine whether an experience is likely to result in stress. These factors are importance, uncertainty, and duration. *Importance* relates to how significant the event is to the individual. *Uncertainty* refers to a lack of clarity about what will happen. Frequently, *not knowing* places more demands on people than does knowing, even if the known result is perceived as negative.

Finally, *duration* is a significant factor. The longer special demands are placed on us, the more stressful the situation. Stress of short duration is referred to as *acute stress*. It may last a few seconds, a few hours, even a few days. Long duration stress, on the other hand, is referred to as *chronic stress*. Chronic stress may last for months and years.

2.1.1.2. Stress - An Indian Perspective

The concept of stress in the modern sense is not easily found in the traditional texts of Indian culture and tradition such as *Carak Samhita*, Patanjali's *Yogasutra* and *Bhagwad Gita*. However, a number of concepts developed by ancient Indian Scholars relate to or appear similar to phenomenon of stress. Some of these, are *dukha* (pain, misery or suffering), *Klesa* (afflictions), *kama* or *trishna* (desires), *atman* and *ahamkara* (self and ego), *adhi* (mental aberrations) and *prajnaparadha* (failure or lapse of consciousness). The body-mind relationship, characteristic of modern stress studies, is emphasized in the Ayurvedic (Indian) system of medicine.

Palsane, *et al.* (1993) noted that the Indian tradition is characterized by a *holistic* approach to human phenomena. Behaviour is interpreted in terms of the totality of an individual's lifestyle and total body-mind relationship. They also observed that modern Western psychological literature focusing on ideas related to the strength of motives and frustration and their behavioural consequences, the *frustration-aggression hypothesis*, *ego involvement*, *mind-body interactions* (psychosomatics) and *locus of control* have their parallels in ancient Indian thought.

Rao (1983) has pointed out that there are two Sanskrit words *klesa* and *dukha* in *Samkhya* and *Yoga* systems which approximate stress. *Klesa* are not mental processes but are a set of *hindering load* on our mental process, they produce agitations which act as restrictions or hindrances. The *Samkhya* system postulates that the feeling of *dukha* or stress is experienced by the individual in the course of his/her interaction with the world around him/her. This system mentions three types of stresses: *personal*, *situational* and *environmental*. Personal stressors can again be two types, namely, physiological and psychological (or mental).

Klesa, as stress has been defined, operates through four different modes. The first is *prosupta* or dormant. Given the right type of conditions, any *mental process* can become a stressor. The second is *tonu* or tenuous denoting comparatively weak

stressors which are held in check by more powerful stressors. They are present but without sufficient intensity and urgency. The third type of stressors are *vichchinna* or intercepted; these lack continuity due to conflict with competing responses. Their demand character is high but they alternate between levels of *high operation* to *dormant*. Naturally, they surrender their stressor value when in a dormant stage. The fourth mode is *Udara* or operative stressors. These are potent stress responses which have found full expression in clearly observable behavioural modes. They have overcome the weaknesses of the first three modes.

This model proposed in the *Yogasutra* is a comprehensive one incorporating cognitive structuring, affective or emotional stages and adaptive reactions. It also presents the concept of *Kriya Yoga* which is aimed at reducing the *number and intensity of the stressors* and facilitates related conservation of mental energy devoid of tension which is defined as *Samadhi bhavana*.

It is evident from this discussion that like Western researchers, Indian scholars also *differently* approached the problem of stress. They viewed this phenomenon from various perspectives ranging from stimulus-oriented to response and psychodynamic points of view. Ancient Indian scholars, seem to have paid due attention to stress. The system of yoga is analytical and not only helps the individual in understanding his own stressors but also leads him to the roots of these stressors. Based on the differently different viewpoints of stress a number of stress theories have evolved.

2.1.1.3. The Background of Stress Theories

Unlike most areas within psychology, the study of stress is basically limited to the twentieth century. As early as 1914, Cannon claimed that the sympathetic nervous system is activated by signals from the *brain* when a person is exposed to an emotionally arousing stimulus. This results in increases in *heart rate, blood pressure,* and *perspiration* and prepares the individual for significant physical activity.

Cannon's work was limited in that the role of *behavioural* and *psychological factors* in the stress response was ignored; however, his research paved the way for the most famous theorist in the field, Hans Selye. Selye (1984) maintained that the body responds similarly to a wide range of stressors. He labeled this three-stage response the General Adaptation Syndrome (GAS). Selye's emphasis on the *nonspecific, biological aspects* of stress led to the formulation of many theories of stress and countless research efforts.

Cannon (1939) and Selye (1984) clearly focus on stress as a *biological response* of the person to a wide range of stimuli. Selye emphasizes the nonspecific nature of the stress response. Mason has criticized this view. He viewed stress as *dependent upon* emotional responses to situations. People who are not psychologically aware of the existence of a potentially stressful event are *least* likely to experience a stress response.

The theories of Cannon and Selye emphasize *biological factors*, while Mason's theory is typically described as an *interactionist* approach to stress. The psychological approach to stress is best represented by the work of Lazarus (1966). He claims that the key to a stress response cannot be found in either the nature of a *specific stressful event* or the *person's response* to that event. Rather the, most important factors are cognitive ones. Lazarus believes that it is the *person's perception* of an event that is crucial. This perception involves a combination of the person's perception of the potential danger of an event and his or her perceived ability to cope with that event. Stress will occur in those circumstances in which the person perceives that he or she does not have the ability or resources needed to cope with the situation.

Whether they support a biological, interactionist, or psychological approach to stress, all theorists agree that stress has the capability of increasing the risk of

suffering various forms of illness. In addition, many theorists believe that important relationships exist between *stress, personality*, and susceptibility to disease.

2.1.1.4. Stress in the Work Place

Today's workplace are filled with micro-task specialization and greater urbanization. Phenomena like these are closely linked with work settings which have numerous systems such as production, finance, administration as well as macro-organisational sub-systems like inter-organisational systems and organisational level goals, strategies, climates, cultures, structures, management styles and performance. Very often the human in the system is reduced to a mere insignificant cog in the wheel of the total technological set-up. This tends to generate feelings of powerlessness, meaninglessness, normiessness and consequent stress. Researchers interested in the studies of stress at workplace treated the concept in *different* ways. This can be categorised as *Traditional Approach* and *Transactional Approach*. These two are briefly described in the following sections.

A. *Traditional Approach*

Traditional approach to Occupational Stress seeks to identify and measure discrete stress concepts on a broad sociological level. It attends to the validity of stress constructs, the predictability of disfunctions and the generalisability of the empirical system findings. When examined collectively, the research generated from the traditional approach has lead to substantial understanding of stress in the work place (Barone, 1994). Industrial psychologists have recognised that stress at work is important, but to continue to do lip service to the most advanced theories about the stress process.

A scanning of the research findings on work stress revealed that attention has been given mainly to the organisational arrangement of work as stressful. Less attention to the *person variables* and almost none to the *stress process* (stressful

transactions between the workers and the environment, coping). Traditionally, research attention was concentrated on *antecedent variables* of stress reaction (Environmental and Person variables) and treated as separate.

B. Transactional Approach to Work Stress

A transactional *process* and *appraisal* centered approach to stress appears a very *different perspective* on work stress and stress in general than what has been traditional.

Transaction

In a particular adaptational encounter the person influence the environment and vice-versa. *Person-environment* relation is constantly subject to change. Psychological stress occurs when a person had made an *evaluation (appraisal)*. The external or internal demands tax or exceed his/her resources. Stress is not a *property of the person* or of the *environment*. But it arises when there is a conjunction between a particular kind of environment and a particular kind of person that leads to a threat appraisal (Lazarus, 1994). This is the *conceptual root* of transactional approach to work stress.

A comprehensive assessment of Occupational Stress as a transactional process requires the *nature* of the stressors, how it is *perceived* and *appraised* and the *emotional reactions* of the worker. One of the fundamental principles of Transactional Psychology argues that Job Stress research would benefit from viewing stress within the greater context of life stress. This observation serves as the primary logical argument for the adoption of transaction approach in the Occupational Stress field. The depth of the contribution of this approach to the study of Occupational Stress is evidenced by the number of empirical studies Lazarus's theoretical work has generated.

Historical Basis of Transactional Approach

A transactional view of stress is associated primarily with Lazarus but, Dewey and Bentley (1989) are credited with the origin of the concept. Although not widely known today in Psychology, *John Dewey* had spent his whole career advocating a *transactional, contextual, process oriented view* for adequately constructing the new behavioural sciences. There has been a stream of development within psychology consistent with Dewey's vision. Some of the work in this tradition is particularly *relevant* to a transactional view of work stress. The Hawthorne studies (Mayo, 1933) moved Industrial Psychology *beyond* mental measurement to human relations. Lewin (1943) was another voice researching conclusions similar to Dewey's. Lewin suggested that Social Psychology may take the unit of study as *contextualised transactions* and that experimentation takes place in real life settings within pre-existing social groups. The approach to work stress of the Michigan group which Lazarus noted favourably, built explicitly on Lewin's theory.

Lazarus and associates continue this tradition for the topic of stress. Lazarus's early laboratory studies of reactions to industrial accidents (Lazarus, *et al.*, 1970) have been supplemented in his recent work by repeated assessment of every day stress through questionnaires and interviews. Lazarus has begun experimental and field research on appraisal in the 1960's and has continued by Lazarus, *et al.* (1970); Lazarus and Folkman (1987). All these works demonstrated *the way* people evaluate what is happening with respect to their well-being and the way they cope with it.

2.1.1.5. Stress and Physiology

Logically, it would seem that *mind* and *body* are the same thing. Mind, is simply an abstract term for the workings of the brain. And the brain not only is part of the body but also is directly connected by nerves to all other parts of the body. Therefore, whatever is going on *mentally* inside a person is also going on *physically*,

and vice versa. Most of the time, however, one is unaware of the activity going on in one's brains. Individuals are conscious only of the effects of that activity - effects that the individual thinks of as *mental*, not physical. What people experience as a mental event, such as sadness, is also a physical event. Likewise, physical events, such as the *firing of neurons* in the brain, *trigger mental events*. It is not so much that the one causes the other as that they cannot, in truth, be separated. As one researcher explained, the words *psychological* and *physical* refer not to different phenomena but to *different ways of talking* about the same phenomenon (Graham, 1967). Selye and others who discuss stress have used *physiological* and *biochemical* concepts (Asterita, 1985). Therefore some knowledge of physiological functioning is needed in order to understand these discussions.

When to appraise a stressor as threatening, a key reaction is *fear*. Fear is actually a package of *responses* - physical, emotional, and cognitive. Physically, the person perspires, breathing quickens, muscles tense, and heart beat faster. Person may turn pale, lips may tremble, and may feel nauseated. If the situation is extremely threatening, the individual may feel such emotions as horror, dread, and even panic. And fear can interfere with the ability to concentrate and distort the view of the world. These features of the fear and anxiety response are generated by the action of the body's *autonomic nervous system (ANS)*, the extensive network of nerve fibers that connects the central nervous system (the brain and spinal cord) to all the other organs of the body. The ANS helps to regulate the involuntary activities of these organs - breathing, heart beat, blood pressure, perspiration and the like.

When the brain interprets a situation as dangerous, it excites a special group of ANS fibers that quickens the heart beat and produces the other changes that one experience as fear or anxiety. The ANS nerve fibers specifically responsible for these activities are referred to collectively as the sympathetic nervous system. The sympathetic nervous system is also called the fight - or - flight system, precisely because it prepares the person for some kind of action in response to danger. When

a perceived danger passes, second group of ANS nerve fibers, the parasympathetic nervous system, returns the heartbeat and other body processes to normal. Together these two parts of the ANS help to regulate the fear and anxiety reactions, as well as other responses to stress. This enable the body to maintain both the stability and the adaptability essential to life.

The ANS regulates the individuals fear through several channels (Thayer, *et al.*, 1996) but one of the most important is the body's endocrine system. The endocrine system consists of endocrine glands located throughout the body. Under various conditions, the glands release chemicals called *hormones* into the blood stream, and various body organs are propelled into action. When the person is confronted by stressors, the ANS triggers the adrenal glands, located on top of the kidneys, and these glands secrete a group of hormones called *corticosteroids*, including the hormone *cortisol*. These corticosteroids in turn stimulate various body organs as well as certain parts of the brain, setting in motion the rise and fall of anxiety reactions. Eventually the corticosteroids stimulate the *hippocampus*, the brain part that seems to regulate emotional memories, and it helps to turn off the body's anxiety reaction.

2.1.1.6. Stress - Theories

Various theories of stress are generated during twentieth century. These theories are formed by researchers in different fields at different periods. These theories of stress began to play a more important role within psychology as the potential relationships between stress and illness were systematically investigated. Some of the important theories of stress are described chronologically in the following pages.

a) *Selye's General Adaptation Syndrome (GAS)*

In this model, selye (1936, 1946, 1982) proposed that stress is the body's general *defensive* reaction to a stressor. The underlying physiological basis of stress

is the prolonged activation of certain hormonal and nervous system mechanisms. The effects of stress are proposed to vary according to an individual's constitutional make up.

The *General Adaptation Syndrome* is a concept that Selye used to describe the process of stress. It consists of three more or less distinct phases: (1) *the initial alarm reaction* (2) *the resistance phase*, and (3) *the exhaustion phase*. During the *alarm stage*, the body mobilizes for action through various hormonal and nervous system changes. At this stage, the individual can cope with the stressor by means of a *fight-or-flight reaction*. The alarm stage is a healthy response to demanding situations. If the stress is relieved, the body returns to its normal state. It is only when stress progresses to the next stage that there are likely to be more serious consequences. During the *resistance stage*, certain superficial signs suggest that the body has returned to normal. However, there are other signs that the body is still in a state of defense. In particular, hormonal levels remain high. Finally, if the stress continues, the person enters the exhaustion stage. Bodily processes begin to break down, and illness occurs. If the stress continues without disruption, the person will die.

Selye's emphasis on the nonspecific nature of the stress response has been *criticized* by Mason who maintains that while the general adaptation syndrome does exist, responses are different to diverse stimuli. Mason believes that Selye's approach is too simplistic and does not provide ample opportunities to explain *why* some people develop stress-related disorders and others *do not*. Pestonjee (1987) also pointed out the *four fundamental errors* that make GAS increasingly inadequate. According to him, the first major shortcoming of this theory, is that it is based on researches carried out on *infra-human* subjects. In such experiments, the stressors are usually physical or environmental, whereas the human organism is not always confronted by such stressors. Secondly, Selye's work on stress depends on the existence of a *non-specific physiological response*. But, it has been noted by researchers that there are certain stimuli, which do not produce non-specific

response and hence, the General Adaptation syndrome does not hold true. Thirdly, *intrapsychic* or *social factors* emerge as a major stressors in human beings. These have not been given their due place in this approach.

Finally, the reactions of infra-human subjects are more direct, perceptible and easily measurable. This is not *true of human subjects* as their responses are always mediated through several layers of cultural and social filters.

b) *The Stressful Life Events Model*

Holmes and Rahe (1967) agreed with Selye that life events can have physical effects. *Stressful Life Events Model* posits that a stress reaction occurs whenever an individual experiences something that requires an adaptive response or coping behaviour. The stress-producing event can be positive or negative and involve any aspect of the individual's life, including family and occupation. Life events are proposed to vary in their ability to cause stress. The effects of these events are proposed to be additive, and the overall size of the effect determines the amount of work that the person must do to cope. The concept of *social readjustment* refers to coping or making changes in response to the stress.

Rahe and his associates (1971) proposed a process by which life stress might occur, and they identified changes along the pathway between *an initial stressor* and *ultimate physical illness*. The pathway includes *buffers* and *filters* with which stressful events are screened. *Past experience* is the first filter that either augments or lessens the impact of a stressful event. That is, if an event is similar to one in the past that was harmful, then the individual will perceive the event as *threatening*. The second filter represents *psychological defense mechanisms*, which are proposed to deflect some stressful occurrences. The third filter is the *physiological reaction*. Here, the life event is proposed to be transformed into physiological responses. Following this, later filters determine whether the person attempts to cope and/or

whether symptoms of illness result. In conjunction with the model, Holmes and his associates devised the Social Readjustment Rating Scale.

In the 1970s, studies were done to evaluate this theory. The reported results were generally *positive* and *supportive* of the model. However, evaluation of the research indicated some serious problems in the measurement and interpretation of life events. Rabkin and Struening (1976) reviewed the research and described that many studies had statistically overestimated the size of the relationship between life events and illness. The reviewers noted that the Social Readjustment Rating Scale was not a *valid or reliable measure*.

c) *Person-Environment Fit Theory*

The Person-Environment Fit Theory was developed by French and his associates (1982). They studied about how the social world affects an individual's social adjustment and physical and mental health. This theory is oriented specifically *toward stress at work*. A central proposition of the theory is that the resources and demands of the work environment may or may not fit the needs, goals, and abilities of the employee. When work demands do not fit the person's abilities and needs, the individual will show signs of strain that will eventually lead to illness. The primary aim of this model is to identify the kinds of conditions likely to result in strain (French, *et al.*, 1982).

There are four basic concepts in this theory: *organisational stress, strain, coping* and *social support*. *Organisational stress* is defined as the potentially threatening conditions of the job (or stressor). Important organisational stress conditions include *job complexity, workload, role ambiguity, and underuse of ability*. However, it is noted that the person simply responds to the work environment. The person interacts with the environment. The individual's perception of the stress condition and the extent to which he or she feels personally capable of meeting the demand are important to consider. *Strain* is any unhealthy

response that a person makes. Physiological responses, or behavioural characteristics are evidence of strain. Strain encompasses both the long-term results of stress and the immediate stress reaction. *Coping* is defense against stress. Both physiological and behavioural coping mechanisms are used. *Social support*, the emotional support that comes from interpersonal interaction, is proposed to buffer stress and strain.

Lazarus (1987) pointed out that the concept of Person-Environment Fit is *static*. It emphasises stable relationships between person and work place. A static or structural approach is indigenous to the field of industrial stress not to all work settings where stress *constantly changes* over time and varies with specific work related contexts.

d) Lazarus's Transaction Approach

Transaction approach examines stress as a *unique process* between the *Person* and *Environment* than a *static arrangement*. By *process* what is implied is the psychological state of the person changes over time and across divers encounters. The goodness of fit between Person and Environment are not constant overtime or from one work task to another. This approach concentrates on Environment in which a stressful encounter takes place. This environmental emphasis surfaces clearly in the ideas of adaptation (Lazarus, 1968) and Person-Environment Fit. Transaction Psychology predicts stress occuring when the environment is evaluated as either *harmful*, *threatening* or *challenging*. *Harm* refers to damage that has already occured (Loss of job, poor job evaluation, failure to be promoted and disapproval by management etc.). A *Threat* is a harm that has not yet happened, but is anticipated in the future. *Challenge* refers to a condition of high demand in which the emphasis is on mastering the demand, overcoming obstacles, growing and expanding as an individual etc.

In threat, the focus is on protecting oneself against harm. In challenge, the emphasis is on the positive outcome possibilities. The attitude of challenge allows to feel engaged and expansive rather than endangered, defensive, and self-protected (Lazarus, 1987). This evaluation is the *environmental appraisal* and individual coping (Lazarus & Folkman, 1984). Appraisal is of two types. *Primary appraisal* concerns whether or not there is any personal stake in the encounter. Whereas, *secondary appraisal* concerns the available coping options for dealing with harm, threat or challenge. Each appraisal is based on the integration of the individual's personal agenda (Goals and Beliefs) and the subjective realities of the situation.

Since *personal agendas* vary from person to person, from moment to moment, people evaluate it in a diverse way. This results in great variation in the appraisal people make in the same environmental context. Appraisal is not usually filled. A sound theory of psychological stress must be capable of helping to understand *variations* in the ways people appraise adaptational transactions with their environments.

Lazarus's conception of Occupational Stress and Person-Environment Fit theory both have merit and limitations. The approach can be construed as complementary rather than contradictory in providing a meaningful conceptual framework for studying stress in the workplace. Brief and George (1994) criticized Lazarus's emphasis on the *idiographic* nature of Occupational Stress. They argue that it is important to discover these working conditions that adversely affect workers. In a similar critique of Lazarus's model, Harris (1994) has noted that occupational stressors associated with the *climate* and *culture* of an organisation, and have profound effect on employees. These may differ as a function of gender and differences in personality and coping skills.

A major difference between Lazarus's conception of Occupational Stress and Person-Environment-Fit theory is in the specificity and the size of the unit of

measurement for the components of job stress. Person-Environment-Fit theory identifies the *general conditions* that produce job strain whereas, Lazarus's model focuses on how a particular stressor event is *perceived* and *appraised*.

e) *A Facet Model of the Job Stress Sequence*

Beehr and Newman (1978) developed a model to identify and organise all relevant facets of *components of job stress*. The Facet model incorporates more than 150 variables. These variables are categorised into several different groups or facets such as Personal facet, Process facet, Environmental facet, Human Consequences facet, Adaptive Responses facet, Organisational Consequences facet and Time facet.

The *personal facet* includes any personal characteristic that can have an impact on how an individual experiences stress. Personal characteristics are proposed to interact with environmental variables through a *process facet* that involves perception and cognitive evaluation of the stressful situation. The *environmental facet* refers to the work environment and includes work-role demands, such as role overload; organisational characteristics, such as size of organisation; and external demands. Both personal and organisational consequences are proposed to result from the person-environment interaction process. *Human consequences* include effects on psychological functioning, such as anxiety; effects on physical health, such as gastrointestinal problems; and effects on overt behaviour, such as drug use and aggression. *Organisational consequences* of stress include such effects as absenteeism, turnover, and productivity losses. *Adaptive responses*, proposed to follow these consequences, represent various attempts to handle the stress.

Beehr and Newman (1978) added the element of time to these facets of stress to show that *stress is a sequential process*. First, the initial experience of stress is felt, and it has immediate human consequences. Following this, the person makes some *initial* adaptive responses aimed at alleviating the stress. If over time, these

initial responses are not successful, secondary consequences to the person and to the organisation will occur. Next, the person will make *secondary* adaptive responses. Because the stress problem is now apparent to the organisation, organisational adaptive responses are initiated as well. Again, if time does not show these adaptive responses to be successful, then long-term human and organisational consequences will occur. These can affect the health of both the person and the organisation.

f) The General Research Model

The General Research Model of Occupational Stress within which Summers, *et al.* (1994) concepts of Job Stress embedded. The model is based on two typical models of the *antecedents* and *consequences* of Job Stress. Those models hypothesize a set of *organisational stressors*, a set of *personal characteristics*, an *individual stress response* and a *set of individual consequences*. The model consists of four categories of variables, all of which have been implicated as factors which *lead* to Job Stress: Personal characteristics include sex, tenure in present job, tenure in the company and number of dependents. Included in organisational characteristics are formalisation and centralisation in structure. Organisational characteristics - procedural refer to the amount and quality of communication, the quality of training, the equity of the reward system, nature of decision making, performance appraisal and feed back system, work load etc. Role characteristics include job levels, leadership received, role conflict and role ambiguity. In Figure 2-1 The General Research Model of Job Stress is presented.

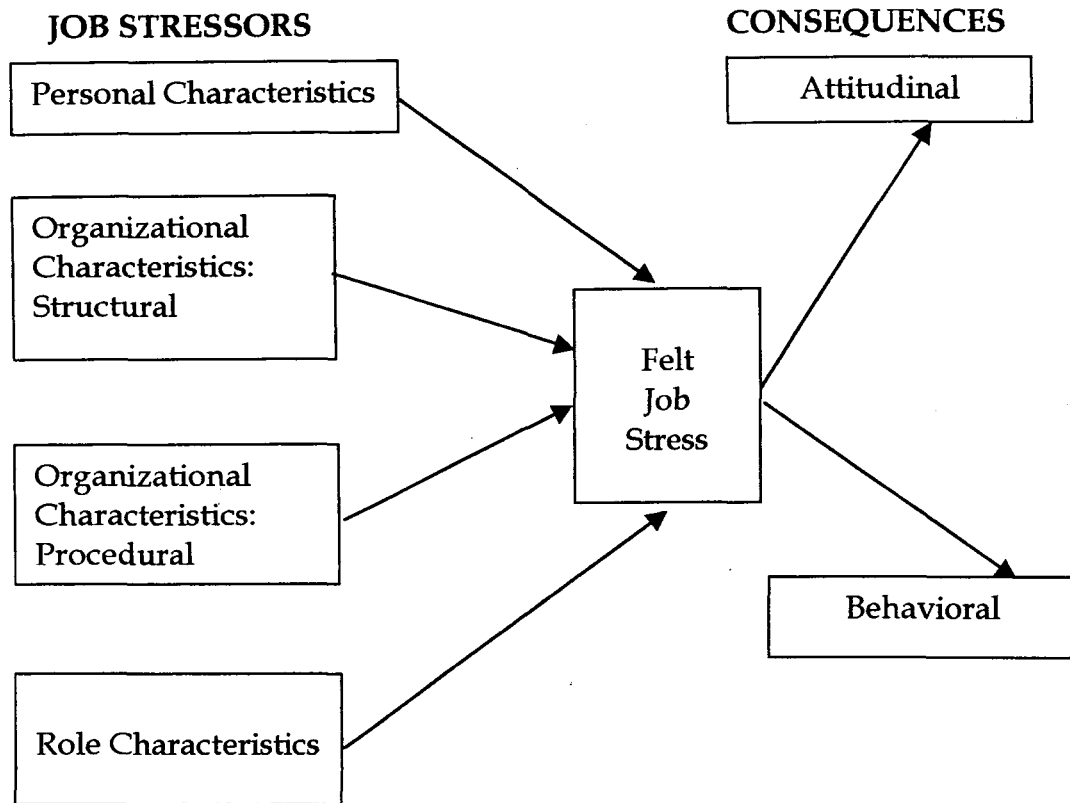


FIGURE 2-1 The General Research Model of Job Stress (Summers, *et al*, 1994)

The model also include two categories of consequences of Job Stress: *Attitudinal* and *Behavioural*.

g) A General Perspective on Stress

In Figure2-2 A general perspective on stress proposed by Berry (1997) is presented.

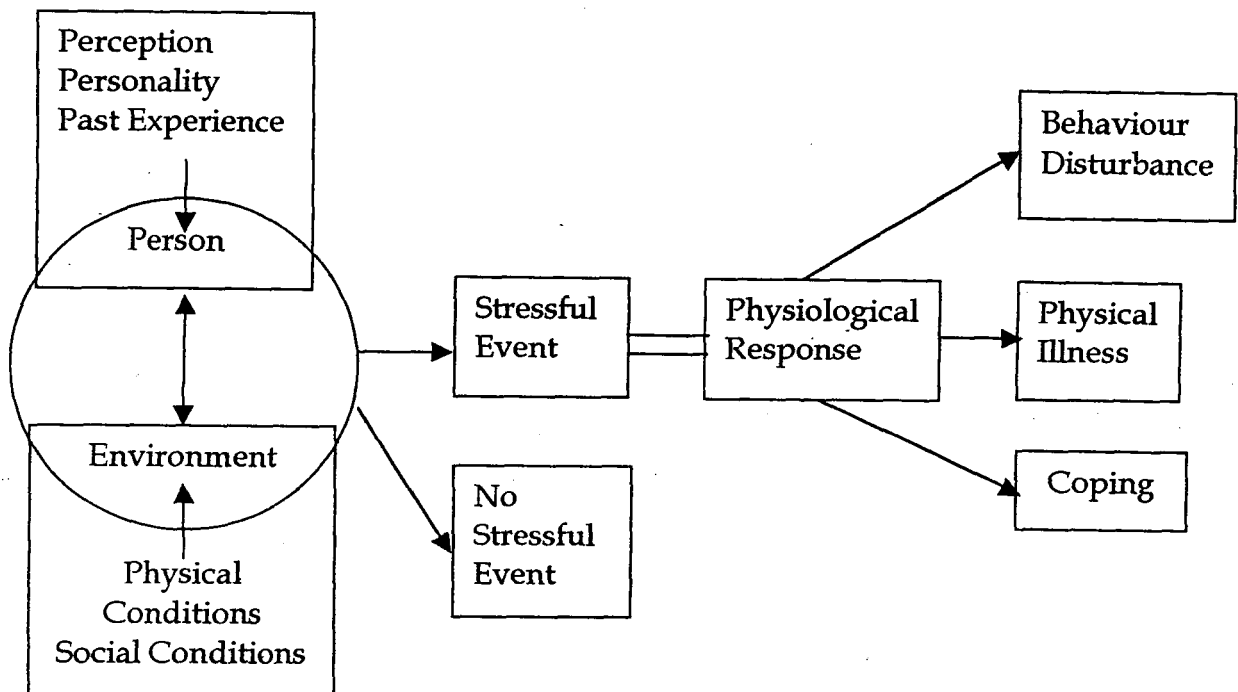


FIGURE 2-2 A General Perspective on Stress (Berry, 1997)

In this model at first, a *person-environment* interaction determines whether or not a stressful event will occur. The environment consist of both *physical* and *social conditions*. Personal variables include *perception* and *cognition*, the *learning* that occurs through experience, and *personality*. These variables account for some individual differences in how people assess situations as threatening. In the figure-2-2, the physiological response is connected to the stressful event by a double line to emphasize that the response is intimately tied to the stressful event. The physiological response, may lead in any of three directions: to *coping*, to *stress-related illness*, and to *behaviour disturbance*. Without coping efforts, illness and behavioural problems are likely; even with coping mechanisms they may occur.

Concluding Remarks

The theoretical models described are important in current research, and they are typical of the current thinking on stress. In several ways, these theories are complementary. First, they all include a *person-environment interaction*. Life events are considered stressful only if the person experiences them as such. What determines whether the person will perceive an event as stressful depends on his or her *past experience; capabilities and characteristic ways of viewing and interacting with the world*. Second, the theories recognize stress as a *physiological phenomenon*.

2.1.1.7. About Stressors

For humans, most stressors have both *physical* and *psychological* components. Any event that forces people to accommodate or change can be a psychological stressor. It is usually *unpleasant circumstances* that have the most adverse psychological and physical effects. These circumstances include *catastrophic events, life changes and strains, chronic stressors and daily hassles* (DeLongis, *et al.*, 1988; Gatchel, *et al.*, 1989).

Catastrophic events are sudden, unexpected, potentially life-threatening experiences or traumas, such as physical or sexual assault, natural disasters, and accidents. *Life changes and strains* include divorce, illness in the family, difficulties at work, moving to a new place, and other circumstances that create demands to which people must adjust (Cohen & Williamson, 1991; Price, 1992). *Chronic Stress-Stressors* that continue over a long period of time - can involve anything from living near a noisy busstand to being unable to earn a decent living because of adverse economic conditions or job discrimination (Evans, *et al.*, 1995; McEwen & Stellar, 1993; Staples, 1996). *Daily hassles* include traffic jams, deadlines, and other irritations, pressures, and annoyances that might not be significant stressors by themselves but whose cumulative effects can be significant.

Stressors at work are as *varied* as they are in other areas of life. Four major types stressors are *Individual, Group, Organisational, and Extraorganisational*.

Individual-level stressors are those directly associated with a person's job duties. The most common stressors are role conflict, workload, and role ambiguity. These role characteristics create stress because they make people feel both overworked and uncertain about what they should be doing (Netemeyer, *et al.*, 1995). Role conflict is the most widely examined individual stressor (Havlovic & Keenan, 1991). Job security is also a potent stressor that significantly influences employee attitudes and behaviour. Job security is an important stressor to manage because it can result in reduced job satisfaction, organisational commitment, and performance (Davy, *et al.*, 1997).

Group-level stressors are caused by group dynamics and managerial behaviour. Managers create stress for employees by exhibiting inconsistent behaviours, failing to provide support, showing lack of concern, providing inadequate direction, creating a high productivity environment, and focusing on negatives while ignoring good performance (Wall, *et al.*, 1996; Barnett & Brennan, 1995). Sexual harassment experiences represent another group-level stressor. Harassing experiences are negatively associated with work, supervision, and promotion, satisfaction and are positively related to ambiguity, conflict, and stress (Morrow, *et al.*, 1994).

Organisational stressors affect large number of employees. A high-pressure environment that places chronic work demands on employees fuels the stress response (Schaubroeck & Ganster, 1993). In contrast, research support the idea that participative management can reduce organisational stress (Plas, 1996). Organisational Politics, organisational culture, lack of performance feedback, inadequate career development opportunities, downsizing etc. also work as a stressor.

Extraorganisational stressors are those caused by factors outside the organisation. The most common nonwork roles involved in this form of conflict are those of *spouse* and *parent*. Balancing the demands of work and family roles is a significant daily task for a growing number of employed adults (Williams & Alleger, 1994). Pressure to work late, to take work home, and to frequently relocate in order to advance are some of the potential sources of conflict between *work* and *family*. When both spouses are employed, added conflict potential exists when one partner's career progress may be negatively impacted by the career progression of the other.

In general, stressors lead to stress, which, in turn, produces a variety of outcomes. In Figure 2-3 the outcome of various stressors proposed by Matteson and Ivancevich (1979) are given.

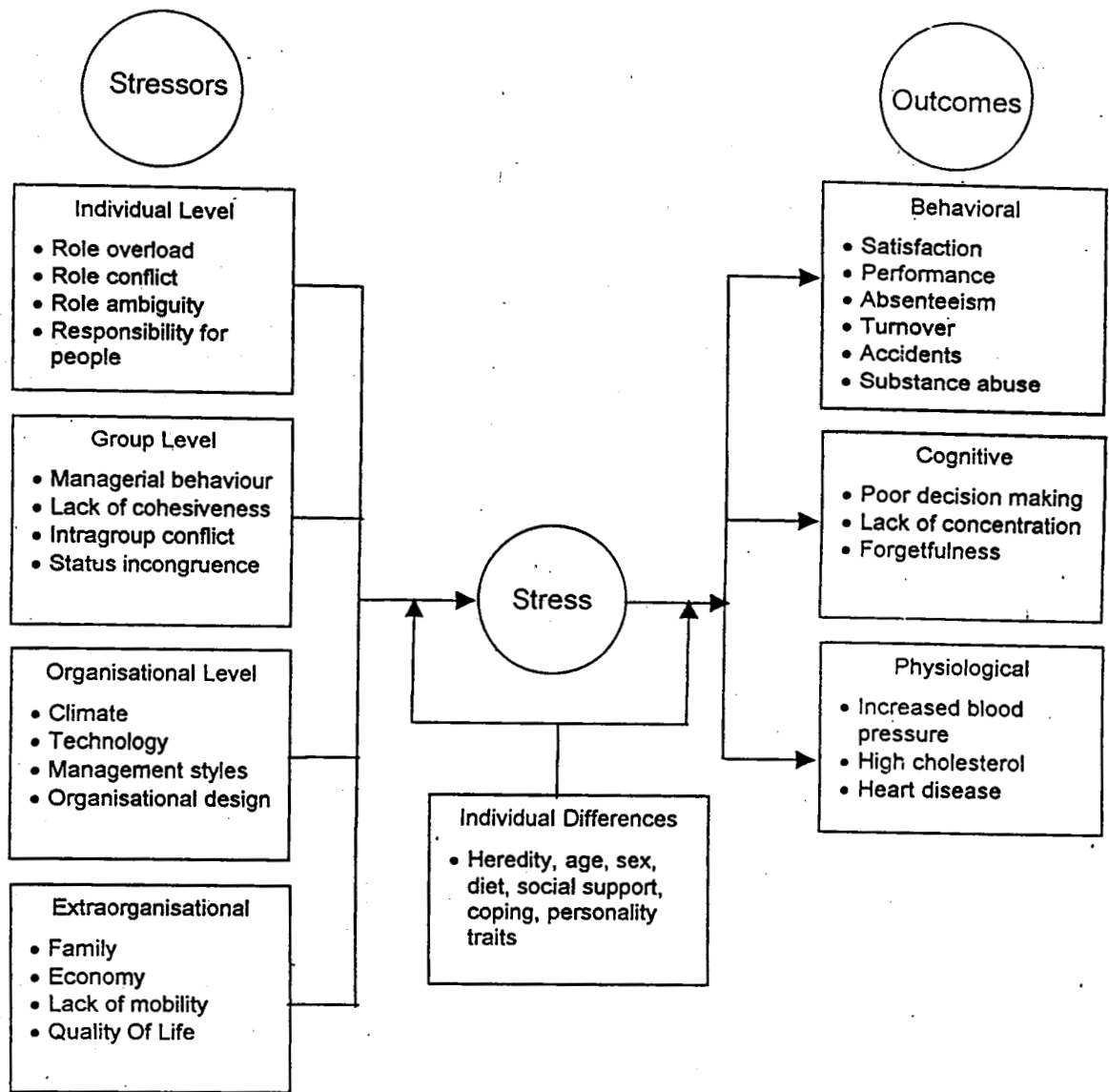


FIGURE 2-3 A Model of Occupational Stress and its Outcomes (Matteson & Ivancevich, 1979)

The model also specifies several individual differences that moderate the stressor-stress-outcome relationship. A moderator is a variable that causes the relationship between two variables.

Consequences/Stress Outcomes

Stress consequences include a range of behavioural and somatic or bodily changes, such as physical illness, emotional and psychological disturbance, and performance problems. In one sense, these effects are the results of *physiologically* coping with a stressor. That is, they result from the body's mobilization. Stressors may be kept under control by these physiological coping efforts, and if so, they are effective. Of course, some effects of stress are *positive*, such as self-motivation and stimulation to *satisfy individual goals and objectives*. Nonetheless, many stress consequences are disruptive, counter productive, and even potentially dangerous.

Kets de Vries (1979) states that each individual needs a moderate amount of stress to be alert and capable of functioning effectively in an organisation. It may prove as an asset so long as it is tolerable and helps in creating healthy competition. Organisational excellence and individual success are achieved through well-managed stressors. Indian scholars (Mathew, 1985; Pestonjee, 1987) in their conceptual papers agreed with this contention. Stress consequences/outcomes are *individual* and *organisational*. Individual consequences includes psychological, cognitive, behavioural and physiological draw backs. Where as organisational consequences include a number of adverse outcomes like decrease in quality-of-work life and morale and an increase in economic costs and legal liabilities.

Stress and Burnout

Burnout is a stress-induced problem common among members of *helping* professions such as teaching, social work, employee relations, nursing, and law enforcement. The three key phases of burnout are *emotional exhaustion*, *depersonalization* and *feeling a lack of personal accomplishment* (Maslach, 1982). Emotional exhaustion is due to a combination of personal stressors and job and organisational stressors (Cordes & Dougherty, 1993). People who expect a lot from themselves and the organisations in which they work tend to create *more* internal

stress, which, in turn, leads to emotional exhaustion. Similarly, emotional exhaustion is fueled by having too much work to do, by role conflict, and by the type of interpersonal interactions encountered at work. Frequent, intense face-to-face interactions that are emotionally charged are associated with higher levels of emotional exhaustion.

Over time, emotional exhaustion *leads* to depersonalization, which is a state of *psychologically withdrawing from one's job*. This ultimately results in a feeling of being unappreciated, ineffective, or inadequate. The additive effect of these three phases is a host of negative attitudinal and behavioural outcomes. A recent meta-analysis of 61 studies covering several thousand people uncovered that burnout was positively related to job stressors and negatively associated with Job Satisfaction (Lee & Ashforth, 1996).

Individual Differences in Stress Vulnerability

Environmental stressors probably affect some people *more readily* than they do others because of differences in people's *susceptibility* to stress. Stress theorists suggest that people contribute to their own stress by interpreting environmental conditions as threatening. Research on individual differences has focused on variables that are thought to affect the perception and interpretation of environmental stressors. These variables are Gender (Martocchio & O'Leary, 1989), Race (Anderson, 1989), Culture (Hofstede, 1994; Peterson, *et al.*, 1995), Cognitive and Personality characteristics (Cummins, 1989; Elliott, *et al.*, 1994) and Type A behaviour (Rosenman & Chesney, 1982).

2.1.1.8. Coping

The results of uncontrolled stress are serious and costly to the individual and the work organisation. Therefore it is necessary to cope with the stress. Coping is the *process of managing demands* (external or internal) that are appraised as taxing

or exceeding the resources of the person (Lazarus & Folkman, 1984). Effective coping helps to reduce the impact of stressors and stress.

In Figure 2-4 A Model of the Coping Process by Lazarus and Folkman (1984) is presented.

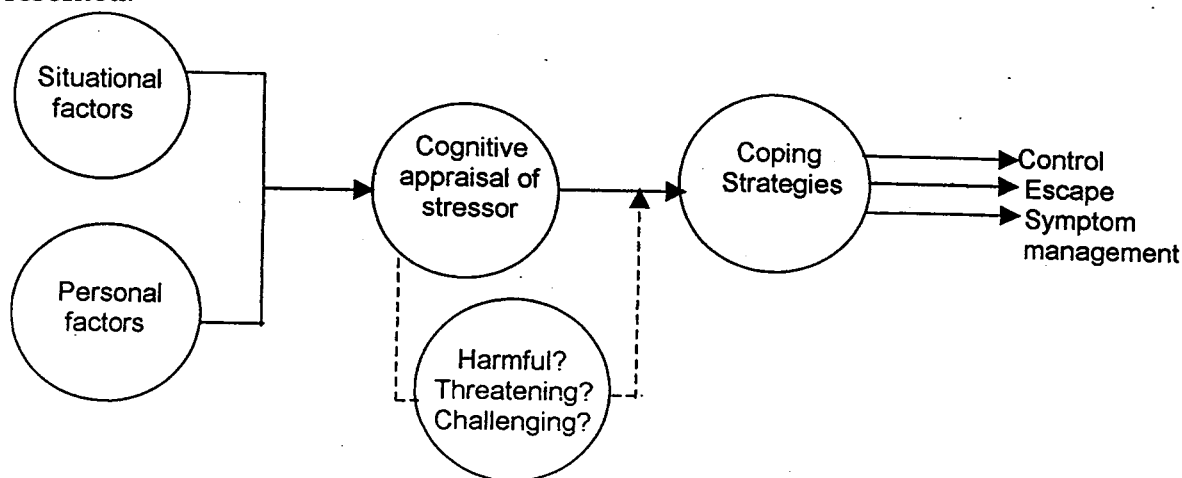


FIGURE 2-4 A Model of the Coping Process (Lazarus & Folkman, 1984)

The coping process has three major components: (1) situational and personal factors (2) cognitive appraisals of the stressor, and (3) coping strategies. Both situational and personal factors influence the appraisal of stressors. In turn, appraisal directly influences the choice of coping strategies.

Coping strategies are characterized by the *specific behaviours* and cognitions used to cope with a situation. People use a combination of three approaches to cope with stressors and stress. The first, called a *control strategy*, consists of using behaviours and cognitions to directly anticipate or solve problems. A control strategy has a take-charge tone. An *escape strategy* amounts to avoiding the problem. Behaviours and cognitions are used to avoid or escape situations. Individuals use this strategy when they passively accept stressful situations or avoid them by failing to confront the cause of stress. Finally, a *symptom management strategy* consists of using methods such as relaxation, meditation, or medication to manage the symptoms of Occupational Stress (Terry, 1994). Like stress responses,

strategies for coping with stress can be *cognitive, emotional, behavioural, or physical*.

a) *Cognitive Coping Strategies*: It replace catastrophic thinking with thoughts in which stressors are viewed as *challenges* rather than *threats* (Ellis & Bernard, 1985). Cognitive coping does not eliminate stressors, but it can help people perceive them as less threatening and thus make them less disruptive.

b) *Emotional Coping Strategies*: Seeking and obtaining social support from others are effective. The perception that one has emotional support, and is cared for and valued by others, tends to be an effective buffer against the ill effects of many stressors (Taylor, 1995). With emotional support comes *feedback* from others, along with advice on how to approach stressors.

c) *Behavioural Coping Strategies*: Involve changing behaviour in ways that *minimize* the impact of stressors. A **time management plan** can help control catastrophizing thoughts by providing reassurance that there is enough time for everything and a plan for handling it all. Behavioural, emotional, and cognitive skills often *interact* closely. Discussing stressors and seeking feedback from others help to think more rationally and calmly, and make it easier to develop and use sensible plans for behavioural coping. When behavioural coping eliminates or minimizes stressors, people find it easier to think and feel better about themselves.

d) *Physical Coping Strategies*: Are aimed at directly *altering* one's physical responses before, during, or after stressors occur. The most common physical coping strategy is some form of *drug use*. Prescription medications are sometimes an appropriate coping aid, especially when stressors are severe and acute. But if people depend on prescriptions or other drugs, the drug effects that blunt stress responses may also interfere with the ability to apply coping strategies. If the drug is abused, it can become *a stressor itself*. The resulting loss of perceived control over stressors may make those stressors even more threatening and disruptive.

2.1.1.9. Stress Prevention and Management

There is a very important distinction between *preventing* stress and *managing* it. Stress *prevention* focuses on controlling or eliminating stressors that might provoke the stress response. Stress *management* suggests procedures for helping people cope effectively with or reduce stress already being experienced. The following are the techniques.

a) *Maximizing Person - Environment (P-E) Fit*

A person-environment fit (P-E fit) approach generally focuses on two dimensions of fit (Edwards, 1996). One is the extent to which work provides formal and informal rewards that meet or match (fit) the person's needs. Misfit on this dimension results in stress. The second type of fit deals with the extent to which the employee's skills, abilities, and experience *match* the demands and requirements of the employer. To the extent that the individual's talents are insufficient for or underutilized by job requirements, stress results. By improving the quality of, or maximizing, the fit between the employee and the organisational environment, potential stressors are eliminated and stress is prevented.

There are numerous strategies for maximizing P-E fit. Employee recruitment programmes which provide realistic *job previews* help potential employees determine whether the reality of the job matches their needs and expectations. Selection programmes that are effective in ensuring that potential employees possess the requisite skills, knowledge, experience, and abilities for the job are key elements in maximizing fit. Fit can be maximized by closely linking personal *predispositions* to relevant aspects of the work environment as well. Once in the organisation, a critical variable in maximizing fit and preventing stress is *effective socialization*. A number of other organisational activities and programmes can be helpful in maintaining good fit. That is effective *job design, organisational reward systems, communication processes, effective leadership* etc.

Two specific types of organisational programmes have become particularly popular during the last two decades. Employee Assistance Programmes (EAP) and Wellness Programmes.

b) Employee Assistance Programmes (EAPs)

Employee Assistance Programmes (EAPs) are designed to deal with a wide range of stress-related problems, both work and non-work related, including behavioural and emotional difficulties, substance abuse, family and marital discord, and other personal problems. EAPs tend to be based on the traditional medical approach to treatment. General programme elements include:

- (i) **Diagnosis:** Employee with a problem asks for help; EAP staff attempts to diagnose the problem.
- (ii) **Treatment:** Counseling or supportive therapy is provided. If in-house EAP staff are unable to help, employee may be referred to appropriate community-based professionals.
- (iii) **Screening:** Periodic examination of employees in highly stressful jobs is provided to detect early indications of problems and
- (iv) **Prevention:** Education and persuasion are used to convince employees at high risk that something must be done to assist them in effectively coping with stress.

Crucial to the success of any EAP is *trust*. Employees must trust that (1) the programme can and will provide real help (2) confidentiality will be maintained, and (3) use of the programme carries no negative implications for job security or future advancement.

c) Wellness Programmes: (Health Promotion Programmes)

It focus on the employee's overall *physical and mental health*. This includes not only disease identification but lifestyle modification as well. Among the most prevalent examples of such programmes are those emphasizing hypertension identification and control, smoking cessation, physical fitness and exercise, nutrition

and diet control, and job and personal stress management. Stress prevention and management is a *vital part* of wellness programmes, because many of the concerns of wellness programmes are at least partially stress related. Stress has been cited as the greatest cause of poor health habits (Randolfi, 1996) and poor health habits are what wellness programmes attempts to change. A major reason organisations are interested in stress management is that it contributes to healthier, more productive, and more effective employees, and consequently to healthier, more productive, and more effective organisations. It is impossible to divorce the topic of stress from health. In a sense, wellness programmes represent a broad-based, contemporary extension of stress programmes, their focus is concern for employee health and quality-of-life issues.

d) *Cognitive Techniques*

It is that a person's response to stressors is mediated by *cognitive processes*, or *thoughts*. The underlying assumption of these techniques is that people's thoughts, in the form of expectations, beliefs, and assumptions, are labels they apply to situations, and these labels elicit *emotional responses* to the situation. Cognitive techniques of stress management focus on changing labels or *cognitions* so that people appraise situations *differently*. This reappraisal typically centers on removing cognitive distortions such as magnifying, overgeneralizing, and personalization. All cognitive techniques have a similar objective: to help people gain more control over their reactions to stressors by *modifying* their *cognitions*.

e) *Relaxation Training*

The purpose of this approach is to reduce a person's arousal level and bring about a calmer state of affairs, both *psychologically* and *physiologically*. Psychologically, successful relaxation results in enhanced feelings of *well-being*, *peacefulness* and *calm*, a clear *sense of being* in control, and a *reduction in tension* and *anxiety*; physiologically, decreases in *blood pressure*, *respiration*, and *heart rate*

should take place. Relaxation techniques include breathing exercises; muscle relaxation; autogenic training, which combines elements of muscle relaxation and meditation; and a variety of mental relaxation strategies, including *imagery* and *visualization*. Conditions conducive to achieving relaxed states include a quiet environment, a comfortable physical position, and closed eyes. Simply taking a few moments of *mental rest* from job activities can be an effective relaxation activity. Short, more frequent breaks of this sort are more relaxing than fewer, longer breaks (Onciul, 1996).

f) Meditation

The most widely practiced meditation is *Transcendental Meditation*, or *TM*. TM is turning the attention toward the subtler levels of thought until the mind transcends the experience of the subtlest state of thought and arrives at the source of thought (Carrington, 1978). The basic procedure used in TM is simple, but the effects claimed, for it are extensive. One simply sits comfortably with closed eyes and engages in the repetition of a special sound (a mantra) for about 20 minutes twice a day. Studies indicate that TM practices are associated with reduced heart rate, lowered oxygen consumption, and decreased blood pressure (Kuna, 1975).

g) Biofeedback

Individuals can be taught to *control* a variety of internal body processes by using a technique called biofeedback. In biofeedback, small changes occurring in the body or brain are detected, amplified, and displayed to the person. Sophisticated recording and computer technology make it possible for a person to attend to subtle changes in heart rate, blood pressure, temperature, and brain-wave patterns that normally would be unobservable. Most of these processes are affected by stress. The potential of biofeedback is its ability to help induce a state of *relaxation* and restore bodily functions to a nonstressed state. One advantage of biofeedback over nonfeedback techniques is that it gives precise data about bodily functions. By

interpreting the feedback, individuals know how high their blood pressure is. Biofeedback training has been useful in reducing anxiety, lowering stomach acidity, *controlling tensions* and migraine headaches, and, in general, reducing *negative physiological manifestations of stress*.

2.1.2 TEACHER STRESS

In the last few years the incidence of stress among Teachers has received a considerable amount of research attention both abroad and in the country. In an international review of Teacher Stress, Kyriacou (1987) refers to the wide spread occurrence and consequence of stress among Teachers. There are a multitude of studies that draw attention to the prevalence of the perception of stress among Teachers of different categories (Siu, 1995; Arnold, 1996; Chen & Miller, 1997; Chen, 1998 and Forlin, 1998).

Teachers are reported as being stressed by the *work load, the behaviour of pupils, lack of promotion prospects, unsatisfactory working conditions, poor relationships with colleagues, pupils and administrators* and a host of *other problems*. Depending on individual *psychological* characteristics, *situational demands* and *past experiences* as well as difference in *appraisal process* a potential stressor may become actual stressor. Although there have been many attempts to investigate the real causes and symptoms of Teacher Stress, often the findings have not been *consistent*. This inconsistency in research findings on Teacher Stress is due to varying *methodology of investigations*.

2.1.2.1. Causes of Teacher Stress

A number of causal factors have been identified by various researchers working in the field of Teacher Stress. Those are briefly described in the following part.

Change as Major Factor

Cox, *et al.* (1988) have identified *change* as a major factor among current sources of stress among Teachers. Change on change beyond the control of most of the Teachers. Even a healthy individual when faced with rapid changes, may find stress unavoidable (Toffler, 1970). There have been changes in the role of the Teacher as a *transmitter of knowledge* in the traditional sense. Teachers are often having to modify their traditional role in order to incorporate the style of powerful media linked sources of information. It is unfair to expect Teachers to meet the challenges imposed by a world in rapid transformation if they do not have *adequate resources* at their end.

Estev (1989) analysed the nature and influence of change in the teaching profession and listed the following area where change is affected to a greater extent leading the Teachers to Job Stress.

- 1) *Transformation of the Role of Teachers:* The demands forcing Teachers are dramatically changed in the last 20-25 years, leading to the greater responsibilities being imposed up on Teachers. These increase in responsibilities are accompanied by appropriate changes in facilities and training to equip them to deal with these demands. Therefore the process of adaptation has not been an easy one and has lead to confusion as to what the role of the Teacher actually is.
- 2) *Increasing Contradiction in the Role of the Teacher:* Various roles of the Teachers are often contradictory. They are required to fulfil the role of *Friend, Colleagues* and *Helper*, a role perhaps incompatible with that of *Evaluator, Selector* and *Disciplinarian*. The accelerated social change have increased the number of contradictions.
- 3) *Attitudinal Change of the Society Towards the Teacher:* Teachers are persecuted by the development of a society which forces profound changes upon their profession. The expectations, support and judgements of Teachers has changed in the social context with in which they work. There have been changes with regard to

society's attitude towards discipline in educational institutions. 4) *Uncertainty about the objective of the Educational System*: Many Teachers are facing the difficulty of aiming to work towards objectives that no longer correspond to existing societal circumstances and 5) *Deterioration of the Image*: The traditional stereotype of the Teacher has been a *Friend, Philosopher and a Guide* who maintains an attitude of service. This is changed.

2.1.2.2. Teacher Stress-Consequences

The process of becoming stressed has to do with its causes. When a Teacher is exposed to those stressors for a prolonged period of time he/she reacts in a way that have negative effect for the Teacher and the institution. These reactions can be physiological, psychological and social (Summers, *et al.*, 1994). Chronic stress on Teachers can have a variety of problems such as high absenteeism and turn over, poor relationships, poor organisational climate, low morales and job dissatisfaction, burnout etc. (Chen & Specter, 1992).

2.1.2.3. Gender & Teacher Stress

On the basis of comprehensive survey of stress among Teachers Beehr and Schuler (1980) concluded that there was evidence that gender *influence* stress related symptoms in the work place. *No gender difference* was found by Martocchio and O'Leary (1989) in a meta analysis of 15 studies. Disalvo, *et al.* (1994) observed that from a broad perspective men and women perceive stressors quite *similarly*. But *contradictory findings* on gender difference were obtained by many researchers. Nelson and Quick (1985) reported *women* experience greater stress than *men* because of the unique sources of job stress typically faced by women. This include lower salaries, career blocks, discrimination, stereotyping and the interface of marriage and work. Gender difference in scores on the *Job Stress Survey* were evaluated for University Teachers and found the existence of sex difference in job stress (Speilberger & Reheiser, 1994).

Survey of literature on teacher stress revealed *inconsistent findings* not only in Gender difference but, in many aspects of the overall perception of stress among Teachers. Regardless of the contradictions found in some studies the net results suggest that all Teachers will experience *some degree* of Occupational Stress. But the frequency with which stressful incidents occur and the strength of their occurrence *varies* from Teacher to Teacher.

2.1.2.4. Models of Teacher Stress

A number of investigations were made by various researchers to develop an understanding about the potential stressors among Teachers. Cox (1977) reported that stress resulting from training and career development, the nature of the work and the physical working conditions, systems in the school organisation and relationship between the school and the community.

Kyriacou and Sutcliffe (1978) suggested a *model of Teacher Stress* which explained the following stressors and the aspects in the process of being stressed.

1. *Potential Occupational Stressors*: These are the objective aspects of the job that could cause excessive stress *ie*, noise level, high work load, inadequate buildings and physical working conditions.
2. *Appraisal*: This refers to how potential stressors in the Teachers job are perceived. This will largely depends upon the personal characteristics and this interaction will determine the consequence of the potential stressor becoming an actual stressor.
3. *Actual Stressors*: These are the potential occupational stressors that a Teacher has seen as being a threat to his/her well-being or self-esteem.
4. *Coping Strategies*: These are the attempts that an individual Teacher makes in order to reduce a perceived threat.

5. **Teacher Stress:** This describes an individual Teacher's response to negative affect that has corresponding psychological, physiological and behavioural reactions.
6. **Characteristics of the Individual Teacher.** Personality, value system and the ability to cope with any demand encountered in the work place.
7. **Potential Non-Occupational Stressors:** Those negative aspects of Teacher's life outside the school, ie, ill-health, family crisis etc.

Needle, *et al.* (1980) highlighted the stressors from job content, conditions of work, relationship with co-workers, promotional opportunities, financial rewards, resource adequacy and role in the organisation as *categories* of stress. Wanberg (1984) presented the categories of Teacher Stress consisting of *societal, institutional* and *personal* sources of stress. Cooper, *et al.* (1988) outlined a *six factor model of Teacher Stress* which explains the following stressors.

1. **Stressors Intrinsic to the Job:** Physical working conditions, level of participation and decision making latitude and work load.
2. **Role in the Organisation:** Role ambiguity and role conflict and levels and types of responsibility.
3. **Relationships at Work:** Relation with superiors, colleagues and subordinates and the demands made interpersonally.
4. **Career Development:** This include the presence of over or under promotion, possible lack of job security.
5. **Organisational Structure and Climate:** These stressors may be those that restrict behaviours ie, the politics and culture of the organisation. Specific features include level of participation and involvement in decision making.

6. **Home and Work Interface:** This refers to the stressors resulting from a mismatch in the relationship between work demands and family or social demands.

In Figure 2-5 the Model of Teacher Stress proposed by Cooper, *et al.* (1988) is presented.

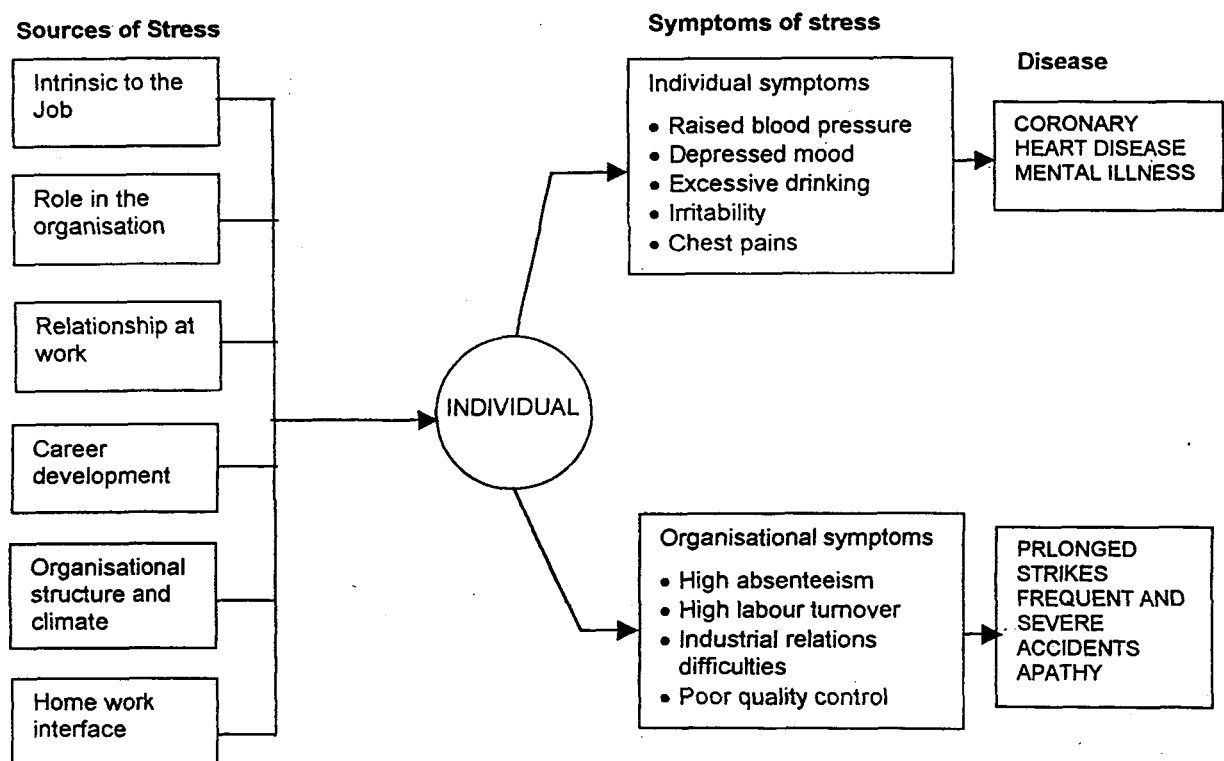


FIGURE 2-5 A Model of Teacher Stress (Cooper, *et al.*, 1988)

One must view the sources of stress in the light of social systems to which the individuals belong (Pestonjee, 1987). There are two such systems: The *primary system*, such as family and religious, regional and linguistic groups; and the *secondary system* to which we relate such as neighbourhood, schools, colleges,

technical institutes and work organisations. As the functional requirements and role expectations from both these systems differ, the demands made on the individual in one system have their effects on his/her performance in the other. Moreover, resources from one system can also be invested in the other system to take care of the problems arising in it.

Basically, there are three important sectors of life in which stress originates: (a) *job* and the *organisation* (b) the *social* sector, and (c) *intrapsychic* sector. The first, namely, job and organisation, refers to the totality of the work environment (task, atmosphere, colleagues, compensations, policies etc). The social sector refers to the social/cultural context of one's life. It may include religion, caste, language, dress and other such factors. The intrapsychic sector encompasses those things which are intimate and personal like temperament, values, abilities and health. It is contended that Stressors can originate in any of these three sectors or in combination thereof.

2.1.2.5. Measurement of Stress

Stress reactions are measured in three broad ways: by means of *self-report*, *through behavioural observations*, and on the basis of *physiological arousal*. The self-report technique is the technique most commonly used by behavioural scientists to evaluate subjective stress levels. Self-report scales may be administered and scored easily and quickly. They may be administered repeatedly and still provide valid measures of momentary changes in stress levels. They have been criticized by some, however, because they are face valid, people who are motivated to disguise their stress levels can readily do so.

Overt behavioural measures of stress include *direct* and *indirect* observational measures. Direct measures focus on behaviours associated with stress-related physiological arousal such as heavy breathing, tremors, and perspiration; self-manipulations such as nail biting, eyeblinks, and postural

orientation; and body movement such as pacing. Another way in which people commonly express fear reactions is by means of facial expressions. The facial features that takes on the most distinctive appearance during fear are the eyebrows (raised and drawn together) the eyes (open, lower lid tensed), and the lips (stretched back). *Indirect* observational measures involve evaluating the degree to which people avoid feared objects.

Physiological arousal is an integral component of the stress response. The most frequently monitored response systems are cardiovascular responses, electrodermal responses, and muscular tension. These measures are important in their own right as *independent indicators* of stress level, and in particular as possible indices of stress-related diseases.

2.1.2.6. Tools in Occupational Stress Research

A large number of instruments used in occupational stress research were identified by the investigator through a comprehensive survey of literature in the field concerned. They are compiled and presented in this section. The survey revealed a limited number of tools constructed along the traditional psychometric lines.

1. *Occupational Stress Inventory (Osipow & Spokane, 1981)*

A promising generic measure to person-environment fit variables was developed by Osipow and Spokane (1981). The variables include Role overload, Role ambiguity and Psychological strain across different occupational levels and Work environments.

2. *Occupation Stress Index (Srivastava & Sing, 1981)*

This psychometric instrument was constructed and standardized by Srivastava and Singh. It includes 46 items which measure 12 occupational stressors.

These 12 stressors are Role overload, Role ambiguity, Role conflict, Group and political pressures, Responsibility for persons, Under-participation, Powerlessness, Poor peer relations, Intrinsic impoverishment, Low status, Strenuous working conditions and Unprofitability.

3. *Police Stress Survey (Spielberger & Westberry, 1981)*

Consistent with Lazarus's transactional approach, this tool is developed. The tool evaluates perceived severity and frequency of occurrence of 60 specific stressors encountered by law-enforcement officers.

4. *Teacher Stress Survey (Grier, 1982)*

This was designed to assess sources of stress relevant to Secondary School Teachers and to compare Teacher Stress with police stress.

5. *Organisational Role Stress Scale (Pareek, 1983)*

Pareek developed and standardized the Organisational Role Stress Scale (ORSS) to measure role stressors. It measures 10 types of role stressors. These role stressors are Inter-role distance, Role stagnation, Self-role distance, Role ambiguity, Role expectation conflict, Role overload, Role erosion, Resource inadequacy, Personal inadequacy and Role isolation. ORSS scale can be used for several purposes. It can be used to investigate the nature and dynamics of role stress in various organisations and to develop interventions for the use of individuals, groups and organisations.

6. *Work Stress Inventory (Barone, et al., 1988)*

This psychometric instrument similar to the Police Stress Survey and Teacher Stress Survey assesses the frequency and intensity of stressors in the work place.

7. *Questionnaire on Stressors (Dewe, 1989)*

This tool provides an alternative to using a general purpose inventory of work stress. The questionnaire gives information about the appraisal of stressors and coping strategies.

8. *Life Events and Difficulties Schedule (Brown, 1990)*

This include standard interviews to assess work stress through more individualising transactions.

9. *Stress Diaries (Weber & Laux, 1990)*

This is another alternative method in the measurement of occupational stress.

10. *The Work Stress Inventory (Turnage & Spielberger, 1991)*

This inventory identifies the large comparable factors across many occupations. One involves appraised stress from organisational policies and supervision. Other involves pressures and risks experienced on the job.

11. *The Job Stress Survey (Spielberger & Reheiser, 1994)*

This was designed to eliminate the shortcomings in existing measures of occupational stress. The Job Stress Survey was adopted from the Police Stress Survey and the Teacher Stress Survey. The 30 items psychometric instrument was designed to assess the perceived intensity and frequency of occurrence of working conditions that adversely affect the psychological well-being of employees.

12. *Teacher Stress Questionnaire (Traverse & Cooper, 1996)*

This instrument was designed based on the models of Teacher Stress proposed by Kyriacou and Sutcliffe (1978) and Cooper, *et al.* (1988). It consists of six sections designed in such a way as to identify the main stressors and stress factors.

2.1.3. JOB SATISFACTION

Job Satisfaction can be defined as a *job attitude which results from a balancing and summation of many specific likes and dislikes experienced in connection with the job*. It is the employee's *judgement* of how well the job on the whole is satisfying his various *needs*. However, a global concept of Job Satisfaction is not warranted by findings from Job Satisfaction studies. Job Satisfaction is not a *single unified entity*, but is a *multidimensional concept*. It breaks down into such dimensions as intrinsic task, satisfaction, attachment to the work group, satisfaction with superiors, satisfaction with security and income, chances of promotion etc.

There has been considerable confusion over the use of the term *Job Satisfaction, Morale, Job involvement* and *Organisational commitment*. Locke (1976) distinguished morale and job involvement from Job Satisfaction. *Job Satisfaction* is an individual's reaction to the job experience whereas *morale* is about a whole group of workers and includes their general level of satisfaction with the organisation. *Job involvement* refers to the degree to which one is absorbed by one's job, which may be either satisfying or dissatisfying depending on the outcome of involvement. Concept of *Organisational Commitment* refers to the extent to which one identifies with and is involved in an organisation (Porter, *et al.*, 1974). Not only are job involvement, organisational commitment, and Job Satisfaction conceptually distinct, they also have measurable differences. They are not simply different aspects of one attitude (Brooke, *et al.* 1988).

2.1.3.1. Job Satisfaction as a Job Attitude

Generally, an attitude is considered to be a *cognitive process* that structures social perceptions and results in a particular pattern of response (McGuire, 1985). An attitude is not observed; it is *inferred* from behaviour and expressions of emotion. The cognitive component includes *perceptions* and *beliefs* about the object, and the affective or emotional component is either a positive or negative

feeling. *Job attitudes*, then, can be defined as *consistent patterns of thoughts, feelings, and behaviour toward some aspect of the job*. Like attitudes in general, Job Satisfaction is described in terms of its *affective or emotional component*. When the affect of the attitude is positive, we call it *Job Satisfaction*; when it is negative, it is *job dissatisfaction*. It is possible to describe Job Satisfaction in terms of its *cognitive component*, or the meaning of the work experience. Finally, Job Satisfaction can be discussed in terms of its *behavioural component*, or tendency to promote *action*. The action tendency indicates what people are likely to do, given what they think and feel about their jobs.

Social psychological research indicates that attitudes can develop through *early life experiences* with the attitude object (McGuire, 1985). Through socialization, individuals develop expectations about what certain occupations will be like, and probably carry these attitudes into work experiences. Then, through direct experience, one find out whether a job meets one's expectations. As a result, job attitudes may change.

2.1.3.2. Theories of Job Satisfaction

A good theory can answer some questions about the *source* and *development* of satisfaction. Some theories of *motivation* refer to work-related satisfactions. *Need theories* include satisfaction concepts in that motivation is defined in terms of attempts to satisfy basic needs. The need fulfilment proposition has strongly influenced the development of Job Satisfaction theories. With such a perspective, satisfaction depends on the extent to which a job fulfills important *needs*, such as security and recognition. *Cognitive theories* of motivation also include satisfaction as part of the motivational process. *Reinforcement theory* also includes satisfaction concepts. Reinforcement is viewed as something that brings satisfaction to an existing state of need.

Other theories directly address Job Satisfaction. Several of these theories contain a *discrepancy hypothesis*. This hypothesis was developed out of research demonstrating that people use *cognitive constructs* to evaluate what they get from a job. That is, according to the discrepancy hypothesis, the level of satisfaction will be determined by the *difference* between what is expected and what is experienced. There is considerable research evidence supporting this view of satisfaction (Michalos, 1986).

a) Maslow's Need Hierarchy Theory (1943)

The crux of Maslow's theory is that needs are arranged in hierarchy. The lowest level needs are the physiological needs, and the highest-level needs are the self actualization needs. These needs are defined to mean the following:

1. *Physiological*: The need for food, drink, shelter, and relief from pain.
2. *Safety and Security*: The need for freedom from threat, that is, the security from threatening events or surroundings.
3. *Belongingness, Social and Love*: The need for friendship, affiliation, interaction, and love.
4. *Esteem*: The need for self-esteem and for esteem from others and
5. *Self-Actualization*: The need to fulfill oneself by making maximum use of abilities, skills and potential.

For each of the above five need levels, the reader can attribute work-related factors that might be associated with need satisfaction in the following way.

1. *Physiological*: Salary, working environment etc.
2. *Safety and Security*: General salary increases, pension plans, hospital and medical plans etc.
3. *Belongingness, Social and Love*: Compatible work groups, Employee-centered supervision, personal and professional friends etc.
4. *Esteem*: Job title, compliments, classroom furnishings and location, access to information etc. and
5. *Self-Actualization*: Advancement, challenging assignments, development opportunities, opportunities to use skills etc.

Maslow's theory assumes that a person attempts to satisfy the more basic needs (Physiological) before directing behaviour toward satisfying upper-level needs.

According to Maslow (1) A satisfied need *ceases to motivate*. For example, when a person decides that he or she is earning enough pay, money loses its power to motivate. (2) Unsatisfied needs can cause *frustration, conflict, and stress*. From a managerial perspective, unsatisfied needs are dangerous because they may lead to undesirable performance outcomes. (3) People have a need to grow and develop and, consequently, will strive constantly to move up the hierarchy in terms of need satisfaction.

Several research studies have attempted to test the need-hierarchy theory. But many studies provided little support that a hierarchy of needs exists (Lawler & Suttle, 1972). The researchers have found that as individuals advance in an organisation, their needs for security decrease, with a corresponding increase in their needs for social interaction, achievement and self-actualization.

b) Herzberg's Two-Factor Theory (1959)

The two factors in this theory are *dissatisfiers-satisfiers or extrinsic-intrinsic factors*, depending on the discussant of the theory. The original research that led to the theory gave rise to two specific conclusions. First, there is a set of *extrinsic* conditions, the job context, which result in dissatisfaction among employees when the conditions are not present. If these conditions are present, this does not necessarily motivate employees. These conditions are the *dissatisfiers* or *hygiene factors*, since they are needed to maintain at least a level of *no dissatisfaction*. They include : Salary, Job Security, Working Conditions, Status, Procedures in the Institution, Quality of Technical Supervision, and Quality of Interpersonal Relations among Peers, with Superiors, and with Subordinates. Second, a set of *intrinsic* conditions - the job content-when present in the job, builds

strong levels of motivation that can result in good job performance. If these conditions are not present, they do not prove highly satisfying. The factors in this set are *satisfiers* or *motivators* and include: Achievement, Recognition, Responsibility, Advancement, The work itself, The possibility of growth. These motivators are directly related to the nature of the job or task itself. When present, they contribute to satisfaction. This, in turn, can result in intrinsic task motivation (Thomas & Velthouse, 1990).

Herzberg's model basically assumes that Job Satisfaction is not a *unidimensional* concept. His research leads to the conclusion that two continua are needed to correctly interpret Job Satisfaction. Despite this important feature, Herzberg's work has been criticized for a number of reasons. Some researchers believe that Herzberg's work *oversimplifies* the nature of Job Satisfaction. Other critics focus on Herzberg's methodology, which requires people to look at themselves retrospectively. Still other critics charge that Herzberg has directed little attention toward testing the motivational and performance consequences of the theory.

c) *McClelland's Learned Needs Theory (1962)*

This theory is closely associated with learning concepts. McClelland believes that many needs are acquired from the *culture*. Three of these *learned needs are the need for achievement, the need for affiliation, and the need for power*. He contends that when a need is strong in a person, its effect is to motivate the person to use behaviour that leads to its satisfaction.

Based on research results, McClelland developed a descriptive set of factors that reflect a high need for achievement. These are: (1) The person likes to take responsibility for solving problems. (2) The person tends to set moderate achievement goals and is inclined to take calculated risks. (3) The person desires feedback on performance.

The need for affiliation reflects a desire to *interact socially* with people. A person with a high need for affiliation is concerned about the quality of important *personal relationships*, and thus, social relationships take precedence over task *accomplishment*. A person with a high need for power, meanwhile, concentrates on obtaining and exercising *power* and *authority*. He or she is concerned with influencing others and winning arguments.

The main theme of McClelland's theory is that these needs are learned through *coping with one's environment*. Since needs are learned, behaviour that is rewarded tends to recur at a higher frequency. Teachers who are rewarded for achievement behaviour learn to take moderate risks and to achieve goals. Similarly, a high *need for affiliation* or power can be traced to a history of receiving rewards for sociable, dominant, or inspirational behaviour. As a result of the learning process, individuals develop unique *configurations of needs* that affect their behaviour and performance.

There are a number of criticisms of McClelland's theory. His use of projective psychological personality tests has been questioned as being *unscientific*. Furthermore, McClelland's claim that need achievement can be learned runs counter to a large body of literature that argues that the acquisition of motives normally occurs in childhood and is very difficult to alter in adulthood. Finally, McClelland's theory is questioned on grounds of whether the needs are permanently acquired.

d) Vroom's Expectancy Theory (1964)

In his book *Work and Motivation* Vroom (1964), a proponent of this view, says people do not just respond to events after they occur, they anticipate that things will occur and that certain behaviour in response to those events will probably produce *predictable consequences*. The decision process begins with the estimation, for each alternative activity, of an *expectation*. This is the worker's judgement of the chance that the activity will lead to a particular outcome. One might estimate the

likelihood that expending effort will result in performance of a task. In addition, the person assesses the likelihood that outcome will be instrumental in obtaining something of value. That is, one attempts to determine *instrumentality*, the chance that performance of the task will lead to a reward. Outcome can have a positive value, indicating a preference for that outcome, or they can have a negative value, indicating avoidance for that outcome. The result of these calculations is an expected value for each possible activity. The person should choose the activity that has the greatest value. Vroom uses the basic concept of valance as a key notion. He defines valance as *the attractiveness of a goal or outcome, or the anticipated satisfaction from an outcome*. Vroom suggests that Job Satisfaction is a reflection of how desirable a person find his job. Vroom outlines the two propositions. (1) The valance of an outcome to a person is a monotonically increasing function of the algebraic sum of the products of the valances for all other outcomes and his conceptions of its instrumentality for the attainment of these other outcomes and (2) The force on a person to perform an act is monotonically increasing function of the algebraic sum of the products of the valances of all outcomes and the strength of his experiences that the act will be followed by the attainment of these outcomes.

Vroom suggests that Job Satisfaction is a reflection of how desirable a person *finds his job*. Thus, it was a measure of a person's valance for his work situation. His model predicted the direct relationship between the *valance* of his job and *turnover* and *absenteeism*. Vroom equated Job Satisfaction with the valance of the job or work role. The overall valance of work role is useful in predicting behaviour in relation to the total work role.

e) *Equity Theory (1965)*

In equity theory (Adams, 1965), satisfaction is a function of how *fairly* an individual is treated at work. Satisfaction results from one's *perception* that work outcomes, relative to inputs, compare favorably with a significant other's

outcomes/inputs. That is *equity* exists when employees perceive that the ratios of their inputs (efforts) to their outputs (rewards) are equivalent to the ratios of other employees. *Inequity* exists when these ratios are not equivalent; an individual's own ratio of inputs to outcomes could be greater than, or less than, that of others (Adams, 1963). A recent meta-analysis involving data from 30 different organisations and 12,979 people supported this model (Witt & Nye, 1992).

Most of the research on equity theory has focused on *pay* as the basic outcome. The failure to incorporate other relevant outcomes limits the impact of the theory in work situations. A review of the studies also reveals that the comparison person is not always clarified. Furthermore several individuals have questioned the extent to which inequity that results from over payment (rewards) leads to perceived inequity.

Despite limitations, equity theory provides a relatively *insightful model* to help explain and predict employee attitudes about pay. The theory also emphasizes the importance of *comparisons* in the work situation.

f) Locke's Value Discrepancy Theory (1969)

Locke (1969, 1976) used the discrepancy hypothesis in his *value discrepancy theory*. He thought that satisfaction is more likely to result from the fulfillment of wants or desires than from the fulfillment of deprived needs. That is, what a person considers important or *valuable* has stronger effects on his or her satisfaction. Values can be described in terms of both their content and their intensity or strength. Content refers to *what is* wanted, and intensity refers to *how much* is wanted. The discrepancy hypothesis describes how values operate on satisfaction. Locke's basic proposition is that satisfaction with some factor or aspect of the job is the result of a dual judgement. First, a person judges the job factor in terms of its importance. This judgement reflects the intensity of the value relating to the job factor. Second, the person estimates the discrepancy or difference between how much of the factor is

desired and how much is received. Thus satisfaction with a job factor will depend on the importance of the factor and on the difference between what is desired of it and what is received. Locke further proposed that a factor's importance affects the intensity of the reaction to a discrepancy. That is, when a job factor is very important, a discrepancy matters more and leads to greater *dissatisfaction* than when the factor is not important (McFarlin & Rice, 1992). A meta analysis of 31 studies that included 17,241 people demonstrated that met expectations were significantly related to Job Satisfaction (Wanous, *et al.*, 1992).

g) *Alderfer's ERG Theory (1972)*

Alderfer agrees with Maslow that individuals' needs are arranged in a hierarchy. However, his proposed need hierarchy involves only three sets of needs: (1) **Existence**: Needs satisfied by such factors as food, air, water, pay and working conditions. (2) **Relatedness**: Needs satisfied by meaningful social and interpersonal relationships. (3) **Growth**: Needs satisfied by an individual making creative or productive contributions. Alderfer's three needs - existence (*E*), relatedness (*R*), and growth (*G*) or *ERG* - correspond to Maslow's in that the existence needs are similar to Maslow's physiological and safety categories; the relatedness needs are similar to the belongingness, social and love category; and the growth needs are similar to the esteem and self-actualization categories.

In addition to a difference in the number of categories, Alderfer's *ERG* theory and Maslow's *need hierarchy* differ on how people *move* through the different sets of needs. In contrast to Maslow, Alderfer's *ERG* theory suggests that, in addition to the satisfaction - progression process, a *frustration-regression process* also exists. That is, if a person is continually frustrated in attempts to satisfy growth needs, relatedness needs reemerge as a major motivating force, causing the individual to redirect efforts toward satisfying a lower-order need category. The *ERG* theory implies that individuals are motivated to engage in behaviour to satisfy one of the

three sets of needs. The ERG theory hasn't stimulated a great deal of research. Thus empirical verification can't be claimed for the ERG model.

h) Lawler's Facet Theory (1973)

The primary aim of the Lawler's fact model is to *predict* satisfaction with different aspects or facets of the job. Lawler used the discrepancy hypothesis and some of Adams' (1965) motivation theory reasoning to do this. He proposed that the level of satisfaction with a job facet is determined by *comparisons* between expectations of what *should be* received from the job facet and perceptions of what *is* received. Expectations of what should be received are determined by perceptions of one's *input* to the job, the *inputs* and *outcomes* of others, and the *demands* of the job. Perception of what actually is received on the job also is determined by equity considerations, specifically by the actual amount one receives compared to the amount other receive.

Satisfaction results when the amount received is the *same* as the amount expected. Dissatisfaction results when one gets *less than one expects*. Lawler proposed that the size of this discrepancy will determine the amount of *dissatisfaction*. A number of variables such as skill, experience, training, effort, age, seniority, education, responsibility, loyalty to the institution, performance etc. can operate to affect the discrepancy between the amount *expected* and the amount *received*. Dissatisfaction with a job facet is more likely when an individual perceives (1) his or her inputs to be high (2) the job to be demanding (3) the outcome level to be low (4) coworkers to have a better input-outcome balance; and (5) coworkers to have greater actual outcomes, particularly if they have similar or less demanding jobs. In the case of positive discrepancies, when *more* is received than should be, Lawler proposed that guilt and discomfort result instead of dissatisfaction.

In Lawler's theory, the same psychological process operates for all job facets. Importance of the job facet is reflected in the measure of satisfaction, because those facets that are most important will appear as the *most* or the *least* satisfactory.

i) Stogdill's Theory (1974)

One of the major sources of frustration in Job Satisfaction research is that there does not seem to be any clearly defined relationship between degree of *Job Satisfaction* and *quality* or *quantity of job performance*. Stogdill extremely concerned with this and decided that it was time to stop trying to view satisfaction as a *causer* of job performance, ie. as input variable, instead he felt it much more appropriate to view the individual in terms of the context of the total organisation.

The *output* of an organisation are group integration, production results in group cohesiveness but is not necessarily related to production. Instead both morale and production are function of group structure. Therefore morale and production will only be related to satisfaction when the conditions are similar. The conditions which lead to high morale and production are also those which lead to the reinforcement of work.

j) The Social Influence Hypothesis (1977)

Social psychologists have shown that attitudes develop in a social context and are molded by reference groups in many cases (Triandis, 1971). Salancik and Pfeffer (1977) have proposed that social influence is an *important determinant* of Job Satisfaction. They argue that people do not make the many comparisons for all the different aspects of a job, as discrepancy theorists have suggested. Instead, individuals take a cognitive shortcut, and simply look to see how others in similar jobs appear to feel. The perception of job attitudes influences one's own attitudes. Some *laboratory research* has supported the social influence hypothesis. For example, subjects who heard others evaluate a task positively were themselves more

likely to *do so* when they performed it later (Weiss & Shaw, 1979). Also, satisfaction with various aspects of work is affected by the individual's attachment to a highly cohesive group (Manning & Fullerton, 1988; O'Reilly & Caldwell, 1985), and cohesive groups provide ample opportunity for social influence.

k) Landy's Opponent Process Theory (1978)

Landy (1978, 1985) observed that satisfaction with a job can change over time even though the job itself has not changed. He proposed, in his *opponent process theory*, that this happens because of the person's internal mechanisms for maintaining a neutral emotional level. That is, individuals try to smooth out our emotional *ups* and *downs*. Landy viewed Job Satisfaction as an *emotional state* that is subject to *physiological influences*. Emotional balance is a neutral state maintained through opponent processes that counteract the emotional response to a job. He proposed that two different opponent operations come into play: (1) an immediate emotional response and (2) a later reaction after many emotional responses to the job have occurred. The individual first feels a strong emotional effect and then a gradual tapering to an emotionally neutral level. Later, when the stimulus is withdrawn, the individual experiences the opposite emotion before returning to an emotionally neutral state. The opposing process is proposed to become stronger over time; thus, the same stimulus comes to provoke only a slight response. Also, because the opponent process is stronger, withdrawal of a stimulus causes a more extreme *overshooting* of emotional equilibrium.

l) Trait/Genetic Components

The trait/genetic model is based on the belief that Job Satisfaction is partly a function of both *personal traits* and *genetic factors*. As such this model implies that stable *individual differences* are just as important in explaining Job Satisfaction as are characteristics of the work environment. Although only a few studies have tested these propositions, results support a positive, *significant* relationship between

personal traits and Job Satisfaction over a period of time from 2 to 50 years (Judge, 1993) Genetic factors also were found to significantly *predict* life satisfaction, well-being, and general Job Satisfaction (Arvey, *et al.*, 1989).

2.1.3.3. Determinants of Job Satisfaction

A job can be defined as an interacting set of *tasks, roles, and relationships* with others. People are likely to have attitudes about all these aspects of the job, as well as about the job as a whole. Studies have been done to evaluate the determinants of Job Satisfaction. According to Korman (1994) there are two types of variables, which determine the Job Satisfaction of an individual. These are: (1) *Organisational Variables* and (2) *Personal Variables*.

1. *Organisational Variables*

These are the following factors intrinsic to the organisation itself.

a) Occupational level: The *higher* the level of the job, the *greater* the satisfaction of the individual. This is because higher level jobs carry greater prestige and self-control. This relationship between occupational level and Job Satisfaction stems from social reference group theory in that our society *values* some jobs more than others. Hence people in valued jobs will like them more than those who are in non-valued jobs. The relationship may also stem from the need-fulfilment theory. People in higher level jobs find most of their needs satisfied than when they are in lower level ones.

b) Job content: *Greater* the variation in job content and the *less* the repetitiveness with which the tasks must be performed, the greater the satisfaction of the individuals involved.

c) Considerate leadership: People like to be treated with consideration. Hence considerate leadership results in *higher* Job Satisfaction than inconsiderate leadership.

d) Pay and promotional opportunities: All other things being equal these two variables are *positively related* to Job Satisfaction and

e) Interaction in the work group: Interaction is most satisfying when (i) it results in the cognition that other person's attitudes are *similar* to one's own, since this

permits the ready calculability of the other's behaviour and constitutes a validation of one's self; (ii) it results in being accepted by others; and (iii) it facilitates the achievement of goals.

2. *Personal Variables*

For some people, it appears most jobs will be dissatisfying *irrespective* of the organisational conditions involved, whereas for others, most jobs will be satisfying. Personal variables like age, educational level, sex etc., are responsible for this difference. *a) Age:* Most of the evidence on the relation between age and Job Satisfaction, holding such factors as occupational level constant, seems to indicate that there is generally a positive relationship between the two variables up to the preretirement years and then there is a sharp *decrease* in satisfaction. *b) Educational level:* With occupational level held constant there is a *negative* relationship between the educational level and Job Satisfaction. The *higher* the education, the *higher* the reference group which the individual looks to for guidance to evaluate his job rewards. *c) Role perception:* Different individuals hold different perceptions about their role. The *more accurate* the role perception of an individual the *greater* his satisfaction and *d) Gender:* There is as yet no consistent evidence as to whether women are more satisfied with their jobs than man, holding such factors as job and occupational level constant. One might predict this to be the case, considering the generally lower occupational aspiration of women.

2.1.3.4. Measurement of Job Satisfaction

Because an attitude is a *hypothetical construct*, it itself cannot be measured. However, reflections of the attitude in behaviour and in reports of thoughts and feelings can be measured. A variety of measurement instruments can be used in studying Job Satisfaction. *Physiological measures* and *questionnaires* asking about feelings can be used in detecting the affective component of Job Satisfaction.

Questionnaires that access the *cognitive component* also provide information about the attitude.

Several standardized instruments for measuring Job Satisfaction are available, and much of the current research is done with one of these. The four well-known standardized instruments that include items covering a range of job factors and sources of satisfaction are *Job Descriptive Index*, the *Minnesota Satisfaction Questionnaire*, the *Need Satisfaction Questionnaire*, and the *Faces Scale*.

a) Job Descriptive Index (JDI)

A standardized scale that has been used in much of the current research is the *Job Descriptive Index (JDI)*, originally developed by Smith, *et al.*, (1969). Its widespread use has produced norms for several different groups in terms of *age, gender, education, and income of the respondents*. The JDI response format contains six subscales composing the measure contain questions about attitudes towards work, supervision, pay, coworkers, opportunities for promotion, and the job in general. Each subscale can be scored separately to provide component scores, or they can be combined to yield a composite score. Another measure of overall satisfaction, called the Job in general scale, has been developed for use with the JDI subscales.

b) Minnesota Satisfaction Questionnaire (MSQ)

There are two forms of the *Minnesota Satisfaction Questionnaire (MSQ)* (Weiss, *et al.*, 1967). The long form includes *100 items* about various aspects of the work situation and yields scores that can be compared with norms for several occupational groups. *Twenty job factors* are represented in these items, including satisfaction with pay, co-workers, supervision, responsibility, social status, and security. The short form includes 20 items and provides an overall measure of Job Satisfaction. The MSQ uses a five-point Likert rating scale.

c) *Need Satisfaction Questionnaire (NSQ)*

This questionnaire is based on the need fulfillment perspective. The Need Satisfaction Questionnaire (NSQ) itemizes several needs that might be satisfied on the job (Porter, 1961). The respondent rates how much satisfaction should be available and how much is available to meet his or her needs. It is an indirect measure inferring satisfaction from need fulfillment. The NSQ is based on a *discrepancy hypothesis*. The ratings identify discrepancies between what is expected and what is received. That is, if the individual expects more need satisfaction than the job actually provides, then dissatisfaction is predicted.

d) *Faces Scale*

Faces Scale (Kunin, 1955) is a *single item* measure, provides an assessment of *overall* Job Satisfaction. The scale is unique because the response categories consist of drawing of *faces* that vary in emotional expression. The drawings have been scaled so that they represent equidistant points along a continuum from positive to negative. A respondent checks the box under the face that best expresses how he or she feels about the job. The Faces Scale is especially useful with *illiterate* workers or with those who have language difficulties.

2.1.4. PERSONALITY

Personality refers to the *unique pattern of psychological and behavioural characteristics* by which each person can be compared and contrasted with other people. The four main theoretical approaches to personality are the *Psychodynamic, Trait, Cognitive-behavioural, and Phenomenological approaches*; the cream of each of which is briefly presented in this part of the report. In the present study *Personality Characteristics* of Teachers are measured using Cattell's 16 PF, which was constructed on the basis of trait approaches, trait theories have given somewhat more importance in the description.

2.1.4.1. The Psychodynamic Approach

The *psychodynamic approach*, first proposed by Freud (1890), assumes that personality arises out of *conflicts* between *basic needs* and the *demands of the real world*. Most of these conflicts occur at an unconscious level. Many of Freud's early followers developed new theories that differed from his. Among these theorists were Adler (1927), Jung (1933) and Horney (1937). These and other theorists like Erik Erikson (1968) tended to downplay the role of instincts and the unconscious, emphasizing instead the importance of conscious processes, ego functions, and social and cultural factors.

Today some of the most influential psychodynamic approaches to personality focus on *object relations* - that is, on how people's perceptions of themselves and others influence their view of and reactions of the world (Westen, 1992). According to object relations theorists such as Klein (1975), Kernberg (1976), Kohut (1984), and Mahler (1968) early relationships between infants and their love objects, usually the *mother* and other *primary caregivers*, are vitally important in the *development* of personality. These relationships, they say, shape a person's thoughts and feelings about social relationships later in life.

The psychodynamic approach is reflected in many forms of psychotherapy. In spite of recent attempts to measure psychodynamic concepts more precisely and objectively, critics still fault the approach for its lack of a scientific base and for its view of human behaviour as driven by unmeasurable forces.

2.1.4.2. The Trait Approach

Trait theory is an approach for analysing the structure of personality by measuring, identifying, and classifying similarities and differences in personality characteristics or traits. The *Trait approach* views personality as the combination of stable internal characteristics that people display consistently over time and across

situations (Carver & Scheier, 1995). The trait approach to personality makes three basic assumptions. 1. *Personality traits are relatively stable and therefore predictable over time.* 2. *Personality traits are relatively stable across diverse situations, and they can explain why people act in predictable ways in many different settings.* 3. *People differ with regard to how much of a particular personality trait they possess; no two people are exactly alike on all traits.* The result is an endless variety of unique human personalities.

Rather than looking for discrete personality types, trait theorists measure the relative strength of many personality characteristics appearing in each individual. Some of the prominent trait theories are presented in the following part.

a) *Allport's Trait Theory (1961)*

Psychologist Gordon Allport (1961) identified several kinds of traits. *Common traits* are those shared by most members of a culture. Common traits show how people from a particular nation or culture are similar or which traits the culture emphasizes. Common traits tell us little about individuals. *Individual traits*, which define a person's unique personal qualities. Allport also made distinctions between *Cardinal traits*, *Central traits*, and *Secondary traits*. A *Cardinal trait* is so basic that all of a person's activities can be traced to the trait's existence. According to Allport, few people have cardinal traits.

Central traits are the core qualities or basic building blocks of personality. Allport found that a surprisingly small number of central traits are enough to capture the essence of a person. In contrast, *Secondary traits* are less consistent, relatively superficial aspects of a person. For this reason, any number of secondary traits could be listed in a personality description. In Allport's terms, a personality description might therefore include one's food preferences, attitudes, political opinions, musical tastes and so forth.

Allport's research helped to lay the foundation for *modern research* on personality traits. However, his focus on the *uniqueness* of each individual personality made it difficult to draw conclusions about the structure of human personality in general.

b) Eysenck's Biological Trait Theory (1961)

British psychologist Hans Eysenck has used factor analysis to study the structure of both normal and disordered personalities. From his research, he has concluded that personality can be described in terms of three basic factors or dimensions : *Psychotism, Introversion - Extraversion* and *Emotionality -- Stability* (neuroticism). Eysenck (1961) believes that personality traits are determined mainly in terms of where a person falls along these three dimensions, especially introversion -extraversion and emotionality - stability. He has presented data to show that scores on tests measuring these dimensions can predict people's key characteristics, including specific behaviour disorders. Eysenck argues that variation in personality characteristics can be traced to *inherited differences in the brain*. These biological differences, he says, explain *why* some people are more physiologically aroused than others.

c) Cattell's Factor-Analytic Approach (1973)

The most recent advanced theory of personality based on the trait approach has been developed by Cattell (1973). Like all other theorists who emphasize the method of factor analysis, Cattell is deeply indebted to the pioneer work of Spearman and the extensive developments by Thurstone. His theoretical formulations seem most directly related to McDougall's. The details of many of Cattell's theoretical ideas, especially those related to development, are quite intimately related to the formulations of Freud and subsequent psychoanalytic writers.

Cattell's theory of personality represents a major attempt to bring together and organize the *findings of factor analytic studies of personality*. He resembles Gordon Allport in that his position may accurately be labelled a *trait theory* and Kurt Lewin in his knack for translating psychological ideas into explicit mathematical forms. However, the one Cattell most resembles is Henry Murray. Both take a broad view of personality, and have developed large, inclusive theoretical systems incorporating many different classes of variables. Both have been concerned with an empirical mapping of wide reaches of the personality domain, and this has in both cases resulted in large numbers of constructs, with operational links to data. In addition, both theorists place heavy emphasis on motivational constructs: *needs* for Murray, *dynamic traits* for Cattell; both make substantial use of psychoanalytic formulations; and both give a systematic theoretical status to the environment as well as to the person. An outstanding difference between them is, Cattell's heavy *commitment* to a particular statistical methodology, factor analysis.

Cattell provides only a very general definition of personality. He defines: *Personality is that which permits a prediction of what a person will do in a given situation*. The goal of psychological research in personality is thus to establish laws about what different people will do in all kinds of social and general environmental situations (Cattell, 1950). Cattell has defined a trait as a *structure of the personality* inferred from behaviour in different situations and described four types of traits; *common traits, unique traits, surface traits* and *source traits*. The main difference between Cattell and Allport is that, Allport classified traits subjectively, whereas Cattell used *factor analysis* to reduce surface traits to source traits.

Cattell identified 16 *basic or source trait (factors) from a list of 171 traits through the process of factor analysis*. Cattell regarded these 16 factors as the *building blocks* of personality, ie. the characteristics in terms of which one's personality can be described and measured. These 16 basic trait dimensions or

factors are given in the following along with explanatory descriptions of the related dimension:

<i>Symbols</i>	<i>Traits</i>		<i>Name of the factors</i>
A	Reserved (detached, critical, aloof, stiff)	<i>v/s</i>	Outgoing (Warmhearted, easy going, participating)
B	Less intelligent (Concrete thinking)	<i>v/s</i>	More intelligent (abstract thinking, bright)
C	Affected by feelings (emotionally less stable, easily upset, changeable)	<i>v/s</i>	Emotionally stable (mature, faces reality, calm)
E	Submissive (mild, easily led, docile, accommodating)	<i>v/s</i>	Dominant (aggressive, stubborn, competitive)
F	Serious (sober, taciturn)	<i>v/s</i>	Happy-go-Lucky (enthusiastic)
G	Expedient (disregards rules)	<i>v/s</i>	Conscientious (Persistent, moralistic, staid)
H	Timid (shy, fears threat, sensitive)	<i>v/s</i>	Venturesome (uninhibited, socially bold)
I	Tough-minded (Self-reliant, realistic)	<i>v/s</i>	Tender-hearted (sensitive, clinging, over protected)
L	Trusting (accepting conditions)	<i>v/s</i>	Suspicious (hard to fool)
M	Practical (down-to-earth concerns)	<i>v/s</i>	Imaginative (bohemian, absent minded)
N	Forthright (unpretentious, genuine but socially clumsy)	<i>v/s</i>	Shrewd (socially aware, astute)
O	Self-assured (secure, placid, complacent)	<i>v/s</i>	Apprehensive (self-critical, insecure, worrying, troubled)
Q ₁	Conservative (respecting traditional ideas)	<i>v/s</i>	Experimenting (liberal, free-thinking)
Q ₂	Group-dependent (a joiner and sound follower)	<i>v/s</i>	Self-sufficient (resourceful, prefers own decisions)

Q ₃	Uncontrolled (careless of social rules, follows own urges)	v/s	Controlled (socially precise, exercising will power, compulsive)
Q ₄	Relaxed (tranquil, unfrustrated, composed)	v/s	Tense (frustrated, driven, overwrought)

Cattell made use of his 16 *factors* in the measurement of personality by *devising a personality inventory* known as *Cattell's sixteen personality factors inventory (16PF)* consisting of suitable, multiple choice questions.

For the prediction and measurement of one's personality, Cattell has taken clearly into account the motivational variables like *urges, sentiments, attitude states, and the roles relevant to the situation*. His theory has given equal importance to the role of both *heredity* and *environment* in the growth and development of personality and thus is able to demonstrate strong interaction between biological-genetic factors and the environmental influence for prediction of human behaviour.

d) *The Big-Five Model of Personality*

Recently, researchers have used factor analysis to identify five basic dimensions of personality, collectively referred to as the *big-five* or *five-factor model*. These are *Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (OCEAN)*. These dimensions, which have been found in many different cultures, may arise partly from inherited differences in *temperament* that provide the raw materials out of which experience molds each personality.

Critics of the five-factor model point out that the data for the model came from questionnaires that may be too structured to give real and complete portraits of personalities. As a result, data from questionnaire may paint too simplistic a picture of human personality and may not reflect its depth and complexity (Block, 1995).

The trait approach to personality has several advantages. Traits lend themselves to measurement and hence to empirical investigation through questionnaires. Without the trait approach, one would not have been able to assess the heritability or consistency of personality. Further, trait theories are not committed to theoretical assumptions that may be valid for some people but not for others.

Trait approaches, however, have three limitations. First, they often rely uncritically on self-reports, and subjects sometimes cannot or will not give an accurate assessment of themselves. Second, trait theories can be no more sophisticated than the theories of personality held by lay people and particularly by college students, who serve as subjects for most studies, because the basic terms of trait theory come from every day language (Block, 1995). That is, Trait theory in some respects is less a theory of personality than a theory of the way *everyday people* think about personality. Finally, traits are simply descriptive and provide little insight into the how and why of personality (Block, 1995).

Critics of trait theories raise some major problems about traits. In its current form, trait theory assumes that all differences between personalities can be described by a short but comprehensive list of traits. This view is criticised by Block (1995) and Digman (1997).

One of the more serious problems faced by Trait theory involved the assumption that, since traits are consistent and stable influences on one's behaviour, one should be able to use traits to predict behaviours. Researchers found that traits could better predict behaviours if traits were measured under different conditions and situations. In addition, researchers found that situations may have as much influence on behaviour as do traits, so situational influences must be taken in to account when predicting someone's behaviour (Wiggins, 1997).

Finally, the critics says Genetic factors have a considerable influence on personality traits and behaviours. Genetic factors push and pull the development of certain traits, whose development may be helped or hindered by environmental factors (Plomin, 1997).

2.1.4.3. The Cognitive - Behavioural Approach

According to the psychodynamic and trait approaches, personality consists of inner dynamics or traits that guide *thinking* and *behaviour*. In contrast, those taking a *cognitive behavioural approach* view personality mainly as the array of behaviours that people acquire through learning and display in particular situations. Some aspects of this approach reflect a traditional behavioural assumption. However, the cognitive-behavioural approach expands that original scope by emphasizing (1) the role of *learned patterns of thought* in guiding our actions and (2) the fact that much of personality is learned in *social situations* through interaction with and observation of other people, including family members (Mischel, 1993; Rotter, 1990). The cognitive-behavioural approach is sometimes called the *social-learning* approach, it views personality as the sum total of the behaviours and cognitive habits that develop as people learn through experience in the social world.

Among the most influential cognitive-behavioural or social-learning theories are those of Julian Rotter (1982), Albert Bandura (1986) and Walter Mischel (1993).

The cognitive-behavioural approach has led to new forms of psychological treatment and many other applications. Critics of the approach, however, consider even its latest versions to be too mechanistic and incapable of capturing what most psychologists mean by personality, including beliefs, intentions, and values.

2.1.4.4. The Phenomenological Approach

Unlike theories that emphasize the instincts and learning processes that humans and lower animals seem to have in common the phenomenological

approach focuses on *mental qualities* that set humans apart: *Self-awareness, creativity, planning, decision making, and responsibility*. For this reason, the phenomenological approach is also known as the *humanistic* view of personality. According to the phenomenological approach, the primary human motivator is an *innate drive* toward *growth* that prompts people to fulfill their unique and natural potential. By far, the most prominent phenomenological theories of personality are those of Abraham Maslow (1971) and Carl Rogers (1980).

Applications of the phenomenological approach include certain forms of psychotherapy and group experiences designed to enhance personal growth. Although it has a large following, the phenomenological approach is faulted for being too idealistic, for failing to explain personality development, for being vague and unscientific, and for underplaying cultural differences in *ideal* personalities.

2.1.4.5. Personality Assessment and Psychometric Questionnaires

Personality assessment can be made by means of variety of techniques like observation, situation test, questionnaire, personality inventory, rating scale, interview, and projective techniques. The sorts of personality characteristics which are normally assessed include emotional adjustment, social relations, motivation interests, values and attitudes. Some psychologists included cognitive scales also within their questionnaires.

Personality Questionnaires

Most personality questionnaires are paper-and -pencil tests that reveal personality characteristics. As measures of personality, questionnaires are more objective than interviews or observation. Questions, administration, and scoring are all standardised so that scores are unaffected by the opinions or prejudices of the examiner.

The foundations underlying personality questionnaires are the *trait* or *type* theories, which are closely related. The trait approach involves the identification of a number of fairly independent and enduring characteristics of behaviour which all people display, but to differing degrees. Groups of traits that are associated, go to make up personality types.

Five of the most widely used instruments are described in the following.

(i) *Cattell's 16 PF*

It is a widely used standardized personality test. The term "PF" stands for personality factors. The test measures 16 factors, or traits, of personality. Unlike the MMPI (Minnesota Multiphasic Personality Inventory), which was intended primarily to identify abnormal personalities, the 16PF was devised to assess various aspects of normal personality. Raymond Cattell (1965) used factor analysis to identify the traits that contribute most significantly to personality.

Although the 16PF Test was originally designed to assess normal personality, it does enable clinicians to identify various abnormalities, such as schizophrenia, depression, and alcoholism. Each disorder is associated with a characteristic personality profile. As with any test, this should be used cautiously, especially with people from different cultural backgrounds. Psychologists have translated this test into other languages, but something is often lost in translation.

There are four different forms of 16 PF are available. Forms A and B, which are full versions, and C and D which are shorter versions, with simpler language for those with low educational attainment. All forms measure the same 16 primary factors and four second order factors. *Introversiion-extraversiion; emotional stability; tough-poise; and independence.* The questionnaire is used for both occupational assessment and counselling. All versions are untimed and take between 25-60 minutes to complete.

(ii) Gordon Personal Profile Inventory

It has two parts. The profile measures *ascendancy, responsibility, emotional stability* and *sociability* and the Inventory measures *cautiousness, original thinking, personal relations* and *vigour*. It is untimed, and each part usually takes 15-20 minutes to complete. It is useful for both counselling and assessment in an occupational setting.

(iii) Saville and Holdsworth's (SHL) Occupational Personality Questionnaire (OPQ)

The OPQ was published in 1984. It is designed specifically to assess personality characteristics in the world of work for assessment and counselling purposes. There are light different versions, with various response formats used in each version. The main domains of personality measured by the OPQ are: *relationships with people; thinking style; and feelings and emotions*. The longest form, concept Model 4.2, assesses 30 primary factors and takes about 50 minutes to complete, whilst the shortest, Images, measures six dimensions and takes about 10 minutes.

(iv) Myers - Briggs Type Indicator

This questionnaire is based on Jung's theory of types. It contains four scales: *introversion-extraversion; sensing-intuition; thinking-feeling; and judging-perceptive*. Scores can be reported as continuous variables or as a specific type code. There are two versions, Form K and a shorter Form G, which are both untimed and usually take around 30-20 minutes respectively to complete.

(v) Californian Psychological Inventory

It is designed to assess personality characteristics that are relevant for everyday life and the revised edition measures five basic scales *interpersonal style* and *manner; internalisation* and *endorsement of normative conventions; thinking*

and *behaviour, cognitive and intellectual functioning*; and special scales such as managerial, creative and leadership potential. The two versions contain 309 and 434 items and usually take between 45-60 minutes to complete.

The other well known personality inventory is MMPI.

(vi) Minnesota Multiphasic Personality Inventory-2 (MMPI)

The *Minnesota Multiphasic Personality Inventory (MMPI-2)* is a true-false self-report questionnaire that consists of 567 statements describing a wide range of normal and abnormal behaviours. The purpose of the MMPI-2 is to help distinguish normal from abnormal groups. The MMPI-2 asks about and identifies a variety of specific personality traits, including depression, hostility, high energy, and shyness and plots whether these traits are in the normal or abnormal range.

One advantage of this test is that it contains three kinds of scales: *validity scales*, which assess whether the client was lying or faking answers; *clinical scales*, which identify psychological disorders, such as depression, paranoia, or schizophrenia; and *content scales*, which identify specific areas, such as the anger (Kaplan & Saccuzzo, 1997).

2.2. REVIEW OF RELATED STUDIES

The exhaustive review is done in order to acquire up-to-date information about what has been thought and done in the area of Teacher Stress. Such a familiarity with the studies in Teacher Stress area will help the investigator to discover what is already known, what others have attempted to find out, what methods of attack have been promising or disappointing and what problems remain to be solved. The studies located are presented in the following sections.

2.2.1. STUDIES ON TEACHER STRESS

A large body of research findings related to Occupational Stress of Teachers were located by the investigator. Each and every study emphasised various aspects of stress, stressors and coping strategies. The review of studies are presented through the categories as *Foreign Studies* and *Indian Studies*.

2.2.1.1. Review of Foreign Studies - Stress and Job Satisfaction

From the review of related studies, investigator found that the studies relating *Teachers Stress* and *Job Satisfaction* are very few in Indian context. So to get a better idea about the nature of relationship between the two variables and to understand methods adopted for analysis, sample size chosen, and also to formulate hypotheses investigator reviewed foreign studies and presented in the following part.

Bensky (1979) conducted a study on 136 teachers enrolled in special education courses responded to a questionnaire which focused on stress. Among findings were that *special education teachers tend to experience less stress, that the increased frequency of meetings mandated by P.L. 94-142 has increased the amount of stress experienced by special education teachers in compliance with the law, that the presence of clear role expectations greatly reduces stress, and that the more satisfied a teacher is in the professional role the less stress is experienced.*

Ashton (1981) studied the attitudes of middle and junior high school teachers toward their job and school climate. Twenty-nine teachers from a school having a modern middle school orientation were compared with twenty teachers from a departmentally organized junior high school. The results shows that *the differences in teacher stress and student intergroup conflict at the schools were not significant.* Other findings showed that the *middle school teachers, compared to junior high*

school teachers, considered teaching to be more important to them, were more satisfied with teaching and were more likely to choose teaching as a career again.

Feitler and Tokar (1981) conducted a survey of 3,789 teachers in 60 school districts in Ohio and Pennsylvania found that feelings of job stress and job satisfaction are inversely related. When compared with a similar British study, the survey results show that the same high proportions of teachers in both countries are satisfied with their jobs. Further student misbehaviour and overwork are the main sources of stress in American schools.

A study of absenteeism, job satisfaction, job stress and locus of control among special education teachers in selected countries of West Virginia was conducted by Knowles (1981) and found out that special education teachers are generally absent, more or less satisfied their jobs, are more stressful. Furthermore, behaviour disordered teachers were found to be absent more, less satisfied with their jobs, and more stressful than mentally retarded or learning disabled teacher.

A statewide teacher stress survey conducted with 365 full time special education teachers in Connecticut by Fimian and Santoro (1982). Of the 365 respondents, 58 were identified as low stress, 250 as moderate stress, and 57 as high stress teachers. Among findings were that the strongest and most frequent sources of stress included inadequate salary, frustration over lack of time for individual students, and frustration because of poor attitudes and behaviours of the administration. Many of the teachers surveyed enjoy and are satisfied with their jobs regardless of the moderate to high stress levels that may be incurred.

Approaches to studying the relationships between stress and school organisational sources of stress were examined by Hubert (1983). For a sample of 1300 high school teachers in Connecticut. The results indicated that the methodology did matter, and that correlation values obtained directly from teacher scores were not indicative of the role of school organisations in teacher stress.

Barter (1984) reviewed six topics of research reports on teacher effectiveness (school effectiveness, teacher shortage, teacher stress, classroom organisation, professional growth and job satisfaction) and *suggested 13 activities for meeting faculty members' needs* (including the establishment of faculty improvement and cultural funds, housing allowances, merit pay, summer grant, and foreign travel programs).

Farber (1984) conducted a study on a group of elementary and secondary suburban school teachers to assess the sources and extent of satisfaction, stress, and burnout. It is found that *satisfaction resulted from experiences that made teachers feel sensitive to and involved with students and colleagues. Excessive paper work and unsuccessful administrative meetings caused stress.*

By using a path analytic model, *Hubert (1984)* determined the relationship of school organisational stressors to teacher stress in public high schools. Surveying 786 teachers from a group of 50 Connecticut high schools, it was found that variation in stress from school to school was strongly related to selected organisational health variables but that stress does not vary much among schools. *Need satisfaction proved valuable in explaining how organisational variables related to stress.*

The Wilson Stress Profile for Teachers was administered by *Sutton and Huberty (1984)* to 10 public school teachers and 10 teachers of the severely handicapped in private schools to explore differences in stress. They found no differences existed in sources of stress or strategies for coping with stress and *an inverse relationship between job satisfaction and stress levels existed.*

The extent of job dissatisfaction among female elementary school teachers were explored by *Wangberg (1984)* from 255 subjects with varying demographic and socio economic backgrounds from different parts of the country. *Nearly 40 percent of the women indicated they would not again choose elementary teaching as a*

career. Two factors were *identified as underlying themes related to teacher job dissatisfaction.*

Ettingoff (1985) conducted a study on teacher stress as a function of pupils behaviours and characteristics of regular and special education and the result showed *no significant difference between teacher groups on perceived satisfaction in teaching or the reported frequency of the symptom of stress.*

Sources of stress among 61 elementary and secondary school teachers were investigated by Jones (1985). *Job satisfaction appeared to increase with teaching higher grade levels.* Teachers with higher job satisfaction scores thought less frequently about leaving the profession.

Laughlin (1985) studied the occupational stress and its relationship to social supports and life turbulence of the teachers in New South Wales. The study revealed that nearly one third of the teachers considered their job to be extremely stressful. *Self reported teacher stress was found to be negatively related to job satisfaction and intention to continue teaching.*

Litt and Turk (1985) surveyed high school teachers to identify sources of stress and dissatisfaction that may induce teachers to leave teaching. Data on perceived role, school climate, coping resources, and specific work problems were *canonically correlated to create a construct of teacher stress.*

Mykletun (1985) examined the stress levels and work satisfaction in 73 Norwegian comprehensive school teachers. *Results indicated stress and satisfaction were primarily attributed to social interaction at work but also to control over the work process, adequacy of job demands, and perception of meaning and pride from work.*

Blase (1986) studied the relationship between principals' leadership style and teacher stress and satisfaction *indicates that teachers' performances are influenced by their perception of principals' behaviour.*

Fimian (1986) presented the results of a statewide teacher stress survey conducted with 187 teachers of learning disabled students and 178 teachers of non learning disabled handicapped students (total N = 365) revealed that LD teachers differed from NLD teachers in terms of experience, educational status, and caseload size; there were *similarities in terms of job satisfaction, support and stress issues.*

Newburg (1987) studied the relationships between job burnout, job stress and job satisfaction among school teachers. The preponderance of the evidence implied that job burnout, job stress and job satisfaction are best considered as separate concepts. In addition it was found that *poor correlation exists between a goal measure of stress and teaching events stress inventory.*

Pelsma (1987) investigated the psychometric characteristics of the Quality of Teacher Work Life Survey (QTWL). The QTWL survey was completed by 251 teachers who rated their present degree of *satisfaction* and the degree of *stress experienced* in each of 36 job-related areas, such as salaries, time for preparation, relationships with parents, and student interest. The results suggest that *job satisfaction and job stress for teachers are multidimensional rather than unidimensional in nature.* Job satisfaction and job stress, as measured by the QTWL, appeared to be *strongly related.* Overall job satisfaction and job stress for the teachers surveyed *did not appear to be significantly related to most demographic variables.* A slight but *significant relationship may exist between satisfaction and educational level and between age and stress.*

Langford (1988) studied the relationship between stress and job satisfaction for seventh day Adventist boarding academy teachers in the southern and south

western unions. The findings of the study indicated that *stress was a significant determiner of teacher job satisfaction.*

Wolpin (1988) studied the psychological burnout among Canadian teachers and the result indicated that teacher with high degree of burnout exhibit more psychosomatic symptoms and are *less satisfied with their job.*

De Prank and Stroup (1989) studied about the teacher stress and their health problems. Result suggested that demographic factors and teacher background did not influence stress, satisfaction, or health concerns. However, while *job stress was the strongest predictor of job satisfaction*, this stress had no direct relationship with health problems.

Pelsma (1989) administered Quality of Teacher Work Life Survey (QTWL), Maslach Burnout Inventory, and Educational Values Scales to 227 teachers. Results identified *10 factors contributing to teacher satisfaction and stress.* The 10 factors accounted for 66.3 percent of the total item variance.

Borg and Falzen (1990) studied the stress and job satisfaction among primary school teachers in Malta. The result showed the prevalence of stress and level of job satisfaction. *Over thirty per cent of subjects rated their job as stressful*, and length of teaching experience and age group taught was moderators of teacher stress. Seventy five per cent of subjects were satisfied with teaching, sex and age group taught were moderators of job satisfaction. *Significant negative correlation existed between self-reported teacher stress and job satisfaction* and between teacher stress and intention to take up a teaching career a second time.

From his study *Barkdoll (1991)* shown that for teachers, *job satisfaction is related more to intrinsic rewards than to the external conditions of their employment.* However, the coping strategies for teachers' stress and recommendations for reforms in education address the teachers' external

environment and offer extrinsic rewards. *Positive mental health variables such as positive affect, dispositional optimism, and self-esteem have been shown to be related to intrinsic motivation, coping with unavoidable stress and increased job involvement. Positive affect is related to extraversion, satisfaction and subjective well-being.*

Borg (1991) studied Occupational Stress, Job Satisfaction and Career Commitment among primary school teachers of Malta. The study identified four factors that contribute to teacher stress viz., pupil misbehaviour, time/ resource difficulties, professional recognition needs and poor relationships. Positive and significant correlation obtained between Stress and Job Satisfaction.

Occupational Stress and satisfaction in teaching was studied by *Borg and Riding (1991a)* on secondary school teachers of Malta. Result of the study concluded that *teachers who reported greater stress were less satisfied with teaching, more frequently absent and more likely to leave teaching.*

Billingsley and Cross (1992) conducted a study on 463 special educators and 493 general educators in Virginia. Analysis indicated that work-related variables, such as leadership support, role conflict, role ambiguity, and *stress, are better predictors of commitment and job satisfaction* than are demographic variables. Findings were similar for general and special educators.

McCormick and Solman (1992) studied teacher's attributions of responsibility for Occupational Stress and satisfaction in Australia. The study suggests *different levels of stress exist at elementary and secondary levels and pointed out that stress and job satisfaction is related.*

Starnaman and Miller (1992) developed and tested a causal model of the relationship among burnout, communication, organizational stressors and outcomes

in the educational setting. Finds that these *role stressors*, in turn, *influenced perceptions of burnout, job satisfaction* and occupational commitment.

Juul and Repa (1993) conducted a study to improve and enrich understanding of how the disclosure or non-disclosure of a lesbian, gay male, or bisexual teacher's sexual orientation at work influences his or her perceptions of job satisfaction and job stress. This study was concerned only with the effects of openness on job satisfaction and job stress. The significance of being either open or closed about *one's sexual orientation at work influenced the perceived levels of job stress and job satisfaction of lesbian, gay male, and bisexual teachers.*

Olsen (1993) studied Work Satisfaction and Stress in the first and third year of appointment on 52 and 47 teachers respectively. Findings indicated *a decrease in Job Satisfaction and increase in job related stress.* Factor driving stress and satisfaction varied over time.

Russell and Wiley (1993) conducted a survey of 154 rural special educators in the areas of mental retardation, learning disabilities and emotional conflict found no significant differences in stress levels among groups, as measured by the teacher stress inventory. An ad-hoc analysis found *no significant differences among groups in supervisor support, room type, or job satisfaction.*

Heston (1996) examined the association of Job Satisfaction and Job Stress among 200 mid west public school teachers. *Strong relationship was found between job satisfaction and job stress* experienced by the sample.

Richardson (1997) conducted a study to discover the sources of stress in elementary school teachers in the Caribbean. The subjects were 645 elementary school teachers (310 males and 335 females). Teacher Stress Inventory which contain seven scales: role ambiguity, role stress, organisational management, job satisfaction, life satisfaction, task stress and supervisory support were used for the study. *Task*

stress emerged as the major source of stress for the teachers. Male teachers showed higher levels of stress on role stress and life satisfaction.

A survey of 235 virginia vocational teachers conducted by *Adams (1999)* examined six internal characteristics that would affect stress: role preparedness, job satisfaction, life satisfaction, illness symptoms, locus of control, and self-esteem. *Role preparedness, illness symptoms, and self-esteem were significant contributors in explaining teacher stress.*

Tang and Yeung (1999) investigated factors that affected stress, burnout, and job satisfaction among Hong Kong high school teachers. A group of 259 high school teachers from Hong Kong responded to the survey, which examined sources of stress, burnout, and job satisfaction. Data analysis indicated that *all six of the stress sources significantly related to all of the burnout outcomes. Among the six stressors, teacher workload was the strongest determinant of teacher burnout. The students and others factors had the strongest impact on job satisfaction.*

A summary of Foreign studies related to *Teacher Stress and Job Satisfaction* is given in the following.

Summary of foreign studies related to Teacher Stress and Job Satisfaction

Author	Year	Result
1. Bensky	1979	More satisfied teacher-experiences less stress
2. Ashton	1981	Middle school teachers were more satisfied than junior high school teachers
3. Feitler and Tokar	1981	Job Stress and Job Satisfaction are inversely related.
4. Knowles	1981	Behaviour disordered teachers were less satisfied and more stressful than other special education teachers.
5. Fimian and Santoro	1982	Many of the teachers were less satisfied and more stressful than other special education teachers.
6. Hubert	1983	Correlation between role of school organisations and teacher stress were not significant.
7. Barter	1984	Thirteen activities were suggested to increase job satisfaction and reduce stress.
8. Farber	1984	Excessive paper work and unsuccessful administrative meetings caused stress.
9. Hubert	1984	Need Satisfaction found to be valuable in explaining how organisational variables related to stress.
10. Sutton and Huberty	1984	Job Satisfaction and Stress levels are inversely related.
11. Wangberg	1984	Nearly 40 percent of the female elementary school teachers were dissatisfied in their job.

contd....

Author	Year	Result
12. Ettingoff	1985	No significant difference between teacher group on perceived satisfaction in teaching or the reported frequency of the symptom of stress were obtained.
13. Jones	1985	Job Satisfaction appeared to increase with teaching higher grade levels.
14. Laughlin	1985	Stress was found to be negatively related to job satisfaction.
15. Litt and Turk	1985	Perceived role, school climate, coping resources, and specific work problems were canonically correlated to create a construct of teacher stress.
16. Mykletun	1985	Stress and Satisfaction were primarily attributed to social interaction at work.
17. Blasé	1986	Teachers' performance are influenced by their perception of principals' behaviour.
18. Fimian	1986	Teachers of learning disabled students and non learning disabled handicapped students were similar in terms of job satisfaction and stress issues.
19. Newburg	1987	Poor correlation exists between a goal measure of stress and teaching events stress inventory.
20. Pelsma	1987	Job satisfaction and job stress for teachers are strongly related and not related to most demographic variables.
21. Langford	1988	Stress was a significant determiner of teacher job satisfaction.
22. Wolpin	1988	Teacher with high degree of burnout are less satisfied with their job.
23. DePrank and Stroup	1989	Job Stress found to be the strongest predictor of job satisfaction.

contd.....

Author	Year	Result
24. Pelsma	1989	Identified 10 factors contributing to teacher satisfaction and stress and factor were accounted for 66.3 percent of the total item variance.
25. Borg and Falzen	1990	Significant negative correlation existed between teacher stress and job satisfaction.
26. Barkdoll	1991	Positive mental health variables related to coping with stress and increased job satisfaction.
27. Borg	1991	Positive and significant correlation obtained between stress and job satisfaction.
28. Borg and Riding	1991	Teachers who reported greater stress were less satisfied with teaching.
29. Billingsley and Cross	1992	Stress is better predictor of job satisfaction than are demographic variables.
30. McCormick and Solman	1992	Stress and Job Satisfaction are related.
31. Starnaman and Miller	1992	Job Satisfaction is influenced by role stressors.
32. Juul and Repa	1993	One's sexual orientation at work influenced the perceived levels of job stress and job satisfaction.
33. Olsen	1993	A decrease in job satisfaction and increase in job related stress were obtained over first to third year.
34. Russell and Wiley	1993	No significant differences was obtained among special educators in stress and job satisfaction.

contd.....

Author	Year	Result
35. Heston	1996	Strong relationship was found between job satisfaction and job stress.
36. Richardson	1997	Task stress emerged as the major source of stress for the teachers.
37. Adams	1999	Role preparedness, illness, symptoms and self-esteem were found to be significant contributors in explaining teacher stress than job satisfaction.
38. Tang and Yeung	1999	Teacher workload was identified as the strongest determinant of teacher burnout and the students had strongest impact on job satisfaction.

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2.2.1.2. Studies on Stress and Personality

Studies related to *Stress* and *Personality* are very few in Indian conditions. At the same time most of the studies conducted in abroad, concentrated only on certain aspects of personality. It may be due to the complexity involved in the measurement, analysis and interpretation of the nature of *Personality*. Investigator reviewed the studies from 1980 onwards and presented it in the following part.

Goodman (1980) reviewed literature on stress among teachers in urban schools and examines the stress concept. Among the sources of stress identified are pupil misbehaviour, environmental factors such as poor working conditions, poor organisational management, and non-participation in decision-making; *personality characteristics*, life experiences, interpersonal relationships; and structural variables such as school location, school racial composition and student's socio-economic status.

Parkay (1980) studied how teachers respond to environmental stress and whether certain personality traits are related to these response patterns. It concludes that *generalized personality traits are indicative of teaching styles that emerge in response to anxiety-provoking environmental conditions.*

The stress experienced by regular classroom teachers and the stress experienced by special education teachers were examined by *Moracco (1981)*. Subjects were elementary and secondary school teachers. Results indicated that individual psychological characteristics influence the perception of stress. *No difference was found between regular and special education teachers in their perception of stress.* It is concluded that *stress is largely an individually perceived phenomenon caused by personality traits* and individual belief systems, rather than by purely environmental or occupational factors.

Fielding and Gall (1982) conducted a study to determine whether teachers' personality characteristics affect their perceptions of stress and burnout and whether school climate interacts with personality factors to influence stress and burnout. A

random sample of 162 teachers in nine junior high/middle schools were selected. *Teachers reported a moderate to substantial amount of stress and burnout.* The highest level of stress was generally reported in *interpersonal situations*, and the second highest level was reported in new situations.

Tellenback (1982) presents a complex causal model of teacher stress based on data received from the responses of 1,466 teachers from Malmo, Sweden to a questionnaire. Results show that *individual personality characteristics, rather than biographical ones, are associated with stress variables.* Teachers' relationships with pupils are by far the most important source of stress.

Hudson and Meagher (1983) investigated the extent of teacher stress and burnout reported by 200 certified teachers from four midwestern states and analysed factors relating to differences in perceived stress by regular and special educators. Findings revealed no major *difference between regular and special education teachers in terms of teacher stress (stress-prone personality, recent personal stressors, internal coping skills, support within the environment, perception of work-related stressors, level of psychological symptoms of stress, level of physiological symptoms of stress, type of reactions to stress utilised, rate of absenteeism, intention to leave the profession, willingness to re-enter the field, and rate of burnout).*

The research conducted by *Harris (1984)* indicated that teachers with a humanistic orientation have fewer problems with classroom discipline and are less subject to stress than are those with an authoritarian approach. An investigation of *teacher stress focussed upon teachers' personality, ideology, gender, age, locus of control, and pupil control orientation.* Participants in the study were 130 elementary and secondary school teachers. Findings indicated that *an authoritarian pupil orientation was associated with high stress* for four of the five stress factors. An *external locus of control was associated with stress* for three of the five factors.

A study involving Nine male and 109 female graduate students in educational psychology, who are or have been teachers, was conducted by *Hughes (1987)* to investigate the relationship between teacher burnout and personality type, self-perceptions, and critical thinking ability. Results provide *significant predictive associations between teacher stress and specific variables related to personality type, demographics, and perceptions of the self.* A more salient finding was that *teachers with higher self-concepts and extraverted and sensing personality types were more resistive to stress and more likely to maintain a sense of personal accomplishment while working under pressure.* Conversely, it was found that *teachers with personalities weighted toward the feeling and perceptual type were significantly more likely to suffer from stress.*

Soh (1988). The relationships between teachers' attitudes toward responsibility and locus of control and other characteristics such as stress, educational attitudes, and attitudes towards change were studied in 54 (35 female and 19 male) experienced primary and secondary school teachers taking a course on classroom-based research. Result shows that *there were significant correlations with responsibility and teacher stress.*

A survey of secondary classroom teachers as perceived organisational structure, role ambiguity, locus of control and job stress was carried out by *Arney (1989).* It was found that five combinations of person-environment variables were significant predictors of teacher job stress. Under low formalisation conditions *subjects with external locus of control experienced a significantly higher degree of stress than internal, under, high role ambiguity conditions.*

Orpen and King (1989) conducted a study on job stress and personality types. *The result indicated that the relationship between stress and response was equal for subjects with type A or type B personality.*

Relationships among secondary school teachers' Occupational Stress, Personality type and Social Supports were examined by *Mo (1991)*. Results of the study reported that greater stress among single and newer teachers, graduate status teachers undergoing less social support. The results also indicated that *teachers with Type A personality suffered less from burnout and the harmful effects of stress.*

The study conducted by *Schonfeld (1991)* to examine the link between Occupational Stress and Depressive symptoms of newly appointed teachers in the New York city. The sample consists of a highly representative group of 255 newly appointed female teachers. Findings suggest that *teachers in the most difficult schools showed increased stress and depressive symptoms.*

A summary of Foreign studies related to *Teacher Stress and Personality* is presented.

Summary of foreign studies related to Teacher Stress and Personality

Author	Year	Result
1. Goodman	1980	Personality characteristics identified as one of the sources of Teacher Stress.
2. Parkay	1980	Generalized personality traits are indicative of teaching styles.
3. Moracco	1981	Stress is largely an individually perceived phenomenon caused by personality traits.
4. Fielding and Gall	1982	The highest level of stress was reported in interpersonal situations.
5. Tellenback	1982	Individual personality characteristics, rather than biographical ones, are associated with stress variables.
6. Hudson and Meagher	1983	No major differences between regular and special education teachers in terms of teacher stress and stress-prone personality were obtained.
7. Harris	1984	An authoritarian pupil orientation and external locus of control was associated with stress.
8. Hughes	1987	Significant predictive associations between teacher stress and specific variables related to personality type were found.
9. Soh	1988	Significant correlations with responsibility and teacher stress were obtained.
10. Arney	1989	Subjects with external locus of control experienced a significantly higher degree of stress than internal locus of control.
11. Orpen and King	1989	The relationship between stress and response was equal for subjects with type A or type B personality.
12. Mo	1991	Teachers with type A personality suffered less from harmful effects of stress.
13. Schonfeld	1991	Teachers in the most difficult schools showed increased stress and depressive symptoms.

2.2.1.3. Studies on Stressors

After reviewing various theoretical aspects of Stress, investigator reviewed studies which identified the sources of Teacher Stress. This is done with an intention that investigator thought it will help him to construct a teacher stress factor inventory. Since there are numerous studies conducted in this area only studies from 1980 and onwards are included here.

Brown and Goodall (1980) identified many stress-producing factors in the life of a teacher. While *discipline seems to be the major problem, social and personal problems also increase the pressure of daily living.*

Clagett (1980) reported about a faculty workshop which was held to identify the sources of stress affecting the faculty and to examine possible strategies for managing stress. 218 stress generators were identified in six categories: Administration (118), student-related (36), Peer-related (23), financial (20), working conditions (16), and personal (5). *The stress factors most frequently cited included lack of faculty participation in decision-making, the increase in under-prepared students coupled with student expectations of high grades, apathetic peers, and low salaries.* Workshop yielded 153 strategies for reducing stress, including strict enforcement of prerequisite completion, realistic student placement, and the establishment of peer support networks.

Mazer and Griffin (1980) summarised the result of a study conducted by joint committee of a local teachers' association and the Tacoma Public Schools. *Involuntary transfer was perceived as the most stressful event;* seventeen per cent of the teachers reported having been involuntarily transferred during the year of the study. Seventy-five per cent reported having to *manage disruptive children,* as event which ranked fourth in the perceived stress gradings.

Truch (1980) identified many factors that contribute to teacher stress and burnout including *discipline problems, physical and emotional abuse of teachers, low*

pay, little support from superiors, public criticism of educational quality and an almost traditional attitude to low esteem for teachers as professionals.

Bausch (1981) identified the educational stressors that are the predominant sources of teacher distress and burnout. The twenty educational stressors identified by female teachers involved all areas of the educational spectrum from paper work to the future of education. While male teachers viewed concern with the lack of adequate salary and inconsistent educational methods and philosophies. The teachers with the least experience should be the most distress, particularly in the areas of school policy and populace. The teacher with the most experience were concerned about teacher representation, salary, and materials. The oldest teacher has the greatest distress in their lack of control over assignment, salary and subject as well as their feelings of lack of self esteem through professional stagnation.

A recent survey of K-12 teachers conducted by Dedrick (1981) in a middle-sized midwestern school system sought to identify the stressful conditions of the teaching profession as perceived by teachers. Women ranked lack of time as the greatest source of stress while men ranked disruptive students as the most stressful condition.

Views on sources of stress on college faculty and strategies for its management were obtained by Larkin and Clagett (1981). Sixteen faculty groups generated 218 responses expressing sources of job stress. The responses were aggregated into the following four categories: academic affairs or faculty - associated problems, student affairs or student-associated problems, business affairs, and college-wide or miscellaneous problems. Concerns included the following: time pressures or constraints related to the functioning of the college bureaucracy (nonteaching duties, the evaluation process); dissatisfaction with support for the faculty (marketing and retention pressures, not enforcing prerequisites); concerns about wages and contracts and physical plant operations; and not being involved in college decision-making.

Secondary school teachers were asked for their perceptions of variables that contributed to difficulty of teaching by Bruner (1982). Results revealed that the 19 highest ranked variables clustered around classroom management and administrative management. Classroom management concerns were at the top of the list for the teachers; *they ranked a lack of administrative support for discipline first, and teaching hostile and disruptive students second.* The findings indicated that *racial and socioeconomic demographics of students and personal family life do not create difficult teaching settings, but that problems were created by disruptive students, emotionally disturbed students, student absenteeism, and parents who do not value education.*

Sources of teacher stress in private boarding schools was identified by Cohen (1982). It include *the expectations placed on teachers, poor administrative leadership, the physical environment, time pressures, and age differences or similarities with colleagues and students.*

The results of a statewide teacher stress survey conducted with 365 full time special education teachers in Connecticut is reported by Fimian and Santoro (1982). Of the 365 respondents, 58 were identified as low stress, 250 as moderate stress, and 57 as high stress teachers. Among findings were that *the strongest and most frequent sources of stress included inadequate salary, frustration over lack of time for individual students, and frustration because of poor attitudes and behaviours of the administration.*

A number of specific stressors have been explored by Schnacke (1982). These are *conduct and discipline of pupils, misbehaviour and poor student attitudes, personnel teaching competence, maintenance of values and standards within the classroom and disagreement with supervisor or administrator.* Other factors also appear as major contributors to stress, such as *pressures precipitated by accountability laws, large classes, low salaries, intense pupil dependence and declining community support.* Another factor compounding the effects of such

stressors was seen to be related to the *teacher's perception of self as well as the profession.*

Meagher (1983) studied the variables associated with stress and burnout of regular and special education teachers and the analysis of data revealed that there was no major difference between regular and special education teachers in terms of teacher stress. When the two groups were compared on each of the eight scales included in the questionnaire, considered collectively, *the most frequently reported stressors were lack of support from administrators, working with other teachers and discipline/behaviour problems.*

A survey of 130 teachers in 4 Buffalo (New York) school district elementary schools conducted by *Milstein and Golaszewski (1983)* indicate that feelings of organisationally based stress did not vary significantly according to such demographic variables as sex or age. Of stress factors unique to educational systems, *lack of materials, student motivation, and discipline problems ranked highest.* Urban teachers reported more than average stress levels. Clear relations were revealed between organisational variables, such as work relationships and career development, and individual stress manifestations. *Classroom-based issues proved more stressful than organisationally based issues.*

A survey conducted by *Welch (1983)* revealed that self-contained special education teachers averaged the greatest number of school days missed, and principals the fewest. *Notification of unsatisfactory performance, last week of school, overcrowded classrooms, and disruptive students were rated as high sources of stress;* planning for instruction, attending meetings, conferring with parents and the principal, and evaluating students performance were rated as presenting relatively less stress. Sources appeared to be consistent across positions and school levels.

The effects of stress, and coping methods used by 274 regular and special educators and administrators were examined by *Faas (1984)*. Results revealed differences in levels of stress reported by teachers of learning disabled (LD) and mentally handicapped students (*Scheduling problems were significantly more stress producing for teachers of LD students*); by special education and regular education teachers (*lack of breaks and preparation time was significantly more stress producing for special education teachers*); and by teachers in self-contained and resource room programs (*discipline and behaviour problems and feeling of personal isolation were significantly more stress producing for teachers in self-contained classrooms*). *Paper work, procedural red tape, discipline and behaviour problems and disinterested parents were high stress producers for all groups.*

Kalker (1984) reports that stress and burnout seem to be more prevalent in helping and service professions, such as teaching. *Poor public image of teachers and education, role related distress, and lack of support all lead to teacher stress.*

Predictors of job-related stress were explored by *Sutton (1984)* in a sample of 200 public school teachers. It was found that *stress was related to personal strain; predictors of strain, in order of importance, were role demands, instructional problems (discipline, student competence, placement, standardised tests, and grading systems), and interpersonal relations.*

Hazelwood (1985) discussed the factors inherent in the job of teacher that make stress as an integral part of the profession, such as *lack of resources, poor parental and political support and low student respect.*

An investigation of the emotional exhaustion aspect of burnout and stressors in resource learning disability (LD) teachers was carried out by *Shea (1985)*. The result showed that teachers who reported feeling higher intensities of emotional exhaustion also reported higher stress associated with the following: *finding time to do assessment, to complete test write-ups, to attend to the needs of severe and mild*

cases, balancing grouping with individualisation, securing parental and administrative support, finding a colleague with whom to discuss ideas, and encouraging adaptations in regular classrooms.

Zastrow (1985) studied the causes and prevention of burnout and reported that structural factors that are contributing causes of high stress levels are also contributing factors in burnout such as *too much paper work, too much travel, isolation from peers, no social life.*

Kloska and Ramasut (1986) conducted a survey concerning the perceived degree of stress of various situations and the strategies used to cope with stress in terms of their frequency of use. Findings indicated that thirty five per cent of subjects reported to be either very or extremely successful. *The major sources of stress included lack of pupil motivation, lack of time to resolve problems with individual children, pupil's lack of discipline, lack of consensus on discipline by staff, completion of records and reports, and lack of resources and equipment.*

Through an anonymous mail survey Raschke, et al. (1986) found out the causes of stress in teachers and their suggestions for improving their school's overall environment. The subjects' report showed that the decline in *public respect for teaching, decreasing lack of enthusiasm among students, collective bargaining in teacher administrator relationships, lack of time, excessive paper work, lack of parental support, low pay and disruptive students are the causes of teacher stress.*

Tishler and Ernest (1987) conducted a study to determine the primary sources of stress for 48 Alabama school teachers. Results of the survey revealed that for the group, there was a relatively low incidence of vulnerability for stress. *Highest job stressors were associated with lack of time, disruptive students, small instructional funds, and relationship with supervisors.*

Byrne and Hall (1989) conducted a study to investigate the importance of particular background variables on three dimensions of burnout (emotional

exhaustion, depersonalisation, reduced personal accomplishment) for elementary (n=98), intermediate (n=163), secondary (n=162), and university (n=219) teachers. A secondary purpose was to delineate factors which teachers perceive as contributing most to feelings of work-related stress. *Organisational factors related to the administration of educational institutions ranked high as a substantial contributor to feelings of stress by teachers at all levels of the educative system.*

In a study by Vance (1989) on occupational stress among 30 American, Indian, Hispanic and white teachers at a reservation school, concludes that, regardless of race or sex, *major sources of stress were inadequate salary, lack of professional recognition, and time management problems.*

Vance, et al. (1989) investigated the job stress in full time laboratory school teachers and the result showed that the strongest sources of stress identified by these subjects were: *not enough time for relaxation and preparation, personal life change, inadequate salary and poorly motivated students.*

The study by Kirby (1990) explored the perceived stress levels of 115 Kentucky elementary school principals. Findings show that *the most stressful events involved forcing the resignation or dismissal of a teacher and dealing with unsatisfactory performance of professional staff. The two most stressful events correlated significantly with the variables such as gender, age, and number of years as a principal.*

Borg (1991) conducted research on Occupational Stress among elementary school teachers. Identifies four factors that contribute to teacher stress: pupil misbehaviour, time/resource difficulties, professional recognition needs, and poor relationships. Results reveal that *stress is most affected by pupil misbehaviour and time/resource difficulties.*

Borg and Riding (1991b) conducted an investigation on Occupational Stress of 545 teachers in Malta. It is revealed that one-third of the respondents rated teaching

as stressful or very stressful. Also identified *pupil misbehaviour, poor working conditions, poor staff relations and time pressures as leading contributors to stress.*

Whether different amounts of general job stress and stress related to the Alabama Performance - Based Accreditation standards were experienced by teachers and principals was studied by *Hipps and Halpin (1992)* in a sample of 65 principals and 242 teachers from 9 Alabama school systems. Teachers experienced more stress than principals, with *largest sources of stress being job overload, relationships with students, salary and compensation, and subordinate-superordinate relationships.*

Pullis (1992) conducted a survey of 244 teachers of the behaviourally disordered indicated that *school/setting factors, career issues, and workload variables were perceived as more stressful* than direct contact with students. Exhaustion, frustration, and negative carryover to life outside the classroom were frequent effects of stress.

In a study conducted by *Ryme (1992)* on 599 elementary, 203 intermediate and 715 secondary teachers found out that *role conflict, work overload, classroom climate, decision making and peer support as the primary organisational determinants of teacher stress.*

Brown and Ralph (1994) conducted a research study with teachers in the University of Manchester to identify stressors and stress management strategies. Sample comprises 100 teachers. Findings indicated that certain work related factors were common stressors, even though causes of stress may differ. These *stressors are teacher/pupil relationship, relation with colleagues and parents, innovation and change, school management and administration and time factors.*

Soyibo (1994) conducted a study on 230 high school teachers in Jamaica using a 40 item self report instrument to identify the significant stress factors. From the results it can be seen that *institutional, environmental and personal factors were identified as significant stress factors.*

Teachers perceptions of their working conditions, based on survey and interview data from special educators in six large urban school districts is reported by Gersten (1995). Major findings include *perceived role conflicts and difficulties in prioritising their many diverse responsibilities, a sense of role overload and increasing work challenges further intensified by shortages of resources, a sense of weakened autonomy regarding their professional judgement, and difficulties relating to the larger school culture and collaboration with general educators.* This combination of factors is seen to lead to high levels of stress, worsening feelings about the ability to teach effectively and in some cases, lower commitment to the field.

Time pressures, meeting children's needs, dealing with nonteaching tasks, maintaining early childhood philosophy and practice, meeting personal needs, parent issues, interpersonal relationships, and attitudes and perceptions about early childhood programs were the major sources of stress that were identified in a study of eight Australian preschool teachers by Kelly and Berthelsen (1995).

In a study by Forlin (1996) on 225 regular primary teachers and 42 principals western Australia found that *the inclusion of a child with mild intellectual disability significantly increased the teachers appraisal of stress severity.*

A study by Keiper and Busselle (1996) on stress in 120 rural teachers in Washington revealed that *time management issues were* listed most frequently as the stress factor, followed by *lack of administrative support, poor student motivation and discipline.* Salary levels and violence toward teachers were found non significant.

In a survey conducted by Thorsen (1996) in 494 teachers in four disciplines at four Ontario Universities found that *quality rather than nature of academic work was stressful. Hours spent on the job with a time constraint were found significant sources of stress.*

Chen and Miller (1997) reviewed the International literature on Teacher stress. They summarised research on both organisational and individual characteristics

positively correlated to Teacher Stress. Organisational characteristics are *time constraints, work load, job demands, role conflict, role ambiguity, income resources, class size, participation in decision making and student discipline and interaction* etc. Individual characteristics are *age, marital status* and *gender*. Teachers found increased stress by *time factors, work load, role conflict and role ambiguity* etc.

In the paper presented by *Forlin (1998)* on Teacher Stress of Australian Teachers, discussed the top four stressful issues as perceived by the sample. These are *teacher accountability for the child's educational outcomes, the child physically attacking others, obtaining funding and reduced ability to teach other students*.

In the following break-up a summary of foreign studies on *Stressors* is presented.

Summary of foreign studies related to stressors

Author	Year	Major Stressors Identified
1. Brown and Goodall	1980	Discipline, social and personal problems.
2. Clagett	1980	Lack of faculty participation in decision-making, increase in under-prepared students coupled with students expectations of high grades, apathetic peers, and low salaries.
3. Mazer and Griffin	1980	Involuntary transfer and manage disruptive children.
4. Truch	1980	Discipline problems, physical and emotional abuse of teachers, low pay, little support from superiors, public criticism, and low esteem for teachers as professionals.
5. Bausch	1981	Lack of adequate salary and inconsistent educational methods and philosophies.
6. Dedrick	1981	Lack of time and disruptive students.
7. Larkin and Clagett	1981	Time pressures, dissatisfaction with support for the faculty, wages and contracts, and being involved in college decision-making.
8. Bruner	1982	Lack of administrative support for discipline and teaching hostile and disruptive students.
9. Cohen	1982	The expectations placed on teachers, poor administrative leadership, the physical environment, time pressures, age differences or similarities with colleagues and students.
10. Fimian and Santoro	1982	Inadequate salary, lack of time, poor attitudes of the administration.

contd.....

Author	Year	Major Stressors Identified
11. Schnacke	1982	Conduct and discipline of pupils, personal teaching competence, maintenance of values and standards within the classroom and disagreement with supervisor.
12. Meagher	1983	Lack of support from administrators, working with other teachers and discipline problems.
13. Milstein and Golaszewski	1983	Lack of materials, student motivation, and discipline problems.
14. Welch	1983	Notification of unsatisfactory performance, overcrowded classrooms, and disruptive students.
15. Faas	1984	Paper work, procedural red tape, discipline problems, and disinterested parents.
16. Kalker	1984	Poor public image of teachers and education, role related distress and lack of support.
17. Sutton	1984	Role demands, instructional problems, and interpersonal relations.
18. Hazelwood	1985	Lack of resources, poor parental and political support and low student respect.
19. Shea	1985	Time limits, securing parental and administrative support, and encouraging adaptations in regular classrooms.
20. Zastrow	1985	Too much paper work, too much travel, isolation from peers, no social life.
21. Kloska and Ramasut	1986	Lack of pupil motivation , time limit, discipline, problems, completion of records and reports, and lack of resources and equipment.

Author	Year	Major Stressors Identified
22. Raschke, et al.	1986	Public respect for teaching, lack of enthusiasm among students, collective bargaining in teacher administrator relationships, lack of time, excessive paper work, lack of parental support, and low pay.
23. Tishler and Ernest	1987	Lack of time, disruptive students, small instructional funds, and relationship with supervisors.
24. Byrne and Hall	1989	Organisational factors related to the administration of educational institutions.
25. Vance	1989	Inadequate salary, lack of professional recognition, and time management problems.
26. Vance, et al.	1989	Time limit, personal life change, inadequate salary and poorly motivated students.
27. Kirby	1990	Dealings with the subordinates.
28. Borg	1991	Pupil misbehaviour and time/resource difficulties.
29. Borg and Riding	1991	Pupil misbehaviour, poor working conditions, poor staff relations, and time pressures.
30. Hipps and Halpin	1992	Job overload, relationships with students, salary and compensation, subordinate-super ordinate relationships.
31. Pullis	1992	School/setting factors career issues, and workload variables.
32. Ryme	1992	Role conflict, work overload, classroom climate, decision making and peer support.
33. Brown and Ralph	1994	Teacher/pupil relationship, relation with colleagues and parents, innovation and change, school management and administration, and time factors.
34. Soyibo	1994	Institutional, environmental and personal factors.

Author	Year	Major Stressors Identified
35. Gersten	1995	Diverse responsibilities, role overload, shortages of resources, and weakened autonomy regarding their professional judgement.
36. Kelly and Berthelsen	1995	Time pressures, meeting children's need and personal needs, parent issues, interpersonal relationships and non teaching tasks.
37. Forlin	1996	Inclusion of child with mild intellectual disability.
38. Keiper and Busselle	1996	Time management issues, lack of administrative support, poor student motivation and discipline.
39. Thorsen	1996	Hours spent on the job with a time constraint.
40. Chen and Miller	1997	Organisational and individual characteristics positively correlated to Teacher stress.
41. Forlin	1998	Teacher accountability for the child's educational outcomes, the child physically attacking others, and obtaining funding.

2.2.1.4. Studies on Other Aspects of Stress

To get an idea about the effect of other variables like Gender, Age, Marital Status, School Locale, Teaching Sector etc. on Teacher Stress investigator reviewed such studies and presented in this section.

Meadow (1980) studied sources of stress for educators. It is found that Deaf educators face the additional stress of slow student progress, antagonism from parents, the existence of additional handicaps in deaf children, increased requirements on teacher time due to federal regulations, and controversies in the field. Teacher stress and burnout can be prevented by building support systems, changing job assignments, recognising teachers' achievements, granting time out from the classroom during the day, and enlisting the help of mental health consultants.

Based primarily on data collected on a sample of nearly 700 public school teachers, *Farber (1982) critically examined several key issues in the field of teacher burnout and came to the conclusions that teacher stress and teacher burnout are distinct and separate concepts.*

Literature on teacher stress is examined in relation to Occupational Stress by *Hoover-Dempsey and Kendall (1982)*. From the analysis *important issues are social support, role factor in the workplace and person-environment fit.*

Alexander (1983) conducted a study to determine factors emerge from the responses of teachers to the Teaching Events Stress Inventory (TESI). Data were collected to assess the levels and sources of stress experienced by 660 teachers in central and western Kentucky. Factor Analysis procedure produced five factors that were relatively stable and independent as well as logically sound. These were labeled as personal/professional threat, interpersonal relationships, racial issues, non-contact teaching tasks and change in normal routine.

Cook (1983) examined the elements affecting teacher stress and also found out the relationships between teacher perceived job stress, attribution of responsibility, social support, and the teacher characteristics of sex, age, years of teaching experience, and grade level taught. *The study revealed relationships exist between teacher stress, attribution of responsibility, social support, and the teacher characteristics of sex and age.*

Crane and Iwanicki (1983) measured two components of stress. Organizational stress (role conflict and role ambiguity) and perceived teacher burnout. Surveys completed by 443 special education teachers in Connecticut. Results revealed that *role conflict accounted for the greatest variance in emotional exhaustion and depersonalisation and only role ambiguity accounted for significant variance in the subscale of personal accomplishment.*

Dunham (1983) identified signs and sources of stress among approximately 220 special educators. The most prevalent being *feeling of exhaustion, frustration, disturbed sleep, and withdrawal.* Coping resources included personal, interpersonal, organisational and community approaches.

Foxworth and Karnes (1983) studied elementary resource room teachers (N=144) of gifted students about Occupational Stress. Results revealed *no significant independent relationship between stress and continuous or age variables. Eleven items, led by financial security and relationships with teachers, were identified as extremely stressful.*

Results of a follow-up to a study of Teacher Stress reported by Hawkes and Dedrick (1983) show that *teachers' concerns are shifting. Stress levels caused by finances are higher and demands for professional support are greater than in the earlier study.*

Helge (1983) explained stress factors and aids in the development of a personalised stress management program for rural special educators. Stress reduction

through cognitive, affective, and physiological methods are discussed. Suggested *cognitive activities include identifying stress patterns, recognising emotions, applying an emotional continuum to stress reduction, identifying currently used stress reduction methods and resources, and practicing new methods.* Suggested *affective stress reduction activities include structuring appropriate releases for anger, structuring a social support group, building positive attitudes, and desensitising oneself to anxiety-producing situations.* *Physiological methods of stress reduction focus on increasing circulation, relaxation techniques and nutrition.*

A comparison of levels of stress of special education elementary teachers and secondary teachers was done by *Pipkin (1983)*. The result of the study showed that there was a significant difference in the levels of job related stress between secondary and elementary special education resource teachers. *The elementary teachers experienced a significantly higher degree of stress than did the secondary teachers.* No significant difference was revealed between the elementary and secondary teacher's level of stress regarding non-job related life events. Highly significant difference was revealed in the degree of association of twenty four demographic factors to the levels of job related stress.

A model of teacher stress was designed to provide empirical support for a cognitive model of teacher stress. A modified form of *Kyraicou and Sutcliffe's* model of teacher stress was presented for investigation by *Hargens (1984)*. The following findings and conclusions were drawn from this study: *When teachers rated themselves as having less coping skills to deal with stressful events, their state anxiety scores increased. Contrary to the population at large, male teachers had higher depression scores than female teachers. The more teachers rated stressors as upsetting, the more their depression scores increased.*

Norris (1984) examined the burnout, stress and job satisfaction of the administrators of former Kansas school and found out that no significant difference appeared between scores of superintendent and principals. *A significant difference*

was evident when scores of former administrators were compared with scores of current administrators. This indicated that former administrators were significantly more dissatisfied with their jobs during their last year in that position than were current administrators.

Gorrell (1985) studied 204 elementary and secondary public school teachers and student teachers and were presented with an inventory of potentially stressful school situations in five categories. Analysis of data revealed that elementary school teachers reported significantly higher levels of stress than secondary school teachers.

Bradfield and Fones (1986) examined the effects of perceived job-related stress on the lives of special education teachers and the result showed that high stress teachers indicated an average of 5.2 physical distress symptoms compared to an average of only 2.9 symptoms for the low stress teachers. High stress teachers indicated an average of 6 days per years taken in sick leave, while the low stress teachers required 1.8 days. 42 percent of high stress teachers indicated plan to change careers while 8 percent of low stress indicated such plan.

Connolly and Sanders (1986) examined the amount of perceived stress and its dimensions on 121 elementary and secondary school teachers. Correlations were found between the 'Emotional Exhaustion' dimension of stress and gender (males experienced more burnout) and years of teaching (teachers with more years at their present job experienced more burnout). Correlations were also found between the 'Depersonalisation' dimension of stress and education level (secondary teachers experienced more burnout). Correlations were found between the third dimension of stress, 'Personal Accomplishment' and gender, years of teaching, and years at the present job. The years at the present job made a significant contribution to the prediction of the three dimensions of burnout.

Evans (1986) analysed the effect of intrinsic and extrinsic job stressors on grades K through 12 physical education teachers. Perceived levels of stress were

compared among physical education teachers when physical illness, psychological strain and absenteeism were functions. *Results indicated that physical education teachers who experienced either physical illness or psychological strain during the school year had significantly higher levels of both intrinsic and extrinsic job-related stress than teachers who did not. Stress also appeared to be a significant factor among teachers who experienced excessive absenteeism from work.*

Role, stress, and burnout of 379 special education teacher trainees and 36 first year teachers were examined by *Fimian and Blanton (1986)*. Results indicated that the majority of such problems were significantly interrelated, *not all background variables predicted significant stress and burnout levels, and different levels of problems were observed at various stages of professional development.*

In 1986, *Gorell, et al.*, conducted a study on the analysis of perceived stress in elementary and secondary student teachers and full time teachers, and the results indicated that *elementary school teachers reported significantly higher levels of stress than secondary school teachers.*

An evaluation study of the effectiveness of two stress reduction programmes were conducted by *Higgins (1986)* and the result indicated that *subjects in both programme had significant decrease in emotional exhaustion and personal strain relative to the controls.* No significant difference was found between the two stress reduction programmes. Results suggested that both of the programmes can be effective in helping workers cope with and reduce Occupational Stress.

Misra (1986) studied the life stress and burnout among teachers and find out that *stress is positively related to burnout. There was significant negative relationship between meaning and stress* which means if people find meaning in their work, they generally, do not feel stress from work.

Retish (1986) the impact of stress burnout and on the educational organisation is discussed. Observations include the *need for clarity on the part of special educators concerning expectations of self and others.*

Schlansker (1986) analysed the teacher stress and burnout and perceived its source by conducting a survey. Results of this study indicated that *teachers, regardless of their setting, urban or suburban, identified stressful events with a high degree of correlation.* About ten per cent of the teachers in the study were found to be experiencing stress leading to burnout. *Teachers who were experiencing the least amount of burnout identified the principal as a significant source of support.* Other *significant sources of support included course work and inservice programmes.*

Tupes (1986) conducted a study to measure, analyse and compare the degree of stress perceived by public elementary and secondary school teachers in the Prince William country school system. The findings of the study revealed that eventhough a moderately high level of stress was reported, *the respondents at the secondary school level did not appear to differ from those at the elementary school level.* *Sex was a significant predictor of perceived stress level, and that there are differential level of stress across selected levels of key demographic variables, such as sex, age, marital status, race, degree and percentage of total family income.*

Wallace and Kass (1986) studied the amount of stress difference between regular and special education elementary teachers. Subjects included 75 teachers in regular classrooms and 62 teachers in special education classrooms. The data were analysed using the general linear model form of the multivariate analysis of variance (MANOVA). *Some differences in stress between the two groups were identified.*

Read (1987) examined the causes of teacher stress. *Research reports on the causes and management of stress focuses upon the areas of the classroom, the school organisation, and individual and personal factors.* The purpose of the study was to present evidence supporting the concept that individual stress management plans are

a necessary tool for teachers. The second purpose was to call attention to the fact that the organisational structure of school systems is a contributing factor to teacher stress.

The relationship of teachers' stress to institutional complexity and perception of working conditions were studied by *Jones (1988)* and was found that *elementary teachers and junior high teachers are significantly more emotionally exhausted than high school teachers, whereas junior high and high school teachers are more depersonalized.*

Wirth (1988) reported the results of 1986 Boston Women's Teachers Group study. It concluded that teachers' feelings about burnout, isolation, job satisfaction, and efficacy were rooted in school-based working relations and institutional structures. *Teacher Stress is an institutionally derived problem, not a result of individual personality failures.*

Jenkins and Calhoun (1989) examines the problem of stress within the teacher's environment and ways in which teachers can manage stress. Results indicated that the teachers trained in the individual approach reported that they significantly *increased the time spent on managing their stress, and used more diversity in applying methods to alter major stressors.*

Manthei (1989) surveyed the school counsellors about the job-related stress. Results indicated that *females reported significantly more stress due to job over load than males. But they experienced less stress than males when performing non professional duties. Males reported more stress regarding financial concern than did females. Older subjects reported less stress than younger subjects. Stressors included role ambiguity, role overload and the role conflict.*

Dedrick and Raschke (1990) examined stressors encountered by special educators, ways of coping with professional demands, and reasons *why some teachers handle job stress better than others.* Ten stress management strategies are analysed: diet and exercise, relaxation techniques, social support systems, goal

setting, creative problem solving, time management, networking, self-talk, stroking and self-given gifts.

Long and Gessaroli (1990) conducted a survey to find out the relationship between teacher stress and perceived coping effectiveness. The study revealed that *males felt more stressed than females. Unmarried subjects felt more role stress and life dissatisfaction compared with married subjects. Males felt that avoidance coping was more effective and female felt that problem solving was more effective. Relationships between stress and coping differed depending on whether males were married. Absenteeism was related to stress but not to coping factors.*

Shea (1990) tried to develop a clearer understanding of the correlates of the emotional exhaustion aspect of burnout among learning disabilities (LD) teachers in resource programs. Specifically, the study examined the relationship between the emotional aspect of burnout as measured by the Maslach Burnout Inventory (MBI) and (1) background variables (age, marital status, teaching experience, level of education, and grade level teaching); (2) Job conditions (number of students, time pressures, instructional complexity, and assessment responsibility); and (3) perceived degree of stress associated with job tasks. Among the conclusions reached were that *teachers who experience more demands on themselves experience more emotional exhaustion; LD teachers do not sense support from parents and administrators, and teachers who share assessment duties with other professionals experience less intense feelings of exhaustion.*

Watts and Short (1990) examined relationship of work-related stress in teachers with wanting to leave the teaching profession and drug use in 277 teachers. *Teachers reported higher rates than a national sample of lifetime alcohol, amphetamine, and tranquilizer use and higher rates of alcohol use.*

Kelley (1991) developed and tested a model of stress and burnout in dual-role teacher coaches. Result indicated that more specifically, *perceived stress predicted all*

components of burnout, with coaching issues adding slightly to the prediction of emotional exhaustion and coaching problem to the prediction of depersonalization. Social support satisfaction predicted all three stress appraisal components, with greater entering as a predictor for perceived stress and coaching issues. Generally, greater perceived stress lead to greater burnout, and greater satisfaction with social support led to less perceived stress. Also, females had slightly higher perceived stress than did males.

Burns and Gmelch (1992) examined the stress factors for Academic department chairs for institutions of higher education. The sample consists of 523 department heads at 100 institutions. Analysis of data revealed that *chairs who have high role ambiguity experience high stress regarding their career. Chairs who have high role conflict characterised as significantly more stress than those chairs with low perceived role conflict. Stress of the chairs was found highly correlated with role conflict and role ambiguity.*

A comprehensive investigation into psychological distress among Australian teachers was conducted by the Tuettemann and Punch (1992). The data showed high stress levels. *Stressors correlated positively with distress and distressors correlated negatively.*

In a cross-cultural study on Occupational Stress of 373 Jewish and Arab teachers in Jerusalem by Gaziel (1993) *found higher stress among Jewish teachers, whereas Arab teachers were most stressed by working conditions and professional image.* Two groups were found different in coping strategies.

In another study by Johnstone (1993) on 58 primary and 32 secondary Scottish teachers conducted to examine the workload and stress found the following results. *The teachers experienced between three and five occasions of stress in those week in which they had extra work and registering high scores on the measure of Occupational Stress.*

Teacher's work load and associated stress was studied by *Johnstone (1993a)* on 570 Schottish classroom teachers. *The results indicated that 93% of teachers reported at least one occasion of stress during the week. The longer the hours worked, the more stress occasions reported.*

Minner and Lepich (1993) examined the Occupational Stress of rural and urban special educational teachers. A 60 item questionnaire was administered on 265 beginning special education teachers in Illinois. *Significantly higher levels of job related stress were found for rural compared to urban teachers.*

Russell and Wiley (1993) studied the Occupational Stress levels among rural teachers in the area of Mental retardation, learning disabilities and emotional conflict. The survey of 154 rural special educators found *no significant difference in stress levels among groups* as measured by the teacher stress inventory.

Smith and Witt (1993) compared the Occupational Stress among African, American and White University faculty members. The sample consists of 1,000 college faculty. It was found that *African - American faculty reported higher levels of Occupational Stress than white counterpart.*

Occupational Stress among 400 university teachers was investigated by *Blix (1994)*. The results shows 40% of the teachers felt a good fit between motivational style and job rewards. Females had higher misfit scores. *Two-thirds of the teachers perceived Occupational Stress at least half the time.*

Elliot (1994) studied the negative affectivity, emotional stress and the cognitive appraisal of Occupational Stress among 127 public school teachers. Results indicated that *negative affect did not completely explain the relationship of cognitive appraisal of stress and degree of distress.*

Littrell (1994) investigated the effects of principal's support on teacher stress on 385 special 313 general education teachers in Virginia. Result of the study indicated that *specific type of support were significant predictors of Job Stress.*

Miller (1995) attempted to determine the personal and work place variables which predict a special educator's decision to stay, transfer, or leave the classroom. A sample of 1,576 special education teachers in Florida was surveyed. Results show that *both current certification status and stress were significant predictors of likelihood of leaving special education.*

The study by *Pennington (1995)* examined the extent of stress among elementary teachers in a very small Seventh Day Adventists schools with multigrade classes. The result indicated that *71% of the sample experienced moderate to high emotional exhaustion and 60% experienced low personal accomplishment.*

Relation between Occupational and marital stress of 48 elementary and secondary public school teachers was examined by *Price, Jr. (1995)*. Results revealed *a significant but low correlation between Occupational Stress and Marital Stress among the sample.*

The extent to which sources of stress, coping resources, background variables and different ways of coping in the fall terms was studied by *Salo (1995)* with 66 finish school teachers on 4 occasions. *Results showed a clear accumulation of stress as the term advanced.*

Policy changes in Hong Kong and expansion of Educational Psychological Services were suggested by *Siu (1995)* after reviewing conceptions of teacher stress on prevalence sources and effects of Occupational Stress on school teachers.

Arnold (1996) investigated the influence of institutional characteristics on teacher stress on nearly 43,000 teachers at 300 secondary education institutions in USA. *Results revealed that institutional variables did not appear to be predictors of faculty stress.* Among professional status variables, *academic rank was identified as a significant predictor of general stress with higher rank predicting higher stress.*

Cooley and Yovanoff (1996) studied 92 special educators and related service providers evaluated two interventions (a series of stress management workshops and a peer-collaboration program) on factors correlated with turnover (burnout, job satisfaction and organisational commitment). *The interventions showed promise as a means of providing on-the-job support for professionals at risk of burnout or exiting the field.*

Work load and stress of 555 college teachers was investigated by Hardie (1996) in New Zealand. The results show that *most teachers were experiencing increasing level of work load and stress.*

Sources of stress in Hong Kong teachers were investigated by Hui and Chan (1996) with specific reference to guidance work as a potential source of stress. A survey of 415 secondary school teachers revealed guidance-related aspects of work constituted a major dimension of stress, with guidance teachers. They found that *female teachers, younger teachers, and junior teachers perceiving more stress than their counterparts.*

A study by Mercy (1996) at the University of Missouri - Columbia investigated the stress factors and Coping Mechanisms among 196 faculty members in 16 departments. It was found that *individual faculty feelings about life in general strongly affected perceptions of Occupational Stress.* Results indicated the *faculty differed by discipline type in the perceived stress.*

Schamer and Jackson (1996) conducted an investigation on Teacher Stress and burnout. The sample consists of 515 secondary level teachers of Ontario city. The study suggests that *more than any other public service professionals, teachers are affected by continued stress leading to burn-out. This in turn result in a negative attitude towards student and a loss of idealism, energy and purpose.*

In a study conducted by Warnemuende (1996) on 108 primary school teachers in England yielded *individual characteristics susceptible to stress and burn-out* such as *Charisma, idealism, perfectionism, and goal orientation* etc.

Brownell (1997) discussed the stress that special education teachers may feel by role overload and lack of autonomy. *Stress relieving strategies* are described, including *setting realistic expectations, making distinctions between the job and personal life, increasing autonomy, looking for alternative sources of reinforcement, increasing efficacy and developing personal coping strategies*.

Professional isolation and Occupational Stress in teachers were studied by Dussault (1997) on a sample of 1158 French Canadian teachers. *The results indicated a positive and significant correlation between isolation and occupational stress*.

From the study conducted by Green, et al. (1997) on the index of teaching stress suggests that *teaching stress can be conceptualised as one measure of student teacher compatibility*.

Biographical differences in Occupational Stress of teachers were investigated by McCormick (1997) in Australia. *Significant difference in Occupational Stress between elementary and secondary school teachers were found*.

Chan (1998) studied the stress, coping strategies and psychological distress among 412 secondary school teachers in China. Result of the *study shows significant relationship between stressors, active and passive coping strategies and psychological distress*.

Guglielmi and Tatrow (1998) reviewed the health effects of Teacher stress and reported *serious health problems as suffered by teachers having Occupational Stress*.

A study of Occupational Stress and personal-strain levels among new and experienced male and female college faculty conducted by Lease (1999) found *no differences in stress or strain between male and female faculty or between new and*

experienced faculty. Role overload and avoidant coping were significant predictors of strain, with hardiness and responsibility for home-centered tasks accounting for variance in some measures.

A summary of studies on other aspects of Teacher Stress is given in the following.

Summary of foreign studies related to *other Aspects of Stress*

Author	Year	Results
1. Meadow	1980	Antagonism from parents and controversies in the field added stress of deaf educators.
2. Farber	1982	Teacher stress and teacher burnout are distinct and separate concepts.
3. Hoover-Dempsey and Kendall	1982	Important issues common to teacher stress and occupational stress are social support, role factor in the workplace and person-environment fit.
4. Alexander	1983	Five factors relating to teacher stress were relatively stable and independent as well as logically sound over years.
5. Cook	1983	Relationships exist between teacher stress, attribution of responsibility, social support and the teacher characteristics of sex and age.
6. Crane and Iwanicki	1983	Role conflict accounted for the greatest variance in emotional exhaustion and depersonalisation.
7. Dunham	1983	Most prevalent sign of stress are feeling of exhaustion, frustration, disturbed sleep, and withdrawal.
8. Foxworth and Karnes	1983	No significant independent relationship between stress and continuous age variables were obtained.
9. Hawkes and Dedrick	1983	'Teachers' concerns are shifting over years.
10. Helge	1983	Stress reduction through cognitive, affective, and physiological methods were suggested.

contd.....

Author	Year	Results
11. Pipkin	1983	The elementary teachers experienced a significantly higher degree of stress than did the secondary teachers.
12. Hargens	1984	Male teachers had higher depression scores than female teachers.
13. Norris	1984	Significant difference between former and current administrators in job satisfaction were obtained.
14. Gorrell	1985	Elementary school teachers reported significantly higher levels of stress than secondary school teachers.
15. Bradfield and Fones	1986	High stress teachers indicated an average of 5.2 physical distress symptoms compared to an average of only 2.9 symptoms for the low stress teachers.
16. Connolly and Sanders	1986	Years of teaching education level, gender, and years at the present job effects stress.
17. Evans	1986	Stress appeared to be a significant factor among teachers who experienced excessive absenteeism from work.
18. Fimian and Blanton	1986	Not all background variables predicted significant stress.
19. Gorell, et al.,	1986	Elementary school teachers reported higher levels of stress than secondary school teachers.
20. Higgins	1986	Stress reduction programme are more effective than controls.

Author	Year	Results
21. Misra	1986	Stress is positively related to burnout.
22. Retish	1986	The need for clarity on the part of special educators concerning expectations of self and others were observed.
23. Schlansker	1986	Teachers, regardless of their setting, urban or suburban, identified stressful events with a high degree of correlation.
24. Tupes	1986	There are differential level of stress across demographic variables, such as sex, age, marital status, race, degree and percentage of total family income.
25. Wallace and Kass	1986	Difference in stress between regular and special education elementary teachers were identified.
26. Read	1987	Classroom, School organisation, and individual and personal factors were considered for stress management.
27. Jones	1988	Elementary and junior high school teachers are significantly more emotionally exhausted than high school teachers.
28. Wirth	1988	Teacher stress is an institutionally derived problem, not a result of individual personality failures.
29. Jenkins and Calhoun	1989	The teachers trained in the individual approach managed stress effectively.
30. Manthei	1989	Influence of Gender and age on various factors of stress were identified.

Author	Year	Results
31. Dedrick and Raschke	1990	Ways of coping and ten stress management strategies were analysed.
32. Long and Gessaroli	1990	Gender and marital status of teachers influenced stress and coping strategies of teachers.
33. Shea	1990	Teachers who experience more demands on themselves experience more emotional exhaustion.
34. Watts and Short	1990	Teachers reported higher rates of drug use due to stress than a national sample.
35. Kelley	1991	Greater perceived stress lead to greater burnout, and greater satisfaction with social support led to less perceived stress.
36. Burns and Gmelch	1992	Stress of the chairs was found highly correlated with role conflict and role ambiguity.
37. Tuettemann and Punch	1992	Stressors correlated positively with distress and distressors correlated negatively.
38. Gaziel	1993	Jewish teachers experienced higher stress than Arab teachers.
39. Johnstone	1993	Workload and stress found to be related.
40. Johnstone	1993a	93% teachers reported at least one occasion of stress during the work.

Author	Year	Results
41. Minner and Lepich	1993	Higher levels of job related stress were found for rural compared to urban teachers.
42. Russell and Wiley	1993	No significant differences in stress levels were identified among different groups of special educators.
43. Smith and Witt	1993	African-American faculty reported higher levels of occupational stress than white counterpart.
44. Blix	1994	Two-thirds of the teachers perceived occupational stress at-least half the time.
45. Elliot	1994	Negative affect did not completely explain the relationship of cognitive appraisal of stress and degree of distress.
46. Littrell	1994	Specific type of support were significant predictors of job stress.
47. Miller	1995	Stress were significant predictors of likelihood of leaving special education.
48. Pennington	1995	71% of the sample experienced moderate to high emotional exhaustion.
49. Price, Jr.	1995	A significant but low correlation between occupational stress and marital stress among the sample.
50. Salo	1995	As the term advanced, a clear accumulation of stress were identified.
51. Siu	1995	Policy changes in Hong Kong and expansion of Educational Psychological services were suggested.

Author	Year	Results
52. Arnold	1996	Institutional variables did not appear to be predictors of faculty stress and academic rank was identified as a significant predictor of general stress.
53. Cooley and Yovanoff	1996	The interventions showed promise as a means of providing on the job support for professionals at risk of burnout.
54. Hardie	1996	Most teachers were experiencing increasing level of work load and stress.
55. Hui and Chan	1996	Female teachers, younger teachers, and junior teachers perceiving more stress than their counter parts.
56. Mercy	1996	Individual faculty feelings about life in general strongly affected perceptions of occupational stress.
57. Schamer and Jackson	1996	More than any other public service professionals, teachers are affected by continued stress leading to burnout.
58. Warnemuende	1996	Individual characteristics susceptible to stress and burn-out were identified.
59. Brownell	1997	Various stress relieving strategies were described.
60. Dussault	1997	A positive and significant correlation between isolation and occupational stress were obtained.
61. Green, et al.,	1997	Teaching stress can be conceptualised as one measure of student teacher compatibility.
62. McCormick	1997	Elementary and secondary school teachers were differed in experiencing occupational stress.

Author	Year	Results
63. Chen	1998	Relationship between stressors, active and passive coping strategies and psychological distress were established.
64. Guglielmi and Tatrow	1998	Teachers having occupational stress were suffered by serious health problems.
65. Lease	1999	No differences in stress or strain between male and female faculty or between new and experienced faculty were obtained.

2.2.1.5. Review of Indian Studies on Various Aspects of Stress

Since culture is an important factor in the study of psychological well-being and organisational stress, the findings based on western samples were not only inconclusive but also restrictive. So the investigator included the studies related to Teacher Stress conducted in India also. A few of these studies from 1989 and onwards have been presented in this review.

Fernandes and Murthy (1989) carried out a study on job-related stress and burnout in middle and secondary school teachers. A structured information schedule, the stress symptom questionnaire and MBI were administered to a sample of 50 female middle and secondary school teachers drawn from seven schools of Bangalore east region. It was found that *76 percent of the total sample faced stress on the job, though the degree to which they experienced stress differed. Pupil misbehaviour was found to be the most stressful, followed by time pressures, poor working conditions and poor school ethos.* Chi-square analysis revealed *non-significant results* between teacher characteristics and stress and burnout.

Vadra and Sultan Akhtar (1989) conducted a study on university teachers (N=120) to determine the stressors emanating from home and family situations. The SFRS Scale developed by them was used. The results showed that *male teachers experienced more social and family role stress* as compared to female teachers and *the married experienced more stress* than the unmarried teachers. The study shows that *extraorganizational stressors are as potent as factors relating to work situation.*

A study of extraorganisational stress among women teachers was carried out by *Akhtar and Vadra (1990)*. The sample comprised 60 women teachers. The SFRS (Social Family Role Stress) Scale developed by *Vadra and Akhtar (1989)* was used for measuring extraorganisational role stress. The results indicated that *for women teachers' job tenure emerged as the significant predictor of social and family stress.*

Ushasree and Jamuna (1990) conducted a study to examine role conflict and job stress among special and general school teachers. The sample comprised 40 special school teachers (20 men and 20 women) for deaf and dumb, and a random sample of 60 teachers (30 men and 30 women) from high school. The analysis of data *did not reveal any sex differences among teachers from special schools on role conflict and job stress*. Teachers from special schools, both men and women, were found to experience *significantly greater role conflict and job stress* compared to their counterparts in general schools.

Biswas and De (1993) studied the role of organisational climate on professional stress experienced by 34 male teachers working in an open climate (OCT) and 34 male teachers working in a paternal climate (PCT). The analysis of the data revealed that *the teachers working in an open climate experienced less composite professional stress, powerlessness and social isolation than the teachers working in a paternal climate*. It was also found that *the teachers in an open climate had less negative orientation and affection towards different aspects of their job and professional lives*.

Mishra (1995) conducted a study to explore the relationship between job-related stress and depressed mood at work among male teachers of higher educational institutions. The study was conducted on a sample of 70 male teachers employed in higher educational institutions in Lucknow. Results showed a *highly significant and positive relationship of overall job-related stress and its four dimensions, i.e., role based stress, task based stress, boundary mediating stress and conflict mediating stress with depressed mood at work*.

Sultana (1995) investigated the level of organisational role stress among male and female teachers of professional and non-professional courses. A group of 50 teachers from professional courses and another group of 50 teachers from non-professional courses were compared on role stress. It was found that *there exists a significant difference between professional male and female teachers, non-*

professional male and female teachers and professional and non-professional teachers in all the role stress variables.

Mishra (1996) conducted a study to compare the levels of occupational stress and job satisfaction among male and female teachers of higher educational institutions. The study was conducted on a sample of 80 degree college teachers comprising 40 males and 40 females. Results indicated that *significant differences observed between male and female teachers on overall stress and overall job satisfaction scores. Stress was found to be correlated negatively and significantly with job satisfaction in both the groups.*

Joshi and Singhvi (1997) examined the effect of teachers' personality factors on their experience of role stress using a sample of 167 teachers drawn from different universities of Rajasthan. The following conclusion were obtained: (a) *The maximum role stress was experienced on the dimension of role erosion. No significant differences were observed in the role stress scores among teachers at different levels.* (b) Adventurous - withdrawal dimension of contact personality factors (CPF) was *correlated with all the role stress dimensions* except role erosion. Group identity - self sufficiency was *correlated negatively with all the role stress dimensions* except role stagnation. Dominance-submission was *correlated positively* with role overload and personal inadequacy. (c) Alienation was found to be *correlated positively* with all the role stress dimensions and total role stress. (d) Machiavellianism was also *correlated positively* with total role stress and all the dimensions of role stress except inter-role distance. (e) Locus of control was *associated negatively* and significantly with role ambiguity. On the whole, internality was *associated positively* and *significantly* with role stagnation, and was *associated negatively* and *significantly* with role ambiguity. Externality by others and externality by chance were *correlated positively* with all dimensions of role stress.

In the following break-up a summary of Indian studies on various aspects of stress is presented.

Summary of Indian Studies on various aspects of Stress

Author	Year	Results
1. Fernandes and Murthy	1989	76% of the teachers faced stress on the job, and pupil misbehaviour was found to be the most stressful.
2. Vadra and Sultan Akhtar	1989	Effect of gender and marital status on stress were identified.
3. Akhtar and Vadra	1990	For women teachers' job tenure emerged as the significant predictor of social and family stress.
4. Ushasree and Jamuna	1990	Special school teachers experienced greater role conflict and job stress than their counterparts in general schools.
5. Biswas and De	1993	Teachers working in an open climate experienced less composite professional stress than the teachers working in a paternal climate.
6. Mishra	1995	Highly significant and positive relationship between overall job-related stress and its four dimensions were obtained.
7. Sultana	1995	Differences in stress of various professional and non-professional teachers were identified.
8. Mishra	1996	Stress was found to be correlated negatively with job satisfaction.
9. Joshi and Singhvi	1997	The maximum role stress was experienced on the dimension of role erosion, contact personality factors was correlated with all the role stress dimensions except role erosion and internality was associated positively with role stagnation and negatively with role ambiguity.

2.2.2. META ANALYSIS

In this part, the retrospect of reviewed studies on Stress among Teachers are given in the form of a meta analysis. Meta analysis is the statistical summary of the whole studies reviewed. This will give a very precise picture about the research status of the variables under consideration. For this purpose, the percentage of reviewed studies on various categories were computed and presented in the following break-up.

Variables		Years (From -To)	Number of Studies	Percentage of Studies
Foreign Studies	Teacher Stress and Job Satisfaction	1979-1999	38	22.89
	Teacher Stress and Personality	1980-1991	13	7.83
	Stressors	1980-1998	41	24.70
	Other Aspects of Stress	1980-1999	65	39.16
Indian studies	Various Aspects of Stress	1989-1997	9	5.42
Total		1979-1999	166	100.00

Studies on *Teacher Stress and Job Satisfaction* were reviewed from the year 1979-1999 and this is 22.89 per cent. About 7.83 per cent of the studies reviewed are dealing *Teacher Stress and Personality* (1980-1991). Studies on *Stressors* (1980-1998) are 24.70 per cent. About 39.16 per cent of studies covered *Other Aspects of Stress* (1980-1999). Studies on stress in Indian context (1989-1997) is very less (5.42%).

The reviewed studies on Stress among Teachers reflect certain important issues. Most of the research on Stress concentrated on identifying major stressors, comparison of stress among different category of Teachers, influence of age, gender,

institutional characteristics etc. Of which most of the studies were conducted upon Elementary, Secondary and University Teachers.

From the review of studies on Stress and Job Satisfaction among Teachers it can be seen that, most of the studies were conducted by foreign researchers. Relationship between Stress among Teachers and Job Satisfaction at different levels and categories, factors affecting Stress and Job Satisfaction, effect of other variables on Stress and Job Satisfaction, etc. were reviewed. Results of these studies indicated that Teacher Stress and Job Satisfaction has a significant relationship.

Review of studies related to Personality Characteristics and Stress among Teachers revealed an *adequacy* of indepth research in this area. In most of the studies relationship between Teacher's Personality Characteristics and Stress were examined. Other studies in this area were done to analyse the relationship between Locus of Control and Stress, and Personality Types and Stress.

Studies relating the Teacher Stress, Job Satisfaction and Personality in Indian context is very rare. No studies were found in India and foreign countries which analyses the association of Job Satisfaction, Personality and Teacher Stress. From the meta analysis of literature the investigator felt that the proposed study is highly significant.

Chapter Three

METHODOLOGY

Variables of the Study	3.1
 Objectives	3.2
 Hypotheses	3.3
 Procedure	3.4
Tools Employed for Data Collection and Psychometric Details	3.4.1
 Selection of Sample	3.4.2
 Data Collection Procedure Scoring and Consolidation of Data	3.4.3
 Statistical Techniques Used in the Study	3.4.4
 Summary of Methodology	3.4.5

The major objectives of the investigation are (a) To study about the *effect* of various demographic and biographical variables on select variables namely, *Perceived Stress, Job Satisfaction* and *Personality Characteristics* (b) To study the *extent* and *degree* of association between *Perceived Stress* and Independent variables (c) To study the *main* and *interaction effects* of Independent variables on *Perceived Stress* of Teachers (d) To find out the best predictors of *Perceived Stress* and *Job Satisfaction* and arrange them in their magnitude of contribution and (e) To formulate the factor structure underlying in the *Teacher Stress Inventory (TSI)* and *Scale of Job Satisfaction (SJS)*. This chapter therefore presents a detailed description of the methodology which is followed at the various phases of the investigation. It is presented under the following major sections.

3.1. VARIABLES OF THE STUDY

3.2. OBJECTIVES

3.3. HYPOTHESES

3.4. PROCEDURE

A detailed description of each is followed:

3.1. VARIABLES OF THE STUDY

The investigator made a preliminary review of literature in the area of stress research conducted abroad and in India. The exhaustive review helped the investigator to identify the following variables for the study.

The present study involves two sets of variables viz., Independent and Dependent variables. *Job Satisfaction* and *Personality Characteristics* were treated as *Independent variables* and *Perceived Stress* of Teachers as the *Dependent variable*.

3.2. OBJECTIVES

The following are the objectives of the study upon which the investigation and the procedure is designed.

- 3.2.1. To study the *extent* and *levels* of Perceived Stress and Job Satisfaction of Teachers (Total sample and relevant Subsamples).
- 3.2.2. To study whether *gender difference* exists in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers for Total sample and Subsamples based on Type, Locale, and Management of Schools.
- 3.2.3. To study whether *significant difference* exists in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers with regard to the Type, Locale, and Management of Schools.
- 3.2.4. To study whether *significant difference* exists in Perceived Stress and Job Satisfaction of Teachers with regard to the Biographical variables (Age, Educational Qualification, Marital Status, Teaching Experience, Number of Dependents, and Type of Career of the Couples).
- 3.2.5. To estimate the *nature* and *degree of association* between Perceived Stress (Stressor wise and Total Stress), Job Satisfaction and Personality Characteristics for Total sample, Higher Secondary, High School, and Primary School Teachers.
- 3.2.6. To study the *main* and *interaction effects* of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers (Total sample, Higher Secondary, High School, and Primary School Teachers).

- 3.2.7. To identify the *best predictors* of Perceived Stress and Job Satisfaction of Teachers
- 3.2.8. To identify the *latent factors* underlying in the Teacher Stress Inventory (TSI) and Scale of Job Satisfaction (SJS).

3.3. HYPOTHESES

The following are the major hypotheses of the study.

- 3.3.1. There will be *significant gender difference* in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers for Total sample and Subsamples based on Type, Locale and Management of Schools.
- 3.3.2. There will be *significant difference* in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers with regard to the Type, Locale and Management of Schools.
- 3.3.3. There will be *significant difference* in Perceived Stress and Job Satisfaction of Teachers with regard to the Biographical variables (Age, Educational Qualification, Marital Status, Teaching Experience, Number of Dependents and Type of Career of the Couples).
- 3.3.4. There will be *significant correlation* between Perceived Stress (Stressor wise and Total Stress), Job Satisfaction and Personality Characteristics for Total sample, Higher Secondary, High School and Primary School Teachers.
- 3.3.5. There will be *significant main and interaction effects* of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers (Total sample, Higher Secondary High School, and Primary School Teachers).
- 3.3.6. Best predictors of Perceived Stress and Job Satisfaction of Teachers can be identified from a set of predictor variables.

3.3.7. The *latent factors* underlying in the Teacher Stress Inventory (TSI) and Scale of Job Satisfaction (SJS) can be identified.

3.4. PROCEDURE

The following procedures are adopted for the investigation.

3.4.1. TOOLS EMPLOYED FOR DATA COLLECTION AND PSYCHOMETRIC DETAILS

Selection of valid and reliable tools for the collection of data is an important aspect for any investigation. For testing the formulated Hypotheses, the data were collected using the following Tools.

1. *Teacher Stress Inventory* (Kumar & Kumar, 2001).
2. *Scale of Job Satisfaction* (Kumar & Kumar, 2001).
3. *16 PF Questionnaire - Form C- Malayalam Version* (Rema & Raveendran, 1989).

Among the three tools used, two tools were specifically designed, constructed and standardised by the investigator for the purpose of measuring Job Satisfaction and Perceived Stress of Teachers.

A brief description of each of the tools is attempted in the following subsections.

3.4.1.1. Teacher Stress Inventory (TSI - Kumar & Kumar, 2001)

Teacher Stress Inventory (TSI) developed by Kumar and Kumar (2001) was used to quantify the Occupational Stress perceived by Teachers of various categories. The steps taken during the construction of the TSI is briefly explained in the following part of the report.

Planning

The investigator reviewed the literature related to Occupational Stress measurement and studied in detail. The tools used by previous researchers to measure Occupational Stress in various work settings were also examined. Special emphasis was given to the assessment of Job Stress experienced by *Teachers*. Most of the traditional Occupational Stress Inventories located by the investigator measure either *organisational stressors or personal strain* (Jones & Dubois, 1989). These tools were based upon the traditional theoretical models of work stress given emphasis to *antecedent* variables of stress reaction (Environmental and Person variables) treated as separate (Lazarus, 1995). A number of stress instruments purely based on the transactional view of Job Stress were reviewed with a view to offer a more transactional approach than relying solely on traditional inventories. The following tools in these line were caught special attention.

Occupational Stress Inventory (Osipow & Spokane, 1981), *Work Stress Inventory* (Barone, et al., 1988), *Life Events and Difficulties Schedule* (Brown, 1990), and the *Job Stress Survey* (Speilberger & Reheiser, 1994) etc. These instruments are more *general* in nature to assess Occupational Stress.

From the review of literature, the investigator located some instruments which are more specific to assess the Occupational Stress in certain particular work settings (*Police Stress Survey* - Speilberger, et al., 1981; *Teacher Stress Survey* - Grier, 1982 and the *Teacher Stress Questionnaire* - Traverse & Cooper, 1996). Instruments which measure generally the Occupational Stress are inadequate to measure *Perceived Stress of Teachers* due to the peculiarities of the nature of the profession and the involvement of Teachers. Hence it is decided to construct and develop an Inventory specifically useful to measure *Perceived Stress of Teachers* in Indian context.

To get a strong theoretical basis for the proposed Inventory, the investigator examined the different *theoretical models* of Occupational Stress of Teachers. This

include the model proposed by Cox (1977), Kyriacou and Sutcliffe (1978), Needle, *et al.* (1980), Wanberg (1984) and Cooper, *et al.* (1988). Details of these models are presented in *Chapter 2, Section 2.1.2.4.*

It is decided to adopt an amalgum of the six factor theory outlined in the work and model of Kyriacou and Sutcliffe (1978) and Cooper, *et al.* (1988) to examine the potential source of Teacher Stress. Along with this, findings from researchers working in the field of stress for Teachers were also studied. Six potential sources for Teacher Stress were identified from this model and they are presented as follows:

Sources of Stress:

1. *Stressors Intrinsic to the Job* - Physical working conditions, level of participation and decision making latitude and work load.
2. *Role in the Organisation* - Role ambiguity, role conflict and levels and type of responsibility.
3. *Relationship at Work* - Superiors, Colleagues, and Subordinates.
4. *Career Development*: Over or under promotion, lack of job security and status incongruency.
5. *Organisational Structure and Climate* - These stressors may be those that restrict behaviours ie. politics and culture of the organisation and how individuals interact with these. Specific features include the level of participation and involvement in decision making, performance appraisal etc.
6. *Home and Work Interface* - This refers to stressors resulting from a mismatch in the relationship between work demands and family or social demands - Dual career couples, conflict, overload, relationship dilemmas, dilemma of equality etc.

Preparation

The investigator made informal discussions and interviews with selected Teachers working in some of the Primary, Secondary and Higher Secondary schools of Kerala State. This was done with a view to get clarity about the aspects of major stressors adapted from Kyriacou and Sutcliffe (1978) and Cooper, *et al.* (1988) model. The discussions and interviews gave more insight to the aspects of six major components. Experts in the field of stress research were also consulted. As a result of these it is decided to construct a 50 item self reporting inventory suitable to give a satisfactory measure of Perceived Stress of Teachers in the Indian context following Likert format. The major stressors and the related aspects that are used in the TSI are presented in Table 3.1.

TABLE 3.1

Stressors and Related Aspects in TSI

Sl. No.	Major stressors	Related aspects
1.	Intrinsic to the Job	Class size, Unsuitable building, Noise level, Inadequate resources, Level of participation in decision making, Work load etc.
2.	Role of Teachers	Role ambiguity, Role conflict, Responsibility for others and Role preparedness
3.	Relationship at Work	Quality of relationship with Colleagues, Head, Office staff, Pupils and Parents
4.	Career Development	Status incongruency, Over/under promotion and Job security, etc.
5.	Organisational Structure	Participation in decision making, Performance appraisal, Change in curriculum, Personal freedom, Poor communication, Inadequate feedback about performance, Unfair control system and Lack of effective consultation
6.	Home Work Interface	Stressful life events, Conflict between organisational and personal beliefs, Financial difficulties, Dual career couples, Dilemma of equality and Interaction between home and work.

Item writing

Based on the models of Teacher Stress adapted and the discussions and interviews with Teachers, the investigator prepared items in English language. The items are then subjected to the evaluation of experts in the field of Occupational Stress research. On the basis of their criticisms and suggestions necessary modifications, additions and deletions were made to improve the clarity of statements. The investigator thus prepared 114 positive and negative statements regarding the various aspects of the six major stressors/causes of Teacher Stress. All the items were scrutinised further by a pannel of experts. Modifications were again made and then, the draft inventory is finalised.

Some illustrative items from the draft inventory are the following as examples:

Stressor: Intrinsic to the Job - Class size

1. Due to increased number of students I am worried about the effectiveness of teaching.

Stressor: Relationship at Work - Relation with Head/Principal

2. I feel irritated in some of the actions taken by the Head/Principal.

Stressor : Career Development - Under promotion

3. There is no possibility for a promotion in the nearest future if I am sticking on this job.

Stressor: Role of Teachers - Role ambiguity

4. I have to perform official duties other than teaching.

Stressor: Organisational Structure - Personal freedom

5. I am forced to teach differently in the traditional teaching methdos.

Stressor: Home Work Interface - Dural career couples

6. Since my husband/wife work far away from home, I have more responsibilities of the family.

Mode of Responding and Scoring

Subjects have to decide how far each statement in the inventory is true for their case. Responses can be made in a five point scale as *Strongly Agree, Agree, Undecided, Disagree* and *Strongly Disagree*. For a positive statement the score given is 5, 4, 3, 2 and 1 respectively for the response *Strongly Agree, Agree, Undecided, Disagree* and *Strongly Disagree*. Scoring scheme is *reversed* for a negative statement.

The draft Inventory in English and Malayalam and also the Response Sheets are presented as Appendix I, IA, IB and IC respectively.

Try out and Selection of Items for the Final Inventory

Statements for the final inventory were selected on the basis of item analysis for which draft inventory was administered on a sample of 100 Teachers selected by stratified sampling method. To try out the draft inventory, the sample is taken from the three districts of Kerala State, viz., Kannur, Kozhikode and Malappuram. Try out was to analyse each item statistically by determining the discriminating power of the items, that is to be included in the final scale. Since it is a Likert type tool, only discriminating power is calculated.

Item Analysis

For item analysis, the procedure suggested by Edward (1957) was used. The response sheets of 100 subjects were arranged in the rank order of total scores obtained by them. The scores obtained by the top 27 Teachers (27%) and bottom 27 Teachers (27%) were taken as the high group and low group respectively. Then the 't' values for each item was calculated using the formula,

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{\sum (X_H - \bar{X}_H)^2 + \sum (X_L - \bar{X}_L)^2}{n(n-1)}}$$

\bar{X}_H = Arithmetic mean of the given item for high group

\bar{X}_L = Arithmetic mean of the given item for low group

X_H = Score of high group

X_L = Score of low group

n = Number of subjects in the group

't' values of 114 items were calculated and tabulated item wise. Items having the t-value 2.58 and above were selected with an inference that such items discriminate the high group and the low group. The 't' values of all the 114 items are given in Table 3.2.

TABLE 3.2

t-values for 114 items of Teacher Stress Inventory

Sl. No.	t-value	+ve/-ve	Sl. No.	t-value	+ve/-ve	Sl. No.	t-value	+ve/-ve
1	2.84*	+ve	39	0.14		77	5.57*	+ve
2	2.75*	-ve	40	7.77*	+ve	78	6.93	
3	4.46		41	5.00		79	6.27	
4	2.56		42	7.17*	+ve	80	3.29*	+ve
5	0.91		43	1.03		81	5.10	
6	0.69		44	3.21		82	1.17	
7	5.29*	+ve	45	1.61		83	4.05*	+ve
8	5.64		46	0.58		84	5.81	
9	4.73		47	5.00*	+ve	85	6.10*	+ve
10	5.82*	+ve	48	2.27		86	4.26*	+ve
11	3.77		49	3.83*	-ve	87	6.25*	+ve
12	5.16*	-ve	50	2.56		88	8.24*	+ve
13	6.46*	+ve	51	5.38		89	2.83*	+ve
14	2.57		52	2.62*	+ve	90	4.39*	+ve
15	1.55		53	6.81*	-ve	91	1.66	
16	6.26		54	4.02		92	6.48	
17	2.58		55	1.56		93	4.34*	+ve
18	5.39*	+ve	56	3.78*	+ve	94	2.34	
19	3.09*	-ve	57	2.85		95	5.49*	+ve
20	1.91		58	2.68*	+ve	96	3.51*	+ve
21	6.30*	+ve	59	0.64		97	4.73*	-ve
22	1.71		60	4.51*	+ve	98	4.76	
23	8.39*	-ve	61	0.77		99	3.57*	+ve
24	4.07		62	3.80*	+ve	100	0.59	
25	1.47		63	1.71		101	2.82*	+ve
26	0.75		64	4.25*	+ve	102	4.01	
27	0.13		65	0.63		103	6.41*	+ve
28	0.26		66	3.08*	+ve	104	7.02	
29	1.89		67	1.77		105	4.91*	+ve
30	5.20		68	2.65*	-ve	106	5.24*	+ve
31	2.73		69	0.47		107	4.05*	+ve
32	4.07*	+ve	70	3.67		108	5.49*	+ve
33	7.03		71	1.18		109	5.94	
34	5.76*	+ve	72	5.34*	-ve	110	4.59	
35	0.01		73	4.09		111	4.98*	+ve
36	4.68		74	1.49		112	6.34	
37	5.52		75	4.52*	+ve	113	0.93	
38	6.33*	+ve	76	4.59		114	2.88*	+ve

* Items selected

Thus the final inventory contains 41 positive items and 9 negative items. The number of selected items for the final scale which falls in the 6 major stressors area are given.

Sl. No.	Stressors	Number of Items	Sl. No. in the Final Inventory
1	Intrinsic to the Job	10	1 - 10
2	Role of Teachers	9	11 - 19
3	Relationship at Work	7	20 - 26
4	Career Development	4	27 - 30
5	Organisational Structure	11	31 - 41
6	Home work Interface	9	42 - 50
Total Items		50	

The following are the number of negative items in the final TSI; items 2, 5, 8, 10, 17, 19, 26, 27 and 41.

Validity

Criterion related validity of the TSI was established using the *Teacher Stress Questionnaire* (Traverse & Cooper, 1996) as the external criteria. Both tools were administered on a sample of 40 Teachers and responses were collected. Scores on TSI and Teacher Stress Questionnaire were correlated through Pearson's Product Moment method. The coefficient of correlation was 0.71.

Reliability

Reliability of the TSI was established by *split-half* method. Items in the TSI was divided into two equal halves (1st half and 2nd half) and each half is treated as separate inventory. These were administered on 40 Teachers, two sets of responses were collected and correlated. The correlation coefficient after correction using Spearman-Brown Prophecy formula was 0.69.

The internal structure of the inventory is examined by correlating the scores on six category of major Stressors with the Total score on the inventory. The intercorrelation matrix is presented as Table 3.3.

TABLE 3.3

Inter Correlations of the six Stressors with Perceived Stress (Total)

Variables	Intrinsic to the Job	Role of Teachers	Relationship at Work	Career Development	Organisational Structure	Home work Interface	Perceived Stress (Total)
Intrinsic to the Job	1.0000						
Role of Teachers	0.0317	1.0000					
Relationship at Work	0.1414	0.1639	1.0000				
Career Development	0.1105	0.0846	0.1184	1.0000			
Organisational Structure	0.0020	0.1796	0.4058	0.0775	1.0000		
Home work Interface	0.0806	0.0461	0.2199	0.2124	0.2851	1.0000	
Perceived Stress (Total)	0.4170*	0.4374*	0.6325*	0.3968*	0.6733*	0.6218*	1.0000

* $P < 0.01$.

The above table shows that all the correlations are positive and each stressor correlates significantly ($P < 0.01$) with Total *Perceived Stress* Scores.

Validity and reliability indices pointed out that the Teacher Stress Inventory (TSI) has acceptable psychometric properties and is sufficient to measure the Perceived Stress among Teachers.

The final Inventory in English, Malayalam and response sheets are given as Appendices II, IIA, II B and II C respectively.

3.4.1.2. Scale of Job Satisfaction (SJS - Kumar & Kumar, 2001)

This scale is prepared and standardised by Kumar and Kumar (2001). The working definition set for the preparation of the Scale is, that Job Satisfaction is an *affective or emotional response toward various facets of one's job*. This definition indicates that Job Satisfaction is not a unitary concept. Rather, a person can be relatively satisfied with one aspect of his or her job and dissatisfied with one or more other aspects. The steps taken by the investigator during the construction of the SJS is briefly explained in the following part of the report.

Planning

The investigator reviewed the literature related to theory and measurement of Job Satisfaction and studied in detail. The tools used by previous researchers to measure Job Satisfaction were also examined. Most of these tools are constructed for general purpose. That is to measure the level of Job Satisfaction from any job. Some of these are *Need Satisfaction Questionnaire* (Porter, 1961), *Minnesota Satisfaction Questionnaire* (Weiss, et al., 1967), *Job Descriptive Index* (Smith, et al., 1969) and *Employee Attitude Scale* (Ganguli, 1983).

Some tools were also located which is specifically designed to measure Teacher's Job Satisfaction. These tools are *Job Satisfaction Inventory for Secondary School Teachers* (Pilla, 1995), *Job Satisfaction Inventory for College Teachers* (Ramakrishnaiah & Rao, 1998), etc. But these tools are not suitable to use in the frequently changing educational environment in Kerala. Hence it is decided to construct and standardise a scale specifically useful to measure Job Satisfaction of Teachers belonging to all categories.

To get a strong theoretical basis for the proposed scale, the investigator examined the different theories of Job Satisfaction. This include theories proposed by *Maslow (1943)*, *Herzberg (1959)*, *McClelland (1962)*, *Vroom (1964)*, *Adams (1965)*, *Locke (1969)*, *Alderfer (1972)*, *Lawler (1973)*, *Stogdill (1974)*, *Salancik and Pfeffer*

(1977), Landy (1978) etc. Details of their theories are briefly discussed in *chapter 2, section 2.1.3.2*.

From the review of different *theories, literature, findings* from researchers working in the field of Job Satisfaction research and also from the comparative study of various available Job Satisfaction Tools, it is decided to consider *eight* major factors as components of Teacher's Job Satisfaction. These eight factors and their sub components are presented as follows:

Factors Effecting Job Satisfaction of Teachers

1. *Parents and Students* - Interest of parents in children's education, sense of responsibility, recognition from parents, relationship with teachers, quality of the students, interest of students, behaviour of students.
2. *Pay and Fringe Benefits* - Perceived fairness of pay and fringe benefits like Medical/HRA/DA/leaves, financial needs and amount of pay and pension.
3. *Working Conditions* - Physical facilities for Teachers and students, place of work, attitude of Government towards Teachers.
4. *Opportunities for Advancement* - Promotion and opportunity to learn more.
5. *Personal Worth* - Interest in the work and self esteem.
6. *Co-Teachers* - Relationship, cooperation, communication and conduct.
7. *Principal* - Relationship, faith, conduct, opportunities given for participation, recognition of work done and management style.
8. *Job Itself* - Feeling of accomplishment, inspiration, variety, opportunity to utilise skill and ability, freedom, morale and responsibility.

Preparation

The investigator made informal discussions and interviews with selected Teachers working in some of the Primary, Secondary and Higher Secondary schools of Kerala State. This was done with a view to get clarity about the aspects of major factors of Job Satisfaction. The discussions and interviews gave more insight to the aspects of eight major components. As a result of these, it is decided to construct a 70-75 item self reporting scale suitable to give a reasonably good measure of Job Satisfaction. Likert format is adopted for construction of the Scale. The major components and the related aspects that are used in the SJS are presented in Table 3.4.

TABLE 3.4
Components and Related Aspects in SJS

Sl. No.	Factors	Related Aspects
1.	Parents and Students	Interest of parents, sense of responsibility, recognition from parents, relationship with teachers, quality of the students, interest of students, and behaviour of students.
2.	Pay and Fringe Benefits	Perceived fairness of pay and fringe benefits like Medical/HRA/DA, leave, etc., financial needs and amount of pay, and pension.
3.	Working Conditions	Physical facilities for teachers and students, place of work and attitude of government towards teachers
4.	Opportunities for Advancement	Promotion and opportunity to learn more.
5.	Personal Worth	Interest in the work and self esteem
6.	Co-Teachers	Relationship, cooperation, communication, and conduct
7.	Principal	Relationship, faith, conduct, opportunities given for participation, recognition of work done, and management style.
8.	Job Itself	Feeling of accomplishment, inspiration, variety, opportunity to utilise skill and ability, freedom, morale, and responsibility.

Item Writing

Based on the discussions and interviews with Teachers, the investigator prepared items in both English and Malayalam language. The items are then subjected to the evaluation of experts in the field of Job Satisfaction Research. On the basis of their criticisms and suggestions necessary modifications, additions and deletions were made to improve the clarity of statements. The investigator thus

prepared 114 statements regarding the various aspects of the eight major components of Teacher's Job Satisfaction. The items included both positive and negative statements. All the items were scrutinised further by a pannel of experts. Modifications were again made and then, the draft inventory is finalised.

Some illustrative items from the draft inventory are the following as examples:

Component : Parents and Students - Interest of parents

1. Excessive interest of the parents in the studies of their children has often created difficulties for me.

Component : Pay and Fringe Benefits - Perceived fairness of pay

2. I receive less salary than what I really deserve.

Component : Working Conditions - Place of work

3. I feel troubled because my working place is far away from my native place.

Component : Opportunities for Advancement - Promotion

4. I am satisfied with the promotion based on seniority.

Component : Personal Worth - Self esteem

5. Teaching is a good job when compared to other jobs.

Component : Co-Teachers - Cooperation

6. My colleagues are neither cooperative nor supportive.

Component : Principal - Management style

7. Head/Principal adopts an autocratic approach in the administration of the school.

Component : Job Itself - Variety

8. My profession is not giving the chance to handle variety of duties.

Mode of Responding and Scoring

Subjects have to decide how far each statement in the scale is true for their case. Responses can be made in a *five point scale* as *Strongly Agree, Agree, Undecided, Disagree* and *Strongly Disagree*. For a positive statement the score given is 5, 4, 3, 2 and 1 respectively for the response *Strongly Agree, Agree, Undecided, Disagree* and *Strongly Disagree*. Scoring scheme is *reversed* for a negative statement.

The draft inventory in English and Malayalam and also the Response Sheets are presented as Appendix III, IIIA, IIIB and IIIC respectively.

Try out and Selection of Items in the Final Scale

Draft Scale was administered to a representative sample of 100 teachers drawn from Kannur, Kozhikode and Malappuram districts of Kerala State. Try out was to analyse each item statistically, by determining the discriminating power of the item, that is to be included in the final scale.

Item Analysis

As the scale is a Likert type, discriminating power of the scale items were only calculated. For this, the procedure suggested by Edward (1957) was used. The response sheets of 100 Teachers were arranged in the rank order of total scores obtained in the Scale of Job Satisfaction. The scores obtained by the top 27 Teachers (27%) and the bottom 27 Teachers (27%) were taken as the High Job Satisfaction Group and Low Job Satisfaction Group respectively. Then the t values of each item was calculated by the formula,

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{\sum (X_H - \bar{X}_H)^2 + \sum (X_L - \bar{X}_L)^2}{n(n-1)}}$$

\bar{X}_H = Arithmetic mean of the given item for high group

\bar{X}_L = Arithmetic mean of the given item for low group

X_H = Score of high group

X_L = Score of low group

n = Number of subjects in the group

Final Scale

t-values of 114 items were calculated and tabulated item wise. Items having the t-value 2.07 and above, were selected with an inference that such items discriminate the High Job Satisfaction Group of Teachers and Low Job Satisfaction Group of Teachers. The t-values of all the 114 items are given in Table 3.5.

TABLE 3.5
t-values for 114 items of Scale of Job Satisfaction

Sl. No.	t-value	+ve/-ve	Sl. No.	t-value	+ve/-ve	Sl. No.	t-value	+ve/-ve
1	1.39		39	3.02*	-ve	77	9.53*	+ve
2	2.07*	+ve	40	2.65		78	5.27*	-ve
3	5.37*	-ve	41	3.29*	+ve	79	9.32*	-ve
4	5.00*	-ve	42	2.78		80	7.55*	+ve
5	3.98		43	0.20		81	7.51	
6	4.47*	+ve	44	3.36		82	7.06	
7	2.71		45	3.75*	-ve	83	7.46*	+ve
8	3.91*	-ve	46	3.87*	+ve	84	4.48*	-ve
9	4.01*	+ve	47	4.93*	+ve	85	5.47	
10	4.62*	+ve	48	0.00		86	5.99*	+ve
11	5.43*	-ve	49	2.49*	+ve	87	8.16*	-ve
12	4.10		50	2.73		88	10.01*	-ve
13	1.40		51	4.51*	-ve	89	5.20	
14	2.54*	+ve	52	3.00*	+ve	90	2.60*	+ve
15	4.45*	+ve	53	2.16		91	10.39*	-ve
16	3.07		54	5.10*	-ve	92	5.45	
17	2.86*	+ve	55	7.00*	-ve	93	6.40*	+ve
18	5.86*	-ve	56	6.51*	+ve	94	8.24*	-ve
19	5.42*	+ve	57	4.63		95	6.27*	+ve
20	7.10*	-ve	58	5.46		96	6.10	
21	0.44		59	5.93*	+ve	97	6.74*	-ve
22	5.12*	+ve	60	7.86*	-ve	98	6.24	
23	3.47*	+ve	61	7.21*	+ve	99	5.72*	+ve
24	1.88		62	5.32		100	7.86*	-ve
25	5.12		63	6.13*	-ve	101	8.43*	+ve
26	3.98*	+ve	64	6.70		102	3.95	
27	5.91*	-ve	65	6.14*	+ve	103	1.05	
28	7.69*	-ve	66	7.26*	-ve	104	4.27*	-ve
29	3.26		67	6.62*	+ve	105	7.52*	-ve
30	3.46*	+ve	68	4.36		106	5.49*	-ve
31	4.14		69	5.09*	-ve	107	3.00	
32	4.41*	+ve	70	6.00*	+ve	108	4.52*	+ve
33	5.14*	-ve	71	2.32		109	3.04*	+ve
34	4.34*	+ve	72	6.96*	+ve	110	3.33	
35	2.49		73	3.00		111	7.34*	-ve
36	4.32*	+ve	74	7.24*	-ve	112	3.14	
37	5.15*	+ve	75	6.82*	+ve	113	3.95*	+ve
38	3.55		76	6.79		114	7.13*	-ve

* Items Selected.

Thus the final Scale consists of 41 positive items and 33 negative items. That is, a total of 74 items. The number of selected items for the final tool which fall in the eight factors of Job Satisfaction are given.

Sl. No.	Factors	Number of Items	Sl. No. in the Final Inventory
1	Relationship with Parents and Students	16	1-16
2	Pay and Fringe Benefits	8	17-24
3	Working Conditions	6	25-30
4	Opportunities for Advancement	4	31-34
5	Personal Worth	4	35-38
6	Co-Teachers	8	39-46
7	Principal	12	47-58
8	Job Itself	16	59-74
Total Items		74	

Reliability of Scale of Job Satisfaction

Split-half method was applied to calculate the reliability of the *Scale of Job Satisfaction*. The scores on the odd and even numbered items were correlated using Pearson's formula for product moment correlation (Garret, 1981). There are 37 items in each halves. For this purpose, Scale of Job Satisfaction was administered on a representative sample of 40 teachers and the scores thus obtained were utilized for studying the reliability of the test.

The formula to find the product moment correlation is

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{[N\sum X^2 - (\sum X)^2] [N\sum Y^2 - (\sum Y)^2]}}$$

Where,

- X - Total Score for first half items
 Y - Total Score for second half items
 N - Number of Teachers.

This gave the reliability of the half test. The reliability of the half-test thus obtained was 0.5646. This was corrected for full length of the test by Spearman-Brown Prophecy formula (Best & Kahn, 1996).

$$r = \frac{2r}{1+r}$$

The reliability thus obtained was 0.7217 (N = 40).

Internal Consistency of the Scale

Evidence in terms of the internal consistency of the *Scale of Job Satisfaction* has been examined for a sample of 300. The whole set of inter correlations were calculated between the eight components of Job Satisfaction. Component Scores have been found to correlate with one another substantially. Each of the component scores correlate considerably with Total Job Satisfaction Scores. The details are presented in Table 3.6

TABLE 3.6

**Inter Correlations of the Eight
Components of Job Satisfaction with Total Job Satisfaction Scores**

Factors	Parents & Students	Pay & Fringe Benefits	Working Conditions	Opportunities for Advancement	Personal Worth	Co-Teachers	Principal	Job Itself	Job Satisfaction Total
Parents & Students	1.0000								
Pay & Fringe Benefits	0.2964	1.0000							
Working Conditions	0.1902	0.2724	1.0000						
Opportunities for Advancement	0.2768	0.2324	0.1831	1.0000					
Personal Worth	0.4297	0.0762	0.1529	0.3246	1.0000				
Co-Teachers	0.3483	0.1318	0.1486	0.3432	0.3437	1.0000			
Principal	0.2170	0.0654	0.1815	0.1931	0.1798	0.4051	1.0000		
Job Itself	0.5346	0.2182	0.2482	0.2698	0.5663	0.3540	0.3857	1.0000	
Job Satisfaction-Total	0.7218*	0.4826*	0.4346*	0.4778*	0.5823*	0.6277*	0.6108*	0.7902*	1.0000

* $P < 0.01$

The above table shows that all the correlations are positive and each component correlate significantly ($P < 0.01$) with Total *Job Satisfaction Scores*.

Validity of Scale of Job Satisfaction

There are various methods of estimating the validity of a measuring instrument. The following types of validity were established for the Scale of Job Satisfaction that was developed.

a. Content Validity

This form of validity is established by evaluating the relevance of the test items individually and as a whole. Each item should be a sampling of that aspect which the test purports to measure and taken collectively, the items should constitute a representative sample of the variable that is measured.

In the construction of the present instrument, items were decided after the informal discussions and interviews with selected teachers working in some of the Primary, Secondary and Higher Secondary Schools of Kerala State. They were also supplemented by the review of related literature and by experts in the field. Thus it can be reasonably assumed that the scale has content validity.

b. Face Validity

The statements of the scale were phrased in the least ambiguous way and hence the wording of the statements suggest that the scale is a good measure of Job Satisfaction of Teachers. Therefore the scale possesses face validity.

c. Criterion Related Validity

The criterion related validity of the scale of Job Satisfaction was assessed by determining its correlation coefficient with the scores obtained by *Job Satisfaction Inventory for Teachers* (Susamma, 1984) as the external criterion. This coefficient was found to be 0.62 for N = 40.

Since the scale of Job satisfaction has approved validity, reliability coefficients, it is an adequate tool for measuring *Job Satisfaction* of Teachers.

The final scale in English, Malayalam and response sheets are given as Appendices IV, IV A, IV B and IV C respectively.

3.4.1.3. 16 PF Questionnaire - Form C (Malayalam Version)

The selection of Cattell's 16PF test to measure Personality Characteristics has been made after a lot of deliberations and a detailed study of various theories of Personality. In view of the theoretical as well as practical considerations this tool was selected. The 16PF questionnaire is an objectively acceptable test devised by basic research in Psychology to give the most complete coverage of personality possible in a brief time. Coverage of personality is ensured by the sixteen functionally,

independent and Psychologically meaningful dimensions isolated by over twenty years of factor analytical research on normal and clinical groups. There fore, having a certain position on one factor does not prevent the person having some other position, whatever, on any other.

Experience with the 16PF in clinical, educational, and industrial psychology shows that the use of the 16 traits gives actual prediction. In view of the above theoretical as well as practical considerations, Cattell's 16PF questionnaire was selected to be used in the study.

There are six forms of the 16PF. Forms A and B for adults, consisting of 187 items each, form C and D with a some what less demanding vocabulary and consisting of 105 items, and forms E and F which have 128 items with a very simple vocabulary and are intended for use with the educationally disadvantaged.

Form C of the 16PF questionnaire was adopted for the present investigation. Majority of questions in the questionnaire are indirect, asking about interests, which the persons would not necessarily perceive to be related to the trait in question, so that faking is minimised. Completion of form C requires 25 to 35 minutes and the reading level is slightly lower than all other forms (Cattell, *et al.*, 1970).

Cattell's 16 PF-Form C was modified by Seetharam (1974) and the language is made simpler than the original form to suit Indian conditions. This modified form of 16 PF-Form C was translated by Rema and Raveendran (1989) into Malayalam language, and this questionnaire were used for the present study. The composite score of the 16 PF is taken as one's Personality Characteristics.

Personality Factors Measured by the Questionnaire

Form C of the 16 PF questionnaire (Malayalam Version) which was adopted in this study consists of 105 items, each provided with three alternatives for answering. It is the shortened version of the 16 PF A and B forms. Sixteen functionally

independent factors with two dimensions at the extremes are measured by this test.

The sixteen primary factors covered by the test are as follows:-

	LOW SCORE		HIGH SCORE
1.	Factor A	Reserved (Detached, Critical, Aloof)	Vs Outgoing (Warmhearted, Easy Going, Participating)
2.	Factor B	Less intelligent (Concrete-Thinking)	Vs More intelligent (Abstract- Thinking, Bright)
3.	Factor C	Affected by feelings (Emotionally Less Stable, Easily Upset, Changeable)	Vs Emotionally stable (Faces Reality, Calm, Mature)
4.	Factor E	Humble (Mild, Obedient, Accommodating, Easily Led, Docile)	Vs Assertive (Independent, Aggressive, Competitive, Stubborn)
5.	Factor F	Sober (Prudent, Serious, Taciturn)	Vs Happy-go-lucky (Impulsively Lively, Enthusiastic)
6.	Factor G	Expedient (Evades Rules, Feels Few Obligations)	Vs Conscientious (Persevering, Staid, Rule-Bound)
7.	Factor H	Shy (Restrained, Diffident, Timid)	Vs Venturesome (Socially-Bold, Uninhibited, Spontaneous)
8.	Factor I	Tough-minded (Self- Reliant, Realistic, No- Nonsense)	Vs Tender-Minded (Dependent, Over-Protected, Sensitive)
9.	Factor L	Trusting (Adaptable, Free of Jealousy, Easy to Get on with)	Vs Suspicious (Self-Opinionated, Hard to Fool, Jealous, Irritable)
10.	Factor M	Practical (Careful, Conventional, Regulated by External Realities, Proper)	Vs Imaginative (Wrapped up in Inner Urgencies, Careless of Practical Matters, Absent- Minded)

11.	Factor N	Forthright (Natural, Artless, Sentimental)	Vs	Shrewd (Calculating, Wordly, Penetrating, Polished)
12.	Factor O	Placid (Self-Assured, Confident, Serene)	Vs	Apprehensive (Worrying, Depressive, Troubled)
13.	Factor Q ₁	Conservative (Respecting Established Ideas, Tolerant of Traditional Difficulties)	Vs	Experimenting (Critical, Liberal, Analytical, Free-Thinking)
14.	Factor Q ₂	Group dependent (A "Joiner" and Sound Follower)	Vs	Self-sufficient (Prefers Own Decisions, Resourceful)
15.	Factor Q ₃	Undisciplined (Self Conflict, Careless of Protocol, Follows Own Urges)	Vs	Controlled (Socially Precise, Following Self-Image)
16.	Factor Q ₄	Relaxed (Tranquil, Torpid, Unfrustrated)	Vs	Tense (Frustrated, Driven, Overwrought)

The test takes 25-35 minutes duration. Two separate stencil keys can be used for scoring. One key for scoring the factors A, C, F, H, L, N, Q₁ and Q₃. Another for scoring B, E, G, I, M, O, Q₂ and Q₄. Each answer scores 0, 1 or 2 points except for the factor B (intelligence) which scores zero or one. For each factor raw scores are obtained by adding the scores of all the items belonging to that factor. While considering response sheets, sheets having motivational distortion score less than 9 were discarded.

Reliability

Test-retest reliability of the 16 PF Form C, on a population of 200 students, conducted by Rema and Raveendran (1989) are shown in Table 3.7.

TABLE 3.7
Test-Retest Reliability of Modified 16 PF Form C

Factor	r	Factor	r	Factor	r	Factor	r
A	0.82	F	0.81	L	0.73	Q ₁	0.86
B	0.84	G	0.77	M	0.85	Q ₂	0.77
C	0.81	H	0.62	N	0.86	Q ₃	0.89
E	0.87	I	0.80	O	0.82	Q ₄	0.63

Test-retest reliability of the questionnaire was also conducted by Haridasan (1993). It is given in Table 3.8.

TABLE 3.8
Test-Retest Reliability of Malayalam Version of 16 PF Form C

Factor	r	Factor	r	Factor	r	Factor	r
A	0.79	F	0.79	L	0.72	Q ₁	0.75
B	0.88	G	0.77	M	0.83	Q ₂	0.69
C	0.81	H	0.75	N	0.81	Q ₃	0.78
E	0.82	I	0.81	O	0.80	Q ₄	0.68

Seetharam (1974) has reported reliability for each factor for the modified form C in English, which is given in Table 3.9.

TABLE 3.9
Factor-wise Reliability Coefficients for the Modified 16 PF Form C in English

Factor	r	Factor	r	Factor	r	Factor	r
A	0.82	F	0.81	L	0.73	Q ₁	0.89
B	0.84	G	0.77	M	0.85	Q ₂	0.77
C	0.81	H	0.62	N	0.86	Q ₃	0.89
E	0.87	I	0.80	O	0.77	Q ₄	0.63

For establishing the *parallel from reliability* of the questionnaire, factor to factor correlations were computed by taking the mean score for each factor of the Malayalam version on each factor of the English version. The coefficients of correlations for the factors ranged from 0.74 to 0.98 as (Rema & Raveendran, 1989) given in Table 3.10.

TABLE 3.10
Factor to Factor Correlation Coefficients
Between English Version and the Malayalm Version of 16 PF Form C

Factor	r	Factor	r	Factor	r	Factor	r
A	0.98	F	0.90	L	0.92	Q ₁	0.89
B	0.97	G	0.90	M	0.93	Q ₂	0.91
C	0.90	H	0.97	N	0.91	Q ₃	0.93
E	0.74	I	0.95	O	0.89	Q ₄	0.78

Validity

Validity of the Malayalam version (Rema & Raveendran, 1989) of 16 PF Form C was established by calculating the mean of the correlations of all the items with the respective factor scores. It was found that the coefficients of correlation ranged from 0.58 to 0.90 as in Table 3.11.

TABLE 3.11
Factor-wise Mean of Correlations

Factor	r	Factor	r	Factor	r	Factor	r
A	0.90	F	0.65	L	0.70	Q ₁	0.70
B	0.61	G	0.65	M	0.64	Q ₂	0.70
C	0.58	H	0.68	N	0.60	Q ₃	0.59
E	0.63	I	0.71	O	0.61	Q ₄	0.60

Thus the test appears to be sound to tackle the same variables for which the Cattell's test was prepared.

For example some items from 16 PF are as follows.

i) Do you mixing up with people in large gatherings like parties?

(a)	Yes	(b)	Sometimes	(c)	No
-----	-----	-----	-----------	-----	----

ii) Do you give up worries easily?

(a)	Yes	(b)	In between	(c)	No
-----	-----	-----	------------	-----	----

iii) Do you like being served by personal servants?

(a)	Yes	(b)	Sometimes	(c)	No
-----	-----	-----	-----------	-----	----

A copy of the 16 PF Questionnaire-Form C (Malayalam Version) and the response sheet are appended in Appendix V and V A.

3.4.2. SELECTION OF SAMPLE

The population meant for the study is Primary, Secondary and Higher Secondary School Teachers of Kerala State. Eventhough the size of the population is finite, because of its huge size, it was impossible and impractical to study the population characteristics as such. Therefore, it is decided to take a representative sample of the population in which representativeness determines the extent of generalisability of the results. To meet representativeness in sample selection investigator had to take decision on three major aspects viz., Size of the sample, Technique of sampling, Factors to be represented in the sample.

3.4.2.1. Size of the Sample

The size of the sample is a crucial factor for the validity of results. Types of statistical procedures to be employed in the present study is taken as the prime concern in fixing up the sample. Further, inferential statistics says as the size of the sample increases, the amount of sampling error will be reduced.

By considering the above factors, the investigator decided to have a sample of size 360 school teachers from three districts of Kerala, 120 each from Primary, Secondary and Higher Secondary Schools.

3.4.2.2. Technique of Sampling

Proportionate stratified random sampling technique is used for the present study. Because the sample for the study consists of different strata like Gender of Teachers, Type of Management of Schools, School locale and also different categories of Teachers.

3.4.2.3. Factors Represented in the Sample

The following factors or strata of the population are taken into consideration while selecting the sample as, Gender of the Subjects, Locale of the School (Rural/Urban) and Type of Management of Schools (Government/Private)

The rationale for the selection of each of these is described in the following subsections.

(i) *Gender of the subjects*

The population consists of Teachers of both gender Male and Female. So it was necessary to include Teachers of both gender almost equally in the sample in the proportion 1:1.

(ii) Locale of the Schools

Some schools are situated in Urban areas in the state, while some others are in Rural areas. In addition, the social status, social recognition etc. of Teachers are different in Urban and Rural areas. So the investigator decided to give representation on the basis of locale also. The Rural and Urban sample is distinguished on the basis of the locale of the school, those schools which is situated under Panchayath administration are grouped as Rural and those under Municipality or Corporation administration as Urban. Greater number of schools are in Rural areas and so schools are selected on the basis of locale in the ratio, Rural: Urban = 3:2.

(iii) Type of Management of Schools

There are two types of schools in Kerala, based on the agencies which run the Schools - *Government* and *Private*. Managerial methods and organisational climate in these two types of schools are different in a notable way. And also the selection procedure of Teachers, promotion criteria, chances of getting transfer etc. are entirely different from the other. So it is highly necessary to include Teachers of both schools. Since there are more Private schools than Government schools in the state, it was decided to select schools based on type of management in the ratio, Private : Government = 3:2.

Since the present study consists three types of Teachers i.e., Primary, Secondary and Higher Secondary Teachers, the Total size will be equally distributed to each category. The break-up of the initial sample of size 360 is given in Table 3.12.

TABLE 3.12
Break-Up of the Proposed Sample

Locale	Category of school	Type of Management	Gender of Teacher		Total	Grand Total	Grand Grand Total
			Male	Female			
Urban	Primary	Govt.	10	10	20	48	144
		Private	14	14	28		
	Secondary	Govt.	10	10	20	48	
		Private	14	14	28		
	Higher Secondary	Govt.	10	10	20	48	
		Private	14	14	28		
Rural	Primary	Govt.	14	14	28	72	216
		Private	22	22	44		
	Secondary	Govt.	14	14	28	72	
		Private	22	22	44		
	Higher Secondary	Govt.	14	14	28	72	
		Private	22	22	44		
TOTAL							360

3.4.3. DATA COLLECTION PROCEDURE SCORING AND CONSOLIDATION OF DATA

The investigator had to administer three tools for getting the necessary data. The investigator prepared all test materials and response sheets in the final form. Data collection was done during November 2001 to March 2002.

3.4.3.1. Data Collection Procedure

The investigator personally met the Teachers and himself distributed the tools. The Teachers were informed about the purpose of the study and was said that the data collected through the questionnaire will be treated as strictly confidential and

used for the research purpose only. Name or any information, which lead to the identification of the Teacher, were avoided from the questionnaire. This is done to eliminate the effects of anxiety and there by a tendency to give fake responses. Investigator supplied copies of test booklets and response sheets to the Teachers. After giving the general instructions, the method of answering was explained to the Teachers. The test booklets and response sheet were collected back within one week or two as per Teachers' convenience. Uniform procedure was adopted for data collection from all Teachers.

3.4.3.2 Scoring and Consolidation of Data

Before scoring, incomplete response sheets were rejected. All the response sheets which were complete in all respects were scored according to the respective test manuals and directions for scoring. While scoring 16PF questionnaire score sheets having motivational distortion score less than nine were avoided. Thus the sample of the study was then reduced to 319. To get equal number of Teachers from all categories, investigator random wise eliminated 19 response sheets. Thus the final sample of the study was then reduced to 300 Teachers. Hundred each from Primary, Secondary and Higher Secondary. The score obtained for the select variables by 300 subjects were then consolidated and tabulated for further analysis. The details of the final sample is given in Table 3.11.

TABLE 3.13

Break-up of the Final Sample

Locale	Category of school	Type of Management	Gender of Teacher		Total	Grand Total	Grand Grand Total
			Male	Female			
Urban	Primary	Govt.	8	8	16	40	120
		Private	12	12	24		
	Secondary	Govt.	8	8	16	40	
		Private	12	12	24		
	Higher Secondary	Govt.	8	8	16	40	
		Private	12	12	24		
Rural	Primary	Govt.	12	12	24	60	180
		Private	18	18	36		
	Secondary	Govt.	12	12	24	60	
		Private	18	18	36		
	Higher Secondary	Govt.	12	12	24	60	
		Private	18	18	36		
TOTAL							300

3.4.4. STATISTICAL TECHNIQUES USED IN THE STUDY

The objectives and hypotheses of the present study demand the use of following major statistical techniques.

3.4.4.1. Percentage Analysis

Percentage analysis was undertaken to study the extent and levels of *Perceived Stress and Job Satisfaction* of Teachers.

3.4.4.2. Mean Difference Analysis

Mean difference analysis was done for the investigation of Gender difference in the selected variables and also for the study of comparison of variables for

various samples, formed on the basis of demographic and biographical aspects. For this purpose the means and standard deviations of the variables were subjected to the two-tailed test of significance of the difference between means for large independent groups. The critical ratio calculated using the formula,

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2}}}$$

Where \overline{X}_1 - Mean score of first group

\overline{X}_2 - Mean score of second group

N_1 - Number of scores in the first group

N_2 - Number of scores in the second group

S_1^2 - Variance of first group

S_2^2 - Variance of second groups

If the obtained t -value falls outside the interval ± 1.96 then the difference between means is treated as significant at 0.05 level. If the obtained t -value falls outside the limits ± 2.58 , the difference is said to be significant at 0.01 level.

3.4.4.3. Pearson's Product Moment Coefficient of Correlation 'r' [Garrett, 1981]

To estimate the extent and degree of association between Job Satisfaction and Personality Characteristics with Perceived Stress, this correlational analysis was employed for the Total sample and relevant subsamples.

When X and Y are two continuous variables then the coefficient of correlation between the two variables is computed by the machine formula,

$$r_{xy} = \frac{N\Sigma XY - \Sigma X\Sigma Y}{\sqrt{[N\Sigma X^2 - (\Sigma X)^2][N\Sigma Y^2 - (\Sigma Y)^2]}}$$

Each Pearson's r , was discussed on the basis of the following:

(i) Verbal Interpretation of 'r' [Garrett, 1981]

The coefficient of correlation between two variables is described as high/very high; marked/substantial; low/negligible depending upon the numerical size of 'r'.

In psychological and educational testing, following is the criteria used for verbally describing the degree of relationship between variables.

'r' from 0.00 to ± 0.20 as indifferent or negligible relationship.

'r' from ± 0.20 to ± 0.40 as low correlation.

'r' from ± 0.40 to ± 0.70 as substantial or marked relationship.

'r' from ± 0.70 to ± 1.00 as high to very high relationship.

(ii) Test of Significance of Correlation Coefficient [Guilford, 1978]

The value of r was tested for significance using Fisher's t-test where,

$$t = r \sqrt{\frac{N-2}{1-r^2}} \text{ for } (N-2) \text{ degrees of freedom.}$$

If the value obtained for t is greater than the tabled value for $(N-2)$ degrees of freedom, and for a given level of significance the relation is said to be significant for that level of significance.

(iii) The 0.99 confidence interval of r was calculated by using the formula $(r \pm 2.58 SE_r)$ where r is the correlation coefficient and

$$SE_r = \frac{1-r^2}{\sqrt{N-1}}$$

Suggesting that the population r would lie between the estimated limits, the probability of this being 0.99.

(iv) Shared variance [Fox, 1969]

The formula for computing percentage variance shared between the variables is $r^2 \times 100$. The obtained value of the variance indicates the percentage of variation of the dependent variable that can be attributed to the variation in the independent variables.

3.4.4.4. Two-way Analysis of Variance

Two-way analysis of variance with 3x3 factorial design was used to determine the main and interaction effects of *Job Satisfaction* and *Personality Characteristics* on *Perceived Stress* of Teachers. Three levels of *Job Satisfaction* (Teachers with High Job Satisfaction, Average Job Satisfaction and Low Job Satisfaction) and three levels based on Personality Score (High, Average, Low) have been considered for the 3x3 factorial design.

The main and interaction effects were said to be significant if the relevant F-ratio exceeds the tabled F-value for the degrees of freedom available in each case at either 0.05 or at 0.01 level of significance.

A model ANOVA is presented,

Analysis of Variance for Two-way Classification

Source	Sum of Squares	df	Variance Estimate
Rows	$nC \sum_{r=1}^R (X_{r..} - \bar{X} \dots)^2$	R-1	S_r^2
Columns	$nR \sum_{c=1}^C (X_{.c} - \bar{X} \dots)^2$	C-1	S_c^2
Interaction	$n \sum_{r=1}^R \sum_{c=1}^C (X_{rc} - X_{r..} - X_{.c} + \bar{X} \dots)^2$	(R-1)(C-1)	S_{rc}^2
Within Cells	$\sum_{r=1}^R \sum_{c=1}^C \sum_{i=1}^n (X_{rci} - X_{rc})^2$	RC(n-1)	S_w^2
Total	$\sum_{r=1}^R \sum_{c=1}^C \sum_{i=1}^n (X_{rci} - \bar{X} \dots)^2$	nRC-1	

- R - Number of rows
 C - Number of columns
 n - Number of measurement in each cell : n>1
 N - nRC (Total number of measurement)
 \bar{X} - Mean of all nRC observations
 df - Degrees of freedom.

3.4.4.5. Scheffe' Test of Post-Hoc Comparison

Scheffe Test was applied as Post-hoc comparison between the pairs of different levels of the independent variables, consequent to significant F's.

To apply Scheffe' procedure, F-value is calculated at first, for each group pair using within group variance estimate S_w^2 and using the following formula (Ferguson, 1976).

$$F = \frac{(\bar{X}_i - \bar{X}_j)^2}{Sw^2/n_i + Sw^2/n_j}$$

Where

\bar{X}_i = M_1 = Mean of the first group

\bar{X}_j = M_2 = Mean of the second group

Sw^2 = Within group variance estimate

n_i = Number of subjects of group i

n_j = Number of subjects of group j.

The value of F were then compared with the value of F' at the 0.05 level and 0.01 level. A significant difference between the pairs of means is judged at the required levels only when the value of F is equal to or greater than F' .

3.4.4.6. Multiple Regression Analysis - Step wise

Multiple Regression is a statistical device used for analysing the collective and separate contributions of two or more independent variables (X_i) to the variation of a dependent variable (Y). It can be used to check whether certain variables are caused or preceded by others to derive a functional relationship between the two sets.

This statistical technique helps to *predict* a criterion or dependent variable from a set of *predictor* or independent variables (Tacq, 1997). The predictor variables are entered one by one to find out the influence of each variable in predicting the criterion variable. First, the predictor variable having the highest correlation with the criterion variable is entered and then calculate the measures like F, R, R^2 , adjusted R^2 , Partial Regression Coefficients B, the Intercept B_0 , Beta weights and Significance of t etc.

Using the F value obtained it is possible to check whether the regressor (predictor variable entered) is significant or not. If the F-value exceeds the tabled

value of F for a particular level of significance for appropriate degree of freedom, the regressor is significant. The investigator can then prepare the equation to the regression line using these quantities.

In step II the predictor variable having the next largest correlation is entered. If the percentage variance contributed by the two variables is considerably higher than the percentage variance contributed by the first variable, then it can be assumed that this variable is also a significant predictor. Along with this, the equation to the regression line and R can be calculated from the regression weights computed. If the R also has increased considerably from the previous R, this is an evidence that the predictor variable second entered is also significant in predicting the criterion variable.

The general regression equation for any number of variables is given as follows:

- Y - Dependent Variable
- X - Independent Variable
- $Y' = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + \dots + B_KX_K$
- B_0 - The slope (intercept), the value of Y when X_1 is equal to zero
- B_1 - Regression coefficient for the Independent Variable X_1 - The change in Y per unit increase in X_1
- X_1 - First predictor variable
- B_2X_2 - Coefficient and variable for the second predictor variable X_2
- B_KX_K - Coefficient and variable for the 'Kth' predictor variable - X_K .

To determine the predictive strength of the relationship we have to compute a static referred to as Multiple R. This static is just the Pearson's correlation (r) between the subjects real Y score and the Y' (predictive) based on the equation $Y' = B_0 + X_1B_1 + X_2B_2 + \dots + X_KB_K$. Thus

Multiple R = $r_{y,y'}$

If the R is high, then the equation predicts the real scores well. Multiple Regression analysis will throw light upon the following issues:

1. Does the equation right?
2. What variable should there be in the equation?
3. How should test them?
4. How good is the equation?

Objectives of the Technique

1. To look for a function $Y' = B_0 + B_1X_1 + B_2X_2 + \dots + B_KX_K$ which represents the linear relationship between X_1 and Y better than among other equations. This comes down to the calculation of Regression Coefficient B_1 and the intercept B_0 .
2. To investigate the magnitude of relationship between X_1 and Y and to predict which part of the variance of Y is explained by the variance of X_1 . This comes down to the calculation of the correlation coefficient $r_{y'}$ and its square $r^2_{y'}$ respectively.
3. To investigate whether the relationship between X_1 and Y that is found in the sample can be generalised to the population. This comes down to the application of a significance test of the relationship.

1. Calculation of the Standardised Partial Regression coefficient β & B_0

$$\beta_1 = \frac{\sum X_1Y - n\bar{Y}\bar{X}_1}{\sum X_1^2 - n\bar{X}_1^2}$$

$$B_0 = \bar{Y} - B_{y'}\bar{X}_1$$

\bar{X}, \bar{Y} - Mean values of X_1 and Y_1

Standard deviation is made equal to 1. Beta weights are most suitable to determine the relative importance of the predictors X_1 and X_2 . *Beta must not be greater than 1.*

If Beta greater than 1 is obtained, the reason is an excessively strong association between the causal factors X_1 and X_2 (Multicollinearity). Tolerance is used for dealing multicollinearity. When multicollinearity measured, tolerance will decrease, hence standard error will become greater, so that precision becomes smaller.

2. Strength of Association of the Relationship and the Explained Variance

R = the linear association between Y on the one hand and X_1 and X_2 on the other, by means of the multiple correlation coefficient R and the square of R is the multiple determination and represents the proportion of explained variance.

$$R = r_{y,y'}$$

t-tests for the significance of B_0 , B_1 and B_2 terms are used to determine whether the term is to be included in the equation. If the term is not statistically significant then it really should not be used in the equation, despite its numerical value.

3.4.4.7. Principal Component Factor Analysis

In the present study the statistical technique factor analysis was used to identify the *underlying factors* that are involved in the Teacher Stress Inventory and Scale of Job Satisfaction. For this purpose the scores obtained for the items in the six potential Stressors and eight components of Job Satisfaction were considered as independent variables and were subject to *factor analysis*.

Factor analysis is a statistical technique used to identify a relatively small number of factors that can be used to represent relationships among sets of many interrelated variables. Factor analysis helps to identify the *underlying constructs* that are not directly observable.

The mathematical model for factor analysis appears somewhat similar to a multiple regression equation. Each variable is expressed as a linear combination of factors that are not *actually observed*. These variables are not single independent variables. Instead, they are labels for groups of variables that characterise these concepts. These groups of variables constitute the *factors*. Usually, the factors characterising a set of variables are not known in advance but are determined by *factor analysis*.

In general, the model for the i^{th} standardised model is written as $x_i = A_{i1} F_1 + A_{i2} F_2 + \dots + A_{ik} F_k + U_i$ where F 's are the common factors, the U is the unique factor and the A 's are the coefficients used to combine the k factors. The unique factors are assumed to be uncorrelated with each other and with the common factors.

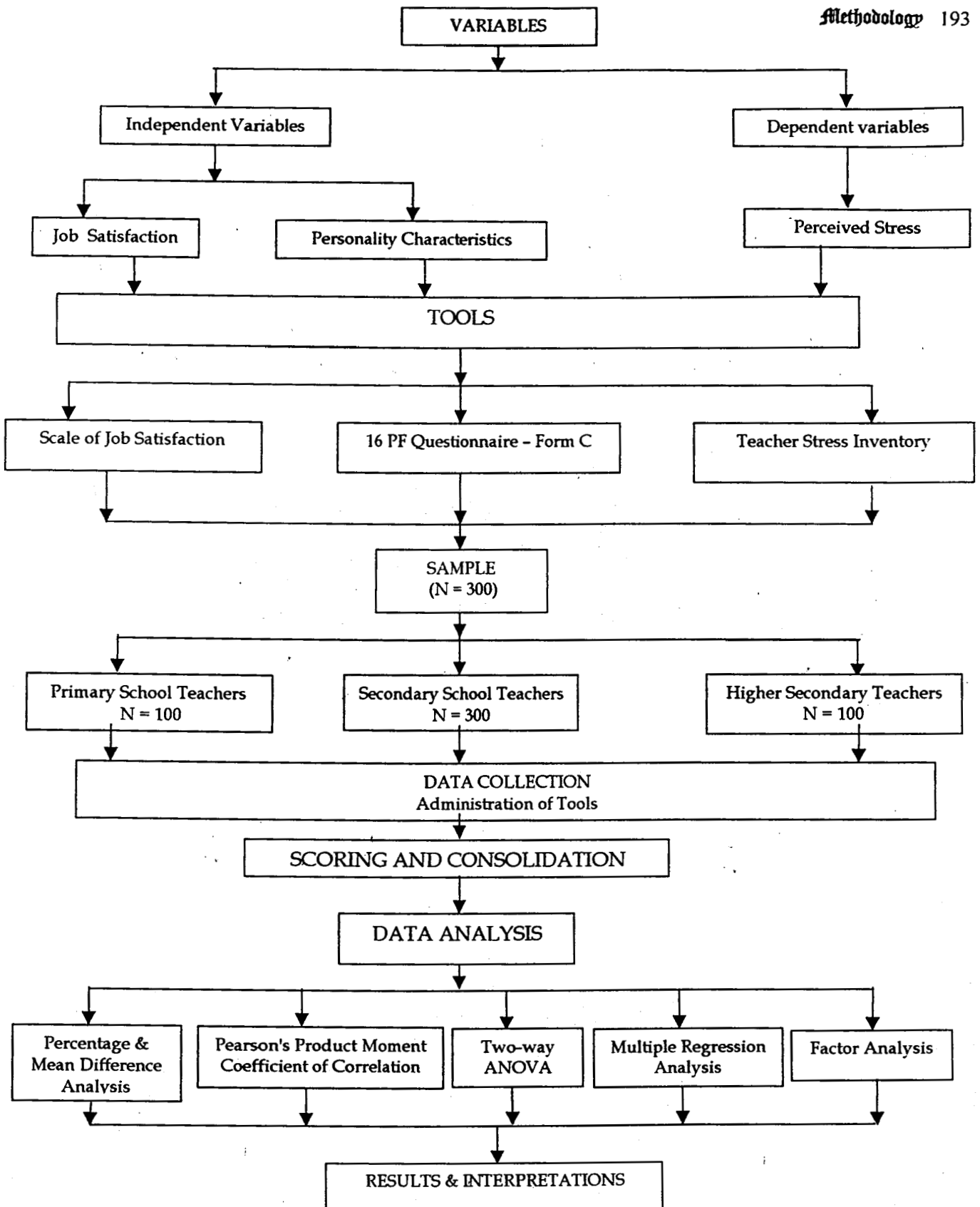
The factors are inferred from the observed variables and can be estimated as linear combination of variables. The general expression for the estimate of the j^{th} factor, F_j is:

$$F_j = \sum_{i=1}^P w_{ji} X_i = w_{j1} X_1 + w_{j2} X_2 + \dots + w_{jp} X_p$$

The w_j 's are known as factor score coefficients, and P is the number of variables.

3.4.5. SUMMARY OF METHODOLOGY

The methodology adopted in the present research programme is summarised in the following Flow chart for clarity and easy reference.



Chapter FOUR

ANALYSIS AND INTERPRETATIONS

Preliminary Analysis	4.1
Extent and Levels of Perceived Stress and Job Satisfaction of Teachers	4.1.1
Gender Difference in Mean Scores of the Variables	4.1.2
Major Analysis	4.2
Investigation of Difference in Perceived Stress Job Satisfaction and Personality Characteristics of Teachers	4.2.1
Extent and Degree of Association of Job Satisfaction and Personality Characteristics with Perceived Stress of Teachers	4.2.2
Investigation of the Main and Interaction Effects of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers	4.2.3
Prediction of Perceived Stress and Job Satisfaction of Teachers	4.2.4
Identification of Latent Factors Underlying in the Teacher Stress Inventory (TSI) and Scale of Job Satisfaction (SJS)	4.2.5

The data for analysis were collected and analysed as per the procedure described in the previous chapter. This chapter deals with the details of the statistical analysis and interpretations of results which will light on the objectives of the study and hence on the validity of the hypotheses stated. These details are presented under the headings follow.

4.1. PRELIMINARY ANALYSIS

4.1.1. EXTENT AND LEVELS OF PERCEIVED STRESS AND JOB SATISFACTION OF TEACHERS

4.1.2. GENDER DIFFERENCE IN MEAN SCORES OF THE VARIABLES

4.2. MAJOR ANALYSIS

4.2.1. INVESTIGATION OF DIFFERENCE IN PERCEIVED STRESS JOB SATISFACTION AND PERSONALITY CHARACTERISTICS OF TEACHERS

4.2.2. EXTENT AND DEGREE OF ASSOCIATION OF JOB SATISFACTION AND PERSONALITY CHARACTERISTICS WITH PERCEIVED STRESS OF TEACHERS

4.2.3. INVESTIGATION OF THE MAIN AND INTERACTION EFFECTS OF JOB SATISFACTION AND PERSONALITY CHARACTERISTICS ON PERCEIVED STRESS OF TEACHERS

4.2.4. PREDICTION OF PERCEIVED STRESS AND JOB SATISFACTION OF TEACHERS

4.2.5. IDENTIFICATION OF LATENT FACTORS UNDERLYING IN THE TEACHER STRESS INVENTORY (TSI) AND SCALE OF JOB SATISFACTION (SJS)

4.1. PRELIMINARY ANALYSIS

As a first step of analysis, the important statistical indices such as *Mean, Median, Mode, Standard Deviation, Skewness* and *Kurtosis* of selected variables namely, Perceived Stress (Stressor-wise and Total Stress), Job Satisfaction (Component-wise and Total Score) and Personality Characteristics of Teachers were computed for the Total and relevant subsamples in order to study their nature of distribution. The summary of the statistical details are presented in Table 4.1.

TABLE 4.1

Statistical Characteristics of the Distribution of Scores of the variables (Component wise and Total score) for the Total sample and Subsamples

SAMPLE	STATISTICAL CHARACTERISTICS	PERCEIVED STRESS ²³⁰							JOB SATISFACTION ³²⁰								PERSONALITY CHARACTERISTICS	
		INTRINSIC TO THE JOB	ROLE OF TEACHERS	RELATIONSHIP AT WORK	CAREER DEVELOPMENT	ORGANISATIONAL STRUCTURE	HOME - WORK INTERFACE	PERCEIVED STRESS - TOTAL	PARENTS & STUDENTS	PAY & FRINGE BENEFITS	WORKING CONDITIONS	OPPORTUNITIES FOR ADVANCEMENT	PERSONAL WORTH	CO-TEACHERS	PRINCIPAL	JOB ITSELF		JOB SATISFACTION - TOTAL
Total Sample N = 300	Mean	28.30	27.02	18.35	10.13	30.42	21.13	135.37	56.55	25.95	19.39	13.63	15.34	29.67	42.09	57.40	260.02	100.39
	Median	28.00	27.00	18.00	10.00	30.00	21.00	136.00	57.00	26.00	20.00	14.00	16.00	30.00	44.00	58.00	262.00	100.50
	Mode	29.00	26.00	18.00	10.00	28.00	18.00	139.00	58.00	26.00	20.00	14.00	16.00	32.00	48.00	60.00	266.00	102.00
	Standard Deviation	3.87	3.40	3.43	2.41	4.76	4.52	12.24	6.88	5.91	3.46	2.25	2.97	5.06	7.28	7.70	25.83	8.67
	Skewness	0.20	0.33	-0.07	2.54	0.34	0.06	-0.23	-0.18	2.11	-0.07	-0.20	-0.55	-0.37	-0.74	-0.25	-0.03	0.03
	Kurtosis	0.08	0.45	0.53	22.34	1.08	0.41	0.20	0.58	19.15	0.78	0.71	-0.02	0.36	0.73	0.32	0.45	-0.35
Higher Secondary N = 100	Mean	28.03	26.78	18.75	9.95	29.93	21.60	135.04	56.90	26.66	19.30	13.37	15.49	28.61	41.65	58.01	259.99	102.05
	Median	28.00	26.00	19.00	10.00	30.00	22.00	136.50	56.50	26.50	20.00	14.00	16.00	30.00	44.00	58.50	260.50	102.5
	Mode	29.00	26.00	18.00	10.00	28.00	22.00	139.00	56.00	26.00	20.00	14.00	16.00	32.00	48.00	60.00	256.00	105.00
	Standard Deviation	3.69	3.32	3.33	1.87	4.51	4.30	11.87	7.34	5.15	3.68	2.41	3.21	5.19	7.97	8.09	28.87	9.05
	Skewness	0.07	0.23	-0.57	0.89	-0.28	-0.50	-0.65	0.03	-0.45	0.26	0.00	-0.56	-0.25	-0.85	-0.17	0.21	-0.25
	Kurtosis	-0.43	-0.06	1.79	2.53	-0.31	0.43	0.91	0.87	0.65	0.65	1.13	-0.24	-0.35	0.77	0.50	0.28	-0.22

contd.....

SAMPLE	STATISTICAL CHARACTERISTICS	PERCEIVED STRESS							JOB SATISFACTION								PERSONALITY CHARACTERISTICS	
		INTRINSIC TO THE JOB	ROLE OF TEACHERS	RELATIONSHIP AT WORK	CAREER DEVELOPMENT	ORGANISATIONAL STRUCTURE	HOME - WORK INTERFACE	PERCEIVED STRESS - TOTAL	PARENTS & STUDENTS	PAY & FRINGE BENEFITS	WORKING CONDITIONS	OPPORTUNITIES FOR ADVANCEMENT	PERSONAL WORTH	CO-TEACHERS	PRINCIPAL	JOB ITSELF		JOB SATISFACTION - TOTAL
High School N = 100	Mean	27.89	26.63	18.23	10.25	30.22	20.84	134.06	55.03	24.83	19.61	13.70	15.45	29.91	43.01	56.66	258.20	99.23
	Median	28.00	26.00	18.00	10.00	30.00	20.00	133.00	55.50	24.00	20.00	14.00	16.00	30.50	45.00	58.00	261.50	99.00
	Mode	26.00	26.00	19.00	10.00	30.00	18.00	123.00	54.00	24.00	20.00	14.00	16.00	32.00	46.00	62.00	239.00	90.00
	Standard Deviation	3.87	3.40	3.33	2.88	4.42	4.79	12.07	6.44	4.84	3.38	2.21	2.65	4.58	6.56	6.95	22.40	8.18
	Skewness	0.46	0.40	0.18	4.40	0.59	0.87	0.34	-0.42	-0.25	-0.33	-0.09	-0.77	-0.38	-0.38	-0.23	0.09	0.24
	Kurtosis	0.84	0.60	0.32	32.37	0.49	0.98	-0.08	0.17	0.06	2.29	0.39	1.06	1.40	0.16	0.14	0.08	-0.36
Primary N = 100	Mean	28.99	27.66	18.08	10.20	31.11	20.96	137.00	57.73	26.35	19.25	13.83	15.08	30.50	41.60	57.54	261.88	99.39
	Median	29.00	28.00	18.00	10.00	31.00	22.00	138.00	58.00	26.00	20.00	14.00	16.00	32.00	44.00	59.00	265.50	100.00
	Mode	29.00	26.00	18.00	10.00	32.00	22.00	137.00	58.00	26.00	20.00	14.00	16.00	32.00	48.00	60.00	266.00	99.00
	Standard Deviation	4.00	3.43	3.61	2.37	5.25	4.47	12.70	6.60	7.33	3.33	2.11	3.03	5.25	7.24	8.02	25.95	8.61
	Skewness	0.04	0.35	0.16	-0.36	0.48	-0.39	-0.43	-0.34	3.50	-0.24	-0.53	-0.39	-0.51	-0.78	-0.43	-0.49	0.08
	Kurtosis	0.03	0.92	0.16	0.70	1.84	0.16	0.29	0.58	23.98	-0.38	0.74	-0.38	0.64	0.68	0.27	0.85	-0.17

SAMPLE	STATISTICAL CHARACTERISTICS	PERCEIVED STRESS							JOB SATISFACTION								PERSONALITY CHARACTERISTICS	
		INTRINSIC TO THE JOB	ROLE OF TEACHERS	RELATIONSHIP AT WORK	CAREER DEVELOPMENT	ORGANISATIONAL STRUCTURE	HOME - WORK INTERFACE	PERCEIVED STRESS - TOTAL	PARENTS & STUDENTS	PAY & FRINGE BENEFITS	WORKING CONDITIONS	OPPORTUNITIES FOR ADVANCEMENT	PERSONAL WORTH	CO-TEACHERS	PRINCIPAL	JOB ITSELF		JOB SATISFACTION - TOTAL
Urban N = 120	Mean	28.55	27.13	18.99	10.17	31.62	21.56	138.02	56.70	25.73	19.20	13.78	15.46	29.11	41.12	57.30	258.39	99.24
	Median	28.00	27.00	19.00	10.00	32.00	22.00	139.00	58.00	26.00	20.00	14.00	16.00	30.00	43.00	58.00	258.00	100.00
	Mode	28.00	26.00	19.00	10.00	3.00	22.00	139.00	58.00	22.00	20.00	14.00	16.00	32.00	48.00	62.00	266.00	101.00
	Standard Deviation	4.09	3.71	3.52	2.24	5.65	4.64	12.44	7.15	5.20	3.56	2.05	3.16	5.74	8.40	8.16	28.37	8.90
	Skewness	0.14	0.15	0.06	0.07	0.11	-0.02	-0.46	-0.08	-0.03	-0.24	-0.19	-0.66	-0.30	-0.54	-0.34	0.10	-0.071
	Kurtosis	-0.06	0.18	0.29	1.26	0.70	0.77	0.37	0.66	-0.54	1.12	0.47	-0.01	-0.69	0.40	0.33	0.33	-0.32
Rural N = 180	Mean	28.14	26.95	17.93	10.11	29.62	20.85	133.60	56.46	26.09	19.51	13.54	15.26	30.05	42.73	57.47	261.11	101.16
	Median	28.00	26.00	18.00	10.00	29.50	20.50	133.00	57.00	26.00	20.00	14.00	16.00	30.00	45.00	58.00	265.00	102.00
	Mode	29.00	26.00	18.00	10.00	28.00	18.00	129.00	56.00	26.00	20.00	14.00	16.00	32.00	48.00	60.00	266.00	102.00
	Standard Deviation	3.72	3.19	3.31	2.52	3.86	4.43	11.81	6.71	6.35	3.39	2.37	2.85	4.53	6.38	7.40	24.01	8.46
	Skewness	0.23	0.49	-0.23	3.69	0.09	0.10	-0.13	-0.27	2.84	0.08	-0.18	-0.47	-0.31	-0.80	-0.17	-0.12	0.14
	Kurtosis	0.22	0.69	0.66	31.18	0.27	0.19	0.35	0.54	24.10	0.52	0.74	0.01	1.62	0.53	0.30	0.52	-0.45

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SAMPLE	STATISTICAL CHARACTERISTICS	PERCEIVED STRESS							JOB SATISFACTION								PERSONALITY CHARACTERISTICS	
		INTRINSIC TO THE JOB	ROLE OF TEACHERS	RELATIONSHIP AT WORK	CAREER DEVELOPMENT	ORGANISATIONAL STRUCTURE	HOME - WORK INTERFACE	PERCEIVED STRESS - TOTAL	PARENTS & STUDENTS	PAY & FRINGE BENEFITS	WORKING CONDITIONS	OPPORTUNITIES FOR ADVANCEMENT	PERSONAL WORTH	CO-TEACHERS	PRINCIPAL	JOB ITSELF		JOB SATISFACTION - TOTAL
Government N = 120	Mean	29.31	27.31	18.52	10.24	29.80	20.83	136.01	56.48	25.59	19.13	13.67	15.33	30.34	43.42	57.48	261.44	101.00
	Median	29.00	26.00	18.00	10.00	30.00	20.00	137.00	58.00	26.00	19.00	14.00	16.00	31.50	45.00	58.00	266.00	100.50
	Mode	29.00	26.00	18.00	10.00	32.00	18.00	139.00	58.00	26.00	20.00	14.00	16.00	32.00	48.00	60.00	266.00	99.00
	Standard Deviation	3.75	3.82	3.13	1.70	4.68	4.41	12.01	7.22	5.68	3.29	2.33	2.93	4.81	6.52	7.90	25.44	8.19
	Skewness	0.00	0.63	0.09	0.50	-0.03	0.16	-0.09	-0.28	-0.37	0.36	-0.51	-0.52	0.66	-0.91	-0.30	-0.60	0.24
	Kurtosis	-0.46	0.53	0.06	0.08	0.60	0.78	-0.18	1.48	0.00	1.20	0.89	0.24	1.66	1.20	1.02	1.10	-0.13
Private N = 180	Mean	27.63	26.83	18.24	10.06	30.83	21.33	134.94	56.60	26.18	19.56	13.61	15.35	29.23	41.20	57.35	259.08	99.98
	Median	28.00	27.00	18.00	10.00	30.00	22.00	136.00	57.00	26.00	20.00	14.00	16.00	30.00	42.50	58.00	260.50	100.50
	Mode	29.00	26.00	19.00	10.00	28.00	22.00	139.00	56.00	26.00	20.00	14.00	16.00	32.00	48.00	58.00	268.00	103.00
	Standard Deviation	3.82	3.09	3.62	2.78	4.77	4.60	12.40	6.66	6.07	3.57	2.20	3.00	5.18	7.64	7.58	26.12	8.98
	Skewness	0.37	-0.15	-0.11	2.73	0.56	-0.02	-0.31	-0.10	3.46	-0.31	0.04	-0.57	-0.20	-0.61	-0.22	0.32	-0.05
	Kurtosis	0.73	-0.30	0.63	21.00	1.26	0.26	0.42	-0.22	28.70	0.72	0.63	-0.14	-0.13	0.53	-0.17	0.24	-0.50

contd.....

SAMPLE	STATISTICAL CHARACTERISTICS	PERCEIVED STRESS							JOB SATISFACTION									PERSONALITY CHARACTERISTICS
		INTRINSIC TO THE JOB	ROLE OF TEACHERS	RELATIONSHIP AT WORK	CAREER DEVELOPMENT	ORGANISATIONAL STRUCTURE	HOME - WORK INTERFACE	PERCEIVED STRESS - TOTAL	PARENTS & STUDENTS	PAY & FRINGE BENEFITS	WORKING CONDITIONS	OPPORTUNITIES FOR ADVANCEMENT	PERSONAL WORTH	CO-TEACHERS	PRINCIPAL	JOB ITSELF	JOB SATISFACTION - TOTAL	
Male N = 150	Mean	28.31	27.60	18.65	10.11	30.85	21.09	136.61	56.47	25.31	19.07	13.31	15.25	29.77	41.95	57.27	258.40	100.33
	Median	28.50	27.00	18.50	10.00	31.00	21.00	138.00	57.00	25.00	19.50	14.00	16.00	31.00	43.00	58.00	260.00	100.00
	Mode	29.00	26.00	18.00	10.00	30.00	22.00	139.00	54.00	24.00	20.00	14.00	16.00	32.00	48.00	62.00	270.00	99.00
	Standard Deviation	3.89	3.44	3.64	2.17	4.81	4.51	11.87	6.95	5.00	3.29	2.13	2.96	5.30	7.58	7.98	25.92	8.37
	Skewness	0.15	0.51	0.13	1.58	0.47	0.03	-0.18	-0.16	-0.17	-0.42	-0.13	-0.60	-0.47	-0.65	-0.22	0.11	-0.09
	Kurtosis	0.52	0.73	0.36	0.10	0.86	0.35	-0.27	0.33	-0.16	1.27	1.01	0.44	0.32	0.96	0.08	0.16	-0.25
Female N = 150	Mean	28.29	26.45	18.06	10.15	29.99	21.18	134.13	56.64	26.58	19.70	13.96	15.43	29.57	42.23	57.53	261.65	100.45
	Median	28.00	26.00	18.00	10.00	30.00	21.50	134.00	57.50	26.00	20.00	14.00	16.00	30.00	44.00	59.00	266.00	101.00
	Mode	26.00	26.00	18.00	10.00	28.00	18.00	129.00	58.00	26.00	20.00	14.00	16.00	30.00	48.00	60.00	266.00	102.00
	Standard Deviation	3.87	3.28	3.18	2.63	4.68	4.55	12.51	6.82	6.66	3.60	2.32	2.99	4.82	7.00	7.43	25.73	9.00
	Skewness	0.26	0.10	-0.46	4.05	0.18	0.08	-0.25	-0.21	2.93	0.15	-0.33	-0.51	-0.26	-0.84	-0.29	-0.17	0.13
	Kurtosis	-0.32	-0.14	0.51	31.81	1.32	0.51	0.58	0.92	23.00	0.31	0.70	-0.42	0.44	0.43	0.67	0.90	-0.42

From the Table of descriptive statistics, it can be seen that there is not *much variation* between values of the three measures of central tendencies viz., mean, median and mode of the variables. The values of coefficient of skewness or the index of asymmetry is near to *zero*. The measures of kurtosis for the variables do not depart *appreciately* from that of normality. This suggests that the select variables of the study fulfils the properties of a *normal distribution*.

The distribution of the scores of the variables such as Perceived Stress (Total), Job Satisfaction (Total) and Personality Characteristics for Total Sample were graphically plotted (Smoothed frequency curve) and are given as Figures 4-1, 4-2, and 4-3.

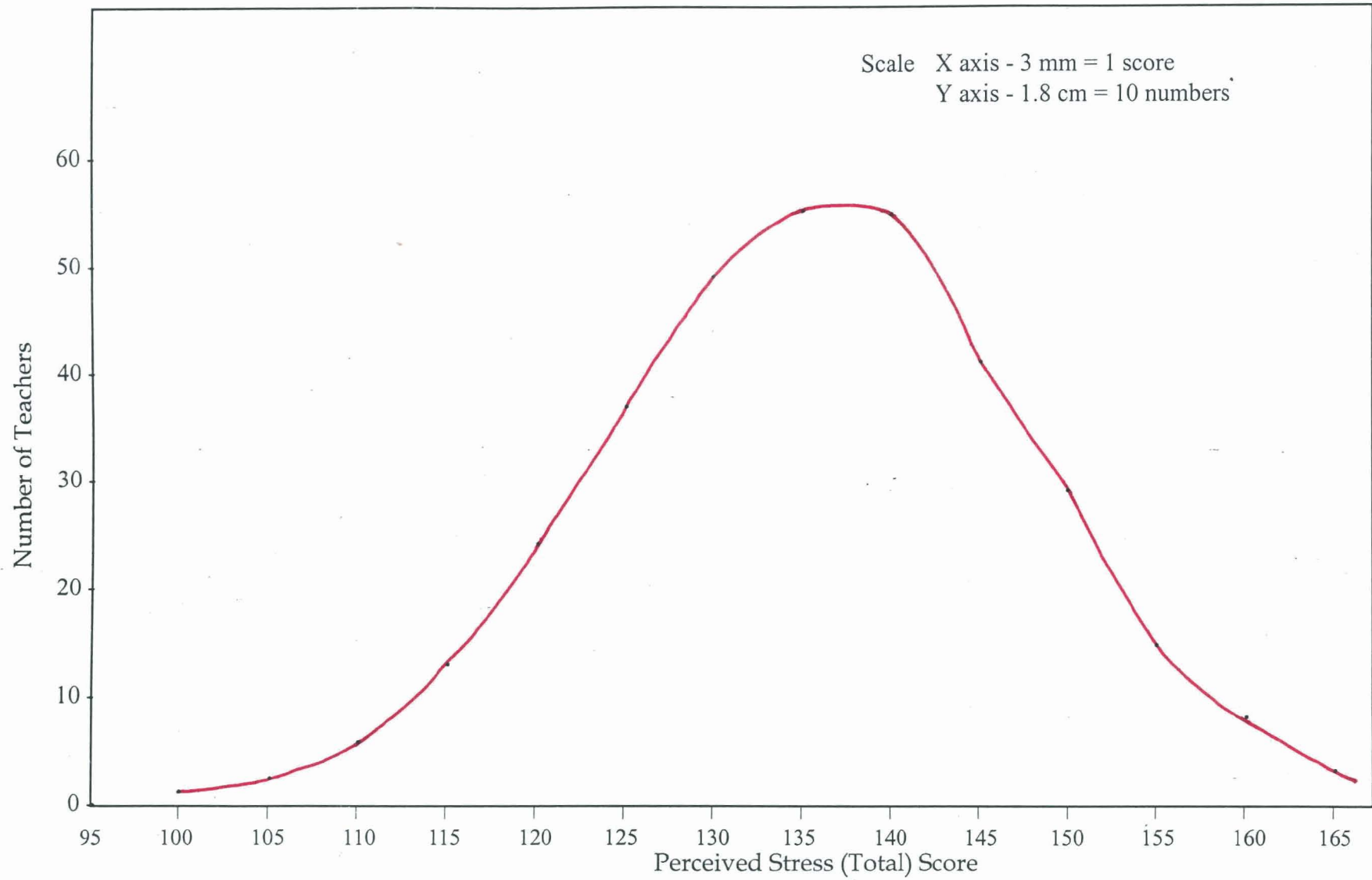


FIGURE 4 - 1 Frequency Curve of Perceived Stress (Total) for Total Sample

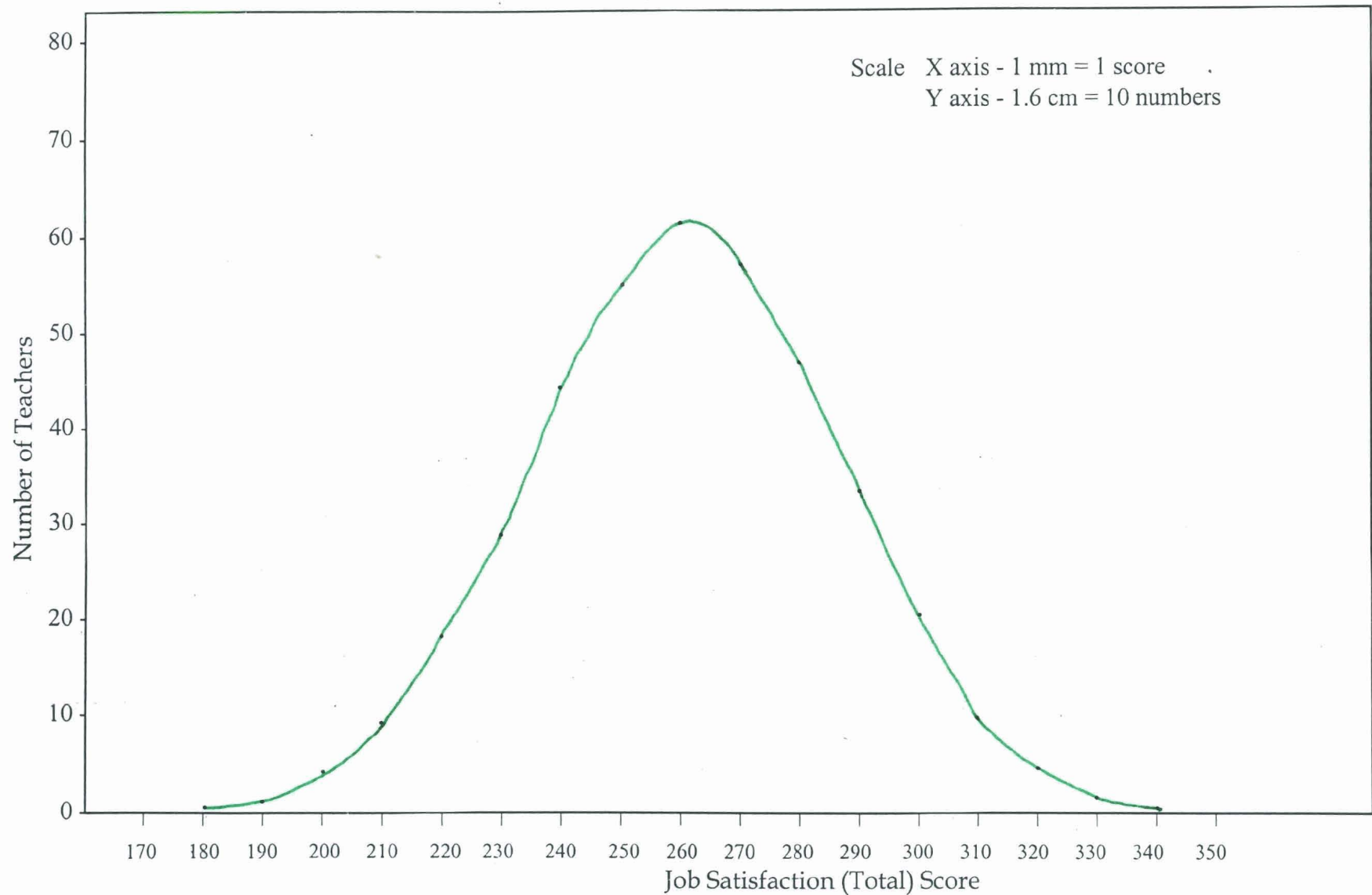


FIGURE 4 - 2 Frequency Curve of Job Satisfaction (Total) for Total Sample

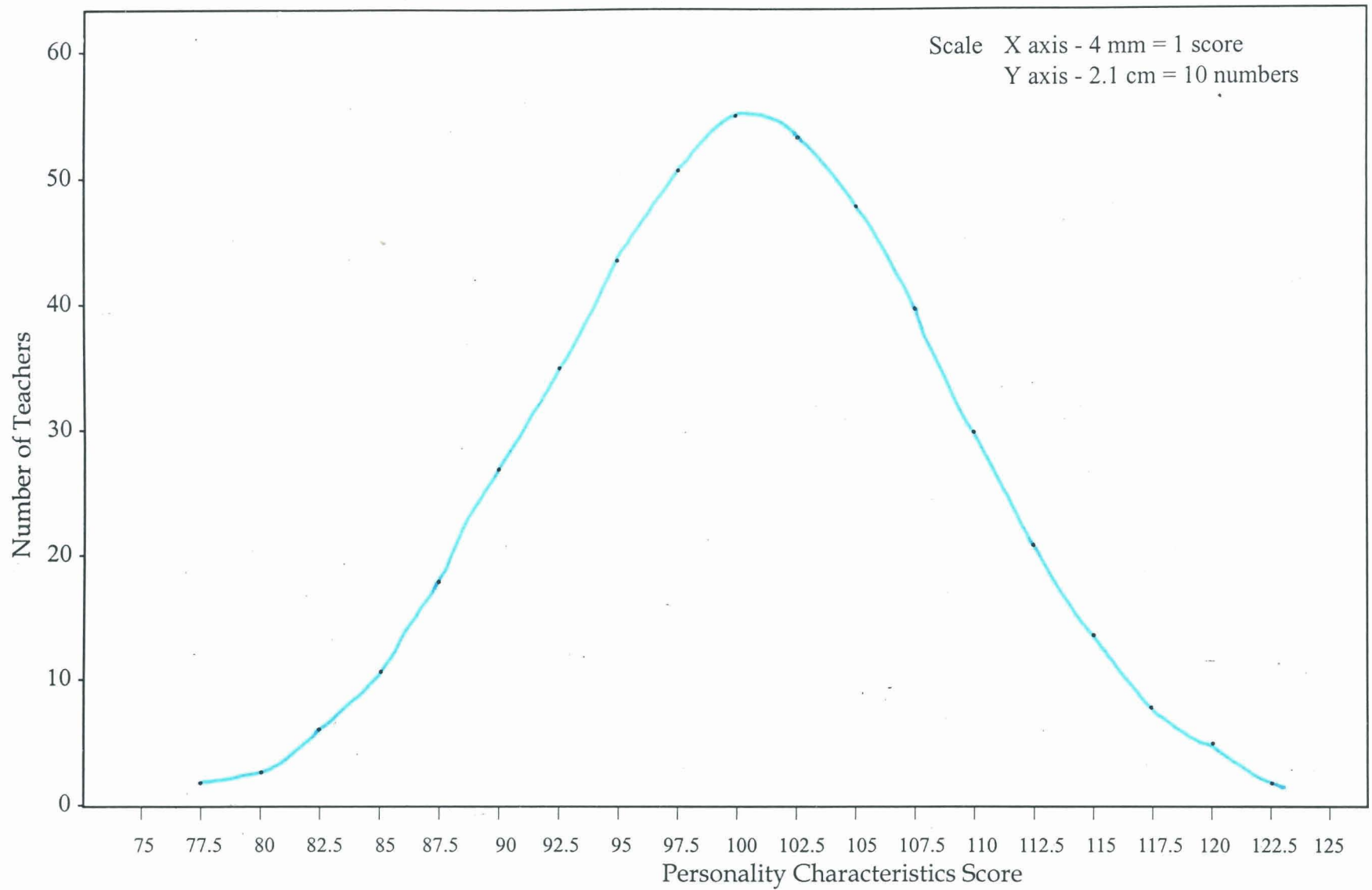


FIGURE 4 - 3 Frequency Curve of Personality Characteristics for Total Sample

The graphs reveal that all the distributions *near* to normality. The near normal distributions obtained suggest that the sample chosen for the study is fairly representative sample of the population.

4.1.1. EXTENT AND LEVELS OF PERCEIVED STRESS AND JOB SATISFACTION OF TEACHERS

The investigator made an attempt to study the *extent* and *levels* of Perceived Stress and Job Satisfaction of Teachers. This is done with a view to report how much per cent of the Teachers (Total and Subsamples) perceived High, Average and Low levels of Perceived Stress and Job Satisfaction.

For this purpose, Perceived Stress (Total) score and Job Satisfaction (Total) were classified in to High, Average and Low levels using mean as a cut off point. The mean Perceived Stress (Total) score ± 1 SD is classified as having *High* and *Low* levels of Perceived Stress. Teachers', whose score fall in between $M \pm 1$ SD is considered as having *Average* level of Perceived Stress.

The mean Job Satisfaction (Total) score of different categories of Teachers ± 1 SD is considered as Teachers having *High* Job Satisfaction and *Low* Job Satisfaction. The Teachers' score which fall in between $M \pm 1$ SD is taken as having *Average* Job Satisfaction.

To get a visual representation regarding the *extent* and *different levels* of Perceived Stress and Job Satisfaction, respective *Pie diagrams* were constructed and explained. The sample used for this purpose were Total sample, Higher Secondary , High School and Primary School Teachers.

4.1.1.1. Extent and Levels of Perceived Stress and Job Satisfaction in Total Sample

The extent and different levels of Perceived Stress and Job Satisfaction (High, Average and Low) for the Total sample were examined and the details are presented in Figure 4-4 and 4-5.

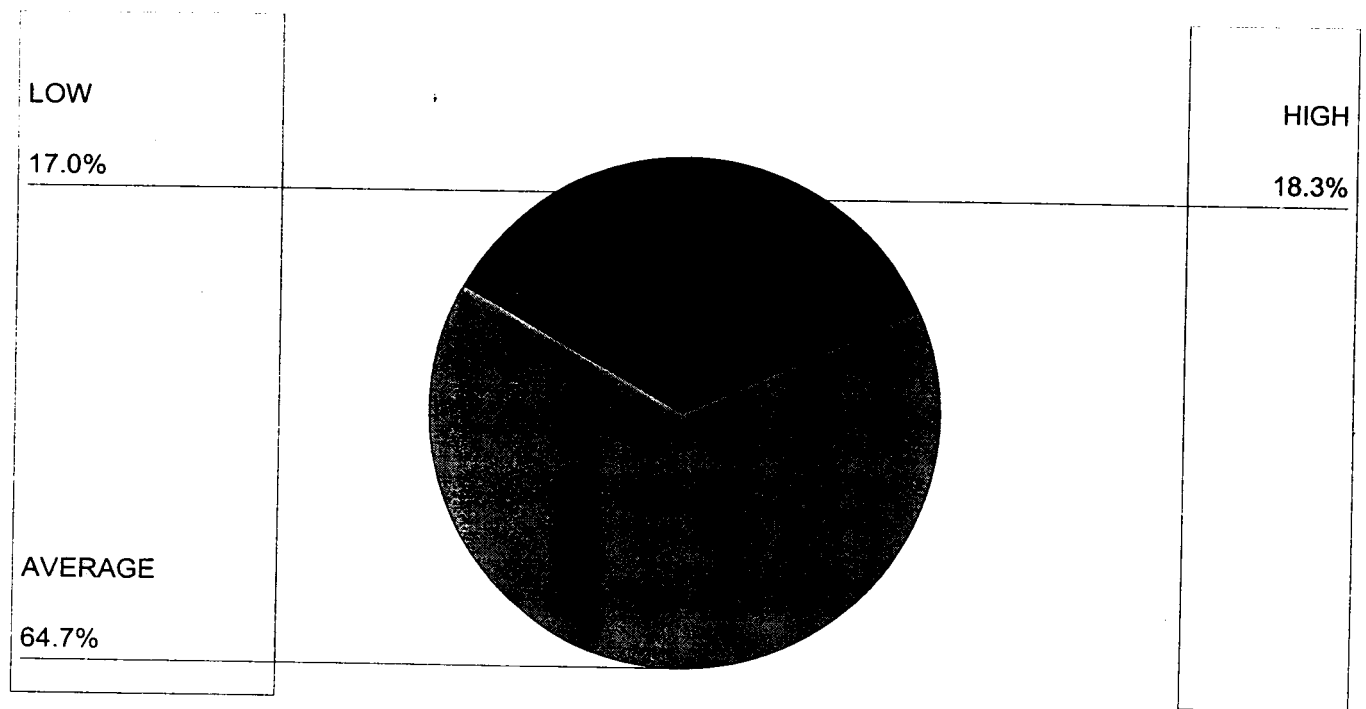


FIGURE 4-4 Extent and Levels of Perceived Stress in Total Sample

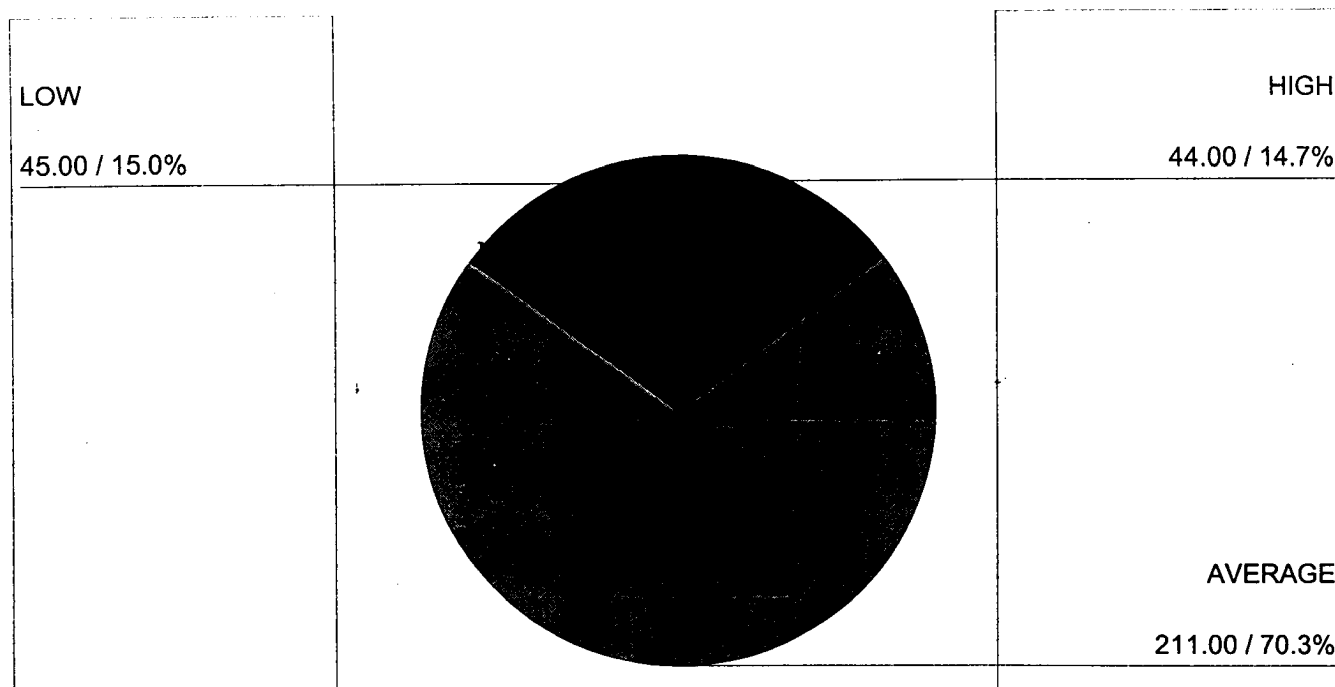


FIGURE 4-5 Extent and Levels of Job Satisfaction in Total Sample

As per Figure 4-4, *18.3 per cent* of the Teachers perceived their profession as *Highly stressful* whereas, *17 per cent* reported that they feel *Low level* of stress in their job. But among the Total sample *64.7 per cent* experience *Average level* of stress in teaching profession.

As seen in Figure 4-5, *14.7 per cent* Teachers of the Total sample have *High* Job Satisfaction whereas *70.3 per cent* reported Average level of satisfaction. *Low level* of Job Satisfaction is reported by *15 per cent* of Total Teachers.

4.1.1.2 Extent and Levels of Perceived Stress and Job Satisfaction in Higher Secondary School Teachers

Higher Secondary School Teachers in the sample were studied to understand the extent and levels of Perceived Stress (Total) and Job Satisfaction (Total). The details are presented in Figure 4-6 and 4-7.

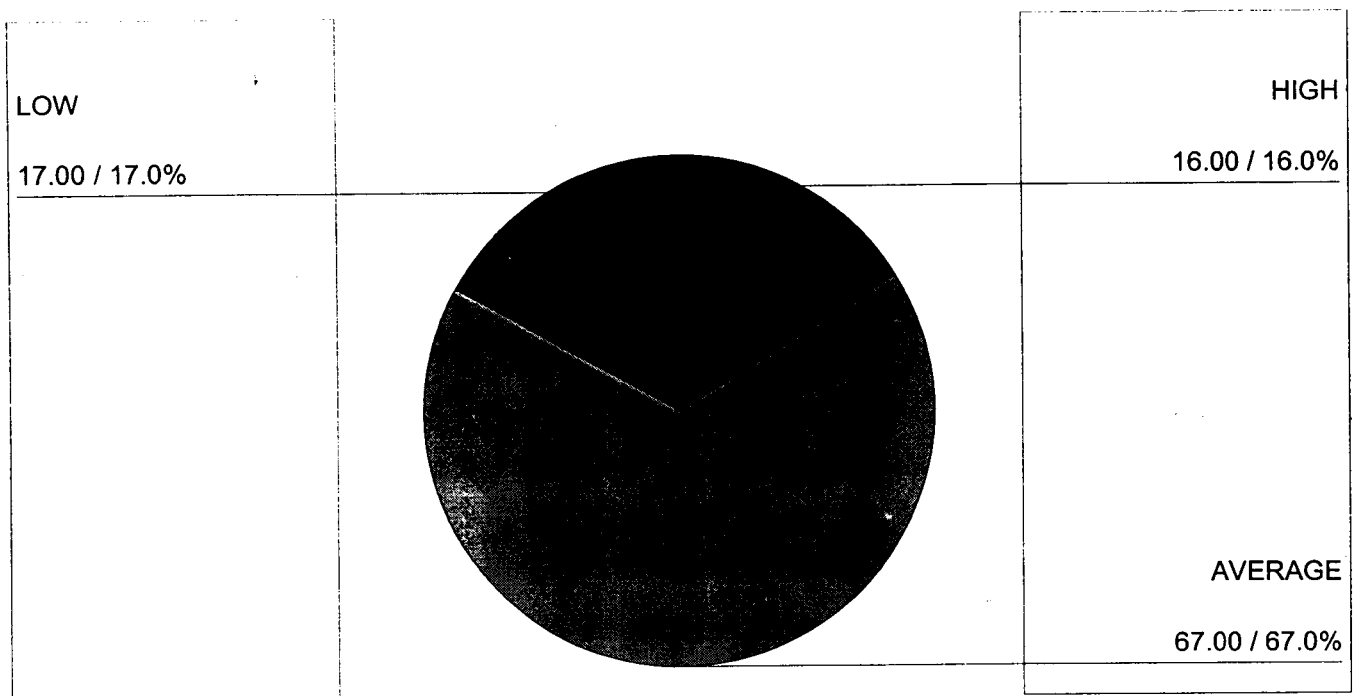


FIGURE 4-6 Extent and Levels of Perceived Stress of Higher Secondary School Teachers

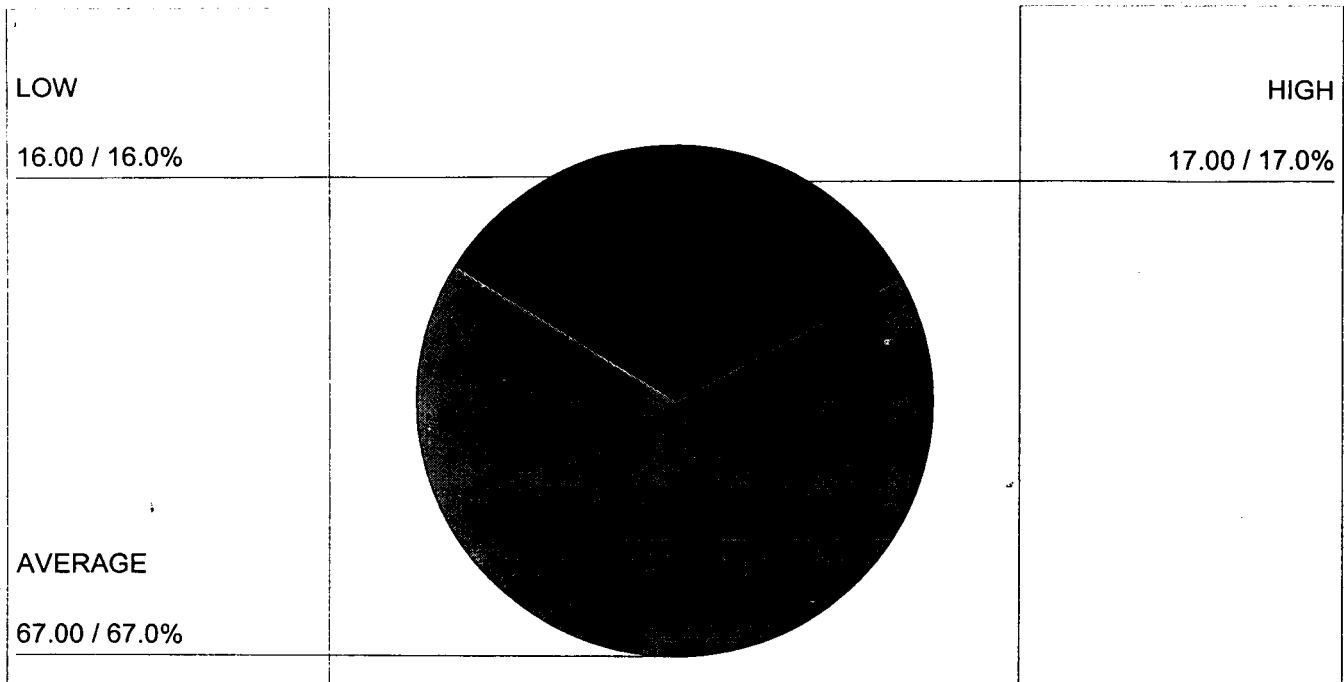


FIGURE 4-7 Extent and Levels of Job Satisfaction of Higher Secondary School Teachers

Figure 4-6 reveals that of the 100 Higher Secondary School Teachers, *High*, *Average* and *Low* levels of Perceived Stress were 16, 67 and 17 per cent respectively.

In the case of Job Satisfaction (Figure 4-7) 17 *per cent* of the Higher Secondary School Teachers (N = 100) experience *High level* Job Satisfaction. The *Low level* Job Satisfaction group comprises 16 *per cent*, and 67 *per cent* of Higher Secondary School Teachers feel *Average level* of Job Satisfaction.

4.1.1.3. Extent and Levels of Perceived Stress and Job Satisfaction in High School Teachers

Details of the extent and levels of Perceived Stress and Job Satisfaction among High School Teachers are presented in Figure 4-8 and 4-9 respectively.

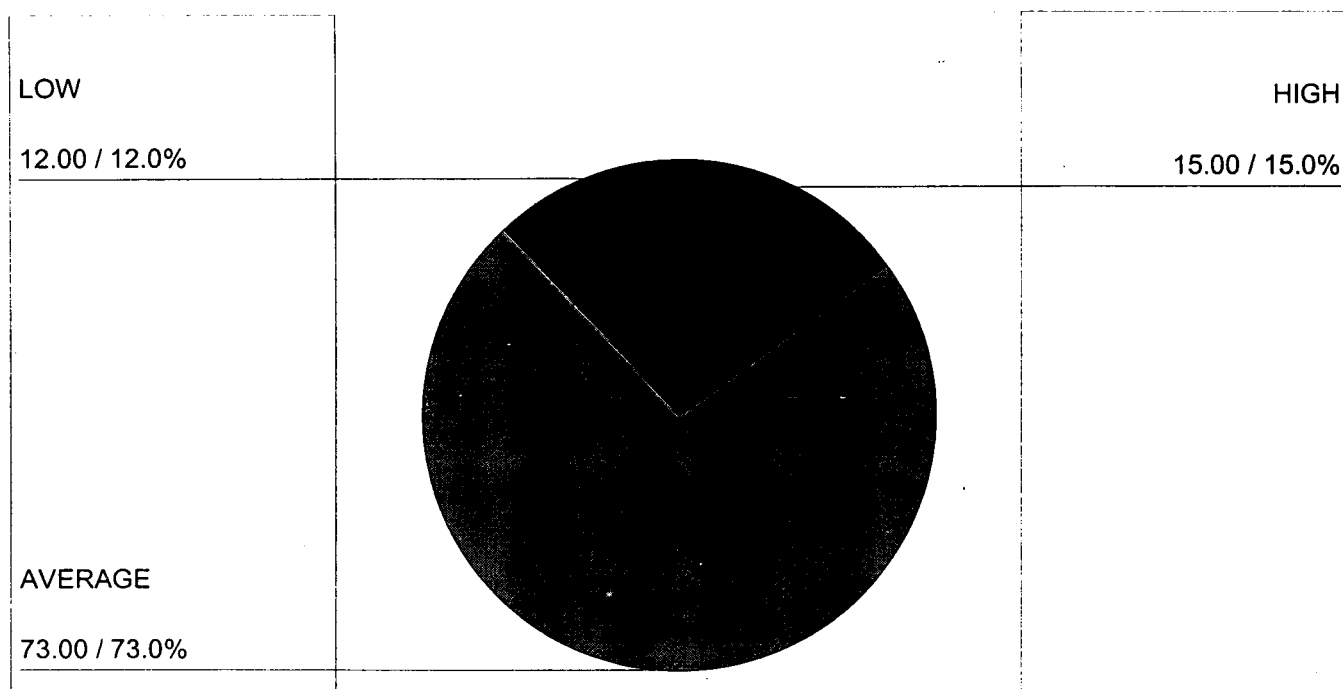


FIGURE 4-8 Extent and Levels of Perceived Stress of High School Teachers

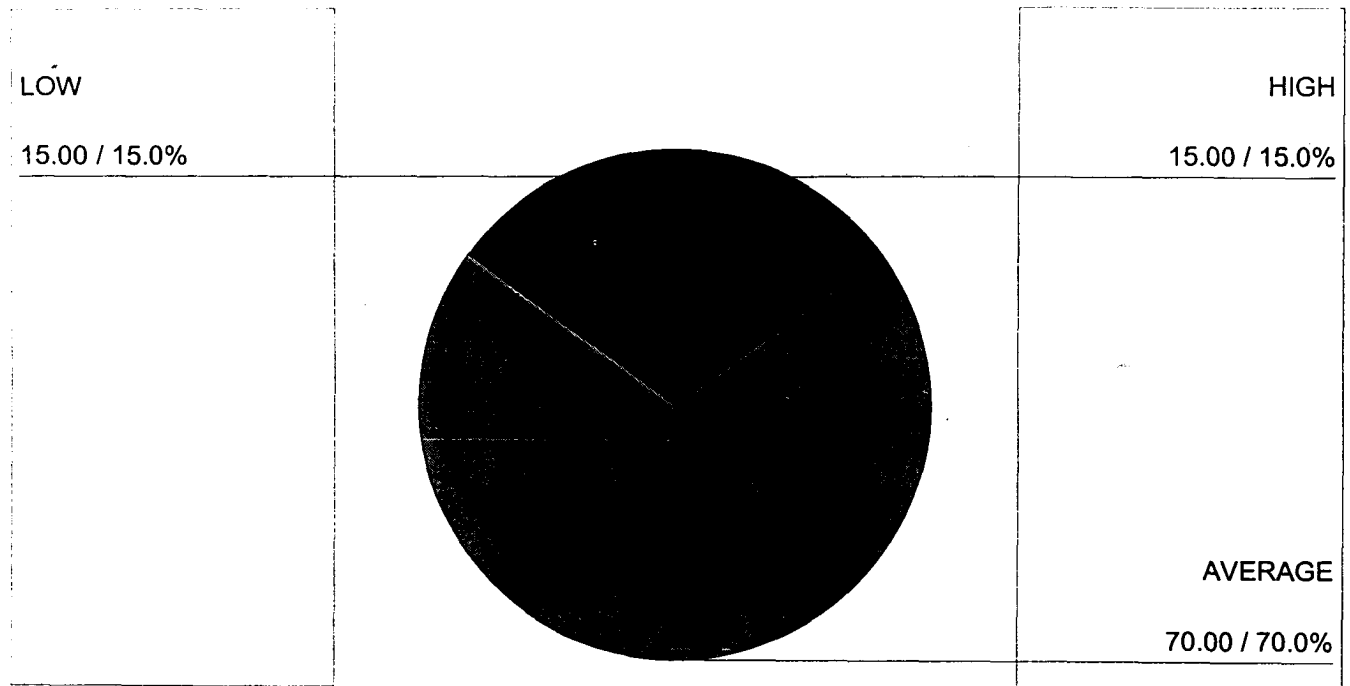


FIGURE 4-9 Extent and Levels of Job Satisfaction of High School Teachers

Among the 100 High School Teachers participated in the study *15 per cent* have *High level* of Perceived Stress. *Average level* of Perceived Stress was reported by *73 per cent* of the High School Teachers. Twelve per cent have *Low level* of Perceived Stress.

As per Figure 4-9 the percentage of High School Teachers having different levels of Job Satisfaction are *15 per cent* (High), *70 per cent* (Average) and *15 per cent* (Low).

4.1.1.4. Extent and Levels of Perceived Stress and Job Satisfaction in Primary School Teachers

Figure 4-10 and 4-11 reveals the extent and levels of Perceived Stress (Total) and Job Satisfaction (Total) of Primary School Teachers.

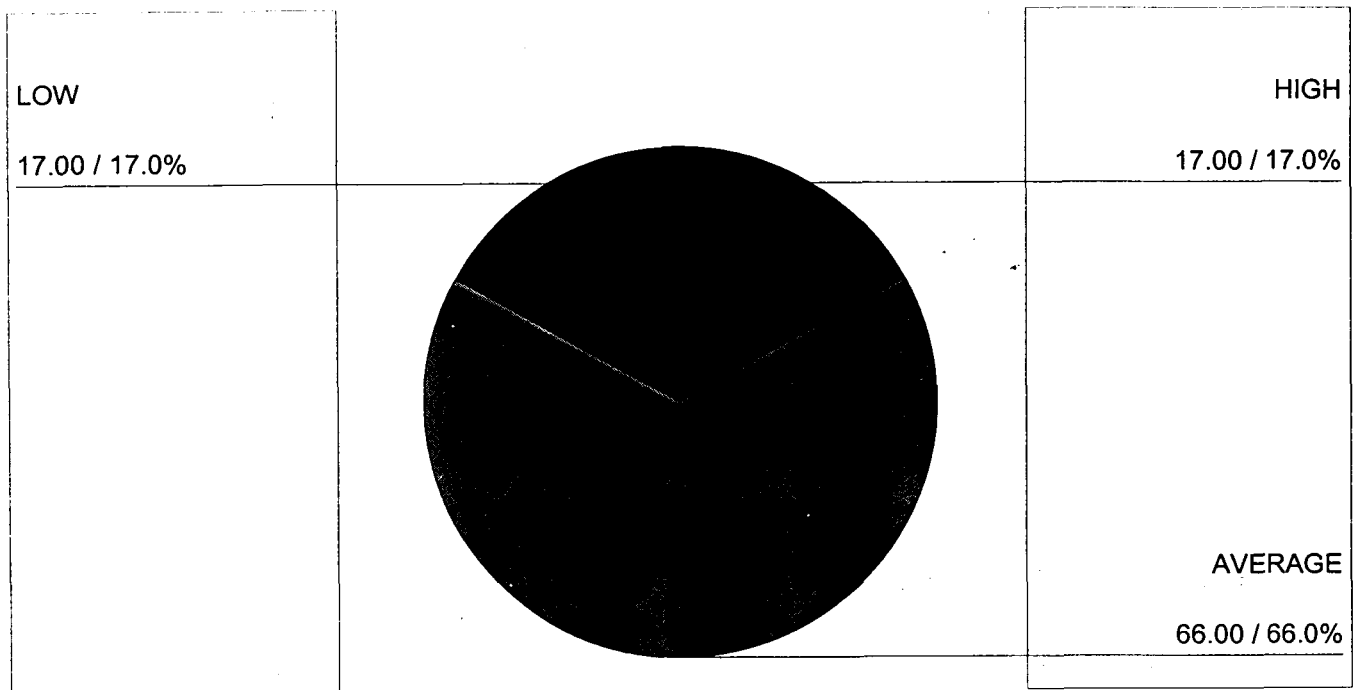


FIGURE 4-10 Extent and Levels of Perceived Stress of Primary School Teachers

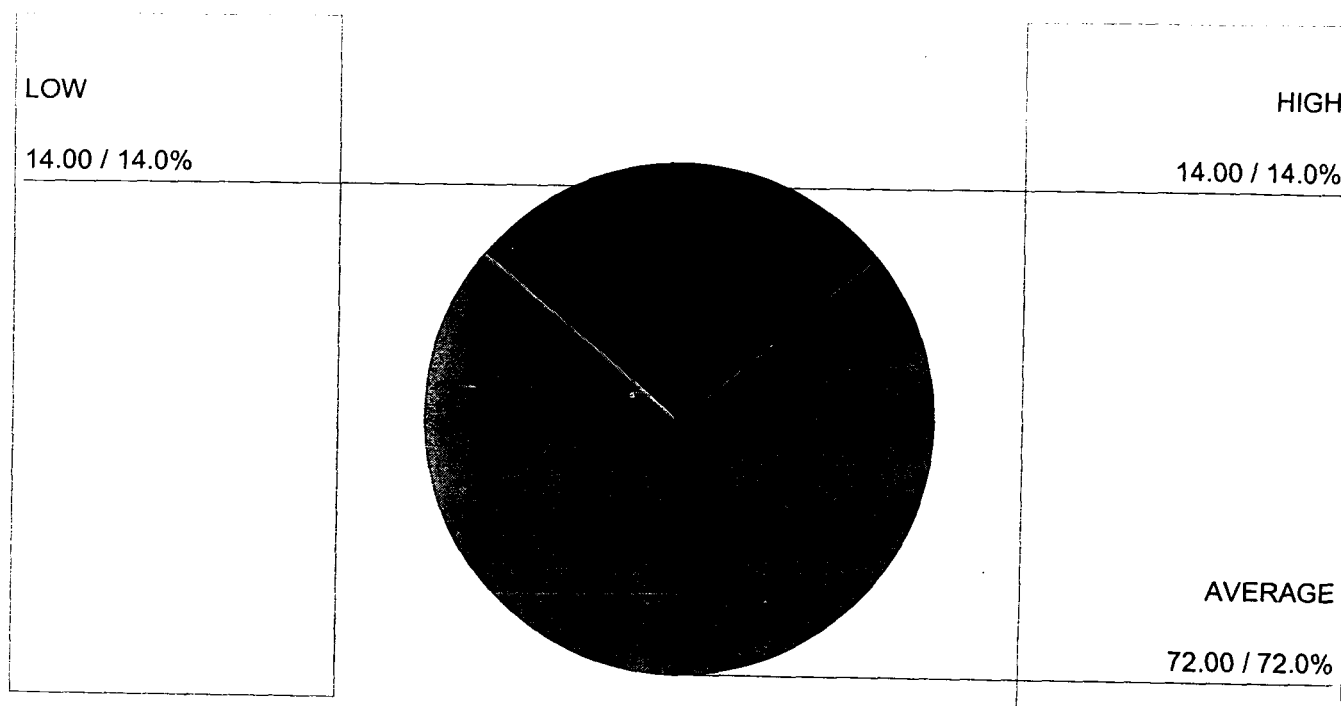


FIGURE 4-11 Extent and Levels of Job Satisfaction of Primary School Teachers

Among the Primary School Teachers (Figure 4-10) *17 per cent* each experience the *High* and *Low stress* level, and *66 per cent* Teachers experience *Average* level of stress.

Figure 4-11 depicts the extent and different levels of Job Satisfaction of Primary School Teachers. As per the figure, *14 per cent* Primary School Teachers experience *High* Job Satisfaction Level. *Seventy two per cent* experience *Average* and *14 per cent* experience *Low* Job Satisfaction Level.

4.1.1.5. Summary of the Extent and Levels of Perceived Stress and Job Satisfaction of Teachers

In this part of the report, a summary of the extent and levels of Perceived Stress and Job Satisfaction of Teachers in Total sample, Higher Secondary, High School and Primary School are presented as Table 4.2 to get an overall view regarding these two variables.

TABLE 4.2
Summary of the Extent and
Levels of Perceived Stress and Job Satisfaction of Teachers

Type of Sample	Perceived Stress						Job Satisfaction					
	High		Average		Low		High		Average		Low	
	N	%	N	%	N	%	N	%	N	%	N	%
Total (N=300)	55	18.3	194	64.7	51	17	44	14.7	211	70.3	45	15
Higher Secondary (N=100)	16	16	67	67	17	17	17	17	67	67	16	16
High School (N=100)	15	15	73	73	12	12	15	15	70	70	15	15
Primary (N=100)	17	17	66	66	17	17	14	14	72	72	14	14

From the Table 4.2 it can be seen that *18.3 per cent* of the Total sample experience *high level* Perceived Stress, and the Teachers working in High Schools are noted for their *Lowest* percentage of low stress level (12 per cent) group.

In the case of Job Satisfaction, *17 per cent* of Higher Secondary School Teachers were characterised by *Higher* level of Job Satisfaction. Very few

Teachers in the Primary Schools reported the *lowest* Job Satisfaction level (14 per cent).

4.1.2. GENDER DIFFERENCE IN MEAN SCORES OF THE VARIABLES

Investigation of Gender difference was done as a part of Preliminary Analysis. In this section, Gender difference in *Perceived Stress, Job Satisfaction* and *Personality Characteristics* of Teachers were tested for significance by comparing the mean scores of the variables obtained for Male and Female Teachers. For this, two-tailed test of significance of difference between means of large independent samples was used. In the present study, the investigator studied the Gender differences on the basis of Total Sample, Type of Institution, Locale and Type of Management.

4.1.2.1. Gender Difference in Perceived Stress, Job Satisfaction and Personality Characteristics for Total Sample

Gender difference was investigated both on Independent and Dependent variables for Total Sample Gender difference was studied for Perceived Stress (Stressor wise and Total Stress) and Job Satisfaction (Component wise and Total score). For this, means and standard deviations of the variables were subjected to t-test and results were examined. The data and results of the t-test are presented in Table 4.3.

TABLE 4.3

**Data and Results of t-test Between Means of
Variables for Male and Female Teachers in the Total Sample**

Variables	MALE			FEMALE			t-value	Level of Significance
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	150	28.31	3.89	150	28.29	3.87	0.04	NS
Role of Teachers	150	27.60	3.44	150	26.45	3.28	2.97	0.01
Relationship at Work	150	18.65	3.64	150	18.06	3.18	1.49	NS
Career Development	150	10.11	2.17	150	10.15	2.63	0.14	NS
Organisational Structure	150	30.85	4.81	150	29.99	4.68	1.56	NS
Home Work Interface	150	21.09	4.51	150	21.18	4.55	0.18	NS
Perceived Stress-Total	150	136.61	11.87	150	134.13	12.51	1.76	NS
Parents and Students	150	56.47	6.95	150	56.64	6.82	0.22	NS
Pay and Fringe Benefits	150	25.31	5.00	150	26.58	6.66	1.86	NS
Working Conditions	150	19.07	3.29	150	19.70	3.60	1.57	NS
Opportunities for Advancement	150	13.31	2.13	150	13.96	2.32	2.54	0.05
Personal Worth	150	15.25	2.96	150	15.43	2.99	0.54	NS
Co-Teachers	150	29.77	5.30	150	29.57	4.82	0.34	NS
Principal	150	41.95	7.58	150	42.23	7.00	0.33	NS
Job Itself	150	57.23	7.98	150	57.53	7.43	0.29	NS
Job Satisfaction - Total	150	258.40	25.92	150	261.65	25.73	1.09	NS
Personality Characteristics	150	100.33	8.37	150	100.45	9.00	0.13	NS

NS - Not Significant.

Significant mean difference at 0.01 level was noted for one stressor, *Role of Teachers* and a significant mean difference at 0.05 level for one component of Job Satisfaction, *Opportunities for Advancement*. This indicates that Males and Females differ statistically in these aspects.

Male Teachers experience more stress due to role ambiguity, role conflict and diverse responsibility incurred on them, than Female Teachers, because the mean score is larger for Male Teachers.

Significant Gender difference exists in Opportunities for Advancement for Male and Female Teachers of Total Sample. From the results it can be inferred that *Female Teachers are more satisfied* than Male Teachers in the case of promotion and opportunities available to learn new things, through the profession due to the high mean score.

No Significant Gender Difference was noticed for the remaining stressors viz., Intrinsic to the Job, Relationship at Work, Career Development, Organisational Structure, Home Work Interface and components of Job Satisfaction viz., Parents and Students, Pay and Fringe Benefits, Working Conditions, Personal Worth, Co-Teachers, Principal and Job Itself, and Personality Characteristics. Male and Female Teachers working in Primary, High School, and Higher Secondary School are same in case of these stressors, components of Job Satisfaction and Personality Characteristics.

4.1.2.2. Gender Difference in Perceived Stress, Job Satisfaction and Personality Characteristics of Higher Secondary School Teachers

The means and standard deviations of Perceived Stress, Job Satisfaction and Personality Characteristics of Higher Secondary School Teachers were subjected to the test of significance of difference between means and results were studied. The data and results of the t-test are presented in Table 4.4.

TABLE 4.4

**Data and Results of t-test Between Means of
Variables for Male and Female Higher Secondary School Teachers**

Variables	MALE			FEMALE			t-value	Level of Significance
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	50	28.46	3.54	50	27.60	3.81	1.17	NS
Role of Teachers	50	27.06	3.16	50	26.50	3.48	0.84	NS
Relationship at Work	50	18.72	3.35	50	18.78	3.35	0.09	NS
Career Development	50	9.88	1.75	50	10.02	2.01	0.37	NS
Organisational Structure	50	30.44	4.15	50	29.42	4.84	1.13	NS
Home Work Interface	50	22.00	4.21	50	21.20	4.39	0.93	NS
Perceived Stress-Total	50	136.56	10.38	50	133.52	13.12	1.29	NS
Parents and Students	50	57.38	6.61	50	56.42	8.05	0.65	NS
Pay and Fringe Benefits	50	26.20	4.86	50	27.12	5.44	0.89	NS
Working Conditions	50	19.14	3.19	50	19.46	4.14	0.43	NS
Opportunities for Advancement	50	13.06	2.14	50	13.68	2.63	1.29	NS
Personal Worth	50	15.66	2.69	50	15.32	3.68	0.53	NS
Co-Teachers	50	29.30	4.93	50	27.92	5.40	1.33	NS
Principal	50	41.52	9.01	50	41.78	6.87	0.16	NS
Job Itself	50	58.38	8.04	50	57.64	8.20	0.46	NS
Job Satisfaction - Total	50	260.64	26.27	50	259.34	31.52	0.22	NS
Personality Characteristics	50	101.56	8.50	50	102.54	9.62	0.54	NS

NS - Not Significant.

No significant mean difference even at 0.05 level was obtained, for Perceived Stress, Job Satisfaction and Personality Characteristics and for their components. This indicates that *no Gender difference exists* in Job Satisfaction (Component wise and Total score), Personality Characteristics and Perceived Stress (Stressor wise and Total Stress) of Male and Female Teachers of Higher Secondary Schools.

From the results it can be observed that Male and Female Teachers of Higher Secondary School experience *same level of stress* due to different stressors. Job Satisfaction level and Personality Characteristics of Male and Female Teachers are *almost equal*.

4.1.2.3. Gender Difference in Perceived Stress, Job Satisfaction and Personality Characteristics of High School Teachers

Gender difference in Independent and Dependent variables were studied for High School Teachers by two tailed test of significance of difference between means. For this purpose, the means and standard deviations of the variables of Male and Female High School Teachers were used. The data and results of the t-test are presented in Table 4.5.

TABLE 4.5

**Data and Results of t-test Between Means of
Variables for Male and Female High School Teachers**

Variables	MALE			FEMALE			t-value	Level of Significance
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	50	27.50	3.83	50	28.28	3.90	1.01	NS
Role of Teachers	50	27.42	3.45	50	25.84	3.20	2.37	0.05
Relationship at Work	50	18.86	3.56	50	17.60	2.98	1.92	NS
Career Development	50	10.30	2.10	50	10.20	3.51	0.17	NS
Organisational Structure	50	30.84	4.81	50	29.60	3.95	1.41	NS
Home Work Interface	50	20.64	4.79	50	21.04	4.83	0.42	NS
Perceived Stress-Total	50	135.56	12.30	50	132.56	11.76	1.25	NS
Parents and Students	50	54.42	6.62	50	55.64	6.27	0.95	NS
Pay and Fringe Benefits	50	24.38	4.90	50	25.28	4.77	0.93	NS
Working Conditions	50	18.80	3.41	50	20.42	3.19	2.46	0.05
Opportunities for Advancement	50	13.40	2.07	50	14.00	2.33	1.36	NS
Personal Worth	50	14.94	2.76	50	15.96	2.47	1.95	NS
Co-Teachers	50	29.18	4.85	50	30.64	4.21	1.61	NS
Principal	50	42.56	6.29	50	43.46	6.86	0.68	NS
Job Itself	50	55.80	6.89	50	57.52	6.98	1.24	NS
Job Satisfaction - Total	50	253.48	22.03	50	262.92	21.98	2.15	0.05
Personality Characteristics	50	98.68	8.31	50	100.78	8.00	1.29	NS

NS - Not Significant.

Significant mean difference at 0.05 level was noted for the stressor *Role of Teachers* and for the Job Satisfaction component *Working Conditions*. And also for *Job Satisfaction Total*. This indicates that Gender difference exists in the effect of *Role of Teachers* as a stressor. *Working Conditions* and *Total Job Satisfaction* level of Male and Female Teachers differ significantly.

From the results obtained, it can be concluded that *Male High School Teachers* experience, more stress than their Female counter parts because high mean score is attached with the Males. But at the same time *Female Teachers* of High Schools, are *more satisfied* (Due to the high mean score) regarding physical facilities available for Teachers and students, place of work, and in the attitude of Government towards Female Teachers than Male Teachers. In addition, *Female Teachers* expressed, *more Job Satisfaction* than Male Teachers.

No Significant difference was obtained for the remaining stressors and components of Job Satisfaction. Personality Characteristics of Male and Female Teachers working in High Schools are almost the same since no significant difference between means was noted.

4.1.2.4. Gender Difference in Perceived Stress, Job Satisfaction and Personality Characteristics of Primary School Teachers

Gender difference in Perceived Stress, Job Satisfaction and Personality Characteristics of Primary School Teachers were examined. For this purpose the means and standard deviations of the variables for Male and Female Teachers were subjected to the two-tailed test of significance of difference. The data and results of the t-test are given in Table 4.6.

TABLE 4.6

**Data and Results of t-test Between Means of
Variables for Male and Female Primary School Teachers**

Variables	MALE			FEMALE			t-value	Level of Significance
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	50	28.98	4.20	50	29.00	3.83	0.02	NS
Role of Teachers	50	28.32	3.64	50	27.00	3.10	1.95	NS
Relationship at Work	50	18.36	4.04	50	17.80	3.14	0.77	NS
Career Development	50	10.16	2.60	50	10.24	2.15	0.17	NS
Organisational Structure	50	31.26	5.45	50	30.96	5.10	0.28	NS
Home Work Interface	50	20.62	4.47	50	21.30	4.50	0.76	NS
Perceived Stress-Total	50	137.70	12.92	50	136.30	12.58	0.55	NS
Parents and Students	50	57.60	7.29	50	57.86	5.91	0.20	NS
Pay and Fringe Benefits	50	25.36	5.17	50	27.34	8.94	1.36	NS
Working Conditions	50	19.28	3.32	50	19.22	3.36	0.09	NS
Opportunities for Advancement	50	13.46	2.20	50	14.20	2.00	1.77	NS
Personal Worth	50	15.14	3.39	50	15.02	2.66	0.20	NS
Co-Teachers	50	30.84	6.00	50	30.16	4.40	0.65	NS
Principal	50	41.76	7.32	50	41.44	7.22	0.22	NS
Job Itself	50	57.64	8.84	50	57.44	7.20	0.12	NS
Job Satisfaction - Total	50	261.08	28.81	50	262.68	23.00	0.31	NS
Personality Characteristics	50	100.74	8.18	50	98.04	8.89	1.58	NS

NS - Not Significant.

No Significant mean difference even at 0.05 level was obtained for any of the three variables such as Perceived Stress (Stressor wise and Total Stress), Job Satisfaction (Component wise and Total score) and Personality Characteristics studied. This indicates that Gender difference is *not existing* in Perceived Stress, Job Satisfaction and Personality Characteristics between Male and Female Teachers of Primary Schools. The Stress, Job Satisfaction and Personality Characteristics of Male and Female Primary School Teachers are *almost the same*.

4.1.2.5. Gender Difference in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers in the Urban Schools

Male and Female Teachers in the Urban Schools were examined to understand whether Gender difference in Perceived Stress (Stressor wise and Total Stress), Job Satisfaction (Component wise and Total Score) and Personality Characteristics exist or not. Data and results of the t-test in this regard are given in Table 4.7.

TABLE 4.7
Data and Results of t-test Between Means of
Variables for Male and Female Teachers in the Urban Schools

Variables	MALE			FEMALE			t-value	Level of Significance
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	60	28.22	4.03	60	28.88	4.15	0.89	NS
Role of Teachers	60	27.62	3.68	60	26.65	3.72	1.43	NS
Relationship at Work	60	19.33	4.00	60	18.65	2.95	1.06	NS
Career Development	60	10.27	2.42	60	10.07	2.06	0.49	NS
Organisational Structure	60	32.58	5.64	60	30.65	5.55	1.89	NS
Home Work Interface	60	21.73	4.75	60	21.38	4.56	0.41	NS
Perceived Stress-Total	60	139.75	12.25	60	136.28	12.48	1.54	NS
Parents and Students	60	57.32	7.07	60	56.08	7.24	0.94	NS
Pay and Fringe Benefits	60	25.62	5.09	60	25.85	5.35	0.24	NS
Working Conditions	60	18.97	3.57	60	19.43	3.57	0.72	NS
Opportunities for Advancement	60	13.42	1.88	60	14.13	2.17	1.94	NS
Personal Worth	60	15.12	3.33	60	15.80	2.96	1.19	NS
Co-Teachers	60	29.27	5.97	60	28.95	5.55	0.30	NS
Principal	60	41.08	9.34	60	41.15	7.42	0.04	NS
Job Itself	60	57.02	8.50	60	57.58	7.85	0.38	NS
Job Satisfaction - Total	60	257.80	29.11	60	258.98	27.85	0.23	NS
Personality Characteristics	60	99.02	8.98	60	99.47	8.88	0.28	NS

NS - Not Significant.

No significant difference between means even at 0.05 level was obtained for the Independent variables Job Satisfaction (Component wise and Total score) and Personality Characteristics, and Dependent variable Perceived Stress of Teachers (Stressor wise and Total Stress). This indicates that there is no Gender difference in Perceived Stress, Job Satisfaction and Personality Characteristics of Male and Female Teachers working in the Urban Schools.

From the results, it can be concluded that Male and Female Teachers working in Urban Schools perceive *same level* of Stress due to six stressors studied. And they have the *same level of* Job Satisfaction irrespective of the Gender. Personality Characteristics of Male and Female Teachers are almost alike.

4.1.2.6. Gender Difference in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers in the Rural Schools

Analysis was done using, means and standard deviations of the variables, of Male and Female Teachers in the Rural schools. Gender difference was studied by two-tailed test of significance of difference between means. The data and results of the t-test are given in Table 4.8.

TABLE 4.8

**Data and Results of t-test Between Means of
Variables for Male and Female Teachers in the Rural Schools**

Variables	MALE			FEMALE			t-value	Level of Significance
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	90	28.38	3.81	90	27.90	3.64	0.86	NS
Role of Teachers	90	27.59	3.29	90	26.31	2.96	2.74	0.01
Relationship at Work	90	18.19	3.33	90	17.67	3.28	1.06	NS
Career Development	90	10.01	1.99	90	10.21	2.96	0.53	NS
Organisational Structure	90	29.69	3.78	90	29.56	3.96	0.23	NS
Home Work Interface	90	20.66	4.32	90	21.04	4.55	0.59	NS
Perceived Stress-Total	90	134.51	11.19	90	132.69	12.40	1.04	NS
Parents and Students	90	55.90	6.86	90	57.01	6.55	1.11	NS
Pay and Fringe Benefits	90	25.11	4.96	90	27.07	7.39	2.08	0.05
Working Conditions	90	19.14	3.11	90	19.88	3.63	1.45	NS
Opportunities for Advancement	90	13.23	2.28	90	13.84	2.43	1.74	NS
Personal Worth	90	15.33	2.70	90	15.19	3.00	0.34	NS
Co-Teachers	90	30.11	4.81	90	29.99	4.24	0.18	NS
Principal	90	42.52	6.13	90	42.94	6.64	0.44	NS
Job Itself	90	57.44	7.66	90	57.50	7.18	0.05	NS
Job Satisfaction - Total	90	258.80	23.71	90	263.42	24.22	1.29	NS
Personality Characteristics	90	101.20	7.86	90	101.11	9.06	0.07	NS

NS - Not Significant.

Significant mean difference at 0.01 level was noticed for one of the stressor *Role of Teachers*. From this it can be said that there exists significant *Gender difference in Role of Teachers*. It is also noticed that one component of Job Satisfaction, *Pay and Fringe Benefits* shows significant mean difference at 0.05 level. That is Gender difference exists in the case of Pay and Fringe Benefits also.

No Significant Gender difference was noticed for other stressors and components of Job Satisfaction since no significant *t-value* is obtained. Personality Characteristics of both Male and Female Teachers of Rural Schools are almost alike because the *t-value* is found not significant in this regard.

Since the high mean score is associated with the Male Teachers, they experience *more stress* due to Role Conflict, Role Ambiguity and diverse responsibilities in the school than their Female counterparts. *t-test* also reveals that, *Rural Female Teachers are more satisfied* regarding pay, pension and fringe benefits like Medical/HRA/DA, leave etc. than Rural Male Teachers because higher mean score is found attached with them.

4.1.2.7. Gender Difference in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers in the Government Schools

Gender difference in Perceived Stress, Job Satisfaction, and Personality Characteristics of Government School Teachers were examined. For this purpose the means and standard deviations of the variables, of Male and Female Teachers, of Government Schools were subjected to the two-tailed test of significance of difference.

The data and results of the *t-test* are presented in Table 4.9.

TABLE 4.9

**Data and Results of t-test Between Means of
Variables for Male and Female Teachers in the Government Schools**

Variables	MALE			FEMALE			t-value	Level of Significance
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	60	29.43	3.41	60	29.18	4.08	0.36	NS
Role of Teachers	60	28.02	4.03	60	26.60	3.49	2.06	0.05
Relationship at Work	60	18.62	3.54	60	18.42	2.69	0.35	NS
Career Development	60	10.57	1.94	60	9.92	1.36	2.12	0.05
Organisational Structure	60	30.32	4.42	60	29.28	4.91	1.21	NS
Home Work Interface	60	20.82	4.31	60	20.85	4.54	0.04	NS
Perceived Stress-Total	60	137.77	11.49	60	134.25	12.36	1.61	NS
Parents and Students	60	56.60	7.38	60	56.37	7.11	0.18	NS
Pay and Fringe Benefits	60	25.20	5.31	60	25.98	6.06	0.75	NS
Working Conditions	60	19.03	2.59	60	19.23	3.89	0.33	NS
Opportunities for Advancement	60	13.38	2.22	60	13.95	2.43	1.34	NS
Personal Worth	60	15.00	2.65	60	15.65	3.18	1.22	NS
Co-Teachers	60	30.08	4.85	60	30.60	4.81	0.59	NS
Principal	60	43.18	6.86	60	43.65	6.22	0.39	NS
Job Itself	60	56.88	8.42	60	58.08	7.38	0.83	NS
Job Satisfaction - Total	60	259.37	27.03	60	263.52	23.80	0.89	NS
Personality Characteristics	60	100.80	8.40	60	101.20	8.04	0.27	NS

NS - Not Significant.

Significant mean difference at 0.05 level was obtained for two stressors, *Role of Teachers* and *Career Development*. This indicates that Gender Difference exists in the stressors *Role of Teachers* and *Career Development*, between Male and Female Teachers of Government Schools.

It can be seen from the Table 4.9 that, in the case of the stressor *Role of Teachers* and *Career Development* high mean score is associated with Male Teachers. That is, *Male Teachers* are more effected by the two stressors and hence subjected to *more stress* than Female Teachers, in the Government Schools.

No significant Gender difference was observed either for Job Satisfaction (Component-wise and Total score) or for Personality Characteristics. From this it can be inferred that Teachers, of Government School possess same level of Job Satisfaction and Personality Characteristics.

4.1.2.8. Gender Difference in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers in the Private Schools

The means and standard deviations of both Independent and Dependent variables, of Male and Female Teachers in the Private Schools, were subjected to two tailed test of significance of difference. The results obtained were studied. The data and results of the t-test are given in Table 4.10.

TABLE 4.10

**Data and Results of t-test Between Means of
Variables for Male and Female Teachers in the Private Schools**

Variables	MALE			FEMALE			t-value	Level of Significance
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	90	27.57	4.03	90	27.70	3.62	0.23	NS
Role of Teachers	90	27.32	2.98	90	26.34	3.15	2.14	0.05
Relationship at Work	90	18.67	3.73	90	17.82	3.47	1.57	NS
Career Development	90	9.81	2.27	90	10.31	3.21	1.21	NS
Organisational Structure	90	31.20	5.04	90	30.47	4.48	1.03	NS
Home Work Interface	90	21.27	4.65	90	21.40	4.56	0.19	NS
Perceived Stress-Total	90	135.83	12.12	90	134.04	12.69	0.97	NS
Parents and Students	90	56.38	6.69	90	56.82	6.66	0.45	NS
Pay and Fringe Benefits	90	25.39	4.82	90	26.98	7.04	1.77	NS
Working Conditions	90	19.10	3.70	90	20.01	3.38	1.72	NS
Opportunities for Advancement	90	13.26	2.08	90	13.97	2.27	2.19	0.05
Personal Worth	90	15.41	3.15	90	15.29	2.87	0.27	NS
Co-Teachers	90	29.57	5.60	90	28.89	4.73	0.88	NS
Principal	90	41.12	7.96	90	41.28	7.35	0.14	NS
Job Itself	90	57.53	7.72	90	57.17	7.48	0.32	NS
Job Satisfaction - Total	90	257.76	25.28	90	260.40	27.01	0.68	NS
Personality Characteristics	90	100.01	8.38	90	99.96	9.60	0.04	NS

NS - Not Significant.

Table 4.10 revealed that *significant difference exists* at 0.05 level in the case of the stressor *Role of Teachers* and for a component of Job Satisfaction *Opportunities for Advancement*, as the critical ratios of these variables exceed 1.96, the limit set for significance at 0.05 level. This suggests that Male and Female Teachers perceive stress due to the stressor *Role of Teachers* and also differ in the component of Job Satisfaction *Opportunities for Advancement*.

Since the higher mean is obtained for *Male Teachers*, it can be inferred that they are *more stressed* than the Female Teachers. In the case of Job Satisfaction component, high mean score is with the *Female Teachers*, it indicates that they are *more satisfied* in promotion scopes and opportunities available to learn more things through the profession than the Male Teachers.

No significant difference obtained for other stressors and components of Job Satisfaction. That is they experience same Stress and Job Satisfaction Level. Male and Female Teachers of Private Schools possess same Personality Characteristics regardless of their Gender because the t-value is found not significant even at 0.05 level.

4.1.2.9. Summary of the Investigation of Gender Difference in the Variables

Investigation of Gender Difference in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers were done as a part of Preliminary Analysis. The investigator studied the Gender Difference on the basis of Total Sample, Type of Institution, Locale and Type of Management. Summary of the obtained t-values for all comparisons are presented in Table 4.11 to get a bird's eye view.

TABLE 4.11

**Summary of t-values in the Investigation of
Gender Difference in Mean Scores of the Variables**

Variables	S A M P L E							
	Total	Higher Secondary	High School	Primary School	Urban	Rural	Govt.	Private
Intrinsic to the Job	0.04	1.17	1.01	0.02	0.89	0.86	0.36	0.23
Role of Teachers	2.97**	0.84	2.37*	1.95	1.43	2.74**	2.06*	2.14*
Relationship at Work	1.49	0.09	1.92	0.77	1.06	1.06	0.35	1.57
Career Development	0.14	0.37	0.17	0.17	0.49	0.53	2.12*	1.21
Organisational Structure	1.56	1.13	1.41	0.28	1.89	0.23	1.21	1.03
Home Work Interface	0.18	0.93	0.42	0.76	0.41	0.59	0.04	0.19
Perceived Stress - Total	1.76	1.29	1.25	0.55	1.54	1.04	1.61	0.97
Parents and Students	0.22	0.65	0.95	0.20	0.94	1.11	0.18	0.45
Pay and Fringe Benefits	1.86	0.89	0.93	1.36	0.24	2.08*	0.75	1.77
Working Conditions	1.57	0.43	2.46*	0.09	0.72	1.45	0.33	1.72
Opportunities for Advancement	2.54*	1.29	1.36	1.77	1.94	1.74	1.34	2.19*
Personal Worth	0.54	0.53	1.95	0.20	1.19	0.34	1.22	0.27
Co-Teachers	0.34	1.33	1.61	0.65	0.30	0.18	0.59	0.88
Principal	0.33	0.16	0.68	0.22	0.04	0.44	0.39	0.14
Job Itself	0.29	0.46	1.24	0.12	0.38	0.05	0.83	0.32
Job Satisfaction - Total	1.09	0.22	2.15*	0.31	0.23	1.29	0.89	0.68
Personality Characteristics	0.13	0.54	1.29	1.58	0.28	0.07	0.27	0.04

* - Significant at 0.05 level; ** - Significant at 0.01 level.

Table 4.11 shows the significant t-values obtained in the comparison of Perceived Stress (Stressor wise and Total Stress), Job Satisfaction (Component wise and Total score) and Personality Characteristics between Male and Female Teachers in the various samples.

In the case of Perceived Stress, Gender Difference was noticed for the samples such as Total Sample, High School, Rural, Government and Private School Teachers in the stressor *Role of Teachers*. That is, stressor works differently among Male and Female Teachers in these samples. A Significant Gender Difference was noticed among Government School Teachers in the stressor *Career Development*. No significant Gender difference was obtained either in Perceived Stress Total score or in other stressors for any other samples under consideration.

While considering Job Satisfaction of Teachers, it can be seen that Gender difference exists in the Job Satisfaction components, *Pay and Fringe Benefits* (Rural School Teachers), *Working Conditions* and *Job Satisfaction - Total* (High School Teachers) and *Opportunities for Advancement* (Total Sample and Private School Teachers). No Significant Gender difference was noticed in the remaining component of Job Satisfaction. Job Satisfaction (Total) of Male and Female Teachers are found to be the same except for High School Teachers.

Personality Characteristics of Male and Female Teachers found to be alike in the Total sample and relevant subsamples because no significant difference is observed in any of the comparisons.

4.2. MAJOR ANALYSIS

In order to analyse the data collected, the investigator used sophisticated statistical techniques such as *Correlations, Two-way ANOVA, Multiple Regression Analysis* and *Factor Analysis*. These analysis were done to realize the

objectives already specified in the Chapter 3. Therefore this part of the report deals with the major statistical procedures adopted for the present investigation, and it is discussed under the following headlines.

4.2.1. INVESTIGATION OF DIFFERENCE IN PERCEIVED STRESS JOB SATISFACTION AND PERSONALITY CHARACTERISTICS OF TEACHERS

4.2.2. EXTENT AND DEGREE OF ASSOCIATION OF JOB SATISFACTION AND PERSONALITY CHARACTERISTICS WITH PERCEIVED STRESS OF TEACHERS

4.2.3. INVESTIGATION OF THE MAIN AND INTERACTION EFFECTS OF JOB SATISFACTION AND PERSONALITY CHARACTERISTICS ON PERCEIVED STRESS OF TEACHERS

4.2.4. PREDICTION OF PERCEIVED STRESS AND JOB SATISFACTION OF TEACHERS

4.2.5. IDENTIFICATION OF LATENT FACTORS UNDERLYING IN THE TEACHER STRESS INVENTORY (TSI) AND SCALE OF JOB SATISFACTION (SJS)

4.2.1. INVESTIGATION OF DIFFERENCE IN PERCEIVED STRESS JOB SATISFACTION AND PERSONALITY CHARACTERISTICS OF TEACHERS

Difference in Perceived Stress (Stressor wise and Total Stress), Job Satisfaction (Component wise and Total Score) and Personality Characteristics of Teachers were examined for the following sub samples based on: *i) Type of School; ii) Locale of the School; iii) Type of Management and iv) Biographical variables.*

Differences in the variables, were tested for significance by comparing the mean scores of the variables obtained for each groups. For this, two-tailed test of significance of difference between means were employed. Eventhough, a two-tailed test do not throw light on the direction of differences, from the higher means obtained between Groups, it may be inferred that, which group is higher for that variable. The Total sample was divided in to three groups, based on the Type of Institution. That is, *Higher Secondary, High School, and Primary School Teachers*. Group difference in *Perceived Stress* (Stressor wise and Total Stress), *Job Satisfaction* (Component wise and Total Score) and *Personality Characteristics* were studied among these groups.

The groups compared were:

- (i) *Higher Secondary and High School Teachers*
- (ii) *Higher Secondary and Primary School Teachers*
- (iii) *High School and Primary School Teachers*

Comparisons were done with a view to understand whether Teachers in different category of schools are different in Perceived Stress, Job Satisfaction and Personality Characteristics or not.

4.2.1.1. Comparison of Perceived Stress, Job Satisfaction and Personality Characteristics between Higher Secondary and High School Teachers

Means and SD's of the scores of Perceived Stress (Stressor-wise and Total Stress), Job Satisfaction (Component-wise and Total score) and Personality Characteristics were subjected to mean difference analysis. The details of comparison and level of significance of each *t*-value is given in Table 4.12.

TABLE 4.12
**Data and Results of t-test Between Means of
 Variables for Higher Secondary and High School Teachers**

Variables	Higher Secondary			High School			t-value	Level of Significance
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	100	28.03	3.69	100	27.89	3.87	0.26	NS
Role of Teachers	100	26.78	3.32	100	26.63	3.40	0.32	NS
Relationship at Work	100	18.75	3.33	100	18.23	3.33	1.10	NS
Career Development	100	9.95	1.87	100	10.25	2.88	0.87	NS
Organisational Structure	100	29.93	4.51	100	30.22	4.42	0.46	NS
Home Work Interface	100	21.60	4.30	100	20.84	4.79	1.18	NS
Perceived Stress-Total	100	135.04	11.87	100	134.06	12.07	0.58	NS
Parents and Students	100	56.90	7.34	100	55.03	6.44	1.91	NS
Pay and Fringe Benefits	100	26.66	5.15	100	24.83	4.84	2.59	0.01
Working Conditions	100	19.30	3.68	100	19.61	3.38	0.62	NS
Opportunities for Advancement	100	13.37	2.41	100	13.70	2.21	1.01	NS
Personal Worth	100	15.49	3.21	100	15.45	2.65	0.10	NS
Co-Teachers	100	28.61	5.19	100	29.91	4.58	1.88	NS
Principal	100	41.65	7.97	100	43.01	6.56	1.32	NS
Job Itself	100	58.01	8.09	100	56.66	6.95	1.27	NS
Job Satisfaction - Total	100	259.99	28.87	100	258.20	22.4	0.49	NS
Personality Characteristics	100	102.05	9.05	100	99.73	8.18	1.90	NS

NS - Not Significant.

From Table 4.12 it can be seen that there exists a *significant difference* at 0.01 level in one component of Job Satisfaction - *Pay and Fringe Benefits*. A remarkable difference in the mean value, indicates that Higher Secondary School Teachers are *more satisfied* regarding Pay and Fringe Benefits like Medical/HRA/DA, leave etc. and pension than High School Teachers.

No significant difference was obtained for Perceived Stress (Stressor-wise and Total Stress) and also for other components of Job Satisfaction. Personality Characteristics of Teachers working in Higher Secondary and High Schools are found to be almost the same.

To enable a visual comparison, scores on Perceived Stress (Total), Job Satisfaction (Total) and Personality Characteristics of Higher Secondary and High School Teachers, were graphically represented in Figure 4-12, 4-13 and 4-14 respectively.

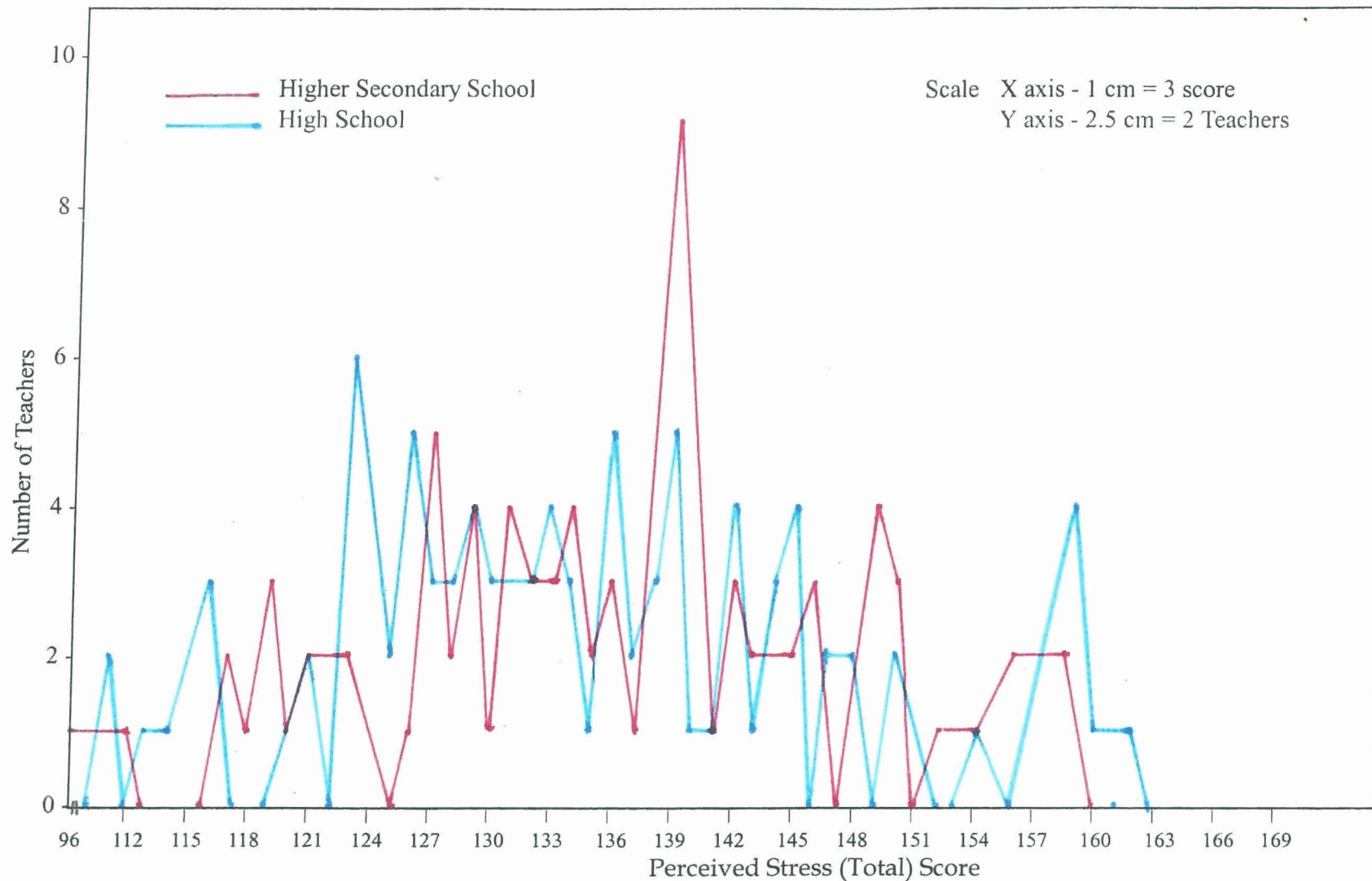


FIGURE 4 - 12 Perceived Stress (Total) of Higher Secondary and High School Teachers

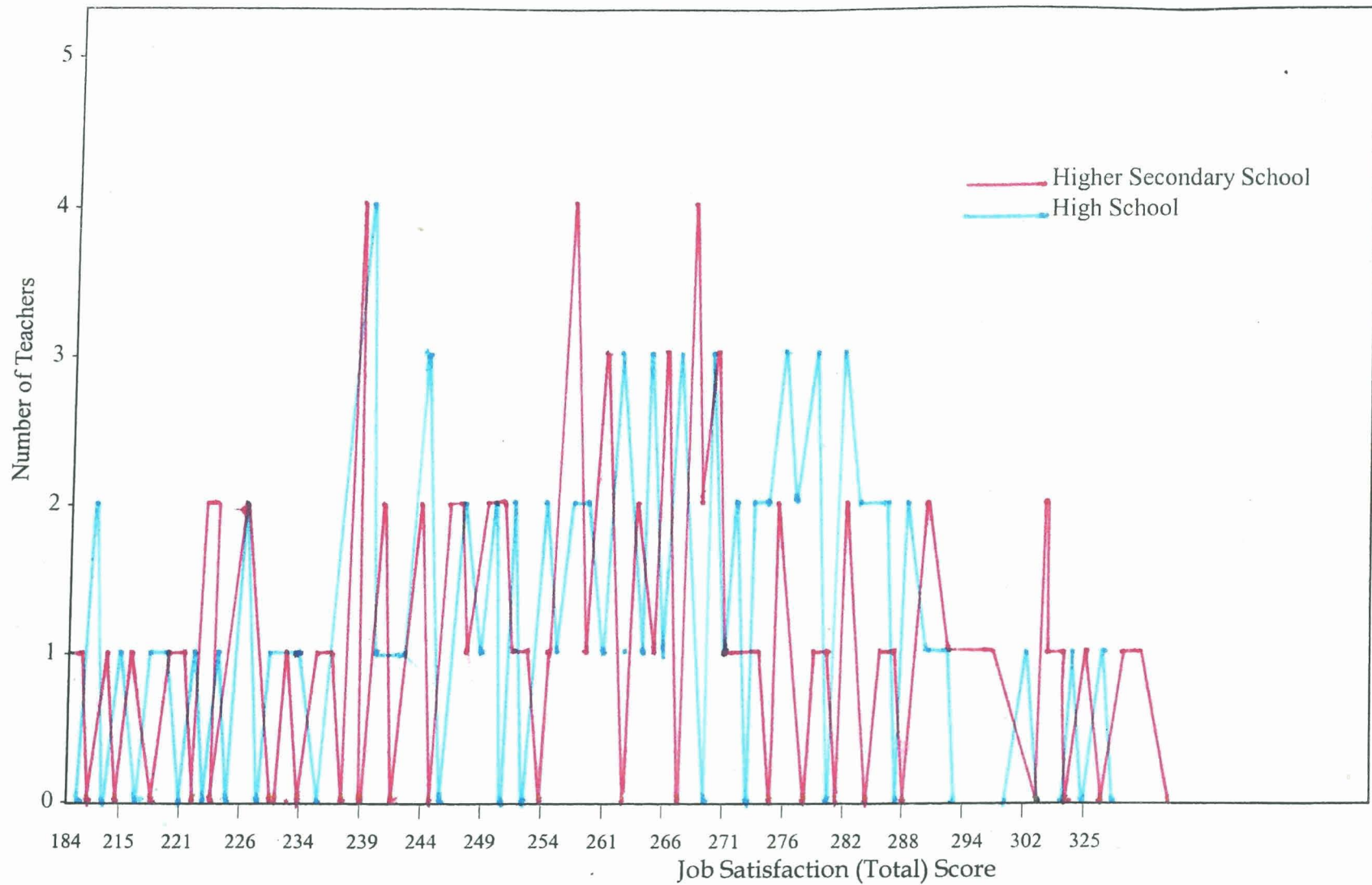


FIGURE 4 - 13 Job Satisfaction (Total) of Higher Secondary and High School Teachers

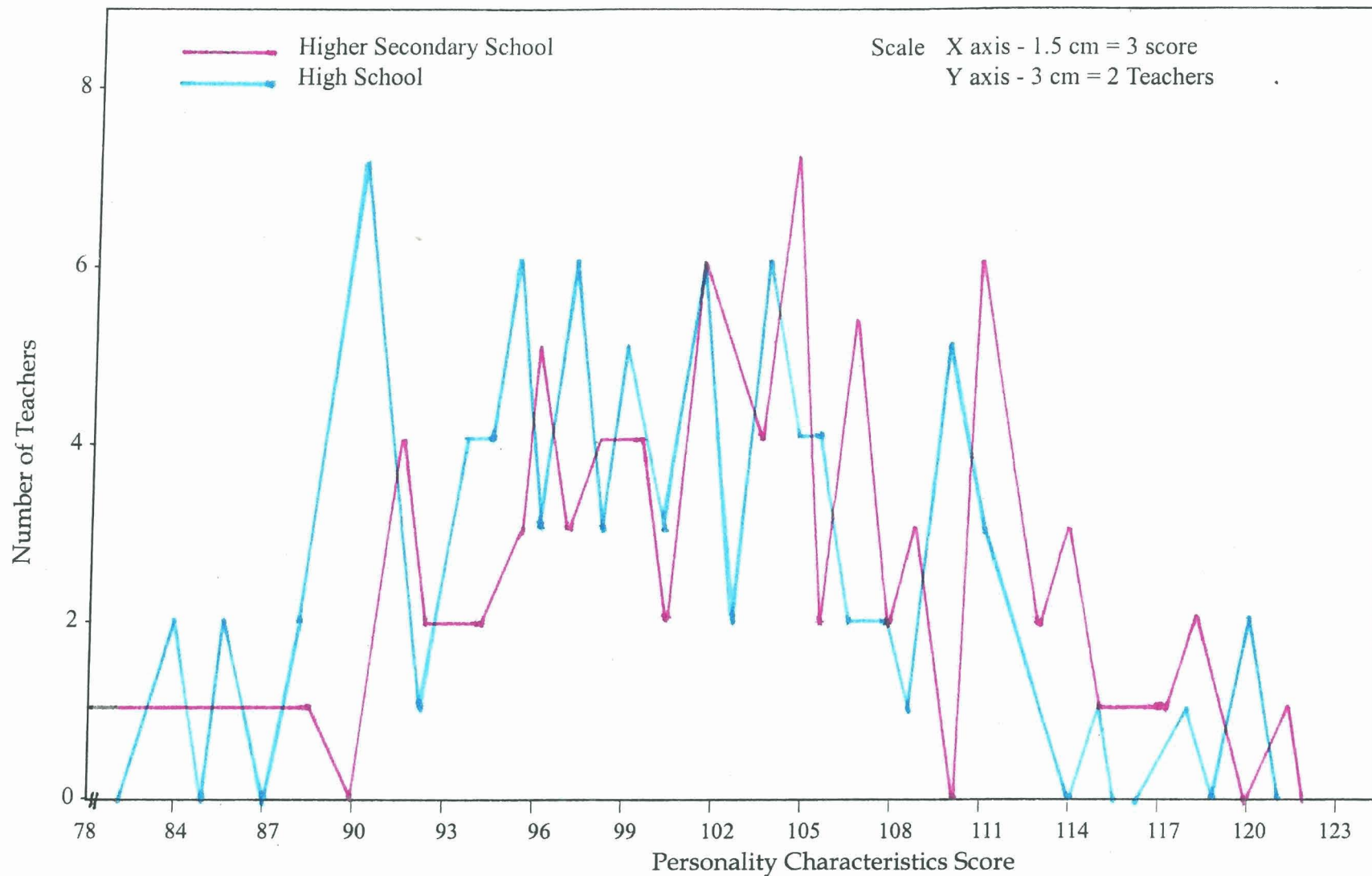


FIGURE 4 - 14 Personality Characteristics of Higher Secondary and High School Teachers

The Figures 4-12, 4-13 and 4-14 depicts the level of the Perceived Stress, Job Satisfaction and Personality Characteristics of Higher Secondary and High School Teachers. From the Figures it is evident that both categories of Teachers possess same Stress level, Job Satisfaction and Personality Characteristics irrespective of the type of institution.

4.2.1.2 Comparison of Perceived Stress, Job Satisfaction and Personality Characteristics between Higher Secondary and Primary School Teachers

Mean values of each variables were compared using the two tailed test of significance of difference. Details of comparison and level of significance obtained are given in Table 4.13.

TABLE 4.13

**Data and Results of t-test Between Means of
Variables for Higher Secondary and Primary School Teachers**

Variables	Higher Secondary			Primary School			t-value	Level of Significance
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	100	28.03	3.69	100	28.99	4.00	1.76	NS
Role of Teachers	100	26.78	3.32	100	27.66	3.43	1.84	NS
Relationship at Work	100	18.75	3.33	100	18.08	3.61	1.36	NS
Career Development	100	9.95	1.87	100	10.20	2.37	0.83	NS
Organisational Structure	100	29.93	4.51	100	31.11	5.25	1.70	NS
Home Work Interface	100	21.60	4.30	100	20.96	4.47	1.03	NS
Perceived Stress - Total	100	135.04	11.87	100	137.00	12.70	1.13	NS
Parents and Students	100	56.90	7.34	100	57.73	6.60	0.84	NS
Pay and Fringe Benefits	100	26.66	5.15	100	26.35	7.33	0.35	NS
Working Conditions	100	19.30	3.68	100	19.25	3.33	0.10	NS
Opportunities for Advancement	100	13.37	2.41	100	13.83	2.11	1.44	NS
Personal Worth	100	15.49	3.21	100	15.08	3.03	0.93	NS
Co-Teachers	100	28.61	5.19	100	30.50	5.25	2.56	0.05
Principal	100	41.65	7.97	100	41.60	7.24	0.05	NS
Job Itself	100	58.01	8.09	100	57.54	8.02	0.41	NS
Job Satisfaction - Total	100	259.99	28.87	100	261.88	25.95	0.49	NS
Personality Characteristics	100	102.05	9.05	100	99.39	8.61	2.13	0.05

NS - Not Significant.

Significant mean difference at 0.05 level was noted for one component of Job Satisfaction, *Co-Teachers*. This shows that Primary School Teachers maintain, better relationship among themselves, co-operation in the works they do, good communication and conduct between each other, than Higher Secondary School Teachers, because high mean score is attached with Primary Teachers. Primary School Teachers are found to be more satisfied than Higher Secondary School Teachers, when the component *Co-Teachers* alone are taken into consideration. *Significant difference* at 0.05 level was noticed for the comparison of Personality Characteristics, since high mean Personality Characteristic score is seen with the Higher Secondary School Teachers, they shows a better Personality Characteristics than Primary School Teachers.

No Significant difference was examined between Higher Secondary and Primary School Teachers regarding their Perceived Stress level (Stressor wise and Total Stress) and in the remaining components of Job Satisfaction. From this, it can also inferred that Higher Secondary School Teachers experience same Stress level as that of Primary School Teachers.

Graphical Comparison of Perceived Stress (Total), Job Satisfaction (Total) and Personality Characteristics of Higher Secondary and Primary School Teachers were done. The graphical representations are is given as Figure 4-15, 4-16 and 4-17.

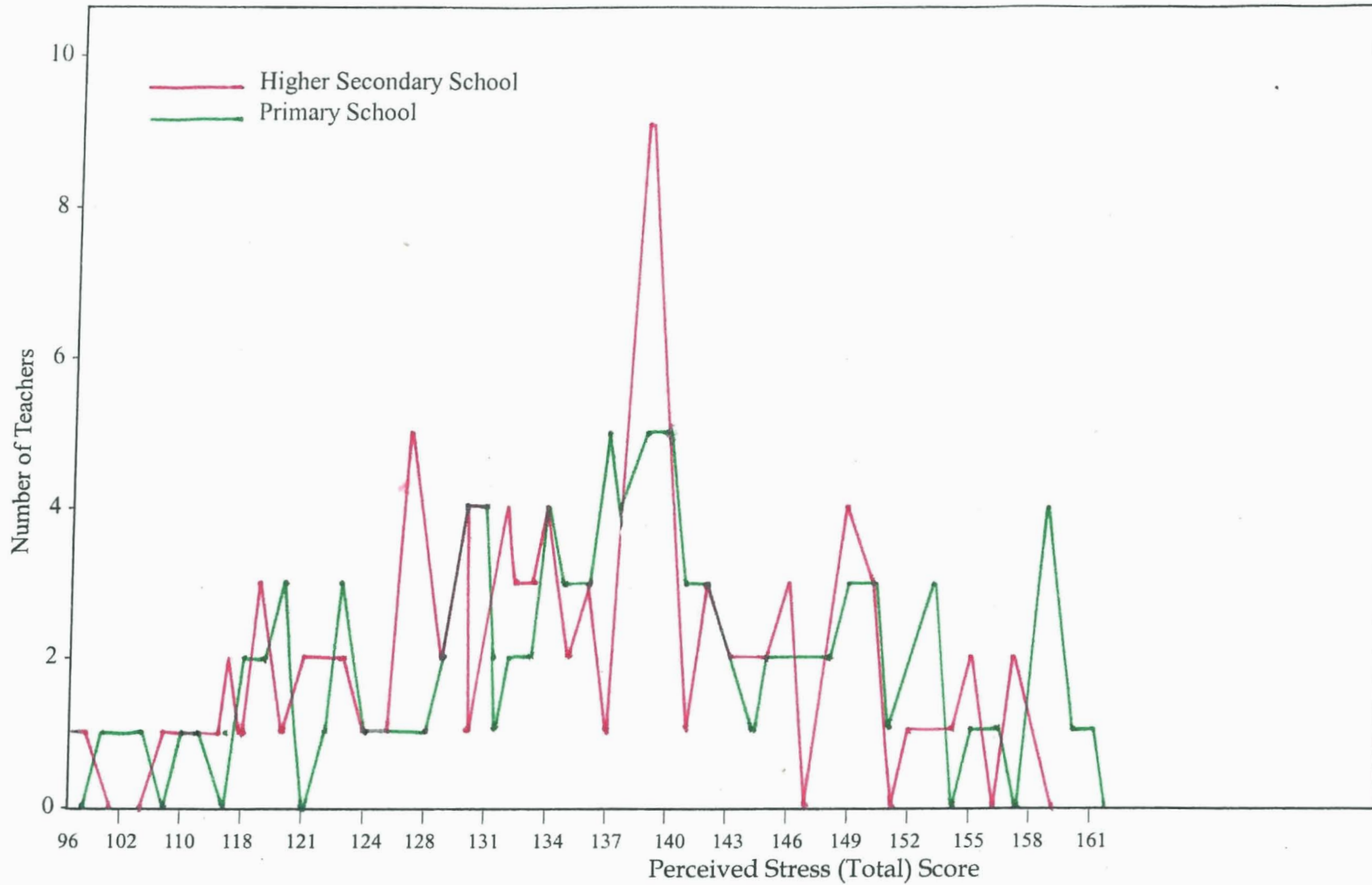


FIGURE 4 - 15 Perceived Stress (Total) of Higher Secondary and Primary School Teachers

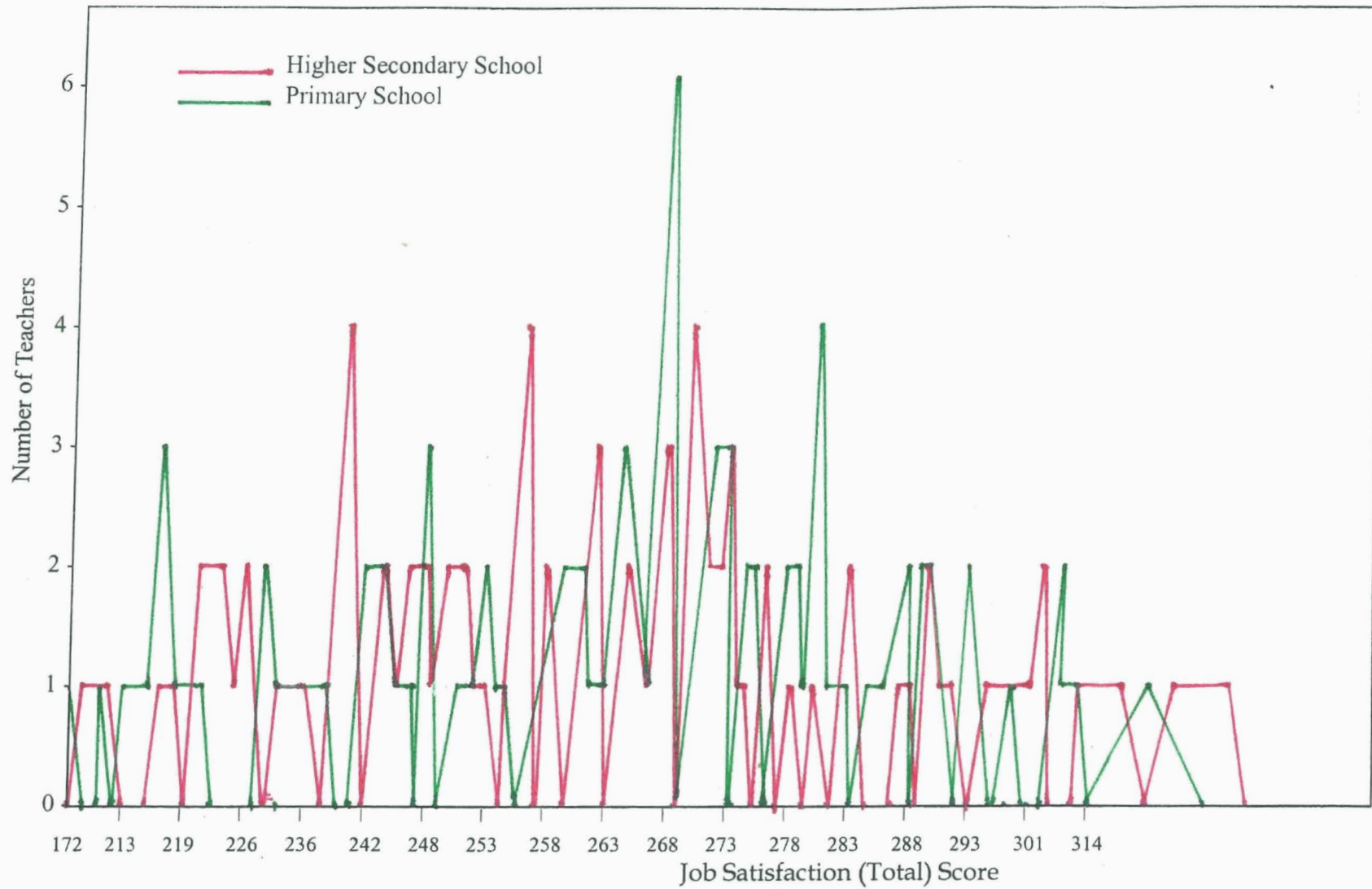


FIGURE 4 - 16 Job Satisfaction (Total) of Higher Secondary and Primary School Teachers

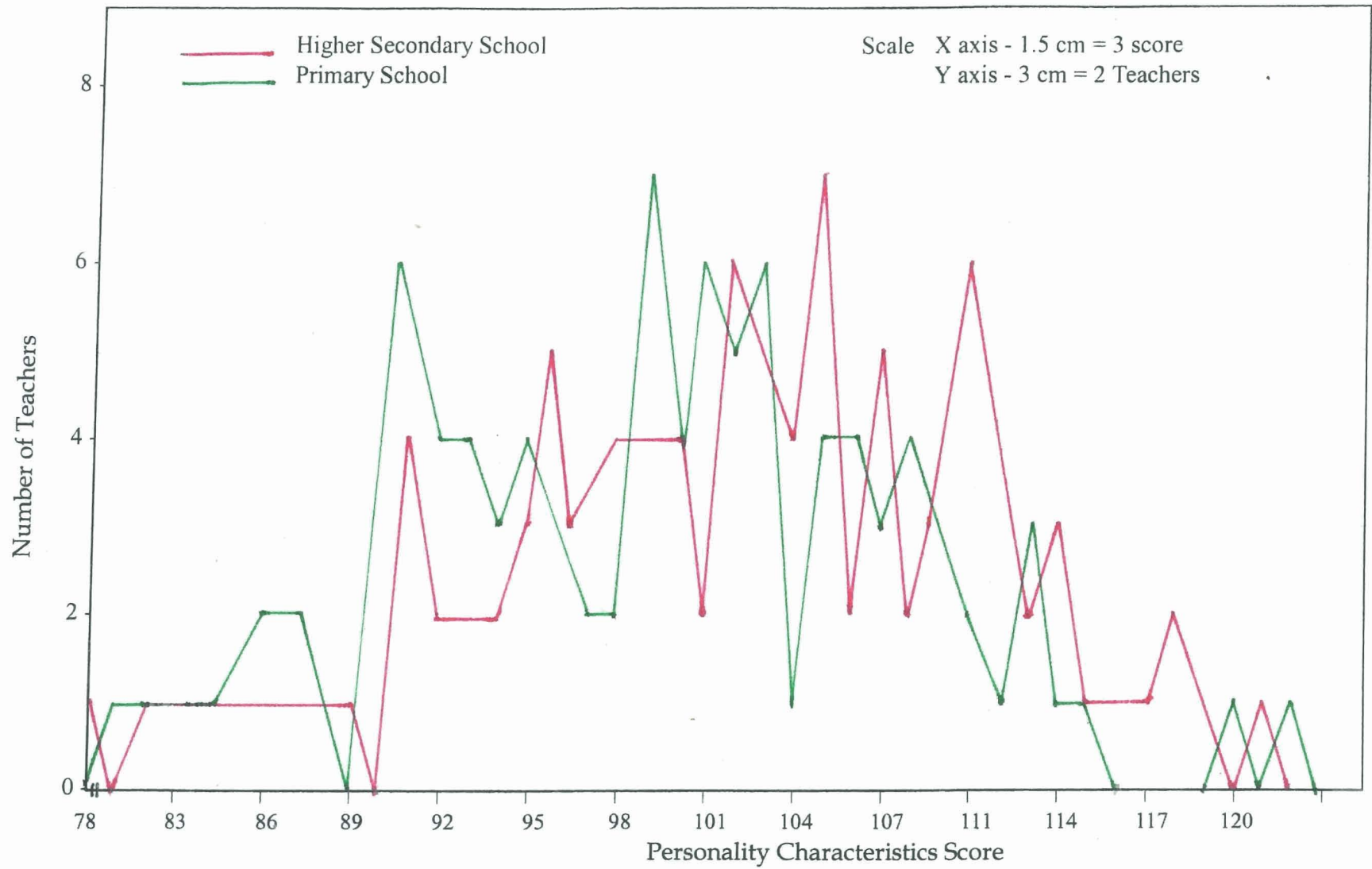


FIGURE 4 - 17 Personality Characteristics of Higher Secondary and Primary School Teachers

From the Figures 4-15, 4-16 and 4-17 it can be observed that Higher Secondary and Primary School Teachers experience same Stress and Job Satisfaction level. Personality Characteristics of both category of Teachers as given in Figure 4-17 reveal slight difference. This difference is substantiated in the mean difference analysis since the *t*-value is found statistically significant.

4.2.1.3. Comparison of Perceived Stress, Job Satisfaction and Personality Characteristics between High School and Primary School Teachers

High School and Primary School Teachers were compared to study whether any difference exist in the Perceived Stress (Stressor-wise and Total Stress), Job Satisfaction (Component-wise and Total score) and Personality Characteristics using the test of significance for difference between means. The results obtained are given in Table 4.14.

TABLE 4.14

**Data and Results of t-test Between Means of
Variables for High School and Primary School Teachers**

Variables	High School			Primary School			t-value	Level of Significance
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	100	27.89	3.87	100	28.99	4.00	1.98	0.05
Role of Teachers	100	26.63	3.40	100	27.66	3.43	2.13	0.05
Relationship at Work	100	18.23	3.33	100	18.08	3.61	0.31	NS
Career Development	100	10.25	2.88	100	10.20	2.37	0.13	NS
Organisational Structure	100	30.22	4.42	100	31.11	5.25	1.30	NS
Home Work Interface	100	20.84	4.79	100	20.96	4.47	0.18	NS
Perceived Stress-Total	100	134.06	12.07	100	137.00	12.70	1.68	NS
Parents and Students	100	55.03	6.44	100	57.73	6.60	2.93	0.01
Pay and Fringe Benefits	100	24.83	4.84	100	26.35	7.33	1.73	NS
Working Conditions	100	19.61	3.38	100	19.25	3.33	0.76	NS
Opportunities for Advancement	100	13.70	2.21	100	13.83	2.11	0.42	NS
Personal Worth	100	15.45	2.65	100	15.08	3.03	0.92	NS
Co-Teachers	100	29.91	4.58	100	30.50	5.25	0.85	NS
Principal	100	43.01	6.56	100	41.60	7.24	1.44	NS
Job Itself	100	56.66	6.95	100	57.54	8.02	0.83	NS
Job Satisfaction - Total	100	258.20	22.40	100	261.88	25.95	1.07	NS
Personality Characteristics	100	99.73	8.18	100	99.39	8.61	0.29	NS

NS - Not Significant.

Significant mean difference at 0.05 level was noticed for two stressors *Intrinsic to the Job* and *Role of Teachers*. It is also noticed that one component of Job Satisfaction, Parents and Students shows significant mean difference at 0.01 level.

The results suggest that, Primary School Teachers experience more stress, from two stressors, *Intrinsic to the Job* and *Role of Teachers*. But at the same time, it is found that Primary School Teachers are *more satisfied* than High School Teachers when the component of Job Satisfaction *Relationship with Parents and Students* are taken in to consideration, since high mean score is associated with Primary Teachers.

From Table 4.14 it can also inferred that, *no significant difference* exists in remaining stressors and components of Job Satisfaction. Difference in the Total Stress and Total Job Satisfaction experienced by High School and Primary School Teachers are not *statistically significant*. High school and Primary School Teachers possess almost same Personality Characteristics because the *t*-value is not found statistically significant.

Perceived Stress (Total), Job Satisfaction (Total) and *Personality Characteristics* were compared between High School and Primary School Teachers using the graphical representation also. It is given as Figure 4-18, 4-19 and 4-20.

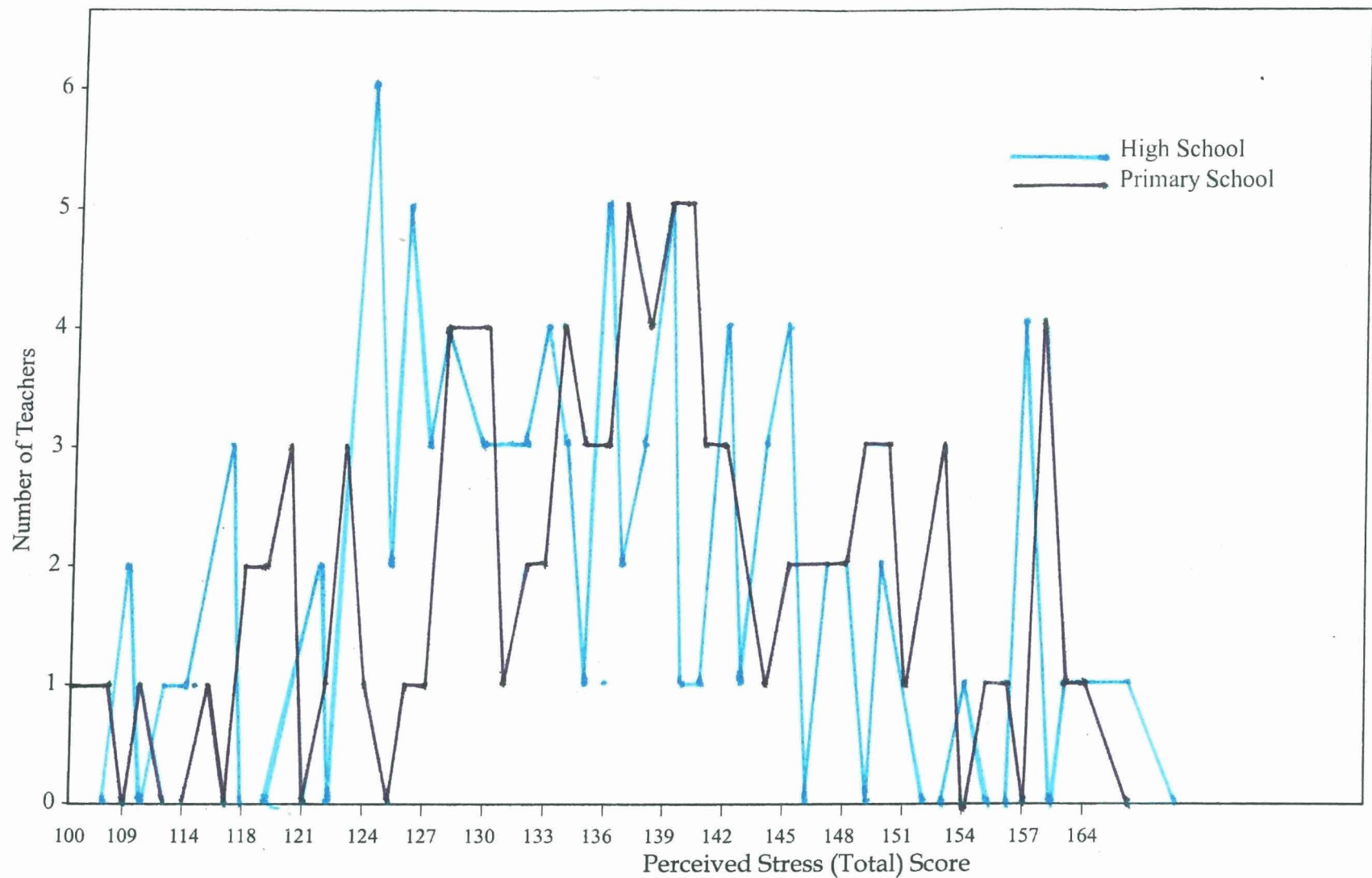


FIGURE 4 - 18 Perceived Stress (Total) of High School and Primary School Teachers

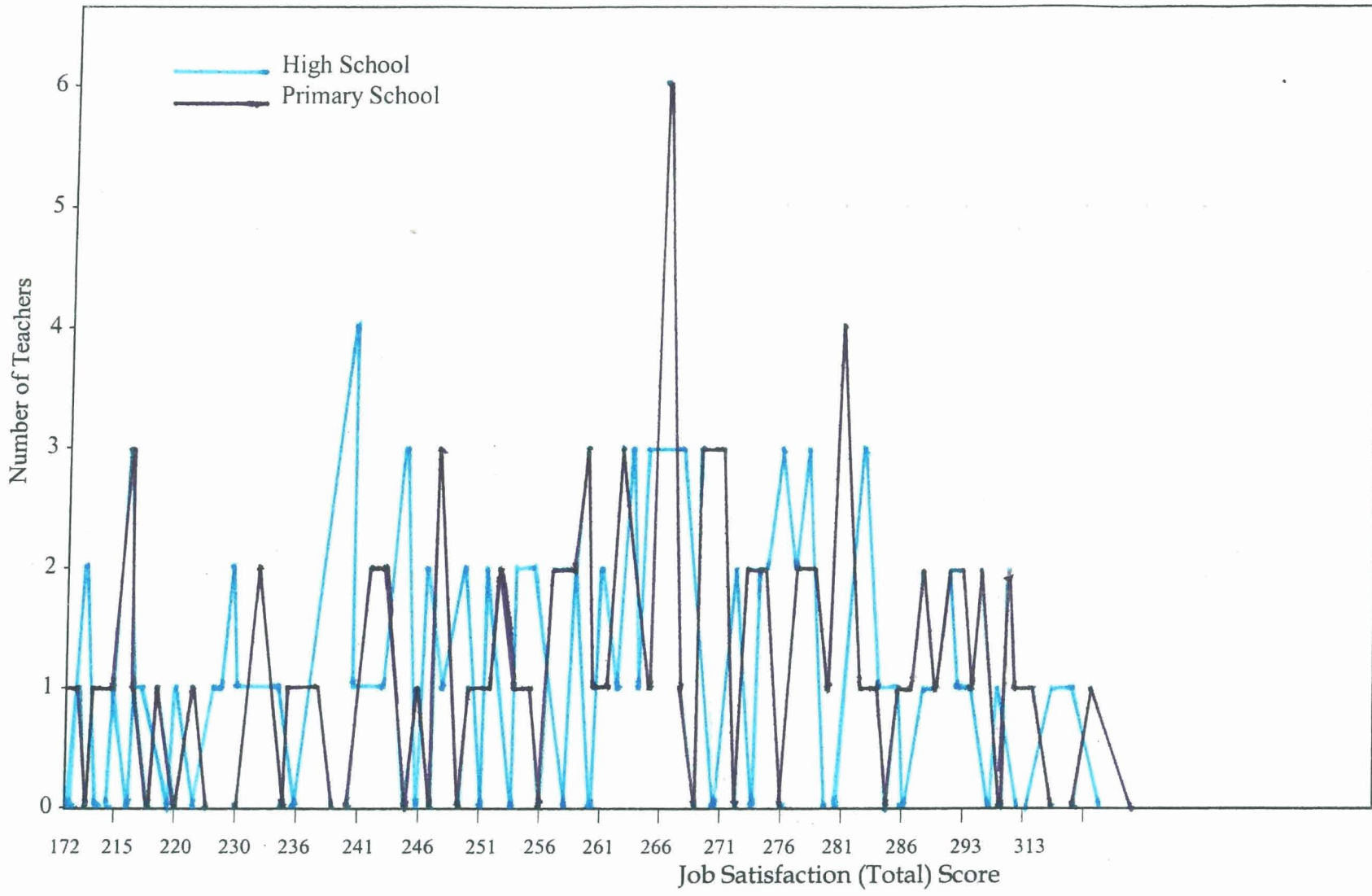


FIGURE 4 - 19 Job Satisfaction (Total) of High School and Primary School Teachers

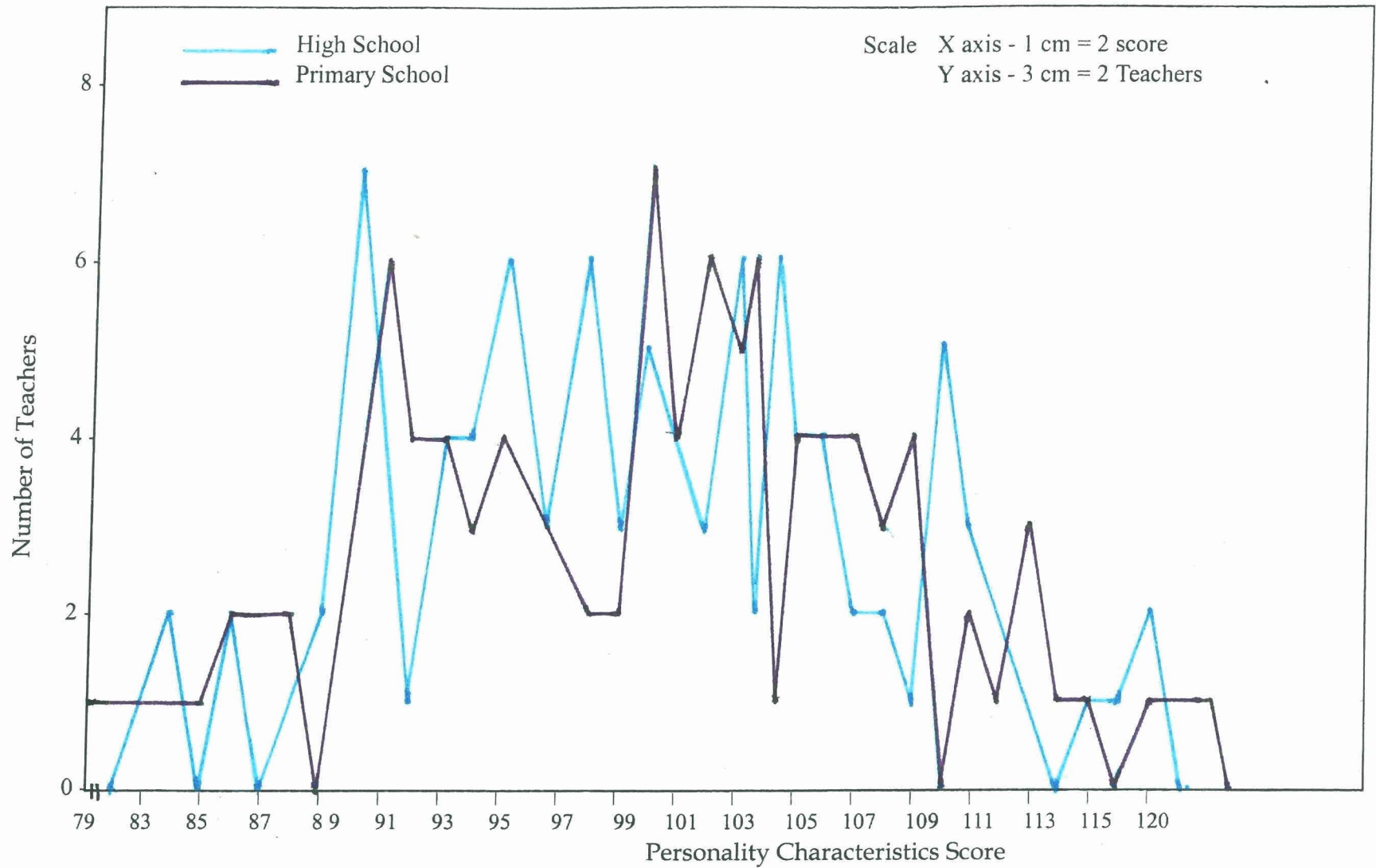


FIGURE 4 - 20 Personality Characteristics of High School and Primary School Teachers

From Figures 4-18 and 4-19 it is easily understood that Teachers working in High Schools and Primary Schools experience almost same amount of Stress and Job Satisfaction. As per Figure 4-20, the Personality Characteristics of High School and Primary School Teachers are almost the same.

4.2.1.4. Comparison of Perceived Stress, Job Satisfaction and Personality Characteristics between Urban and Rural School Teachers

The Total sample was divided into two, based on the Locale of the institution. That is, Urban and Rural School Teachers and their *Perceived Stress* (Stressor wise and Total Stress), *Job Satisfaction* (Component wise and Total score) and *Personality Characteristics* were compared. The comparisons were done using the two-tailed test of significance for difference between means. The details of comparison and level of significance are given in Table 4.15.

TABLE 4.15
**Data and Results of t-test Between Means of
 Variables for Urban and Rural School Teachers**

Variables	Urban			Rural			t-value	Level of Significance
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	120	28.55	4.09	180	28.14	3.72	0.88	NS
Role of Teachers	120	27.13	3.71	180	26.95	3.19	0.44	NS
Relationship at Work	120	18.99	3.52	180	17.93	3.31	2.62	0.01
Career Development	120	10.17	2.24	180	10.11	2.52	0.22	NS
Organisational Structure	120	31.62	5.65	180	29.62	3.86	3.39	0.01
Home Work Interface	120	21.56	4.64	180	20.85	4.43	1.32	NS
Perceived Stress-Total	120	138.02	12.44	180	133.60	11.81	3.08	0.01
Parents and Students	120	56.70	7.15	180	56.46	6.71	0.29	NS
Pay and Fringe Benefits	120	25.73	5.20	180	26.09	6.35	0.54	NS
Working Conditions	120	19.20	3.56	180	19.51	3.39	0.75	NS
Opportunities for Advancement	120	13.78	2.05	180	13.54	2.37	0.93	NS
Personal Worth	120	15.46	3.16	180	15.26	2.85	0.56	NS
Co-Teachers	120	29.11	5.74	180	30.05	4.53	1.51	NS
Principal	120	41.12	8.40	180	42.73	6.38	1.78	NS
Job Itself	120	57.30	8.16	180	57.47	7.40	0.18	NS
Job Satisfaction - Total	120	258.39	28.37	180	261.11	24.01	0.86	NS
Personality Characteristics	120	99.24	8.90	180	101.16	8.46	1.87	NS

NS - Not Significant.

From Table 4.15, it can be seen that there exists a *significant difference* at 0.01 level for two stressors *Relationship at Work* and *Organisational Structure*. Significant difference is noticed in the *Perceived Stress-Total* score. From the higher means, it can be said that Urban School Teachers experience *more stress* than Rural School Teachers. It may be mainly due to the effect of two stressors, *Relationship at Work* and *Organisational Structure*. From these result it can be inferred that, Urban School Teachers have poor relationship with colleagues, head, office staff, pupil and parents, when compared to Rural School Teachers.

No significant difference was noticed for the remaining stressors, Job Satisfaction (Component-wise and Total score) and Personality Characteristics. That is, Teachers working in Urban and Rural Schools have the same Personality Characteristics and Job Satisfaction, eventhough there is a significant difference in Total Stress level.

To enable a visual comparison, scores on Perceived Stress (Total), Job Satisfaction (Total) and Personality Characteristics of Urban and Rural School Teachers were graphically represented in Figure 4-21, 4-22 and 4-23.

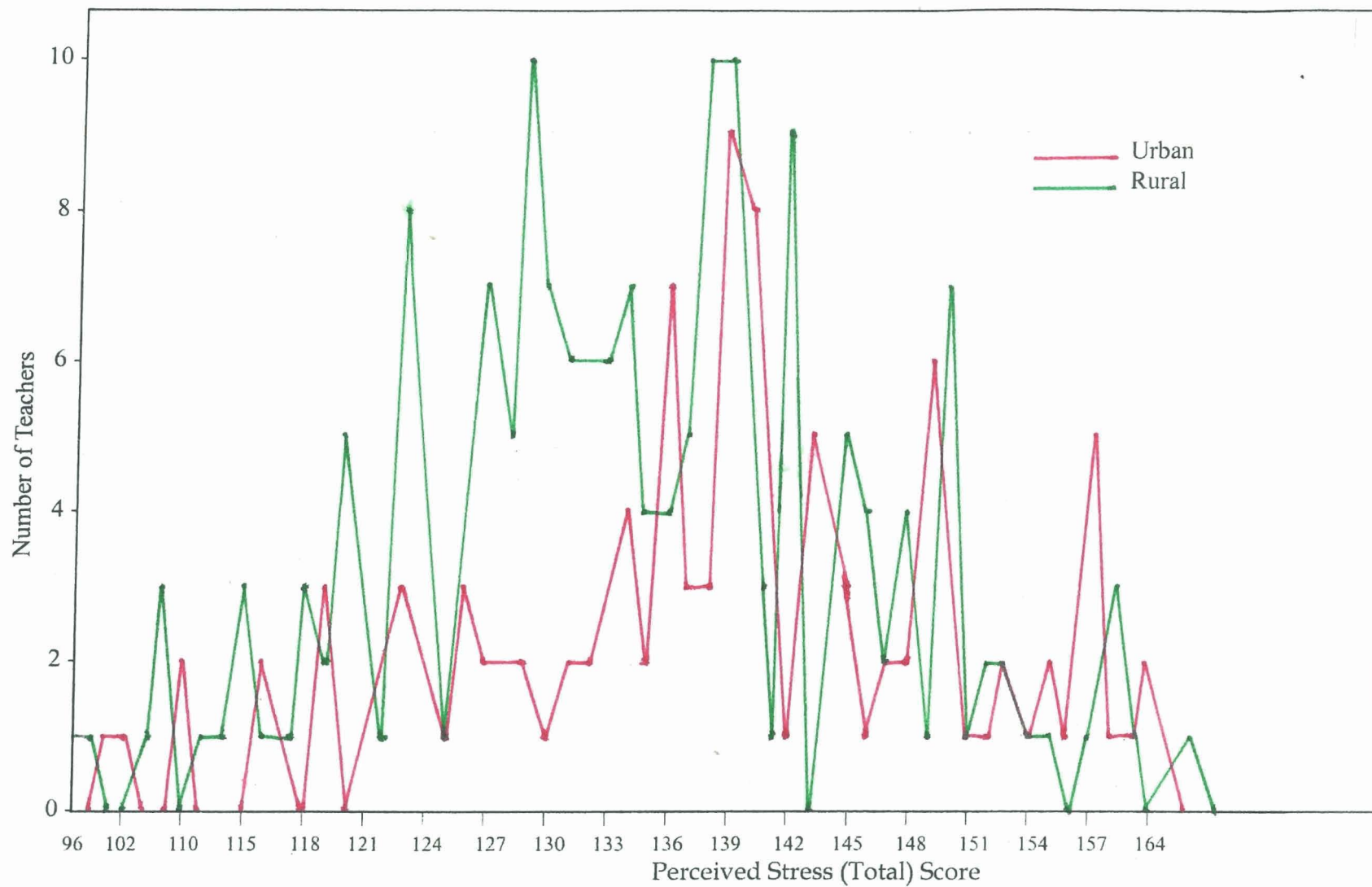


FIGURE 4 - 21 Perceived Stress (Total) of Urban and Rural School Teachers

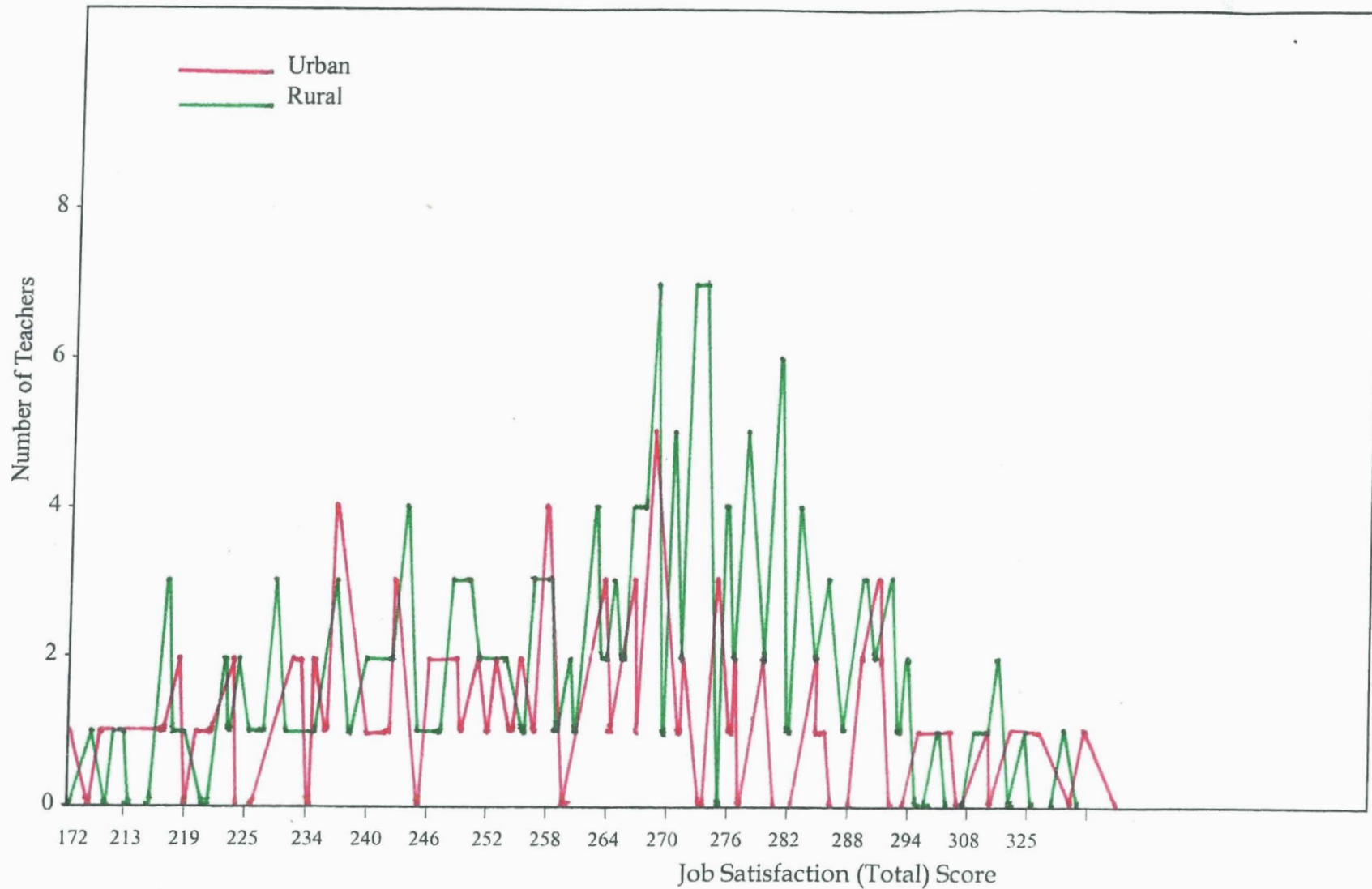


FIGURE 4 - 22 Job Satisfaction (Total) of Urban and Rural School Teachers

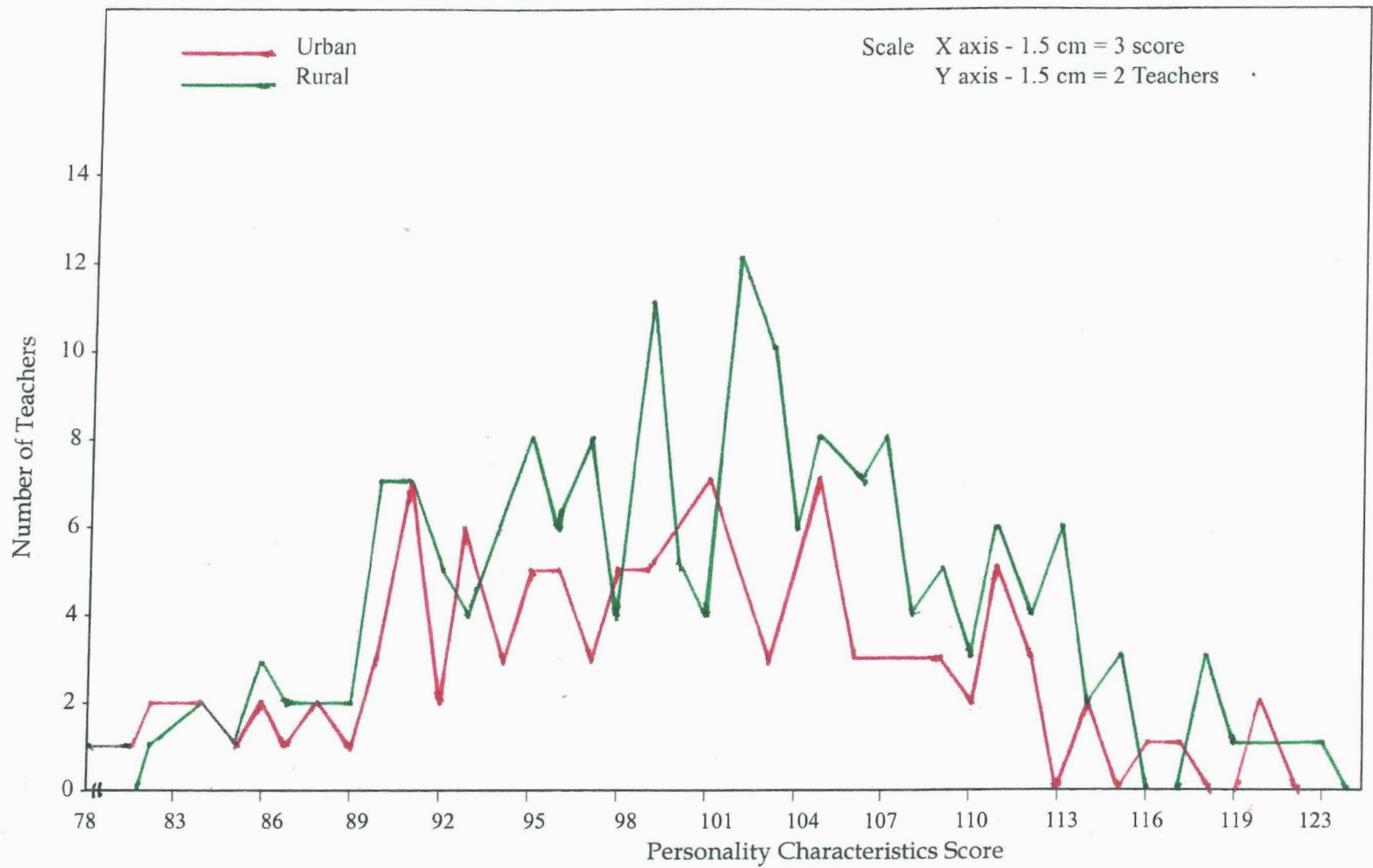


FIGURE 4 - 23 Personality Characteristics of Urban and Rural School Teachers

Figure 4-21 reveals that Urban School Teachers experience more stress than Rural School Teachers. But as per Figure 4-22 the level of Job Satisfaction of Urban and Rural School Teachers are almost the same. From the Figure 4-23 it is evident that there exists a difference in Personality Characteristics of two groups, but it is not statistically significant.

4.2.1.5. Comparison of Perceived Stress, Job Satisfaction and Personality Characteristics between Government and Private School Teachers

The Total sample was grouped in to two on the basis of Type of Management, ie. *Government* and *Private* School Teachers. And the two groups were compared with regard to Perceived Stress (Stressor-wise and Total Stress), Job Satisfaction (Component-wise and Total score) and Personality Characteristics. The details of mean difference analysis and level of significance are given in Table 4.16.

TABLE 4.16
Data and Results of t-test Between Means of
Variables for Government and Private School Teachers

Variables	Government			Private			t-value	Level of Significance
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	120	29.31	3.75	180	27.63	3.82	3.77	0.01
Role of Teachers	120	27.31	3.82	180	26.83	3.09	1.14	NS
Relationship at Work	120	18.52	3.13	180	18.24	3.62	0.72	NS
Career Development	120	10.24	1.70	180	10.06	2.78	0.69	NS
Organisational Structure	120	29.80	4.68	180	30.83	4.77	1.85	NS
Home Work Interface	120	20.83	4.41	180	21.33	4.60	0.94	NS
Perceived Stress - Total	120	136.01	12.01	180	134.94	12.40	0.75	NS
Parents and Students	120	56.48	7.22	180	56.60	6.66	0.15	NS
Pay and Fringe Benefits	120	25.59	5.68	180	26.18	6.07	0.86	NS
Working Conditions	120	19.13	3.29	180	19.56	3.57	1.08	NS
Opportunities for Advancement	120	13.67	2.33	180	13.61	2.20	0.22	NS
Personal Worth	120	15.33	2.93	180	15.35	3.00	0.06	NS
Co-Teachers	120	30.34	4.81	180	29.23	5.18	1.90	NS
Principal	120	43.42	6.52	180	41.20	7.64	2.70	0.01
Job Itself	120	57.48	7.90	180	57.35	7.58	0.14	NS
Job Satisfaction - Total	120	261.44	25.44	180	259.08	26.12	0.78	NS
Personality Characteristics	120	101.00	8.19	180	99.98	8.98	1.02	NS

NS - Not Significant.

Significant difference in the mean of the stressor, *Intrinsic to the Job*, reveals that Government School Teachers are *more stressed* and worried about, the number of students in a class, lack of facilities in the institution, discipline problems, work load, and inadequate resources, than Private School Teachers.

At the same time, Government School Teachers are more satisfied than Private School Teachers, regarding the component of Job Satisfaction - *Principal*. *Government School Teachers* have good relationship and faith in head of the institution, and they are getting opportunities for decision making, and recognition of work done than Private School Teachers. In both cases high mean score is attached with the Government School Teachers.

No significant t-value is obtained for any other stressors or components of Job Satisfaction. Personality Characteristics of Urban and Rural School Teachers are found to be almost *the same* since no significant *t-value* is obtained.

Comparison of Perceived Stress (Total), Job Satisfaction (Total) and Personality Characteristics between Government and Private School Teachers were done using graphical representations. Graphical representations are given as Figure 4-24, 4-25 and 4-26.

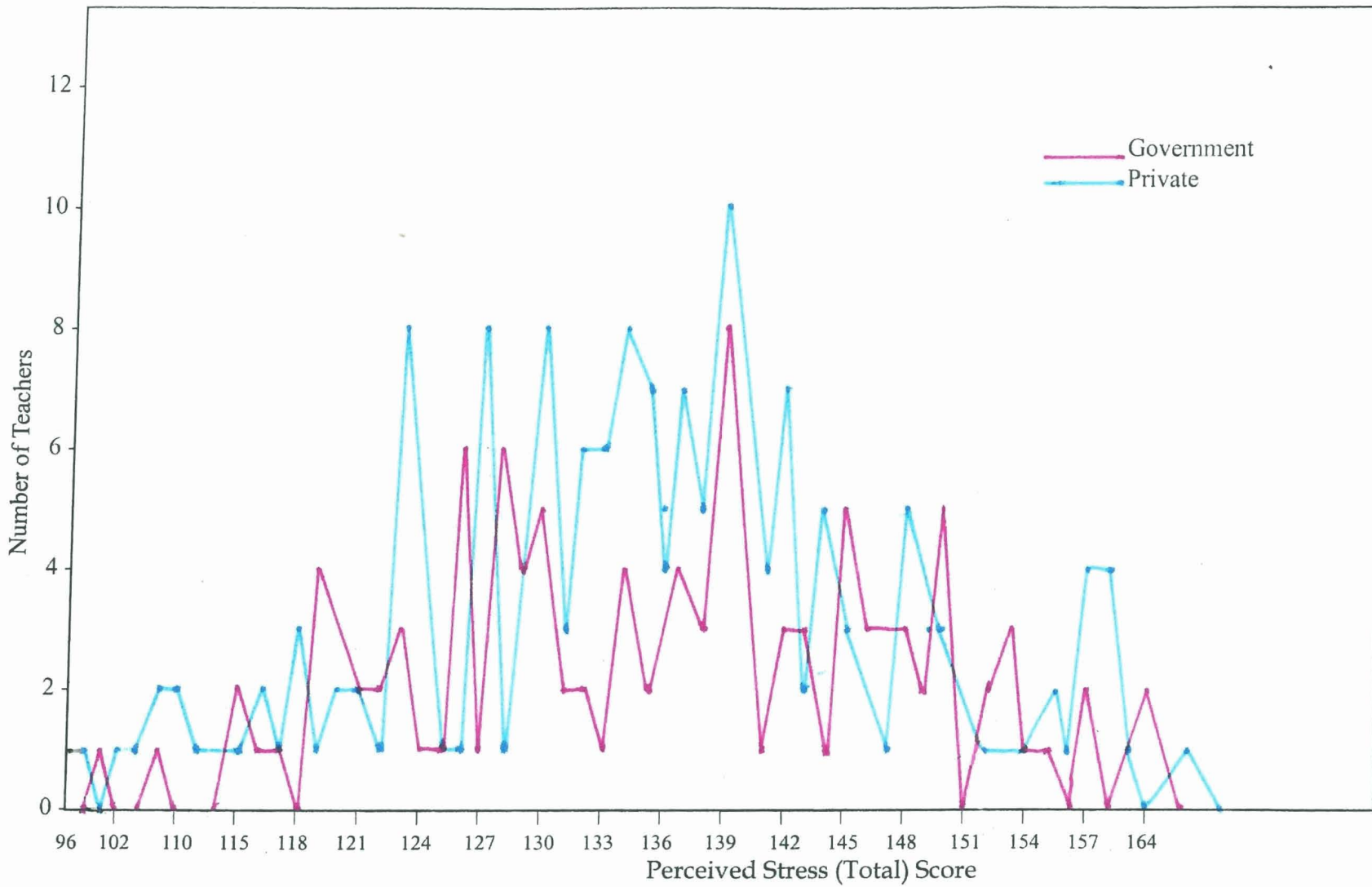


FIGURE 4 - 24 Perceived Stress (Total) of Government and Private School Teachers

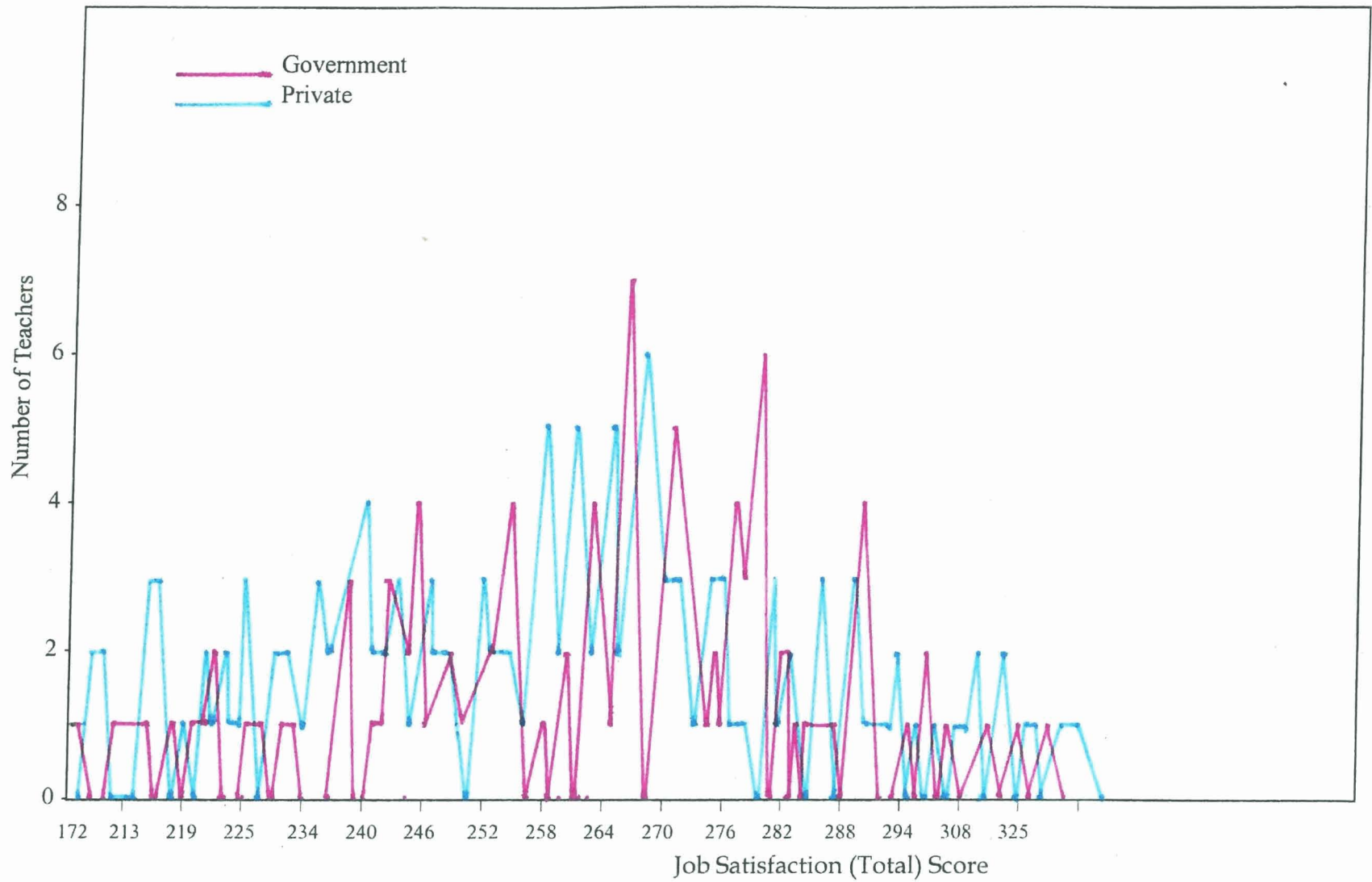


FIGURE 4 - 25 Job Satisfaction (Total) of Government and Private School Teachers

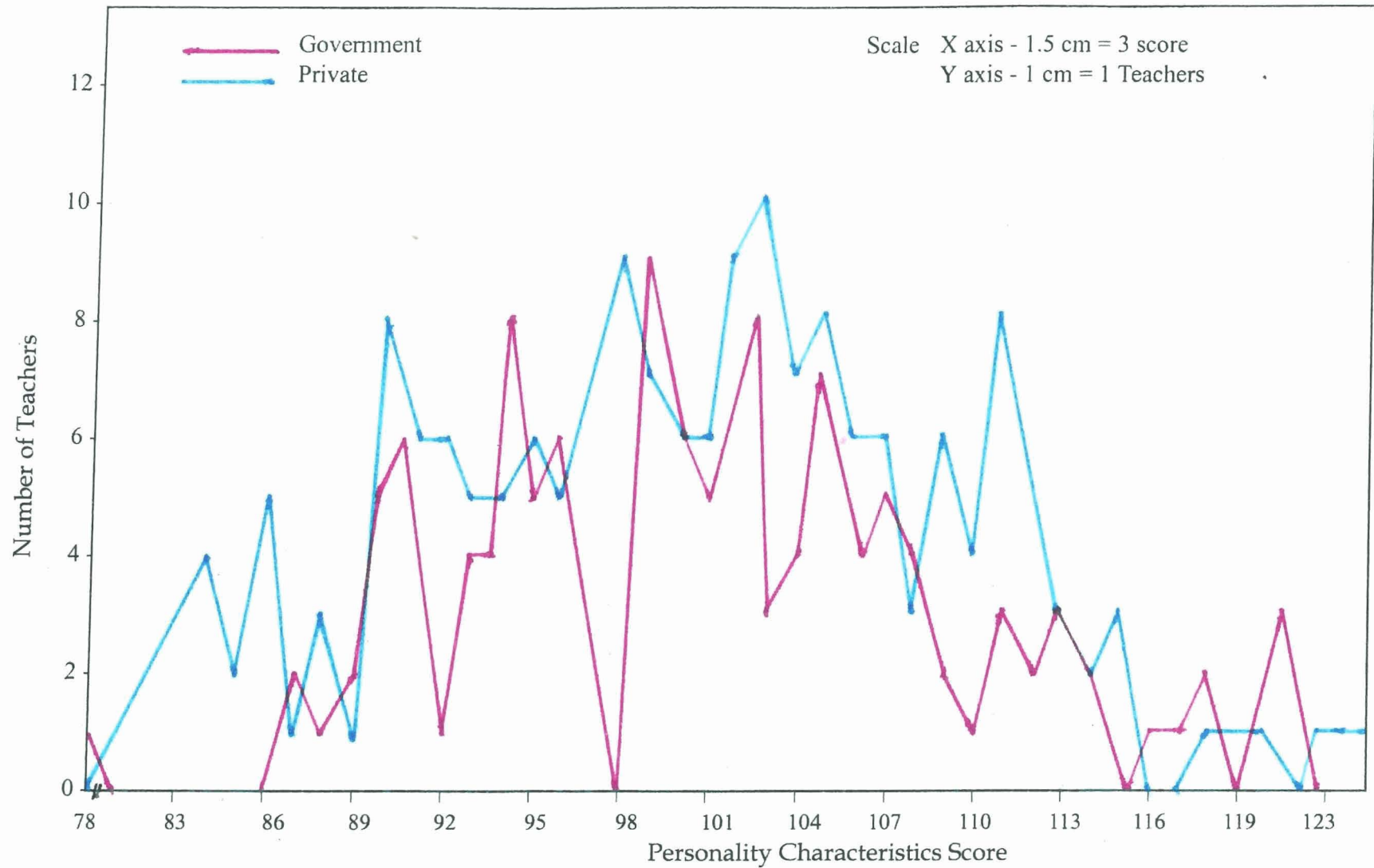


FIGURE 4 - 26 Personality Characteristics of Government and Private School Teachers

From Figures 4-24 and 4-25 it can be observed that Government and Private School Teachers experience same level of Stress and Job Satisfaction regardless of the Type of Management of their Institution. Personality Characteristics of Government and Private School Teachers are almost the same, it is evident from the Figure 4-26.

4.2.1.6. Summary of the Investigation of Difference in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers based on Type, Locale and Management of Schools

Group difference in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers were examined for Type of Institutions, Locale and Type of Management. All the comparisons were done, using two-tailed test of significance of difference between means. The obtained t-values for all comparisons are consolidated and presented in Table 4.17.

TABLE 4.17
t-Values for All Comparisons

Variables	SAMPLES COMPARED				
	Higher Secondary Vs High School	Higher Secondary Vs Primary	High School Vs Primary	Urban Vs Rural	Govt. Vs Private
Intrinsic to the Job	0.26	1.76	1.98*	0.88	3.77**
Role of Teachers	0.32	1.84	2.13*	0.44	1.14
Relationship at Work	1.10	1.36	0.31	2.62**	0.72
Career Development	0.87	0.83	0.13	0.22	0.69
Organisational Structure	0.46	1.70	1.30	3.39**	1.85
Home Work Interface	1.18	1.03	0.18	1.32	0.94
Perceived Stress-Total	0.58	1.13	1.68	3.08**	0.75
Parents and Students	1.91	0.84	2.93**	0.29	0.15
Pay and Fringe Benefits	2.59**	0.35	1.73	0.54	0.86
Working Conditions	0.62	0.10	0.76	0.75	1.08
Opportunities for Advancement	1.01	1.44	0.42	0.93	0.22
Personal Worth	0.10	0.93	0.92	0.56	0.06
Co-Teachers	1.88	2.56*	0.85	1.51	1.90
Principal	1.32	0.05	1.44	1.78	2.70**
Job Itself	1.27	0.41	0.83	0.18	0.14
Job Satisfaction - Total	0.49	0.49	1.07	0.86	0.78
Personality Characteristics	1.90	2.13*	0.29	1.87	1.02

* - Significant at 0.05 level

** - Significant at 0.01 level.

From Table 4.17, it can be seen that Perceived Stress (Total) is significantly different in *Urban* and *Rural* School Teachers ($t=3.08$; $P<0.01$). Urban and Rural School Teachers also shows a significant difference in the experience of the stressor, *Relationship at Work* and *Organisational Structure*. High school and Primary School Teachers significantly differ in the influence of two stressors, *Intrinsic to the Job* and *Role of Teachers*. Government and Private School Teachers significantly differ only in the stressor *Intrinsic to the Job*. In all comparisons the remaining stressors show no significant difference. In the comparison of Higher Secondary and High School Teachers; Higher Secondary and Primary School Teachers, no difference in Perceived Stress (Stressor wise and Total Stress) was noted.

In the case of Job Satisfaction, *Pay and Fringe Benefits* work as a significant component for the difference between Higher Secondary and High School Teachers. The component of Job Satisfaction *Co-Teachers* is significantly different among Higher Secondary and Primary School Teachers. Teacher's *Relationship with Parents and Students* is significantly different among High School and Primary School Teachers. *Principal's* influence on, Teachers working in Government and Private Schools are significantly different. For the remaining Components of Job Satisfaction no significant difference was noted. Total Job Satisfaction among the Groups compared were found to be the same. All these inferences are made on the basis of comparison of mean values of the variables.

Personality Characteristics of Teachers in various samples compared were found to be almost the same except between Higher Secondary and Primary School Teachers ($P < 0.05$).

4.2.1.7. Comparison of Perceived Stress and Job Satisfaction of Teachers Among Different Age Groups

For the comparison, Total Teachers were divided into four groups based on their Age. A maximum of six comparisons were done among these four groups. These comparisons were done to know whether the Age has any influence on Perceived Stress (Stressor wise and Total Stress) and Job Satisfaction (Component-wise and Total Score). Personality characteristics of different age groups were not compared, by assuming that Teachers of various Age groups show remarkable difference in their Personality.

The number of Teachers come under each age groups are given as follows.

Age in years	Number of Teachers
20-30	57
31-40	126
41-50	93
51-60	24
Total	300

t-values of the six paired comparison based on four different Age Groups are given in Table 4.18.

TABLE 4.18

t-values of the Six Paired Comparison Based on Four Different Age Groups

Variables	AGE GROUPS COMPARED					
	20-30 vs 31-40 years	20-30 vs 41-50 years	20-30 vs 51-60 years	31-40 vs 41-50 years	31-40 vs 51-60 years	41-50 vs 51-60 years
Intrinsic to the Job	2.89**	4.23**	2.69**	1.82	1.34	0.41
Role of Teachers	1.92	1.62	1.00	0.07	0.06	0.02
Relationship at Work	0.54	0.58	0.17	0.06	0.23	0.26
Career Development	1.07	0.90	1.34	0.03	0.66	0.54
Organisational Structure	1.16	1.20	0.72	0.08	0.20	0.25
Home work Interface	0.78	1.65	1.88	1.01	1.37	0.59
Perceived Stress - Total	1.81	1.90	1.46	0.22	0.06	0.10
Parents and Students	0.37	0.56	1.32	0.24	1.81	2.00*
Pay and Fringe Benefits	0.74	2.46*	0.65	3.02**	1.12	0.89
Working Conditions	1.00	2.29**	0.09	1.63	0.96	2.11*
Opportunities for Advancement	0.13	0.79	0.29	0.81	0.23	0.28
Personal Worth	0.25	0.35	0.63	0.11	0.95	1.05
Co-Teachers	0.24	1.45	1.93	1.55	2.01*	0.89
Principal	1.23	1.52	3.77**	0.34	3.00**	2.67**
Job Itself	0.44	0.53	0.83	0.09	0.51	0.46
Job Satisfaction - Total	0.39	0.07	0.46	0.44	0.14	0.49

* Significant at 0.05 level

** Significant at 0.01 level

Table 4.18 reveals that there exists a *significant difference (at 0.01 level)* in the stressor, *Intrinsic to the Job* for the three groups compared such as Teachers having the age 20-30 & 31-40, 20-30 & 41-50 and 20-30 & 51-60. From this result it can be inferred that those Teachers come under these age range show a *significant difference* in the stressor *Intrinsic to the Job* than Teachers of other three age groups. But the Total Stress experienced by Teachers in all age groups were found to be *the same*. *No significant difference* was noticed in the remaining stressors.

In the case of components of Job Satisfaction (Component wise and Total score) *no significant* difference was obtained between the Age Groups 20-30 & 31-40. Teachers with the Age Groups 20-30 & 41-50 differ significantly in two components of Job Satisfaction namely, *Pay and Fringe Benefits* and *Working Conditions*. From the higher mean scores of Teachers having the Age between 20-30, it can be said that these Teachers experience more Job Satisfaction in the two components. Teachers with Age 20-30 & 51-60 show a significant difference regarding the component of Job Satisfaction *Principal*. Since the higher mean score is associated with Teachers having the Age 51-60, it can be inferred that these Age Group of Teachers are more satisfied with their *Principal* than Teachers with Age range 20-30 years.

When 31-40 & 41-50 Age Group of Teachers were compared, significant t-value is obtained for Job Satisfaction component *Pay and Fringe Benefits*. And it is found that Teachers between the Age 31-40 are more satisfied (Due to the higher mean value) than Teachers with Age between 41-50. Teachers having the Age between 51-60 are found to be more satisfied than those Teachers with Age between 31-40, regarding the two components of Job Satisfaction, *Co-Teachers* and *Principal*.

The three components of Job Satisfaction, *Relationship with Parents and Students*, *Working Conditions* and *Principal* show a significant difference when Teachers of 41-50 & 51-60 Age Groups are compared. From the higher mean value of the components it can be seen that 51-60 Age Group Teachers are *more satisfied* regarding Working Conditions and Principal. But these Teachers are less satisfied with the component *Parents and Students* than Teachers having the Age Group 41-50.

No significant difference in *Job Satisfaction* (Total) was obtained for any of the six paired comparison among the four Age Group of Teachers.

4.2.1.8. Comparison of Perceived Stress and Job Satisfaction of Teachers based on Educational Qualification.

On the basis of Educational Qualification, the Total Sample were grouped into three as Teachers having (i) *TTC (Teacher Training Certificate) & Pre-Degree*, (ii) *Graduation* and (iii) *Post Graduation and above*. These three groups of Teachers were compared on Perceived Stress (Stressor-wise and Total Stress) and Job Satisfaction (Component-wise and Total score). Mean of these variables were compared to test whether there exists any significant difference between the groups, formed on the basis of Educational Qualification of Teachers. A maximum of three comparisons could be possible among these three groups. Number of Teachers come under each group is given in the following. Personality Characteristics of Teachers were not compared.

Educational Qualification	Number of Teachers
TTC & Pre-Degree	45
Graduation	112
Post Graduation	143
Total	300

For the comparison, the means and SD's of the variables were subjected to two tailed test of significance for difference. The results were studied. The *t*-values obtained in the comparison are given in Table 4.19.

TABLE 4.19

**t-values of the three Paired Comparison
Among Three Groups of Teachers Based on Educational Qualification**

Variables	EDUCATIONAL QUALIFICATION		
	TTC & PDC Vs Graduation	TTC & PDC Vs PG	Graduation Vs PG
Intrinsic to the Job	1.36	2.45*	1.39
Role of Teachers	0.75	1.08	0.52
Relationship at Work	0.70	1.47	1.02
Career Development	1.34	0.16	1.45
Organisational Structure	0.05	0.63	0.73
Home work Interface	0.28	0.35	0.79
Perceived Stress - Total	0.36	0.82	0.58
Parents and students	1.37	0.42	1.11
Pay and Fringe Benefits	0.79	0.30	1.11
Working Conditions	1.31	0.69	0.81
Opportunities for Advancement	0.41	1.03	1.86
Personal Worth	0.79	0.98	0.24
Co-Teachers	1.32	0.99	2.81**
Principal	0.70	0.14	1.18
Job Itself	0.28	0.85	0.76
Job Satisfaction-Total	0.14	0.26	0.15

* Significant at 0.05 level

** Significant at 0.01 level

As per Table 4.19, significant mean difference exists in two comparisons only. That is, in one of the stressor, *Intrinsic to the Job* ($P < 0.05$) between Teachers having Educational Qualification *TTC/Pre-Degree* and *Post Graduation*; and in one of the component of Job Satisfaction *Co-Teachers* ($P < 0.01$) between *Graduate* and *Post Graduate Teachers*.

Teachers having qualification *TTC/Pre-Degree*, experience *more stress* due to lack of physical facilities for Teachers and students, strength of the class, noise level, work load, and lack of participation in decision making than *Post Graduate Teachers*. These inferences were made on the basis of higher mean value of the stressor compared.

Graduate Teachers are *more satisfied* with the relationship, cooperation, communication and conduct of *Co-Teachers* than *Post Graduate Teachers*, since the high mean score is attached with *Graduate Teachers*.

No significant difference was noticed for other stressors and components of Job Satisfaction. Total Stress experienced and Total Job Satisfaction level is not effected by the variation in Educational Qualification of the Teachers.

4.2.1.9. Comparison of Perceived Stress, and Job Satisfaction of Teachers based on Marital Status

The Total sample was grouped into two, *Married* and *Unmarried Teachers*. The means of Perceived Stress (Stressor-wise and Total Stress) and Job Satisfaction (Component-wise and Total Score) were compared. Personality Characteristics were not taken into account. The comparison were done using the two tailed test of significance for difference between means. The details of comparison and level of significance are given in Table 4.20.

TABLE 4.20

**Data and Results of t-test Between Means
of Variables for Married and Unmarried Teachers**

Variables	MARITAL STATUS						t-value	Level of significance
	Married			Unmarried				
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	256	28.51	3.94	44	27.09	3.20	2.62	0.01
Role of Teachers	256	27.09	3.52	44	26.66	2.61	0.95	NS
Relationship at Work	256	18.39	3.46	44	18.16	3.27	0.42	NS
Career Development	256	10.17	2.43	44	9.93	2.31	0.62	NS
Organisational Structure	256	30.40	4.73	44	30.52	4.96	0.15	NS
Home work Interface	256	20.72	4.60	44	23.52	3.16	5.04	0.01
Perceived Stress - Total	256	135.28	12.47	44	135.89	10.91	0.33	NS
Parents and Students	256	56.85	6.60	44	54.82	8.17	1.56	NS
Pay and Fringe Benefits	256	26.00	6.06	44	25.64	5.06	0.43	NS
Working Conditions	256	19.32	3.53	44	19.77	3.02	0.89	NS
Opportunities for Advancement	256	13.73	2.23	44	13.09	2.30	1.70	NS
Personal Worth	256	15.41	2.84	44	14.91	3.64	0.88	NS
Co-Teachers	256	29.95	5.02	44	28.05	5.01	2.33	0.05
Principal	256	42.33	7.34	44	40.66	6.85	1.48	NS
Job Itself	256	57.41	7.61	44	57.36	8.29	0.03	NS
Job Satisfaction - Total	256	261.01	25.67	44	254.30	26.33	1.57	NS

NS: Not Significant

Table 4.20 shows that, there exists significant difference between means of two stressors, namely, *Intrinsic to the Job* (at 0.01 level) and *Home-work Interface* (at 0.01 level), and one component of Job Satisfaction *Co-Teachers* (at 0.05 level). This suggests that Married Teachers experience *more stress* than unmarried Teachers due to lack of physical facilities for Teachers and students, strength of the class, discipline problems, stressful life events, and also due to the dilemma of equality and interaction between home and work. Married teachers expressed *more satisfaction* regarding the relationship, communication and cooperation with Co-Teachers, when compared to unmarried teachers.

4.2.1.10. Comparison of Perceived Stress and Job Satisfaction of Teachers based on Teaching Experience

The Total Sample was grouped into four on the basis of Teaching Experience. These groups were Teachers having 1) *1-10 years* 2) *11-20 years* 3) *21-30 years* and 4) *31-40 years* of Teaching Experience. A six paired comparisons were done using t-test. The number of Teachers come under each group are as follows.

Teaching Experience in Years	Number of Teachers
1-10	131
11-20	104
21-30	57
31-40	8
Total	300

Each Comparison were done on two variables, Perceived Stress (Stressor-wise and Total Stress) and Job Satisfaction (Component-wise and Total score).

Personality Characteristics of the sample is not taken for comparison. For this the mean and SD's of each variable were used. Details of six comparisons were summarised and the t-values are given in Table 4.21.

TABLE 4.21

**t-values of the Six Paired Comparison Among
Four Groups of Teachers Based on Teaching Experience**

Variables	TEACHING EXPERIENCE GROUPS COMPARED					
	1-10 vs 11-20 years	1-10 vs 21-30 years	1-10 vs 31-40 years	11-20 vs 21-30 years	11-20 vs 31-40 years	21-30 vs 31-40 years
Intrinsic to the Job	3.47**	2.67**	0.89	0.04	0.05	0.04
Role of Teachers	2.05*	0.94	0.92	0.67	0.27	0.53
Relationship at Work	0.95	1.61	0.27	0.84	0.65	1.02
Career Development	1.51	0.85	0.13	0.03	0.47	0.42
Organisational Structure	0.95	0.37	1.01	0.38	0.70	0.83
Home work Interface	0.25	2.22*	1.27	2.32*	1.39	0.20
Perceived Stress - Total	2.59**	1.23	0.79	0.95	0.15	0.25
Parents and Students	0.02	1.63	0.01	1.78	0.00	0.84
Pay and Fringe Benefits	0.79	3.52**	0.16	2.19*	0.39	1.14
Working Conditions	2.67*	1.38	0.82	0.92	0.09	0.38
Opportunities for Advancement	0.39	0.18	0.50	0.50	0.41	0.54
Personal Worth	1.05	0.63	2.02*	0.32	2.53*	2.31*
Co-Teachers	0.36	0.82	0.33	0.51	0.21	0.02
Principal	0.23	0.74	2.15*	0.93	2.28*	1.50
Job Itself	2.09*	1.06	0.18	0.87	0.82	0.36
Job Satisfaction - Total	1.26	1.36	0.86	0.27	1.63	1.72

* Significant at 0.05 level ** Significant at 0.01 level

It can be seen from Table 4.21 that, there exists a significant difference between means of the stressor, *Intrinsic to Job* for the two comparisons between Teachers with experience 1-10 & 11-20 years and 1-10 & 21-30 years. From the examination of mean values it is found that, Teachers having 1-10 years of experience are less affected by class size, unsuitable building, noise level, lack of resources, and workload, when compared to Teachers having 11-20 and 21-30 years of experience.

The stressor *Role of Teachers*, show significant difference between the groups of Teachers having 1-10 years and 11-20 years of experience. Teachers with 11-20 years of experience, are *more affected* by role conflict and diverse responsibilities than Teachers with an experience 1-10 years as evidenced by the higher mean value.

In the comparison of Teachers with 1-10 & 21-30 years of experience, the stressor *Home work Interface significantly differentiates*. Significant difference in *Home work Interface* is also noted in the comparison of Teachers having experience 11-20 & 21-30 years. Teachers having an experience of 21-30 years are less affected by the stressor *Home-work Interface*, when compared to Teachers having experience of 1-10 and 11-20 years, because the lesser mean value is associated with the Teachers having an experience of 21-30 years.

The effect of other stressors *Relationship at Work, Career Development* and *Organisational structure*, on different groups were found to be the same. *No significant difference* is noticed in Total stress, except in the comparison between Teachers with 1-10 years and 11-20 years of experience. From the high mean score of Perceived Stress - Total it can be said that Teachers with 11-20 years of experience are more stressed than Teachers with 1-10 years of experience.

While considering the variable Job Satisfaction (Component-wise and Total score), it can be seen that Teachers having 21-30 years of experience show a significant difference from those having 1-10 years and 11-20 years of experience regarding *Pay and Fringe Benefits*. From the high mean score it can be inferred that Teachers having 21-30 years of experience are *less satisfied* regarding pension, financial needs and amount of pay received, and also in the Fringe benefits available, than Teachers with 1-10 and 11-20 years of experience.

The components *Working Conditions*, and *Job Itself* significantly differentiate Teachers having 1-10 years and 11-20 years of experience. Teachers with 1-10 years of experience are *more satisfied* with working conditions, and they possess a feeling of accomplishment, self inspiration, freedom, responsibility and variety in the works than Teachers with 11-20 years of experience.

Teachers with 1-10 and 31-40 years of teaching experience show a significant difference in the components of Job Satisfaction *Personal Worth*. From the higher mean value obtained it can be concluded that Teachers with 31-40 years of experience are *more interested* in their work and giving more value to their profession than those with an experience of 1-10 years. These group of Teachers having 1-10 and 31-40 years of experience show a *significant difference* in the relationship with *Principal*. Teachers having 31-40 years of experience have *more satisfaction* regarding the Job Satisfaction component *Principal* than Teachers with 1-10 years of experience.

When Teachers having an experience of 11-20 & 31-40 years were compared, it is found that, these Teachers differ significantly in two components of Job Satisfaction, namely *Personal Worth* and *Principal*. Since the higher mean value is associated with Teachers having an experience of 31-40 years, it can be said that these Teachers are *more satisfied* regarding the two components. The component of Job Satisfaction, *Personal Worth* significantly differentiate Teachers

having 21-30 years and 31-40 years of experience. From the higher mean value it can be inferred that Teachers with an experience of 31-40 years are more interested in their work and giving more value to their profession than those with an experience of 21-30 years.

In the six paired comparison, all the groups expressed same level of Total *Job Satisfaction*, because no significant *t*-value is obtained for Job Satisfaction (Total).

4.2.1.11. Comparison of Perceived Stress and Job Satisfaction of Teachers based on Number of Dependents

Perceived Stress (Stressor-wise and Total Stress) and Job Satisfaction (Component-wise and Total score) of Teachers were compared based on number of dependents. Personality Characteristics were not considered for comparison. To facilitate comparison, the Total Sample were divided in to three groups. The groups formed and the number of Teachers in each group are as follows.

Number of Dependents	Number of Teachers
1-3	172
4-7	80
No Dependents	48
Total	300

Using these three groups three paired comparisons were made. The details of comparison and respective *t*-values of each variable are summarised and given in Table 4.22.

TABLE 4.22

t-values of the Three Paired Comparison
Among Three Groups of Teachers Based on Number of Dependents

Variables	NUMBER OF DEPENDENTS		
	1-3 Vs 4-7 Numbers	1-3 Vs No Dependents	4-7 Vs No Dependents
Intrinsic to the Job	0.25	2.92**	2.39*
Role of Teachers	0.75	2.32*	2.72**
Relationship at Work	0.06	1.39	1.18
Career Development	0.09	1.13	0.94
Organisational Structure	1.02	0.17	0.59
Home work Interface	0.92	2.64**	3.15**
Perceived Stress - Total	0.19	1.14	1.12
Parents and Students	1.03	1.65	0.78
Pay and Fringe Benefits	2.51*	0.90	1.32
Working Conditions	0.50	0.54	0.85
Opportunities for Advancement	1.48	2.31*	1.03
Personal Worth	0.88	0.85	1.37
Co-Teachers	1.59	2.92**	1.42
Principal	0.58	1.80	2.00*
Job Itself	0.00	0.56	0.50
Job Satisfaction - Total	1.02	2.24*	1.14

* Significant at 0.05 level

** Significant at 0.01 level

In the comparison of Teachers with 1-3 and no dependents; and Teachers having 4-7 and no dependents shows a significant difference in the effect of the stressor, *Intrinsic to the Job, Role of Teachers* and *Home-work Interface* when compared to Teachers with no dependents, from the magnitude of Mean values, it can be said that Teachers having dependents 1-3 and 4-7 are more stressed regarding the stressors *Intrinsic to the Job* and *Role of Teachers*, than Teachers with no dependents. But at the same time it is also noticed that stress due to the stressor *Home-work Interface* is more for no dependents group.

Stress experienced due to the stressor, Relationship at Work, Career Development, and Organisational Structure are found to be *the same* among the different groups compared. Teachers with 1-3 and 4-7 dependents show a significant difference in the Job satisfaction component *Pay and Fringe Benefits*. Teachers having 1-3 dependents are more satisfied with their pay and Fringe Benefits than Teachers with 4-7 dependents, and it is evident from the higher mean values of 1-3 dependents group.

In the comparison of Teachers with 1-3 and no dependents, show a significantly different Job Satisfaction level. Teachers having 1-3 dependents expressed more satisfaction than those with no dependents regarding two Job Satisfaction components (Opportunities for Advancement and Co-Teachers) and in Total Job Satisfaction level. It is inferred from the comparison of mean values.

Job Satisfaction component *Principal*, showed significantly different effect on the group of Teachers with no dependents and 4-7 dependents. Teachers with 4-7 dependent are more satisfied with their Principal, than Teachers with No dependents.

No significant difference have been noticed in remaining components of Job Satisfaction for any of the three paired comparisons done.

4.2.1.12. Comparison of Perceived Stress and Job Satisfaction of Teachers based on Type of Career of Couples

To study whether there exists any significant difference in Perceived Stress (Stressor-wise and Total Stress) and Job Satisfaction (Component-wise and Total Score) of Teachers based on Type of Career of Couples, the married Teachers were divided into three groups, based on the nature of career of their spouse. Personality Characteristics are not considered for comparison. The number of Teachers in each category, and the type of groups formed are as follows.

Type of career of the couples	Number of Teachers
Same Career	109
Dual Career	96
Spouse Unemployed	51
Total	256

These three groups were compared using two-tailed test of significant difference in means. For this means and SD's of the variables were used. A maximum of three paired comparisons were made. Groups compared and the respective t-values obtained are given in Table 4.23.

TABLE 4.23

**t-values of the Three Paired Comparison
Among Three Groups of Teachers Based on Type of Career of Couples**

Variables	TYPE OF CAREER OF COUPLES		
	Spouse Unemployed Vs Dual Career Couples	Spouse Unemployed Vs Same Career Couples	Same Career Vs Dual Career Couples
Intrinsic to the Job	0.33	0.01	0.39
Role of Teachers	0.30	1.03	1.03
Relationship at Work	0.23	1.18	0.48
Career Development	1.59	1.01	0.42
Organisational Structure	0.12	1.74	1.84
Home work Interface	0.03	1.37	1.77
Perceived Stress -Total	0.30	0.30	0.68
Parents and Students	1.37	2.42*	1.17
Pay and Fringe Benefits	2.74**	2.30*	0.16
Working Conditions	0.13	0.26	0.14
Opportunities for Advancement	1.64	0.80	0.98
Personal Worth	0.08	0.20	0.29
Co-Teachers	0.56	1.07	0.50
Principal	0.03	0.04	0.02
Job Itself	0.38	0.15	0.28
Job Satisfaction - Total	1.10	1.25	0.04

* Significant at 0.05 level.

** Significant at 0.01 level.

In the three paired comparison, *no Significant difference* was obtained either for *Total Perceived stress* or for any of the six *Stressors*. From this it can be said that Career of the couples have *no significant effect on Perceived stress* (Stressor-wise and Total Stress) of Teachers.

When Job Satisfaction components were taken into consideration, *Pay and Fringe Benefits* shows a significant difference between Teachers of *Spouse Unemployed* and Dual Career Couples. Dual Career Couples expressed *more satisfaction* with Pay and Fringe Benefits than Spouse Unemployed group, since the higher mean value is attached to Dual Career Couples. Teachers with Spouse Unemployed and Teachers with Spouse in the Same Profession showed *significant difference* in the relationship with *Parents and Students* and *Pay and Fringe Benefits*. From the higher means it can be inferred that Same Career Couples are *more satisfied* regarding their relationship with Parent and Students and salary they received than Spouse Unemployed group.

The remaining Job Satisfaction components and Total Job Satisfaction level of Teachers were *unaffected* by the Nature of Career of the Couple.

4.2.2. EXTENT AND DEGREE OF ASSOCIATION OF JOB SATISFACTION AND PERSONALITY CHARACTERISTICS WITH PERCEIVED STRESS OF TEACHERS

The *extent* and *degree* of association of each independent variable, *Job Satisfaction* and *Personality Characteristics* with *Perceived Stress*, is investigated using Pearson's Product Moment Coefficient of Correlation. The correlation technique is described in terms of the size and direction of r , statistical significance of the coefficient (by Fisher's t-test), 99 per cent confidence interval of r , and shared variance which a variable has in common with the variable

associated. These details of correlations were calculated separately for Total Sample, Higher Secondary, High School and Primary School Teachers.

The following assumptions are satisfied before using Pearson's Coefficient of Correlation.

1. The relationship between two variables are rectilinear.
2. The two variables are continuous.

[Job Satisfaction, Personality Characteristics and Perceived Stress of Teachers are treated as internal variables, so they are continuous].

3. The pairs of measures are independent.

[The design of the study itself is the evidence for satisfying this assumption]

4. Variables follow normal distribution

[Normality of variables is verified in the preliminary analysis].

In estimating the correlation between Perceived Stress and Job Satisfaction, investigator gave importance to the relationship between Total Job Satisfaction and Perceived Stress (Stressor-wise and Total Stress).

4.2.2.1. Relationship between Job Satisfaction (Total) and Perceived Stress (Stressor-wise and Total Stress) for Total Sample

Relationship between the Independent variable Job Satisfaction (Total) and Dependent variable Perceived Stress were studied for Total Sample, using Pearsons Product Moment Coefficient of Correlation. The details are presented in Table 4.24.

TABLE 4.24

**Correlation of Job Satisfaction with Perceived
Stress (Stressor-wise and Total Stress) for Total Sample**

Variables Correlated with Job Satisfaction - Total	Coefficient of Correlation r	Fisher's t	Level of Significance	Confidence Interval (99 per cent)	Shared Variance
Intrinsic to the Job	-0.129	-2.246	0.05	(-0.276, 0.018)	1.664
Role of Teachers	-0.005	-0.086	NS	(-0.154, 0.144)	0.003
Relationship at Work	-0.396	-7.445	0.01	(-0.522, -0.270)	15.682
Career Development	-0.177	-3.105	0.01	(-0.322, -0.033)	3.133
Organisational Structure	-0.427	-8.152	0.01	(-0.549, -0.305)	18.233
Home work Interface	-0.299	-5.409	0.01	(-0.435, -0.163)	8.940
Perceived Stress - Total	-0.464	-9.042	0.01	(-0.581, -0.347)	21.530

NS : Not significant.

Table 4.24 shows that there exist *significant* and *negative* relationship between Total Job Satisfaction and the following Stressors.

1. Intrinsic to the Job and Job Satisfaction (0.05 level)
2. Relationship at Work and Job Satisfaction (0.01 level)
3. Career Development and Job Satisfaction (0.01 level)
4. Organisational Structure and Job Satisfaction (0.01 level)

5. Home-Work Interface and Job Satisfaction (0.01 level)
6. Perceived Stress - Total and Job Satisfaction (0.01 level).

The sign of r in all the six cases is negative which indicates that higher the influence of stressors, Job Satisfaction will be low. Significant correlation, further suggests that there exists a *true relationship* between Perceived Stress and Total Job Satisfaction.

The relationship obtained can be verbally interpreted as: *Negligible relationship* between Total Job Satisfaction and stressors like *Intrinsic to the Job, Role of Teachers* and *Career Development*; *Low correlation* exists between Total Job Satisfaction and stressor *Home-work Interface*; and *Substantial correlation* exists between Total Job Satisfaction and stressors like *Relationship at Work* and *Organisational Structure*. The relationship between Total Job Satisfaction and Total Perceived Stress is found to be as *marked*.

The 99 per cent confidence interval of r suggests that the probability is 0.99 that the population r falls between the given limits.

The percentage of variance shared between the variables are also given in the Table 4.24. This indicates that, that much per cent of variance of Job Satisfaction is attributable to the respective variation in each stressors and Perceived Stress - Total. The *highest per cent of shared variance* is for Perceived Stress - Total (21.53) and the *lowest* is noticed for the Stressor *Role of Teachers* (0.003).

4.2.2.2. Relationship between Job Satisfaction (Total) and Perceived stress (Stressor-wise and Total Stress) for Higher Secondary School Teachers

Correlation coefficients between Total Job Satisfaction and Perceived Stress (Stressor-wise and Total Stress) were obtained for Higher Secondary Schools and the details are presented in Table 4.25.

TABLE 4.25

**Correlation of Job Satisfaction with Perceived
Stress (Stressor-wise and Total Stress) for Higher Secondary School Teachers**

Variables Correlated with Job Satisfaction - Total	Coefficient of Correlation r	Fisher's t	Level of Significance	Confidence Interval (99 per cent)	Shared Variance
Intrinsic to the Job	-0.201	-2.031	0.05	(-0.450, 0.048)	4.040
Role of Teachers	-0.070	-0.695	NS	(-0.328, 0.188)	0.490
Relationship at Work	-0.340	-3.579	0.01	(-0.569, -0.111)	11.560
Career Development	-0.415	-4.516	0.01	(-0.630, -0.200)	17.223
Organisational Structure	-0.402	-4.346	0.01	(-0.619, -0.185)	16.160
Home work Interface	-0.432	-4.742	0.01	(-0.643, -0.221)	18.662
Perceived Stress - Total	-0.513	-5.916	0.01	(-0.704, -0.322)	26.317

NS : Not significant.

Table 4.25 shows that there exists *significant* and *negative* relationship between Total Job Satisfaction and the following Stressors.

- (1) Intrinsic to the Job and Total Job Satisfaction (0.05 level)
- (2) Relationship at Work and Total Job Satisfaction (0.01 level)
- (3) Career Development and Total Job Satisfaction (0.01 level)
- (4) Organisational Structure and Total Job Satisfaction (0.01 level)

- (5) Home Work Interface and Total Job Satisfaction (0.01 level)
- (6) Total Perceived Stress and Total Job Satisfaction (0.01 level).

The negative sign of r suggests that higher the influence of stressors, lower will be the Job Satisfaction and vice versa.

The relationship obtained can be verbally interpreted as : *Negligible* relationship between Total Job Satisfaction and Stressor, *Role of Teachers*; *Low correlation* exists between Total Job Satisfaction and stressors like *Intrinsic to the Job, Relationship at Work*; and *Substantial correlation* exists between Total Job Satisfaction and stressors like *Career Development, Organisational Structure, Home-work Interface*. The relationship between Total Job Satisfaction and Total Perceived Stress is found to be as *marked*.

The 0.99 confidence interval of r indicates that the population ' r ' would falls between the given limits.

The percentage of variance shared between the variables is also given in Tale 4.25. These values indicate that, about that much per cent of the variance in Job Satisfaction is attributable to the variation in each stressors and Total Perceived Stress. The highest percentage overlap (26.32) is shared by Perceived Stress (Total) and Job Satisfaction. The lowest is shared between (0.49) the stressor Role of Teachers and Job Satisfaction.

4.2.2.3. Relationship between Job Satisfaction (Total) and Perceived Stress (Stressor-wise and Total Stress) for High School Teachers

Correlation coefficients between Job Satisfaction (Total) and Perceived Stress (Stressor-wise and Total Stress) were computed for High School Teachers and the details are presented in Table 4.26.

TABLE 4.26

**Correlation of Job Satisfaction with Perceived
Stress (Stressor-wise and Total Stress) for High School Teachers**

Variables Correlated with Job Satisfaction - Total	Coefficient of Correlation r	Fisher's t	Level of Significance	Confidence Interval (99 per cent)	Shared Variance
Intrinsic to the Job	-0.023	-0.228	NS	(-0.282, 0.236)	0.053
Role of Teachers	-0.045	-0.446	NS	(-0.304, 0.214)	0.203
Relationship at Work	-0.423	-4.621	0.01	(-0.636, -0.210)	17.893
Career Development	-0.082	-0.815	NS	(-0.340, 0.176)	0.672
Organisational Structure	-0.451	-5.002	0.01	(-0.658, -0.244)	20.340
Home work Interface	-0.187	-1.885	NS	(-0.437, 0.063)	3.497
Perceived Stress - Total	-0.396	-4.269	0.01	(-0.615, -0.177)	15.682

NS : Not significant.

Table 4.26 shows that there exists significant and negative relationship between Total Job Satisfaction and following stressors:

- (1) Relationship at Work and Total Job Satisfaction (at 0.01 level)
- (2) Organisational Structure and Total Job Satisfaction (at 0.01 level)
- (3) Perceived Stress - Total and Total Job Satisfaction (at 0.01 level)

The sign of ' r ' is negative, indicating that as the stressors influence increases, Job Satisfaction decreases.

The relationships obtained can be verbally interpreted as : *Negligible* relationship between Total Job Satisfaction and stressors like *Intrinsic to the Job, Role of Teachers, Career Development, Home-work Interface*; and *Substantial* relationship exists between Total Job Satisfaction and stressors like *Relationship at Work, Organisational Structure*. The relationship between Total Job Satisfaction and Total Perceived Stress of High School Teachers is found to be as *marked*.

The 99 per cent of confidence interval of r suggests that the chance is 0.99 that population r falls between the given limits.

The percentage of variance shared between the variables is also given in Table 4.26. From these values it can be said that, that much per cent of the variance of Job Satisfaction can be attributed to the respective variation in each stressors and Total Perceived Stress. The highest variance is shared commonly by Job Satisfaction and Organisational Structure. It was about 20 per cent. The stressor, Intrinsic to the Job is shared the lowest percentage of variance with Job Satisfaction.

4.2.2.4. Relationship between Job Satisfaction (Total) and Perceived Stress (Stressor-wise and Total Stress) for Primary School Teachers.

Correlation coefficients between Job Satisfaction (Total) and Perceived Stress (Stressor-wise and Total Stress) were determined for Primary School Teachers using Pearson's Product Moment Correlation Method. The details are presented in Table 4.27.

TABLE 4.27

**Correlation of Job Satisfaction with Perceived
Stress (Stressor-wise and Total Stress) for Primary School Teachers**

Variables Correlated with Job Satisfaction - Total	Coefficient of Correlation r	Fisher's t	Level of Significance	Confidence Interval (99 per cent)	Shared Variance
Intrinsic to the Job	-0.169	-1.697	NS	(-0.421, 0.083)	2.856
Role of Teachers	-0.074	-0.735	NS	(-0.332, 0.184)	0.548
Relationship at Work	-0.441	-4.864	0.01	(-0.650, -0.232)	19.448
Career Development	-0.089	-0.885	NS	(-0.346, 0.168)	0.792
Organisational Structure	-0.462	-5.157	0.01	(-0.666, -0.258)	21.344
Home work Interface	-0.277	-2.854	0.01	(-0.516, -0.038)	7.673
Perceived Stress Total	-0.503	-5.761	0.01	(-0.697, -0.309)	25.301

NS : Not significant

Table 4.27 shows that there exists *significant* and *negative* relationship between Total Job Satisfaction and the following stressors.

- (1) Relationship at Work and Job Satisfaction (at 0.01 level)
- (2) Organisational Structure and Job Satisfaction (at 0.01 level)
- (3) Home-work Interface and Job Satisfaction (at 0.01 level)
- (4) Perceived Stress -Total and Job Satisfaction (at 0.01 level)

The negative sign of the correlation indicates that an increase in the effect of stressors will result in a decrease of Job Satisfaction and vice versa.

The relationship obtained can be verbally interpreted as : *Negligible* relationships between Total Job Satisfaction and stressors like *Intrinsic to the Job, Role of Teachers, Career Development*; *Low correlation* exists between Total Job Satisfaction and *Home-work Interface*; and *Substantial* correlation exists between Total Job Satisfaction and stressors like *Relationship at Work* and *Organisational Structure*. The relationship between Total Job Satisfaction and Total Perceived Stress is found to be as *marked*.

The 99 per cent confidence interval suggests that the chance is 0.99 that the population r falls between the given limits.

The shared variance between the variables, indicates that, that much per cent of the variance of the variable Total Job Satisfaction is attributable to the respective variation in different stressors and Total Perceived stress. The highest percentage overlap (25.30) is shared by Perceived Stress (Total) and Job Satisfaction. The lowest is shared between (0.55) the stressor Role of Teachers and Job Satisfaction.

4.2.2.5. Relationship between Personality Characteristics and Perceived Stress (Stressor-wise and Total Stress) for Total Sample

Relationship between the Independent variable Personality Characteristics and Dependent variable Perceived Stress (Stressor-wise and Total Stress) was studied for Total sample using Pearson's Product Moment of Correlation. The correlations obtained for each stressor and Perceived Stress - Total are presented in Table 4.28.

TABLE 4.28

**Correlation of Personality Characteristics with
Perceived Stress (Stressor-wise and Total Stress) for Total Sample**

Variables Correlated with Personality Characteristics	Coefficient of Correlation r	Fisher's t	Level of Significance	Confidence Interval (99 per cent)	Shared Variance
Intrinsic to the Job	-0.056	-0.968	NS	(-0.205, 0.093)	0.314
Role of Teachers	-0.010	-0.173	NS	(-0.159, 0.139)	0.01
Relationship at Work	-0.184	-3.232	0.01	(-0.328, -0.040)	3.386
Career Development	-0.130	-2.263	0.05	(-0.277, 0.017)	1.69
Organisational Structure	-0.126	-2.193	0.05	(-0.273, 0.021)	1.588
Home Work Interface	-0.160	-2.798	0.01	(-0.305, -0.015)	2.56
Perceived Stress - Total	-0.206	-3.634	0.01	(-0.349, -0.063)	4.244

NS : Not significant.

Table 4.28 reveals that, there exists a significant and negative relationship between Personality Characteristics and the following stressors.

- (1) Relationship at Work and Personality Characteristics (0.01 level)
- (2) Career Development and Personality Characteristics (0.05 level)
- (3) Organisational Structure and Personality Characteristics (0.05 level)
- (4) Home-work Interface and Personality Characteristics (0.01 level)
- (5) Total Perceived Stress and Personality Characteristics (0.01 level)

The negative r suggests that as the Personality Characteristics of Teachers increase, effect of various stressors decrease.

The size of the r indicates that: *Negligible* relationship exists between Personality Characteristics and stressors like *Intrinsic to the Job, Role of Teachers, Relationship at Work, Career Development, Organisational Structure, Home-work Interface*. The relationship between Total Perceived Stress and Personality Characteristics is found to be as *low*.

The 99 per cent confidence interval of r suggests that the probability of population r falls between the specified limit is 0.99. The percentage of variance shared between Personality Characteristics and each stressor was also given in Table 4.28. Nearly four per cent of variance is attributed commonly by Perceived Stress (Total) and Personality Characteristics. This is the highest variance shared. The lowest variance is associated with Role of Teachers (0.01).

4.2.2.6. Relationship between Personality Characteristics and Perceived Stress (Stressor-wise and Total Stress) for Higher Secondary School Teachers

The extent and degree of association between Personality Characteristics and Perceived Stress (Stressor-wise and Total Stress) were determined for Higher Secondary School Teachers using correlational analysis. The details regarding Coefficient of Correlation, Fisher's t , Level of Significance, Confidence Interval and Shared Variance are given in Table 4.29.

TABLE 4.29

**Correlation of Personality Characteristics with Perceived Stress
(Stressor-wise and Total Stress) for Higher Secondary School Teachers**

Variables Correlated with Personality Characteristics	Coefficient of Correlation r	Fisher's t	Level of Significance	Confidence Interval (99 per cent)	Shared Variance
Intrinsic to the Job	-0.017	-0.168	NS	(-0.276, 0.242)	0.029
Role of Teachers	-0.006	-0.059	NS	(-0.265, 0.253)	0.004
Relationship at Work	-0.183	-1.843	NS	(-0.434, 0.068)	3.349
Career Development	-0.285	-2.943	0.01	(-0.523, 0.047)	8.123
Organisational Structure	-0.020	-0.198	NS	(-0.279, 0.239)	0.040
Home Work Interface	-0.160	-1.605	NS	(-0.413, 0.093)	2.560
Perceived Stress - Total	-0.158	-1.584	NS	(-0.411, 0.095)	2.496

NS - Not significant.

From Table 4.29, it can be seen that, only one stressor *Career Development*, is significantly related (at 0.01 level) to the Personality Characteristics of Higher Secondary School Teachers. The negative sign of r , indicates that as the Personality Characteristics increases, the Stress due to the stressor Career Development decreases.

The size of r , indicates that: *Negligible relationship* exists between Personality Characteristics and stressors like *Intrinsic to the Job*, *Role of*

Teachers, Relationship at Work, Organisational Structure, Home-work Interface; and Low relationship exists between Personality Characteristics and one of the six stressors, *Career Development*. The relationship between Total Perceived Stress and Personality Characteristics of Higher Secondary School Teachers are also found to be as *low*.

The 99 per cent confidence interval of r suggests that the probability of population r falls between the limits specified is 0.99. The percentage of variance shared between Personality Characteristics and each stressor are also given in the Table 4.29. The common variance shared by Personality Characteristics and *Career Development* is 8.12 per cent which is the highest. The lowest percentage of variance is attributable to the stressor *Role of Teachers* and *Job Satisfaction* (0.004).

4.2.2.7. Relationship between Personality Characteristics and Perceived Stress (Stressor-wise and Total Stress) for High School Teachers

To study the extent and degree of association between Personality Characteristics and Perceived Stress (Stressor-wise and Total Stress) of High School Teachers, correlational analysis was employed. The details of the relationship obtained are presented in Table 4.30.

TABLE 4.30

**Correlation of Personality Characteristics with
Perceived Stress (Stressor-wise and Total Stress) for High School Teachers**

Variables Correlated with Personality Characteristics	Coefficient of Correlation r	Fisher's t	Level of Significance	Confidence Interval (99 per cent)	Shared Variance
Intrinsic to the Job	-0.007	-0.069	NS	(-0.266, 0.252)	0.005
Role of Teachers	-0.010	-0.099	NS	(-0.269, 0.249)	0.010
Relationship at Work	-0.209	-2.116	0.05	(-0.457, 0.039)	4.368
Career Development	-0.077	-0.765	NS	(-0.335, 0.181)	0.593
Organisational Structure	-0.116	-1.156	NS	(-0.372, 0.140)	1.346
Home Work Interface	-0.090	-0.895	NS	(-0.347, 0.167)	0.810
Perceived Stress - Total	-0.154	-1.543	NS	(-0.407, 0.099)	2.372

NS : Not significant.

From the Table 4.30 it can be said that among the six stressors, only one stressor, *Relationship at Work* is significantly related to Personality Characteristics of High School Teachers. The negative sign of the r suggests that as the Personality Characteristics of a Teacher increases, the Stress due to the stressor, Relationship at work decreases.

The size of the r indicate that: *Negligible relationship* exists between Personality Characteristics and stressors like *Intrinsic to the Job, Role of*

Teachers, Career Development, Organisational Structure, Home-work Interface; and *Low correlation* exists between Personality Characteristics and one of the stressor, *Relationship at Work*. The relationship between Total Perceived Stress and Personality Characteristics of High School Teachers are also found to be as *negligible*.

The 99 per cent confidence interval of r suggests that the probability of population r fall between the specified limits is 0.99. The percentage of variance shared between Personality Characteristics and each stressor are also given in the Table 4.30. The highest percentage of shared variance is for *Relationship at Work*. About four per cent of variance of *Relationship at Work* is attributable to Personality Characteristics. The lowest variance is noticed for the stressor, *Intrinsic to the Job* (0.005).

4.2.2.8. Relationship between Personality Characteristics and Perceived Stress (Stressor-wise and Total Stress) for Primary School Teachers

Teachers in the Primary Schools were examined for the extent and degree of association between Personality Characteristics and Perceived Stress (Stressor-wise and Total Stress). Pearson's Product Moment Correlation technique was employed for the purpose. Details and results of analysis are presented in Table 4.31.

TABLE 4.31

Correlation of Personality Characteristics with Perceived Stress (Stressor-wise and Total Stress) for Primary School Teachers

Variables Correlated with Personality Characteristics	Coefficient of Correlation r	Fisher's t	Level of Significance	Confidence Interval (99 per cent)	Shared Variance
Intrinsic to the Job	-0.149	-1.492	NS	(-0.403, 0.105)	2.220
Role of Teachers	-0.007	-0.069	NS	(-0.266, 0.252)	0.005
Relationship at Work	-0.202	-2.042	0.05	(-0.451, 0.047)	4.080
Career Development	-0.054	-0.535	NS	(-0.313, 0.205)	0.292
Organisational Structure	-0.205	-2.073	0.05	(-0.453, 0.043)	4.203
Home Work Interface	-0.269	-2.765	0.01	(-0.510, -0.029)	7.236
Perceived Stress - Total	-0.296	-3.068	0.01	(-0.533, -0.059)	8.762

NS : Not significant.

Table 4.31 reveals that, there exists a *significant* and *negative* relationship between Personality Characteristics and the following stressors:

- (1) Relationship at Work and Personality Characteristics (0.05 level)
- (2) Organisational Structure and Personality Characteristics (0.05 level)
- (3) Home-work Interface and Personality Characteristics (0.01 level)
- (4) Total Perceived Stress and Personality Characteristics (0.01 level)

Negative sign of the correlation coefficients, suggest that when Personality Characteristics score increases may Stress due to various stressors in the working environment decreases and vice versa.

The size of r indicates that: *Negligible relationship* exists between Personality Characteristics and stressors like *Intrinsic to the Job, Role of Teachers* and *Career Development*; and *Low correlation* exists between Personality Characteristics and stressors like *Relationship at Work, Organisational Structure* and *Home-work Interface*. The relationship between Total Perceived Stress and Personality Characteristics of Primary School Teachers is found to be as *low*.

The 99 per cent confidence interval of r suggests that the probability of population r falls between the limits specified is 0.99. The percentage of variance shared between Personality Characteristics and each stressor are also given in the Table 4.31.

The highest variance (8.76) is shared by *Perceived Stress (Total)* and Personality Characteristics. The stressor, *Role of Teachers* and Personality Characteristics shared the lowest variance (0.005).

4.2.2.9. Summary and Discussion of Correlational Analysis

The results of the correlational analysis employed, to examine the *extent* and *degree of association* of Job Satisfaction and Personality Characteristics with Perceived Stress (Stressor wise and Total Stress) of Teachers are summarised and discussed. The r 's obtained in the analysis are consolidated and presented in Table 4.32.

TABLE 4.32

Summary of Correlational Analysis Between Job Satisfaction (Total)
and Personality Characteristics with Perceived Stress (Stressor wise and Total Stress) of Teachers

Variables	JOB SATISFACTION (TOTAL)				PERSONALITY CHARACTERISTICS			
	Total sample r	Higher Secondary r	High School r	Primary School r	Total Sample r	Higher Secondary r	High School r	Primary School r
Intrinsic to the Job	-0.129*	-0.201*	-0.023	-0.169	-0.056	-0.017	-0.007	-0.149
Role of Teachers	-0.005	-0.070	-0.045	-0.074	-0.010	-0.006	-0.010	-0.007
Relationship at Work	-0.396**	-0.340**	-0.423**	-0.441**	-0.184**	-0.183	-0.209*	-0.202*
Career Development	-0.177**	-0.415**	-0.082	-0.089	-0.130*	-0.285**	-0.077	-0.054
Organisational Structure	-0.427**	-0.402**	-0.451**	-0.462**	-0.126*	-0.020	-0.116	-0.205*
Home-work Interface	-0.299**	-0.432**	-0.187	-0.277**	-0.160**	-0.160	-0.090	-0.269**
Perceived Stress - Total	-0.464**	-0.513**	-0.396**	-0.503**	-0.206**	-0.158	-0.154	-0.296**

* Significant at 0.05 level

** Significant at 0.01 level

From the Table 4.32, it can be seen that, all coefficients of correlation, obtained between Job Satisfaction (Total) and Perceived Stress (Stressor-wise and Total Stress) is negative. The negative sign shows the nature of the relation between Job Satisfaction (Total) and Perceived Stress (Stressor-wise and Total Stress). That is, when the Job Satisfaction is *low*, stress due to various stressors is *greater* and vice-versa. In Total sample and Subsamples based on Type of Schools *substantial* relationship always found between the stressor *Organisational Structure* and Job Satisfaction (Total). In various Subsamples and Total sample the relationship between *Role of Teachers* and Job Satisfaction (Total) is always found to be negligible and not significant. In all samples considered, the relationship between Job Satisfaction (Total) and *Perceived Stress (Total)* is found to be significant at 0.01 level and can be verbally interpreted as *marked* relationship. Among the 28 correlational analysis done, between Job Satisfaction (Total) and Perceived Stress (Stressor-wise and Total Stress), 19 *r*'s were statistically significant.

To test the extent and degree of association between Personality Characteristics and Perceived Stress (Stressor-wise and Total Stress) correlational analysis was done on Total sample and Subsamples based on Type of Schools. Out of 28 correlational analysis 11 *r*'s was found significant (Table 4.32). At the same time all coefficients of correlations were found *negative*. This shows the nature of relationship between Personality Characteristics and Perceived Stress (Stressor-wise and Total Stress). From the negative sign of *r* it can be inferred that as the Personality Characteristics score increases, the Stress due to various stressors decreases and vice versa. In the Total sample significant correlation obtained between the Personality Characteristics and stressors such as *Relationship at Work, Career Development, Organisational Structure, Home work Interface* and also between *Perceived Stress (Total)*. Among the Higher Secondary School Teachers significant correlation was found between only one

stressor (*Career Development*) and Personality Characteristics. The Personality Characteristics of High School Teachers and the stressor *Relationship at Work* were found to be significantly related. *Perceived Stress (Total)* and stressors such as *Relationship at Work*, *Organisational Structure* and *Home-work Interface* were significantly related to the Personality Characteristics of Primary School Teachers. The remaining stressors *Intrinsic to the Job* and *Role of Teachers* were not significantly related to the Personality Characteristics. In Total sample and Subsamples the *r*'s obtained between Personality Characteristics and Perceived Stress (Stressor-wise and Total Stress) can be verbally interpreted as *Negligible* or *Low*.

4.2.3. INVESTIGATION OF THE MAIN AND INTERACTION EFFECTS OF JOB SATISFACTION AND PERSONALITY CHARACTERISTICS ON PERCEIVED STRESS OF TEACHERS.

In order to find the influence of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers, Two-way Analysis of Variance was employed.

Two-Way ANOVA

In the present study, Two-way Analysis of variance with *3x3 factorial design was used*. As per this design, each independent variable is classified into three groups. The details of groups classified, for these two variables are as follows.

Classification based on Job Satisfaction

The sample was divided into three groups as *High-Job-Satisfaction (HJS)*, *Average-Job-Satisfaction (AJS)* and *Low-Job-Satisfaction (LJS)*. Assuming Job Satisfaction scores follows a normal distribution, the conventional procedure of σ

distance from the mean M was used. Subjects who obtained scores in Job Satisfaction above the rounded scores of $M+\sigma$ were treated as of the High-Job-Satisfaction Group. Subjects obtained scores below the rounded score $M-\sigma$ in Job Satisfaction were considered as the Low-Job-Satisfaction Group and the subjects who obtained scores between $M+\sigma$ and $M-\sigma$ was considered as the Average Job Satisfaction Group.

Classification based on Personality Characteristics

Here also, the conventional procedure of σ distance from the mean M was used, and three groups of Personality Characteristics were obtained. These are Teachers with *Favourable Personality Characteristics (FPC)*, *Moderate Personality Characteristics (MPC)* and *Less Favourable Personality Characteristics (LPC)*.

Actual number of subjects falling in each categories of Job Satisfaction and Personality Characteristics in Total and Subsamples are given in Table 4.33.

TABLE 4.33
Actual Number of Subjects Falling in
Each Category of Job Satisfaction and Personality Characteristics

Independent Variable	Sample	Total Sample	Higher Secondary	High School	Primary School
	Groups				
Job Satisfaction	HJS	44	17	15	14
	AJS	211	67	70	72
	LJS	45	16	15	14
Personality Characteristics	FPC	55	22	18	17
	MPC	186	61	62	63
	LPC	59	17	20	20

HJS – High Job Satisfaction Group
AJS – Average Job Satisfaction Group
LJS – Low Job Satisfaction Group

FPC – Favourable Personality Characteristics
MPC – Moderate Personality Characteristics
LPC – Less Favourable Personality Characteristics

Conditions Satisfied for using Analysis of Variance

- i) The distribution of the dependent variable in the population from which the samples are drawn followed normality. [Test for normality is done in Preliminary Analysis]
- ii) Homogeneity of variance across groups : A test to this effect has not been conducted since -
 - a) The sample drawn for the study is large (N=300) and hence the possibility of gross departure from homogeneity is minimum.

- b) Moderate departure from homogeneity will not seriously affect the inferences drawn from the data.
- iii) The observation should be independent. [In the present design of the study, there is no reason to suspect the validity of the third assumption and hence has not been tested.

In the present study Analysis of Variance was conducted separately for Total Sample, Higher Secondary, High School and Primary School Teachers.

4.2.3.1. Main and Interaction Effects of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers for Total Sample.

To analyse the Main and Interaction Effects of the Job Satisfaction and Personality Characteristics on Perceived Stress, Two-way Analysis of Variance with 3x3 factorial design was employed. In the 3x3 factorial design of Two-way ANOVA, three levels of Job Satisfaction and three levels of Personality Characteristics were made use off.

Levels of Job Satisfaction

(Based on the conventional procedure of σ distance from the mean M was used).

The mean score of Job Satisfaction (N=300) is 260.02 and standard deviation is 25.83. Therefore Teachers who have Job Satisfaction scores 286 ($M+1\sigma$) and above were treated as group having High Job Satisfaction (HJS), Teachers who scored below 234 ($M-1\sigma$) were considered as groups having Low Job Satisfaction (LJS) and Teachers who come in between 286 and 234 were considered as groups having Average Job Satisfaction (AJS).

Levels of Personality Characteristics

(Based on the conventional procedure of σ , distance from the mean M , of the scores)

The mean and standard deviation of scores of Personality Characteristics are 100.39 and 8.67 respectively. Therefore Teachers having scores above 109 ($M+1\sigma$) were treated as Favourable Personality Characteristics (FPC) group, Teachers having scores below 92 ($M-1\sigma$) were treated as Less Favourable Personality Characteristics (LPC) group. Teachers who scores between 109 and 92 were treated as Moderate Personality Characteristics (MPC) group.

The whole computations were done using computer software, Statistical Package for the Social Sciences (Einspruch, 1998). The technique of unequal samples was used for Analysis of Variance.

The sum of squares, their degrees of freedom, the mean square of the variances and corresponding F-ratios were computed. The significance of F-values obtained, were ascertained by comparing those with F-values of Table for F-distribution.

Summary of the results obtained in the Two-way ANOVA for Total Sample is given in Table 4.34.

TABLE 4.34

**Results of Two-way ANOVA for Perceived Stress
By Job Satisfaction By Personality Characteristics for Total Sample (N = 300)**

Source of Variation	Sum of Squares	df	Mean square of variance	F-value	Level of Significance
Job Satisfaction	5682.56	2	2841.28	22.37	0.01 ✓
Personality Characteristics	333.65	2	166.83	1.31	NS
Job Satisfaction x Personality Characteristics	278.71	4	69.68	0.55	NS
Within Cells	36964.84	291	127.03		
Total	43259.76	299			

NS: Not Significant.

Main Effect of Job Satisfaction on Perceived Stress of Teachers

The obtained F-value for the main effect of *Job Satisfaction* on *Perceived Stress* of Teachers is 22.37, which is far above the tabled F-value for (2,291) degrees of freedom at 0.01 level of significance. This suggests that the main effect of *Job Satisfaction* on *Perceived Stress* of Teachers is significant beyond 0.01 level of significance. It can be inferred that *a change in Perceived Stress* of Teachers can be attributable when *levels of Job Satisfaction* changes.

Main Effect of Personality Characteristics on Perceived Stress of Teachers

For the main effect of *Personality Characteristics* on *Perceived Stress* of Teachers, the obtained F-value is 1.31, which is far below the tabled value 3.01, for (2,291) degrees of freedom at 0.05 level of significance. Hence it is not found significant at 0.05 level. This suggests that *Personality Characteristics* has *no*

significant effect on Perceived Stress of Teachers. Variation in Perceived Stress of Teachers is *not attributable* to a change in the different levels of Personality Characteristics.

Interaction Effect of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers

The F-value for first order interaction effect of *Job Satisfaction* and *Personality Characteristics* on *Perceived Stress* of Teachers is 0.55 (Table 4.34). This F value is less than the tabled F value 2.39, for (4,291) degrees of freedom at 0.05 level. This suggests that the interaction effect of these two Independent variables on the Dependent variable Perceived Stress of Teachers is *not significant even at 0.05 level*.

It is inferred that *change in the Perceived Stress* of Teachers *cannot be attributed* to the combined effect of Job Satisfaction and Personality Characteristics.

Scheffe' Test of Post-Hoc Comparison

As the main effect of the variable Job Satisfaction was found significant, further analysis as a post-hoc comparison between the pairs of different levels of Job Satisfaction on Perceived Stress of Teachers was attempted using *Scheffe' Test of Post-Hoc Comparison* (Ferguson, 1976).

Since there are three Job Satisfaction levels (High, Average, Low), the Scheffe' Test was done between the following three pairs.

- (i) High Job Satisfaction Group with Average Job Satisfaction Group
- (ii) High Job Satisfaction Group with Low Job Satisfaction Group
- (iii) Average Job Satisfaction Group with Low Job Satisfaction Group.

For this F-ratio between pairs of means is calculated using the within-group variance estimate S_w^2 . Then consulted a Table F and obtained the value of F required for significance at 0.05 or at 0.01 level, for $df_1 = K-1$ and $df_2 = N-K$. After this, calculated the quantity F^1 , which is $K-1$ times the F required for significance at 0.05 or at 0.01 level; that is, $F^1 = (K-1) F$. Then, compared the values of F and F^1 , and F was significant when it is greater than or equal to F^1 .

F-ratios between pairs of means of Job Satisfaction were computed and the results are presented in Table 4.35.

TABLE 4.35

**Results of the Scheffe' Test of
Post -Hoc Comparison Between means of Perceived
Stress for Total Sample Based on Three Groups of Job Satisfaction (N=300)**

Sample	Dependent Variable	Groups Compared	Means		F-value	F ¹ values		Level of Significance
			M ₁	M ₂		0.05	0.01	
Total Sample	Perceived Stress	HJS with AJS	125.39	135.83	31.24	6.02	9.30	0.01
		HJS with LJS	125.39	142.96	54.07	"	"	0.01
		AJS with LJS	135.83	142.96	14.84	"	"	0.01

HJS - High Job Satisfaction

AJS - Average Job Satisfaction

LJS - Low Job Satisfaction

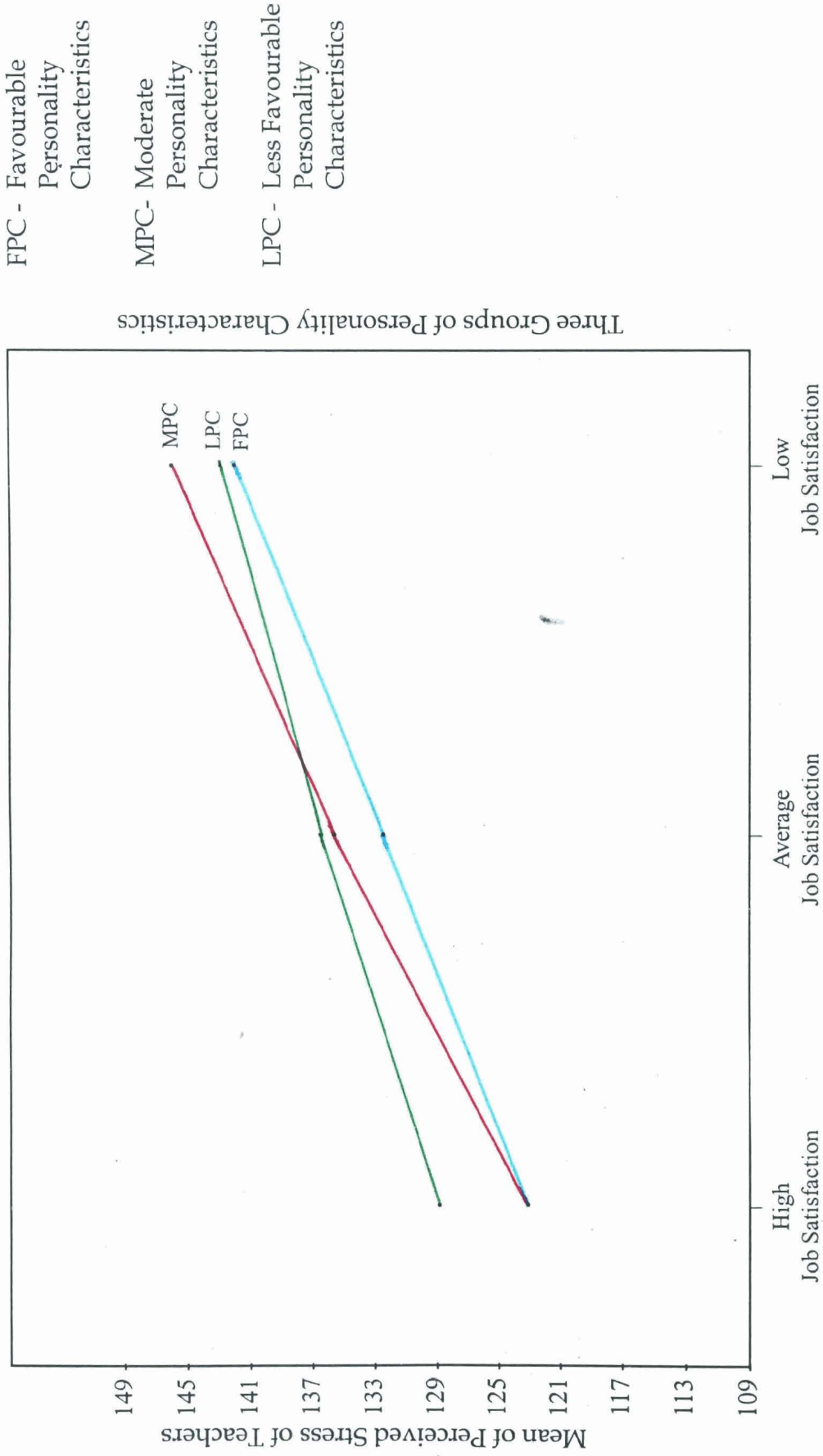
In the Post-hoc comparison employed, F-values obtained for all the three pairs are greater than the F^1 value required at 0.01 level. This suggest that there is significant difference between each pair having High Job Satisfaction, Average Job Satisfaction and Low Job Satisfaction on their Perceived Stress level. That is Perceived Stress level of Teachers vary with a difference in their Job Satisfaction

level. Higher mean value is associated with the lower groups (AJS and LJS) signifying their influence in creating variations in Perceived Stress.

Graphical Representation of Interaction Effect

Investigator studied the interaction of the three levels of independent variables, *Job Satisfaction* and *Personality Characteristics* graphically.

For this, three levels of *Job Satisfaction* are plotted on X-axis and mean scores of Perceived Stress of Teachers on Y-axis. The three levels of *Personality Characteristics* are indicated by three lines on the graph. The graphical representation is given in Figure 4-27.



Three Groups of Personality Characteristics

Three Groups of Job Satisfaction

FIGURE 4 - 27 Interaction Effect of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers for Total Sample

Figure 4-27, represents patterns of interaction between Independent and Dependent variables for Total Sample. It shows that, Perceived Stress is always high for Teachers with *Moderate Personality Characteristics* and *Low Job Satisfaction* than other Teachers. Teachers with Less Favourable Personality Characteristics and High Job Satisfaction experience *higher Perceived Stress*. And Teachers with Low Job Satisfaction and Favourable Personality Characteristics experience *Less Perceived Stress*.

From this it can be concluded that there is a tendency of interaction of *Job Satisfaction* and *Personality Characteristics* on *Perceived Stress* of Teachers. But this interaction is not found *statistically significant*.

4.2.3.2. Main and Interaction Effects of Job Satisfaction and Personality Characteristics on Perceived Stress of Higher Secondary School Teachers.

To study the Main and Interaction effects of *Job Satisfaction* and *Personality Characteristics*, on Perceived Stress of Higher Secondary Teachers, Two-way ANOVA, with 3x3 factorial design was employed. For this each Independent variables were divided into three groups.

The mean score of Job Satisfaction (N=100) is 259.99 and standard deviation is 28.37. Therefore Teachers who have Job Satisfaction scores 288 ($M+1\sigma$) and above were considered as group having *High Job Satisfaction* (HJS), Teachers who scored below 232 ($M-1\sigma$) were considered as groups having *Low Job Satisfaction* (LJS) and Teachers who come in between 288 and 232 were considered as groups having *Average Job Satisfaction* (AJS).

The mean and standard deviation of scores of Personality Characteristics are 102.05 and 9.05 respectively. Therefore Teachers having scores above 111 ($M+1\sigma$) were treated as Teachers with *Favourable Personality Characteristics*

(FPC) group, Teachers having scores below 93 ($M-1\sigma$) were treated as *Less Favourable Personality Characteristics* (LPC) group. Teachers who scores between 111 and 93 were treated as *Moderate Personality Characteristics* (MPC) group. Number of Teachers coming under each group of Job Satisfaction and Personality Characteristics are presented in Table 4.33.

The sum of squares, their degrees of freedom, the mean square of the variances and corresponding F-ratios were found out. The significance of F-values obtained were ascertained by comparing those with F-values of Table for F-distribution. Summary of the results obtained in the Two-way ANOVA are given as Table 4.36.

TABLE 4.36

**Results of Two-way ANOVA for
Perceived Stress By Job Satisfaction By
Personality Characteristics of Higher Secondary School Teachers**

Source of Variation	Sum of Squares	df	Mean Square of Variance	F-value	Level of Significance
Job Satisfaction	999.73	2	499.87	4.47	0.05
Personality Characteristics	56.87	2	28.43	0.25	NS
Job Satisfaction x Personality Characteristics	696.91	4	174.23	1.56	NS
Within Cells	10180.15	91	111.87		
Total	11933.66	99			

NS : Not Significant.

Main Effect of Job Satisfaction on Perceived Stress of Teachers

The obtained F-value for the main effect of *Job Satisfaction* on *Perceived Stress* of Teachers is 4.47, which is above the tabled F-value for 2,91 degrees of freedom at 0.05 level of significance. This suggests that, the main effect of *Job Satisfaction* on *Perceived Stress* of Teachers is significant at 0.05 level of significance. From this it can be said that when *levels of Job Satisfaction* changes, a corresponding change in *Perceived Stress* of Teachers can be observed.

Main Effect of Personality Characteristics on Perceived Stress of Teachers

Main effect of *Personality Characteristics* on *Perceived Stress* of Teachers as indicated by the obtained F-value is 0.25, which is far below the tabled value 3.09, for 2,91 degrees of freedom at 0.05 level of significance. Hence it is not significant at 0.05 level of significance. This suggests that *Personality Characteristics* has no significant effect on *Perceived Stress* of Teachers. That is a variation in *Perceived Stress* of Teachers is *not attributable* to a change in the different levels of *Personality Characteristics*.

Interaction Effect of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers

The F-value for first order interaction effect of *Job Satisfaction* and *Personality Characteristics* on *Perceived Stress* of Higher Secondary Teachers is 1.56 (Table 4.36). This F-value is less than the tabled F-value 2.46, for 4,91 degrees of freedom at 0.05 level. This suggests that the interaction effect of these two Independent variables on the Dependent variable *Perceived Stress* of Teachers is not significant even at 0.05 level. From this it can be stated that change in the *Perceived Stress* of Teachers *cannot be attributed* to the combined effect of *Job Satisfaction* and *Personality Characteristics*.

Scheffe' Test of Post-Hoc Comparison

As the main effect of the variable *Job Satisfaction* was found significant, further analysis as a post-hoc comparison between the pairs of different levels of Job Satisfaction on Perceived Stress of Teachers was studied using Scheffe' Test of *Post-Hoc Comparison* (Ferguson, 1976).

The Scheffe' test was done among the three Job Satisfaction pairs. These groups were Teachers with High Job Satisfaction (HJS), Average Job Satisfaction (AJS), and Low Job Satisfaction (LJS). The results are given in Table 4.37.

TABLE 4.37

**Results of the Scheffe' Test of
Post-Hoc Comparison Between Means of Perceived Stress for Higher
Secondary School Teachers Based on Three Groups of Job Satisfaction (N=100)**

Sample	Dependent Variable	Groups Compared	Means		F-value	F ¹ values		Level of Significance
			M ₁	M ₂		0.05	0.01	
Higher Secondary School Teachers	Perceived Stress	HJS with AJS	123.71	136.37	19.43	6.18	9.64	0.01
		HJS with LJS	123.71	141.50	23.32	"	"	0.01
		AJS with LJS	136.37	141.50	3.04	"	"	NS

NS - Not Significant.

HJS - High Job Satisfaction

AJS - Average Job Satisfaction

LJS - Low Job Satisfaction

From the Table 4.37 it can be said that, groups compared with HJS shows a significant difference at 0.01 level, because the corresponding group pairs F-value are greater than F¹ value required at 0.01 level. This suggest that there is significant difference between High Job Satisfaction group and other groups on

their Perceived Stress level. From the Scheffe' Test result, it is also noticed that there is no significant difference between Average Job Satisfaction group and Low Job Satisfaction group on their Perceived Stress level, since the F value obtained (3.04) is less than F^1 value (6.18) required at 0.05 level of significance. From these observations it can be inferred that Teachers' Perceived Stress level vary, as the Job Satisfaction level become highest, Average or Low. High means are associated with the low groups (Average and Low) in the pair. This indicates that the Average or Low groups in Job Satisfaction created the difference in the Perceived Stress level.

Graphical Representation of Interaction Effect

Investigator studied the interaction effect of *Job Satisfaction* and *Personality Characteristics*, by plotting the pattern of relationship graphically. For this, three levels of *Job Satisfaction* are plotted on X-axis and mean scores of *Perceived Stress* of Teachers on Y-axis. The three levels of *Personality Characteristics* are indicated by three lines on the graph. The graphical representation is given in Figure 4-28.

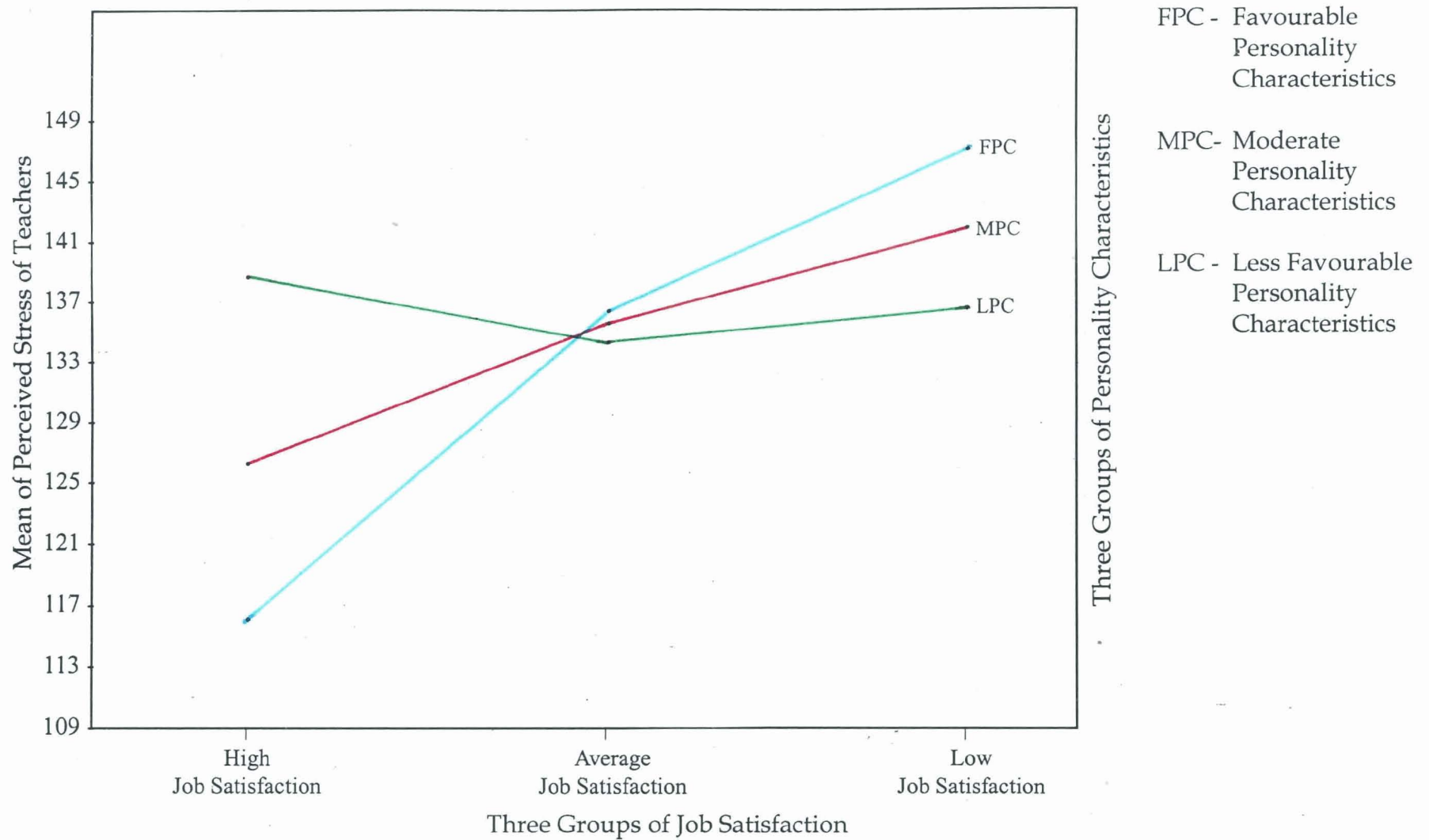


FIGURE 4 - 28 Interaction Effect of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers for Higher Secondary School

From the Figure 4-28, the pattern of relationships between Independent and Dependent variable for Higher Secondary School Teachers, it can be seen that there exists an interaction of *Job Satisfaction* and *Personality Characteristics* on *Perceived Stress* of Teachers. But it is not *statistically significant*.

As the Personality Characteristics move from Favourable to Less Favourable, Perceived Stress level of a highly satisfied Teacher increases. When the Personality Characteristics score of a Teacher with Low Job Satisfaction, increases the Perceived Stress level also *increases*. And the same characteristics can be observed for the group with Average Job Satisfaction also .

4.2.3.3. Main and Interaction Effects of Job Satisfaction and Personality Characteristics on Perceived Stress of High School Teachers.

In the present study, Two-way analysis of variance with 3x3 factorial design was used to study the main and interaction effect of Job Satisfaction and Personality Characteristics on Perceived Stress of High School Teachers. For ANOVA, the each independent variable were divided into three groups or levels.

The mean and SD's of Job Satisfaction were 258.20 and 22.40 respectively. Teacher with Job Satisfaction score 281 ($M+1\sigma$) and above were grouped as *High Job Satisfaction* group (HJS), Teacher with a score 236 ($M-1\sigma$) and below were grouped as *Low Job Satisfaction* group (LJS) and Teachers who scores lies between 281 and 236 were grouped into *Average Job Satisfaction* group (AJS).

The mean and SD's of Personality Characteristics are 99.73 and 8.18 respectively. Therefore Teachers having scores above 108 ($M+1\sigma$) were treated as *Favourable Personality Characteristics* (FPC) group, Teachers having scores below 92 ($M-1\sigma$) were treated as *Less Favourable Personality Characteristics* (LPC) group. Teachers who scores between 108 and 92 were treated as *Moderate Personality Characteristic* (MPC) group.

Number of Teachers falling in each category of Job Satisfaction and Personality Characteristics are presented in Table 4.33.

By using ANOVA, the sum of squares, their degrees of freedom, the mean square of variance and corresponding F-ratios were obtained. In order to ascertain significance, tabled F-values were taken from Table F. Summary of the results obtained by two-way ANOVA for High School Teachers is given as Table 4.38.

TABLE 4.38

Results of Two-way ANOVA for Perceived Stress By Job Satisfaction By Personality Characteristics for High School Teachers (N = 100)

Source of Variation	Sum of Squares	df	Mean Square of Variance	F-value	Level of Significance
Job Satisfaction	1501.56	2	750.78	5.84	0.01
Personality Characteristics	162.65	2	81.33	0.63	NS
Job Satisfaction x Personality Characteristics	123.43	4	30.86	0.24	NS
Within Cells	11704.50	91	128.62		
Total	13492.14	99			

NS : Not Significant.

Main Effect of Job Satisfaction on Perceived Stress of Teachers

The F-value obtained for the main effect of *Job Satisfaction* on *Perceived Stress* of High School Teachers is 5.84, which is above the tabled F-value for 2,91 degrees of freedom at 0.01 level of significance. That is, the main effect of *Job Satisfaction* on *Perceived Stress* of Teachers is significant at 0.01 level. This can

be interpreted as, a variation in the Perceived Stress of Teacher can be attributable to a *variation* in the Job Satisfaction level.

Main Effect of Personality Characteristics on Perceived Stress of Teachers

Main effect of Personality Characteristics on Perceived Stress of Teachers is indicated by the obtained F-value 0.63, which is far below the tabled value 3.09, for 2,91 degrees of freedom at 0.05 level of significance. Hence it is not significant at 0.05 level of significance. This suggests that Personality Characteristics has no significant effect on Perceived Stress of Teachers. That is, *a change* in the Perceived Stress of a Teacher *cannot be attributable* to a change in the different levels of Personality Characteristics.

Interaction Effect of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers

The F value obtained (Table 4.38) for the first order interaction effect of *Job Satisfaction* and *Personality Characteristics* is 0.24, which is much less than the table F-value, 2.46, for 4,91 degrees of freedom at 0.05 level. Therefore the interaction effect is not significant at 0.05 level. From this it is inferred that a change in the Perceived Stress of Teachers *cannot be attributed to the combined* effect of Job Satisfaction and Personality Characteristics.

Scheffe' Test of Post-Hoc Comparison

As the main effect of the variable Job Satisfaction was found significant, further analysis as a post-hoc comparison between the pairs of different levels of Job Satisfaction on Perceived Stress of Teachers was attempted. For this *Scheffe' Test of Post-Hoc Comparison* was used. For employing ANOVA, the Independent variable, *Job Satisfaction* was divided into the groups (HJS, AJS and LJS). So the Scheffe' Test was done between these three pairs.

F-ratios between pairs of means of Job Satisfaction were computed and the results are given the following Table 4.39.

TABLE 4.39

**Results of the Scheffe' Test of
Post-Hoc Comparison Between Means of Perceived Stress
for High School Teachers Based on Three Groups of Job Satisfaction (N=100)**

Sample	Dependent Variable	Groups Compared	Means		F-value	F ¹ values		Level of Significance
			M ₁	M ₂		0.05	0.01	
High School Teachers	Perceived Stress	HJS with AJS	131.50	129.41	0.126	6.18	9.64	NS
		HJS with LJS	131.50	139.56	1.855	"	"	NS
		AJS with LJS	129.41	139.56	19.15	"	"	0.01

NS - Not Significant.

HJS - High Job Satisfaction

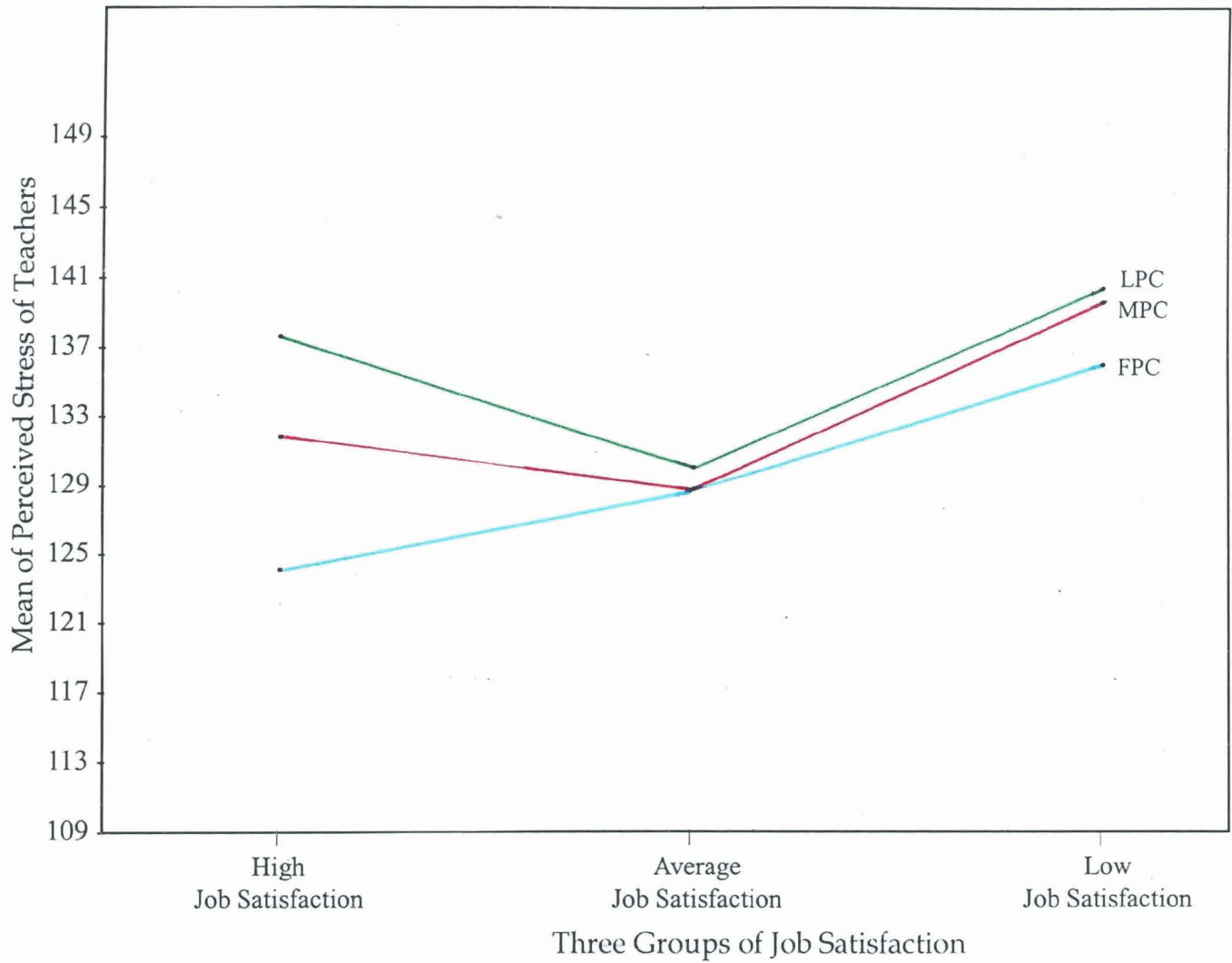
AJS - Average Job Satisfaction

LJS - Low Job Satisfaction

As per the Table 4.39, significant F-value obtained only for one pair comparison, that is between Average Job Satisfaction group and Low Job Satisfaction group. The F-value obtained for this group was 19.15 which is greater than the F¹ value required at 0.01 level of significance. From this result it can be said that Perceived Stress level of Average Job Satisfaction group and Low Job Satisfaction group are significantly different. High mean score is attached with the Low group, which created the variation in the Dependent variable.

Graphical Representation of Interaction Effect

Investigator studied the interaction effect of *Job Satisfaction* and *Personality Characteristics* on *Perceived Stress* of High School Teachers by plotting the relationship graphically. The graphical representation of the interaction effect of the Independent variables on *Perceived Stress* is given as Figure 4-29.



Three Groups of Personality Characteristics

- FPC - Favourable Personality Characteristics
- MPC- Moderate Personality Characteristics
- LPC - Less Favourable Personality Characteristics

FIGURE 4 - 29 Interaction Effect of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers for High School

From the Figure 4-29, it can be seen that, there is interaction of independent variables on Perceived Stress of Teachers. But this interaction effect is not strong enough to be observed through the statistical analysis. From the graph, it can be said that, as the Job Satisfaction of the sample with Favourable Personality Characteristics, decreases the Perceived Stress level increases. But in the case of a subject with Less Favorable Personality Characteristics and Moderate Personality Characteristics, as the Job Satisfaction decreases, Perceived Stress level *also decreases*, but after a certain Job Satisfaction level, *Perceived Stress level increases* with a decrease in Job Satisfaction.

Subjects with Favourable Personality Characteristics and High Job Satisfaction, *is less stressed*. At the same time a subjects with Low Job Satisfaction and Less Favourable Personality Characteristics experience more stress than others.

4.2.3.4. Main and Interaction Effects of Job Satisfaction and Personality Characteristics on Perceived Stress of Primary School Teachers

Two-way ANOVA, with 3x3 factorial design was used to compute the main and interaction effects of Job Satisfaction and Personality Characteristics on Perceived Stress of Primary School Teachers. For analysis, each Independent variable were divided into three groups or levels. For grouping, the conventional method of σ , distance from the mean M was used. The mean and SD's of Job Satisfaction ($N = 100$) were 261.88 and 25.95 respectively. Teachers with a Job Satisfaction score 288 ($M+1\sigma$) and above were grouped and treated as *High Job Satisfaction* (HJS) group. Teachers with a Job Satisfaction score 236 ($M-1\sigma$) and below were grouped and treated as *Low Job Satisfaction* (LJS) group. Teacher with a Job Satisfaction score between 288 and 236 were grouped and treated as *Average Job Satisfaction* group (AJS).

The same procedure were adopted for grouping the Teachers on the basis of their Personality Characteristics. Mean and SD's Personality Characteristics are 99.39 and 8.61 respectively. Teachers with the Personality Characteristics score greater than or equal to 108 ($M+1\sigma$) were grouped as *Favourable Personality Characteristics* (FPC) group and Teachers with the Personality Characteristics score less than or equal to 91 ($M-1\sigma$), were grouped as *Less Favourable Personality Characteristics* (LPC) group. Teachers with a Personality Characteristics score between 108 and 91, were grouped as *Moderate Personality Characteristic* (MPC) group. Actual number of teachers coming under each group are presented in Table 4.33.

The sum of squares, their degrees of freedom, the mean square of the variances and corresponding F-ratios were obtained. The significance of F-values obtained were ascertained by comparing those with F-values of Table for F-distribution. Summary of the results obtained by Two way ANOVA is given as Table 4.40.

TABLE 4.40
**Results of Two-way ANOVA for
 Perceived Stress By Job Satisfaction By
 Personality Characteristics for Primary School Teachers (N = 100)**

Source of Variation	Sum of Squares	df	Mean Square of Variance	F-value	Level of Significance
Job Satisfaction	1229.80	2	614.90	4.58	0.05
Personality Characteristics	234.98	2	117.49	0.88	NS
Job Satisfaction x Personality Characteristics	30.84	4	7.71	0.06	NS
Within Cells	12219.15	91	134.28		
Total	13714.77	99			

NS : Not Significant.

Main Effect of Job Satisfaction on Perceived Stress of Teachers

The F-value for the main effect of *Job Satisfaction* on *Perceived Stress* of Primary School Teachers is 4.58 and this is greater than the tabled F-value for 2,91 degrees of freedom at 0.05 level of significance. This indicates that the main effect due to the variable *Job Satisfaction* on *Perceived Stress* is significant at 0.05 level. That is, a change in the Job Satisfaction level will result in an increase or decrease in Perceived Stress.

Main Effect of Personality Characteristics on Perceived Stress of Teachers

The F-value obtained for the main effect of Personality Characteristics on Perceived Stress of Primary School Teachers is indicated by the obtained F-value of 0.88, which is far below the tabled F-value for 2,91 degrees of freedom at 0.05 level of significance. This shows that the main effect of the variable, *Personality Characteristics* on *Perceived Stress* of Teachers is not significant. That is a change

in the Personality Characteristics of a Teacher *will not result* in a change of Perceived Stress of that Teacher.

Interaction Effect of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers

The F-value obtained (Table 4.40) for the interaction effect of *Job Satisfaction* and *Personality Characteristics* is 0.06, which is much less than the tabled F-value, 2.46 for 4,91 degrees of freedom at 0.05 level. Therefore interaction effect is *not significant* at 0.05 level. From this it can be said that change in the Perceived Stress of a Teacher cannot be defined as the combined effect of Job Satisfaction and Personality Characteristics.

Scheffe' Test of Post-Hoc Comparison

The main effect of Job Satisfaction on Perceived Stress was found to be significant. So the investigator conducted a post-hoc comparison to determine the nature of effect of each Job Satisfaction group on Perceived Stress. For this investigator used Scheffe' Test of Post-Hoc Comparison. As there are three Job Satisfaction groups (High, Average and Low), the Scheffe' test was done between three group pairs.

The groups compared, F and F^1 value for each comparison, and also the level of significance are given in Table 4.41.

TABLE 4.41

**Results of the Scheffe' Test of
Post-Hoc Comparison Between Mean of Perceived Stress for
Primary School Teachers Based on Three Groups of Job Satisfaction (N=100)**

Sample	Dependent Variable	Groups Compared	Means		F-value	F ¹ values		Level of Significance
			M ₁	M ₂		0.05	0.01	
Primary School Teachers	Perceived Stress	HJS with AJS	123.57	138.07	18.27	6.18	9.64	0.01
		HJS with LJS	123.57	144.06	23.35	"	"	0.01
		AJS with LJS	138.07	144.06	3.48	"	"	NS

NS - Not Significant.

HJS - High Job Satisfaction

AJS - Average Job Satisfaction

LJS - Low Job Satisfaction

From Table 4.41 it can be said that, groups compared with HJS shows a significant difference at 0.01 level, because the corresponding group pairs F-value is greater than F¹ value required at 0.01 level. This suggests that High Job Satisfaction group were significantly different from other two groups, on their Perceived Stress. In addition to this, it is also noticed that, the perceived stress level a teacher with Average or Less Job Satisfaction is not significantly different, because the F-value obtained (3.48) is much less than F¹ value required at 0.05 level. From this it can be reached at the following conclusions. High Perceived Stress means are associated with Low groups (Average and Low) in the pair. This indicates that Average or Low groups in Job Satisfaction created the difference in the Perceived Stress Level.

Graphical Representation of Interaction Effect

Investigator studied the interaction effect of *Job Satisfaction* and *Personality Characteristics*, by plotting the pattern of relationship in a graph. For this, three levels of Job Satisfaction are plotted on X-axis and mean scores of Perceived Stress of Teachers on Y-axis. The three levels of Personality Characteristics are indicated by three lines on the graph. The graphical representation using the criterion means are given as Figure 4-30.

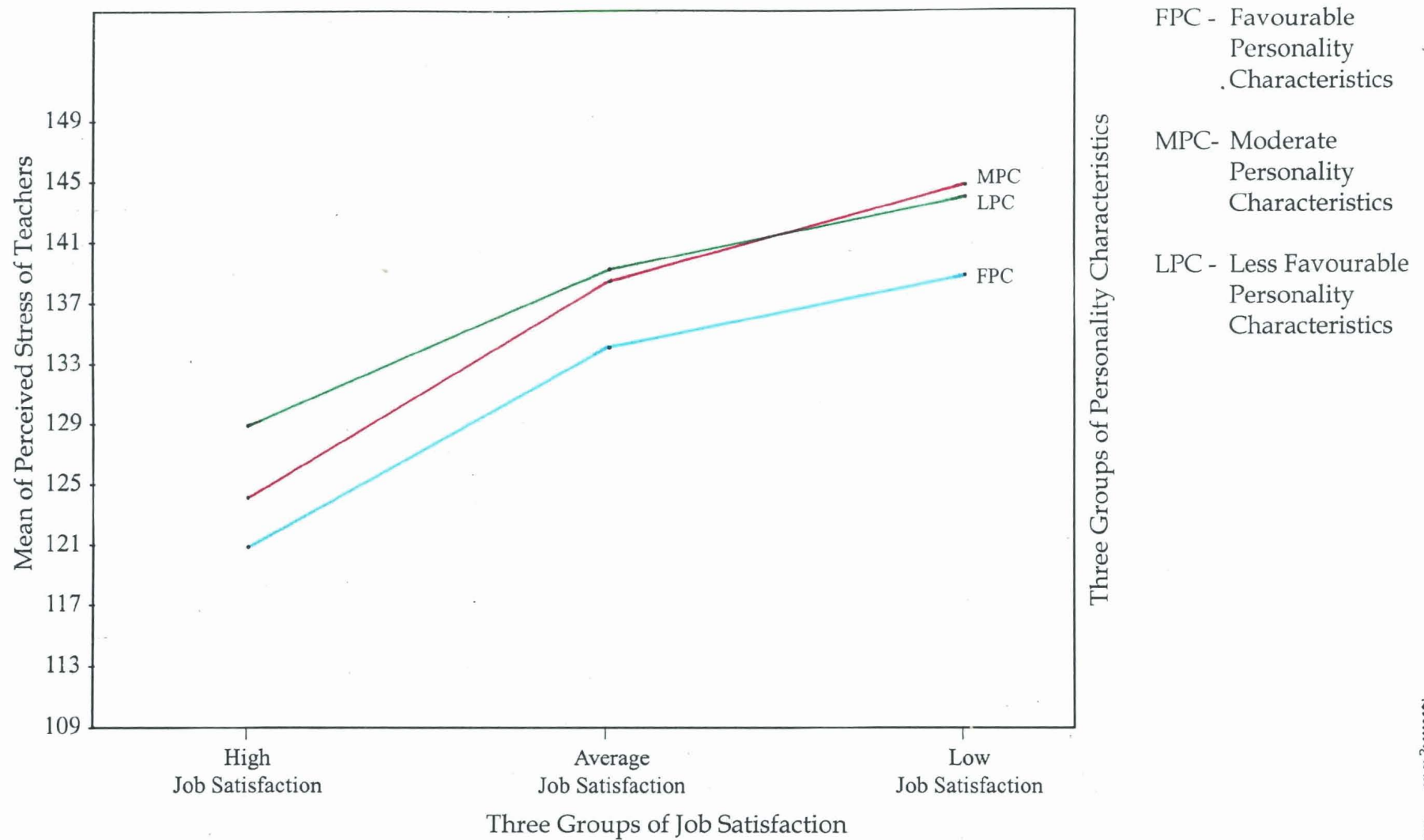


FIGURE 4 - 30 Interaction Effect of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers for Primary School

Figure 4-30 shows the interaction of Independent variables on Perceived Stress. But this interaction effect is not statistically significant.

From the graph, it can be inferred that, a Teacher with Low Job Satisfaction and Moderate Personality Characteristics experiences *more stress* than others. But at the same time a Teacher with High to Average Job Satisfaction and Less Favourable Personality Characteristics experience *more stress*. *Perceived Stress level is lowest* for Teachers with High Job Satisfaction and Favorable Personality Characteristics.

4.2.3.5. Summary and Discussion of Two-way ANOVA

To study the main and interaction effects of *Job Satisfaction* and *Personality Characteristics* on *Perceived Stress of Teachers* Two-way Analysis of Variance with 3x3 factorial design was employed. As per this design, each Independent variable Job Satisfaction and Personality Characteristics were divided into three groups, by using the conventional procedure of σ distance from the mean M . In the present study Analysis of variance was conducted separately for Total sample, Higher Secondary, High School and Primary School Teachers. The F-value obtained in each analysis are consolidated and presented in Table 4.42.

TABLE 4.42
**Summary of Two-way ANOVA for
 Perceived Stress By Job Satisfaction By Personality Characteristics**

Source of Variation	Total Sample F	Higher Secondary F	High School F	Primary School F
Job Satisfaction	22.37**	4.47*	5.84**	4.58*
Personality Characteristics	1.31	0.25	0.63	0.88
Job Satisfaction x Personality Characteristics	0.55	1.56	0.24	0.06

* Significant at 0.05 level.

** Significant at 0.01 level.

From Table 4.42 it can be seen that, F-values obtained for the main effect of Job Satisfaction on Perceived Stress of Teachers is significant in all samples. This means a change in the Job Satisfaction level will result in an increase or decrease in Perceived Stress of the sample.

No significant main effect of Personality Characteristics on Perceived Stress is obtained in any of the samples considered. That is, a variation in Perceived Stress of Teachers is not attributable to a change in the different levels of Personality Characteristics.

The F-values for first order interaction effect of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers is found not significant even at 0.05 level. From this it can be inferred that change in the Perceived Stress of Teachers *cannot be attributed* to the combined effect of Job Satisfaction and Personality Characteristics.

When the interaction effect is graphically studied, it is noted that in all cases there exists an interaction effect, but it is statistically not significant. And it is also observed that in all samples Teachers with Less Favourable Personality Characteristics and High Job Satisfaction experience higher Perceived Stress.

As the main effect of the variable Job Satisfaction was found significant, further analysis as a post-hoc comparison between the pairs of different levels of Job Satisfaction on Perceived Stress of Teachers was attempted using Scheffe' Test. From the significant F-values and high mean scores, the investigator reached at the conclusion that, in all samples except among Primary School Teachers *Average* or *Low* groups in Job Satisfaction created the difference in the Perceived Stress. Among the Primary School Teachers, *Low Job Satisfaction* group alone created the variation in the Dependent Variable.

4.2.4. PREDICTION OF PERCEIVED STRESS AND JOB SATISFACTION OF TEACHERS

This part of the analysis has been taken up with a view to predict the *best predictors* of Perceived Stress and Job Satisfaction of Teachers. To identify the best predictors of Perceived Stress, from its six stressors, Perceived Stress (Total) is treated as the Dependent variable and its six stressors as the Independent variables (Predictors). To identify the *best predictors* of Job Satisfaction, eight components were treated as the Independent variables (Predictors) and Job Satisfaction (Total) as the Dependent variable.

After identifying the best predictors, investigator has also an intention to arrange them in the descending order based on their predictive efficiency. For studying the relative effect of each predictors, Stepwise Multiple Regression analysis was used. The results obtained at each step of the multiple regression analysis were carried to predict the relative contribution of each of the predictors

(Independent variables) to the amount of variance in the Total scores of the Dependent variable.

The analysis has been done using computer software, Statistical Package for the Social Sciences (SPSS) (Einspruch, 1998). This analysis has been carried out separately for Perceived Stress and Job Satisfaction of Teachers.

4.2.4.1. Identification of Best Predictors of Perceived Stress of Teachers

To identify the best predictors of Perceived Stress (Total) of a Teacher, its six stressor variables viz., *Intrinsic to the Job, Role of Teachers, Relationship at Work, Career Development, Organisational Structure* and *Home-work Interface* were treated as predictors (Independent variable) and the Total Perceived Stress as Dependent variable. For computing the relative effect of each of the six stressors, on *Total Perceived Stress*, stepwise Multiple Regression analysis was employed. This analysis has been done for the Total sample. The data regarding intercorrelation of criterion variable i.e., Perceived Stress - Total with its six predictor variables (Independent variable) are given in the following.

Variables	Perceived Stress - Total Y	Intrinsic to the Job X ₁	Role of Teachers X ₂	Relationship at Work X ₃	Career Development X ₄	Organisational Structure X ₅	Home work Interface X ₆
Y Perceived Stress-Total	1.000						
X ₁ Intrinsic to the Job	0.417	1.000					
X ₂ Role of Teachers	0.437	0.032	1.000				
X ₃ Relationship at Work	0.633	0.141	0.164	1.000			
X ₄ Career Development	0.397	0.111	0.085	0.118	1.000		
X ₅ Organisational Structure	0.673	0.002	0.180	0.406	0.078	1.000	
X ₆ Home work Interface	0.622	0.081	0.046	0.220	0.212	0.285	1.000

Step 1

The indices of correlations indicate that *Organisational Structure (Variable X₅)* has the highest zero order correlation ($r= 0.673$) with Total Perceived Stress and hence it is selected to *enter first* in the analysis.

The results of step-wise regression analysis for Perceived Stress are summarised and presented in Table 4.43.

TABLE 4.43

Result of Stepwise Multiple Regression Analysis for Perceived Stress of Teachers-Total Sample

Step No.	Predictors	R	R ²	F-value for R	Constant Bo	t-value for Bo	Variable	B	t-value for B	β	Coeff. of Determination r	Shared Variance R ² ×100	Increment in Percentage Variance
1.	Organisational Structure (X ₅)	0.673	0.453	247.11 (1,298df)	82.65	24.35**	X ₅	1.733	15.72**	0.673	73.94	45.30	-
2.	Home-work Interface (X ₆)	0.809	0.655	281.26 (2,297df)	66..32	22.30**	X ₅ X ₆	1.390 1.267	15.17** 13.15**	0.540 0.468	58.78	36.34 29.11	20.20
3.	Intrinsic to the Job (X ₁)	0.894	0.799	391.08 (3,296df)	33.46	10.44**	X ₅ X ₆ X ₁	1.412 1.177 1.204	20.15** 15.92** 14.55**	0.549 0.435 0.381	44.89	36.93 27.04 15.88	14.40
4.	Role of Teachers (X ₂)	0.947	0.896	634.65 (4,295df)	7.90	2.85**	X ₅ X ₆ X ₁ X ₂	1.264 1.184 1.172 1.141	24.66** 22.24** 19.66** 16.61**	0.491 0.437 0.371 0.317	32.27	33.05 27.22 15.44 13.88	9.70
5.	Relationship at Work (X ₃)	0.982	0.964	1563.06 (5,294df)	4.66	2.83**	X ₅ X ₆ X ₁ X ₂ X ₃	0.993 1.103 1.053 1.047 1.041	30.65** 34.83** 29.56** 25.64** 23.46**	0.386 0.407 0.333 0.291 0.292	19.04	25.97 25.34 13.89 12.72 18.46	6.80

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contd.....

Step No.	Predictors	R	R ²	F-value for R	Constant Bo	t-value for Bo	Variable	B	t-value for B	β	Coeff. of Determination r	Shared Variance R ² x100	Increment in Percentage Variance
6.	Career Development (X ₄)	1	1	-	0.	-	X ₅	1.000		0.389	0	26.15	3.60
							X ₆	1.000		0.369		22.98	
							X ₁	1.000		0.316		13.19	
							X ₂	1.000		0.278		12.15	
							X ₃	1.000		0.280		17.73	
							X ₄	1.000		0.197		7.80	

R - Multiple Correlation β - Standardised Partial Regression Coefficient.

B - Partial Regression Coefficient ** - Significant at 0.01 level.

As per Table 4.43, the value of Multiple correlation (R) is 0.673 and this value is significant beyond 0.01 level, F value being 247.11 for df (1,298). The strength of association between *Total Perceived Stress* and *Organisational Structure* can be verbally interpreted as *very high* relationship since the value obtained for coefficient of determination,

$$\left[r = \sqrt{\frac{\text{Residual Sum of Squares}}{\text{Total Sum of Squares}}} \times 100 \right] \text{ is } 73.94.$$

It is found that R^2 is 0.453. This shows that 45.30 per cent of variance of *Perceived Stress* is accounted by whatever is measured by the variable X_5 i.e., *Organisational Structure*. The remaining percentage of the variance must be attributed to variables not measured in this regression equation. This variable is positively related with Total Perceived Stress.

The partial regression coefficient (B) is 1.733. This value indicates that scores of *Perceived Stress* would change by 1.733 units for every unit change in the stressor *Organisational Structure*. The value of the constant that would go into the multiple regression equation that could be written to predict Perceived Stress at this stage is 82.65. The general format in which the multiple regression equation may be written as

$$y^1 = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + \dots \dots \dots + B_nX_n$$

Where y^1 is the predicted score of the criterion variable (Perceived Stress), B_0 is a constant, $B_1, B_2, B_3 \dots \dots \dots B_n$ are partial regression coefficients and $X_1, X_2, \dots \dots X_n$ are the scores of different predictor variables.

Since all the necessary information regarding step-wise regression analysis is given in Table 4.43, the regression equation for the first step can be written as

$$y^1 = B_0 + B_5 X_5$$

$$= 82.65 + 1.733 X_5$$

Where y^1 refers to the score of Perceived Stress and X_5 refers to the score of *Organisational Structure*. The t -values for B_0 and B_5 terms are significant and hence these terms are included in the regression equation.

Step 2

The next predictor variable entered in the equation is *Home-work Interface* (X_6). The results after step 2 show that the value of Multiple Correlation (R) is 0.809 and this value is significant beyond 0.01 level, F -value being 281.26 for df (2,297). The strength of association between *Perceived Stress* and *Home work Interface* can be verbally interpreted as *substantial* since the value obtained for coefficient of determination is 58.78 per cent.

It is seen that Multiple R^2 is 0.655 which indicates that the two predictors *Organisational Structure* and *Home-work Interface* put together could explain 65.5 percentage of variance of *Perceived Stress*. The remaining percentage of variance must be attributed to variables not included in this equation. The percentage of variance has been raised from 45.33 to 65.50, the increment in variance being 20.20.

The relative contribution of the predictors X_5 and X_6 in terms of proportion of variance predicted by each variable was determined and are given in column 13 of Table 4.43. It can be noted that of the 65.50 per cent of variance in the criterion variable, 36.34 per cent of variance is accounted by the variable *Organisational Structure* (X_5) and 29.11 per cent of variance is accounted by variable *Home-work Interface* (X_6).

The partial regression coefficient (B) is 1.39 for *Organisational Structure* and 1.267 for *Home-work Interface*. These values indicate that the scores of Total Perceived Stress would change by 1.39 units for every unit change in the variable *Organisational Structure* and 1.267 units for every unit change in the variable *Home-work Interface*.

The value of the constant that would go into the multiple regression equation that could be written to predict *Perceived Stress* at this stage is 66.32. The standardised partial regression coefficient, β is not reaching the value one. Hence the problem of multicollinearity is minimised. The *t*-values for B_0 , B_5 and B_6 terms were noted for its significance at 0.01 level. Hence the terms can be included in the regression equation. The regression equation in this case is

$$y^1 = B_0 + B_5X_5 + B_6X_6$$

$$y^1 = 66.32 + 1.39 X_5 + 1.267 X_6$$

Where y^1 refers to the score of *Perceived Stress*, and X_5 the score of *Organisational Structure* and X_6 the score of *Home-work Interface*.

Step 3

The next predictor variable entered in the equation is *Intrinsic to the Job* (X_1).

The results after step 3 show that the value of Multiple Correlation (R) is 0.894 and this value is significant beyond 0.01 level, F value being 391.08 for df (3,296). The strength of association between *Perceived Stress* and *Intrinsic to the Job* can be verbally interpreted as substantial since the value obtained for coefficient of determination is 44.89 per cent.

It is seen that Multiple R^2 is 0.799 which indicates that the three predictors *Organisation Structure*, *Home-work Interface*, and *Intrinsic to the Job* put

together could explain 79.9 percentage of variance of *Perceived Stress* of Teachers. The remaining percentage of variance must be attributed to variable not measured in this equation. The percentage of variance has been raised from 65.50 to 79.90, the increment in variance being 14.40.

The relative contribution of the predictors X_5 , X_6 and X_1 in terms of proportion of variance predicted by each variable were determined and are given in column 13 of Table 4.43. It can be noted that of the 79.90 per cent of variance in the criterion variable, 15.88 per cent of variance is accounted by the variable X_1 , 36.93 per cent of variance is accounted by variable X_5 , and 27.04 per cent of variance is accounted by variable X_6 .

The partial regression coefficients (B) are 1.204 for *Intrinsic to the Job*, 1.412 for *Organisational Structure*, and 1.177 for *Home-work Interface*. These values indicate that the scores of Perceived Stress of Teachers would change by 1.204 units for every unit change in the variable *Intrinsic to the Job*, 1.412 units for every unit change in the variable *Organisational Structure* and 1.177 units for every unit change in the variable *Home-work Interface*.

The standardised partial regression coefficients (β) is 0.381 which is not equal or above one. Hence the problem of excessive strength of association cannot be accounted (Multicollinearity). The t -values for B_0 , B_5 , B_2 and B_1 were found significant beyond 0.01 level of significance justifying the inclusion of these terms in the regression equation.

The value of the constant that would go into the multiple regression equation that could be written to predict Perceived Stress of Teachers at this stage is 33.46. The regression equation in this case is

$$y^1 = B_0 + B_1X_1 + B_5X_5 + B_6X_6$$

$$y^1 = 33.46 + 1.204 X_1 + 1.412 X_5 + 1.177 X_6$$

Where y^1 refers to the score of *Perceived Stress* of Teachers, X_1 the score of *Intrinsic to the Job*, X_5 the score of *Organisational Structure* and X_6 the score of *Home-work Interface*.

Step 4

The fourth predictor variable entered in the analysis is *Role of Teachers* (X_2).

The results after step 4 indicated that multiple correlation (R) is 0.947 and this value is significant beyond 0.01 level, F value being 634.65 for df (4,295). The strength of association between *Perceived Stress* of Teachers and *Role of Teachers* can be verbally interpreted as low since the value obtained for coefficient of determination is only 32.27 percent.

It can be seen that the multiple R^2 is 0.896. This indicates that the four predictors *Organisational Structure*, *Home-work Interface*, *Intrinsic to the Job* and *Role of Teachers* put together could explain 89.60 percentage of variance of *Perceived Stress Total*. The remaining percentage of variance must be attributed to variables not included in this equation. The percentage variance has been raised from 79.90 to 89.60, the increment in variance being 9.70.

The relative contribution of predictors X_5 , X_6 , X_1 , and X_2 in terms of proportion of variance predicted by each variable were determined. It can be noted that of the 89.60 per cent of variance in the criterion variable, 33.05 per cent of variance is accounted by the variable X_5 , 27.22 per cent of variance is accounted by the variable X_6 , 15.44 per cent of variance is accounted by the variable X_1 and 13.88 per cent of variance is accounted by the variable X_2 .

The partial regression coefficient (B) is 1.264 for *Organisational Structure*, 1.184 for *Home-work Interface*, 1.172 for *Intrinsic to the Job*, and 1.141 for *Role of*

Teachers. These values indicate that the scores of *Perceived Stress* of Teachers-Total would change by 1.264 units for every unit change of *Organisational Structure*, 1.184 units for every unit change of *Home-work Interface*, 1.172 units for every unit change of *Intrinsic to the Job*, and 1.141 units for every unit change of *Role of Teachers*.

The problem of multicollienarity is not existed since the Beta is below one. The *t*-values for B_0 , B_1 , B_2 , B_5 and B_6 were significant at 0.01 level signifying the inclusion of these terms in the regression equation.

The value of the constant that would go into the multiple regression equation that could be written to predict *Perceived Stress* of Teachers at this stage is 7.90. The regression equation obtained at this step is

$$y^1 = B_0 + B_1X_1 + B_2X_2 + B_5X_5 + B_6X_6$$

$$y^1 = 7.90 + 1.172X_1 + 1.141X_2 + 1.264X_5 + 1.184X_6$$

Where y^1 - Scores of *Perceived Stress of Teachers Total*

X_1 - Score of *Intrinsic to the Job*

X_2 - Score of *Role of Teachers*

X_5 - Score of *Organisational Structure*

X_6 - Score of *Home-work Interface*.

Step 5

The fifth predictor variable entered in the analysis is *Relationship at Work* (X_3). The results after step 5 indicated that multiple correlation (*R*) is 0.982 and this value is significant beyond 0.01 level, *F* value being 1563.06 for *df* (5,294). The strength of association between *Perceived Stress* of Teachers and *Relationship at Work* can be verbally interpreted as *low* since the value obtained for coefficient of determination is only 19.04 per cent.

It can be seen that the multiple R^2 is 0.964. This indicates that the five predictors *Organisational Structure*, *Home-work Interface*, *Intrinsic to the Job*, *Role of Teachers*, and *Relationship at Work* put together could explain 96.40 percentage of variance of *Perceived Stress* of Teachers. The remaining percentage of variance must be attributed to the variable *Career Development*. The percentage variance has been raised from 89.60 to 96.40, the increment in variance being 6.80.

The relative contribution of predictors X_5 , X_6 , X_1 , X_2 and X_3 in terms of proportion of variance predicted by each variable were determined. It can be noted that of the 96.40 per cent of variance in the criterion variable, 25.97 per cent of variance is accounted by the variable X_5 , 25.34 per cent of variance is accounted by the variable X_6 , 13.89 per cent of variance is accounted by the variable X_1 , 12.72 per cent of variance is accounted by the variable X_2 , and 18.46 per cent of variance is accounted by the variable X_3 .

The partial regression coefficient (B) is 0.993 for *Organisational Structure*, 1.103 for *Home-work Interface*, 1.053 for *Intrinsic to the Job*, 1.047 for *Role of Teachers* and 1.041 for *Relationship at Work*. These values indicate that the scores of *Perceived Stress* of Teachers would change by 0.993 units for every unit change of *Organisational Structure*; 1.103 units for every unit change of *Home-work Interface*; 1.053 units for every unit change of *Intrinsic to the Job*; 1.047 units for every unit change of *Role of Teachers* and 1.041 units for every unit change of *Relationship at Work*.

The t -values for B_0 , B_5 , B_6 , B_1 , B_2 and B_3 were significant. Hence these terms are included in the regression equation at this stage. The problem of multicollinearity is not existed since the Beta is below one. The value of the constant that would go into the multiple regression equation that could be written

to predict *Perceived Stress* of Teachers at this stage is 4.66. The regression equation obtained at this step is

$$y^1 = B_0 + B_5X_5 + B_6X_6 + B_1X_1 + B_2X_2 + B_3X_3$$

$$y^1 = 4.66 + 0.993X_5 + 1.103X_6 + 1.053X_1 + 1.047X_2 + 1.041X_3$$

Where y^1 - Score of *Perceived Stress* of Teachers.

X_5 - Score of *Organisational Structure*

X_6 - Score of *Home work Interface*

X_1 - Score of *Intrinsic to the Job*

X_2 - Score of *Role of Teachers*

X_3 - Score of *Relationship at Work*.

Step 6

The last predictor variable entered in the analysis is *Career Development* (X_4). The results after step 6 (Final step) indicated that multiple correlation (R) is 1, and this value is significant beyond 0.01 level. The strength of association between *Perceived Stress* of Teachers and *Career Development* can be verbally interpreted as negligible since the value obtained for coefficient of determination is zero per cent.

It can be seen that the multiple R^2 is 1. This indicates that the six predictors put together could explain 100 percentage of variance of *Perceived Stress* of Teachers. The percentage of variance has been raised from 96.40 to 100, the increment in variance being 3.60.

The relative contribution of each predictors in terms of proportion of variance predicted by each predictor variable were determined. It can be noted that of the 100 per cent of variance in the criterion variable, 26.15 per cent of variance is accounted by the predictor variable *Organisational Structure*, 22.98

per cent of variance is accounted by the predictor variable *Home-work Interface*, 13.19 per cent of variance is accounted by the predictor variable *Intrinsic to the Job*, 12.15 per cent of variance is accounted by the predictor variable *Role of Teachers*, 17.73 per cent of variance is accounted by the predictor variable *Relationship at Work*, and 7.80 per cent of variance is accounted by the predictor variable *Career Development*.

The t -values for B_0 , B_5 , B_6 , B_1 , B_2 , B_3 and B_4 were significant at 0.01 level. Hence these terms are included in the regression equation. The standardised partial regression coefficient, β is not reaching the value one. Hence the problem of multicollinearity is minimised. The value of the constant that would go into the multiple regression equation that could be written to predict *Perceived Stress* of Teachers at this stage is 0. Therefore the regression equation at this stage is

$$y^1 = B_0 + B_5X_5 + B_6X_6 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4$$

$$y^1 = 0 + 1X_5 + 1X_6 + 1X_1 + 1X_2 + 1X_3 + 1X_4$$

$$\text{i.e., } y^1 = y = X_1 + X_2 + X_3 + X_4 + X_5 + X_6$$

Where $y^1 = y$ = Score of the *Perceived Stress* of Teachers and $X_1, X_2, X_3, X_4, X_5, X_6$ are the scores of six predictor variables.

4.2.4.2. Summary and Discussion of Stepwise Multiple Regression Analysis for Perceived Stress of Teachers

To identify the best predictors of Perceived Stress (Total) of a Teacher, its six stressors were treated as the *predictor variables*. The stepwise Multiple Regression Analysis was carried out for all the six predictor variables. In the sixth step the shared variance reached 100. Hence the process reached at an end.

Results of the multiple stepwise regression analysis presented in Table 4.43 enabled the investigator to identify the best predictors and their relative

contribution to the percentage variance of Perceived Stress of Teachers. It is given in the following along with the Beta weights.

Step No.	Predictors	Percentage of Variance	Beta Weights
1.	Organisational Structure	45.30	0.673
2.	Home-work Interface	20.20	0.468
3.	Intrinsic to Job	14.40	0.381
4.	Role of Teachers	9.70	0.317
5.	Relationship at Work	6.80	0.292
6.	Career Development	3.60	0.197
Total		100.00	

Of the six predictor variables, the stressor *Organisational Structure* accounted for 45.30 per cent of variance in Total Perceived Stress of Teachers. Next stressor with highest percentage variance is *Home-work Interface*, 20.20 per cent. The least percentage of variance is accounted for the stressor, *Career Development*. Hence it can be concluded that the two *best predictors* of Perceived Stress are *Organisational Structure* and *Home-work Interface*.

4.2.4.3. Identification of the Best Predictors of Job Satisfaction of Teachers

Multiple regression analysis was taken up to identify the best predictors of Job Satisfaction of Teachers. The components of Job Satisfaction, viz., *Parents and Students, Pay and Fringe Benefits, Working Conditions, Opportunities for Advancement, Personal Worth, Co-Teachers, Principal and Job Itself* were taken as the predictor (Independent) variables and *Job Satisfaction Total* as the Dependent variable. For studying the relative effect of each of the eight

predictors of Job Satisfaction, Stepwise Multiple Regression Analysis was employed.

The results obtained at each step of the multiple regression analysis was carried to predict the relative contribution of each of the predictors to the amount of variance in the Total score of *Job Satisfaction*. This analysis was done on Total Sample (N = 300). The data regarding intercorrelation of criterion variable, Job Satisfaction and eight predictors are given in the following.

Variables	Job Satisfaction - Total Y	Parents & Students - X ₁	Pay & Fringe Benefits X ₂	Working Conditions X ₃	Opportunities for Advancement X ₄	Personal Worth X ₅	Co-Teachers X ₆	Principal X ₇	Job Itself X ₈
Y Job Satisfaction Total	1.000								
X ₁ Parents & Students	0.722	1.000							
X ₂ Pay & Fringe Benefits	0.483	0.296	1.000						
X ₃ Working Conditions	0.435	0.190	0.272	1.000					
X ₄ Opportunities For Advancement	0.478	0.277	0.232	0.183	1.000				
X ₅ Personal Worth	0.582	0.430	0.076	0.153	0.325	1.000			
X ₆ Co-Teachers	0.628	0.348	0.132	0.149	0.343	0.344	1.000		
X ₇ Principal	0.611	0.217	0.065	0.182	0.193	0.180	0.405	1.000	
X ₈ Job Itself	0.790	0.535	0.218	0.248	0.270	0.566	0.354	0.386	1.000

Step 1

It can be seen from inter correlation matrix, that the first variable entered into the stepwise regression analysis was the Job Satisfaction predictor X_8 i.e., *Job Itself*, since this predictor has the highest zero order correlation ($r=0.790$) with the *Job Satisfaction - Total*.

The results of stepwise regression analysis for Job Satisfaction-Total is summarised and presented in Table 4.44.

TABLE 4.44

Result of Stepwise Multiple Regression Analysis for Job Satisfaction of Teachers - Total Sample

Step No.	Predictors	R	R ²	F-value for R	Constant Bo	t-value for Bo	Variable	B	t-value for B	β	Coeff. of Determination r	Shared Variance R ² x 100	Increment in Percentage Variance
1.	Job Itself (X ₈)	0.790	0.624	495.40 (1,298 df)	107.82	15.63**	X ₈	2.651	22.26**	0.790	61.29	62.40	-
2.	Co-Teachers (X ₆)	0.873	0.763	477.70 (2,297 df)	74.66	12.36**	X ₈ X ₆	2.179 2.032	21.49** 13.17**	0.649 0.398	48.70	51.30 24.99	13.90
3.	Pay and Fringe Benefits (X ₂)	0.922	0.851	561.47 (3,296 df)	54.56	10.82**	X ₈ X ₆ X ₂	1.979 1.935 1.328	24.12** 15.74** 13.18**	0.589 0.379 0.304	38.66	46.59 23.80 14.68	8.80
4.	Principal (X ₇)	0.953	0.908	727.44 (4,295 df)	40.38	9.85**	X ₈ X ₆ X ₂ X ₇	1.718 1.503 1.373 0.970	25.53** 14.77** 17.31** 13.57**	0.512 0.294 0.314 0.274	30.34	40.45 18.48 15.18 16.71	5.70
5.	Parents and Students (X ₁)	0.982	0.965	1621.84 (5,294 df)	15.38	5.54**	X ₈ X ₆ X ₂ X ₇ X ₁	1.275 1.226 1.144 1.013 1.110	27.58** 19.13** 22.84** 22.92** 21.90**	0.380 0.240 0.262 0.286 0.296	18.71	30.02 15.08 12.65 17.46 21.34	5.70

Step No.	Predictors	R	R ²	F-value for R	Constant Bo	t-value for Bo	Variable	B	t-value for B	β	Coeff. of Determination r	Shared Variance R ² x 100	Increment in Percentage Variance
6.	Working Conditions (X ₃)	0.991	0.983	2804.48 (6,293 df)	5.43	2.68**	X ₈	1.206	36.97**	0.360	13.08	28.40	1.80
							X ₆	1.210	26.94**	0.237		14.88	
							X ₂	1.002	27.85**	0.229		11.08	
							X ₇	0.963	30.97**	0.272		16.60	
							X ₁	1.101	30.99**	0.293		21.16	
							X ₃	1.066	17.49**	0.143		6.21	
7.	Personal Worth (X ₅)	0.997	0.994	6901.74 (7,292 df)	4.81	4.00**	X ₈	0.994	46.43**	0.296	7.75	23.40	1.10
							X ₆	1.094	40.33**	0.214		13.45	
							X ₂	1.060	49.27**	0.243		11.71	
							X ₇	1.014	54.53**	0.286		17.46	
							X ₁	1.018	47.66**	0.271		19.58	
							X ₃	1.041	28.79**	0.139		6.06	
X ₅	1.159	23.23**	0.133	7.76									

contd.....

Step No.	Predictors	R	R ²	F-value for R	Constant Bo	t-value for Bo	Variable	B	t-value for B	β	Coeff. of Determination r	Shared Variance R ² x 100	Increment in Percentage Variance
8.	Opportunities for Advancement (X ₄)	1	1	-	0	-	X ₈	1.000	-	0.298	0	23.50	0.60
							X ₆	1.000		0.196		12.30	
							X ₂	1.000		0.229		11.06	
							X ₇	1.000		0.282		17.23	
							X ₁	1.000		0.266		19.23	
							X ₃	1.000		0.134		5.83	
							X ₅	1.000		0.115		6.69	
							X ₄	1.000		0.087		4.16	

R - Multiple Correlation β - Standardised Partial Regression coefficient B- Partial Regression Coefficient
 ** - Significant at 0.01 level.

As per Table 4.44, the value of multiple correlation (R) is 0.790 and this value is significant beyond 0.01 level, F value being 495.4 for df (1,298). The strength of association between *Job Satisfaction - Total* and *Job Itself* can be verbally interpreted as *Substantial*, since the value obtained for coefficient of determination is 61.29 per cent.

It is found that R^2 is 0.624. This shows that 62.40 per cent of variance of *Job Satisfaction - Total* is accounted by whatever is measured by the variable X_8 i.e., *Job Itself*. The remaining percentage of the variance must be attributed to variables not measured in this regression equation. This predictor is positively related to *Job Satisfaction - Total*. The partial regression coefficient (B) is 2.651. This value indicates that scores of Total Job Satisfaction would change by 2.651 units for every unit change in the component *Job Itself*.

As per Table 4.44, the standardised partial regression coefficient (β) is 0.790, which is not above *one*, shows that the absence of multicollinearity (absence of excessively strong association between the causal factors of other predictor variables). The t -value obtained for the B_0 and B_8 terms are significant beyond 0.01 level, so it is found appropriate for these terms to include in the equation.

The value of the constant that would go into the multiple regression equation that could be written to predict *Total Job Satisfaction*, at this stage is 107.82.

The equation to the regression line for the first step can be written as

$$y^1 = B_0 + B_8 X_8$$

$$\text{i.e., } y^1 = 107.82 + 2.651 X_8$$

Where y^1 is the predicted score of *Job Satisfaction - Total*, X_8 is the score of Job Satisfaction component, *Job Itself*.

Step 2

The next factor (Predictor) entered in analysis is *Co-Teachers* (X_6). The results after step 2 shows that Multiple Correlation (R) is 0.873 and this value is significant beyond 0.01 level, F value being 477.70 for df (2,297). The strength of association between *Job Satisfaction Total* and *Co-Teachers* can be verbally interpreted as *substantial*, since the value obtained for coefficient of determination is 48.70 per cent.

It is found that the multiple R^2 is 0.763. This result indicates that the two predictors *Job Itself* and *Co-Teachers* put together could explain 76.30 per cent of variance of Total Job Satisfaction. The remaining per cent of variance must be attributed to variables not measured in this equation. The percentage variance has been raised from 62.40 to 76.30, the increment in variance being 13.90.

The relative contribution of the variable X_6 and X_8 in terms of proportion of variance predicted by each variable were determined and are given in column 13 of Table 4.44. It can be seen that of the 76.30 per cent of variance in the criterion variable, 51.3 per cent of variance is accounted by the variable X_8 and 24.99 per cent of variance is accounted by variable X_6 .

The partial regression coefficient (B) is 2.032 for *Co-Teachers* and 2.179 for *Job Itself*. These values indicate that the scores of *Job Satisfaction - Total* would change by 2.032 units for every unit change in the predictor *Co-Teachers* and 2.179 units for every unit change in the predictor *Job Itself*.

The standardised partial regression coefficient (β) is less than one. Hence the problem of multicollinearity is minimised. The t -values for B_0 , B_6 and B_8 terms were noted for its significance at 0.01 level. Hence the terms can be included in the regression equation. The value of the constant that would go into

the multiple regression equation that could be written to predict *Job Satisfaction - Total* at this stage is 74.66.

The regression equation in this case is

$$y^1 = B_0 + B_6X_6 + B_8X_8$$

$$y^1 = 74.66 + 2.032X_6 + 2.179X_8$$

Where y^1 is the predictor score of *Job Satisfaction - Total*, X_6 is the score of the component *Co-Teachers* and X_8 is the score of the component *Job Itself*.

Step 3

The next predictor variable entered in the equation is *Pay and Fringe Benefits* (X_2). The results after step 3 show that, the value of Multiple Correlation (R) is 0.922 and this value is significant beyond 0.01 level, F-value being 561.47 for df (3,296). The strength of association between *Job Satisfaction - Total* and *Pay and Fringe Benefits* can be verbally interpreted as *low* since the value obtained for coefficient of determination is only 38.66 per cent.

It is seen that multiple R^2 is 0.851 which indicates that the three predictors *Job Itself*, *Co-Teachers*, and *Pay and Fringe Benefits* put together could explain 85.10 percentage of variance of Total Job Satisfaction of Teachers. The remaining percentage of variance must be attributed to variables not measured in this equation. The percentage of variance has been raised from 76.30 to 85.10, the increment in variance being 8.80.

The relative contribution of the variable X_8 , X_6 and X_2 in terms of proportion of variance predicted by each variable were determined, and are given in column 13 of Table 4.44. It can be noted that of the 85.10 per cent of variance in the criterion variable, 46.59 per cent of variance is accounted by the variable X_8 ,

23.80 per cent of variance is accounted by variable X_6 , and 14.68 per cent of variance is accounted by variable X_2 .

The partial regression coefficients (B) are 1.979 for *Job Itself*, 1.935 for *Co-Teachers*, and 1.328 for *Pay and Fringe Benefits*. These values indicate that the scores of Job Satisfaction would change 1.979 units for every unit change in the variable *Job Itself*, 1.935 units for every unit change in the variable *Co-Teachers*, and 1.328 units for every unit change in the variable *Pay and Fringe Benefits*.

Since the value of β is less than one, the problem of excessive strength of association cannot be accounted (Multicollinearity). The t -values for B_0 , B_2 , B_6 and B_8 were found significant beyond 0.01 level. This significance justifying the inclusion of these terms in the regression equation. The value of the constant that would go into the multiple regression equation that could be written to predict *Job Satisfaction* of Teachers at this stage is 54.56. The regression equation in this case is

$$y^1 = B_0 + B_2X_2 + B_6X_6 + B_8X_8$$

$$y^1 = 54.56 + 1.328X_2 + 1.935X_6 + 1.979X_8$$

Where y^1 refers to the predictive score of *Job Satisfaction - Total*, X_2 the score of the component *Pay and Fringe Benefits*, X_6 the score of the component *Co-Teachers* and X_8 the score of the component *Job Itself*. This equation will help us to find out the individual predictor values y' , given the individual values X_2 , X_6 and X_8 .

Step 4

The fourth predictor variable entered in the analysis is *Principal* (X_7). The results after step 4 indicated that multiple correlation (R) is 0.953, and this value is significant beyond 0.01 level, F value being 727.44 for df (4,295). The strength of association between *Job Satisfaction - Total* and *Principal* can be verbally

interpreted as low since the value obtained for coefficient of determination is only 30.34 per cent.

It can be seen that the multiple R^2 is 0.9080. This indicates that the four predictors *Job Itself*, *Co-Teachers*, *Pay and Fringe Benefits* and *Principal* put together could explain 90.80 percentage of variance of *Job Satisfaction*. The remaining percentage of variance must be attributed to variables not measured in this equation. The percentage of variance has been raised from 85.10 to 90.80, the increment in variance being 5.70.

The relative contribution of the predictors X_8 , X_6 , X_2 and X_7 in terms of proportion of variance predicted by each variable were determined. It can be noted that, of the 90.80 per cent of variance in the criterion variable, 40.45 per cent of variance is accounted by the variable X_8 , 18.48 per cent of variance is accounted by the variable X_6 , 15.18 per cent of variance is accounted by the variable X_2 and 16.7 per cent of variance is accounted by the variable X_7 .

The partial regression coefficient (B) is 1.718 for *Job Itself*, 1.503 for *Co-Teachers*, 1.373 for *Pay and Fringe Benefits* and 0.970 for *Principal*. These values indicate that the scores of *Job Satisfaction* would change by 1.718 units for every unit change of *Job Itself*, 1.503 units for every unit change of *Co-Teachers*, 1.373 units for every unit change of *Pay and Fringe Benefits* and 0.970 units for every unit change of *Principal*.

The standardised partial regression coefficient (β) is less than one. Hence the problem of multicollinearity is minimised. The t -values for B_0 , B_2 , B_6 , B_7 and B_8 were significant at 0.01 level signifying the inclusion of these terms in the regression equation. The value of the constant that would go into the multiple regression equation that could be written to predict *Job Satisfaction* of Teachers at this stage is 40.38. The regression equation obtained at this step is

$$y^1 = B_0 + B_2X_2 + B_6X_6 + B_7X_7 + B_8 X_8$$

$$y^1 = 40.38 + 1.373X_2 + 1.503X_6 + 0.970X_7 + 1.718X_8.$$

Where y^1 - *Predictive scores of Job Satisfaction-Total*

X_2 - Score of the component *Pay and Fringe Benefits*

X_6 - Score of the component *Co-Teachers*

X_7 - Score of the component *Principal*

X_8 - Score of the component *Job Itself*

Step 5

The fifth predictor variable entered in the analysis is *Parents and Students* (X_1). The results after step 5 indicated that multiple correlation (R) is 0.982, and this value is significant beyond 0.01 level, F-value being 1621.84 for df (5,294). The strength of association between *Job Satisfaction* and *Parents and Students* can be verbally interpreted as *negligible*, since value obtained for coefficient of determination is only 18.71 per cent.

It can be seen that the multiple R^2 is 0.9650. This indicates that the five predictors *Job Itself*, *Co-Teachers*, *Pay and Fringe Benefits*, *Principal*, and *Parents and Students* put together could explain 96.50 percentage of variance of *Job Satisfaction*. The remaining percentage of variance must be attributed to the variables not measured in this equation. The percentage variance has been raised from 90.80 to 96.50, the increment in variance being 5.70.

The relative contribution of variables X_8 , X_6 , X_2 , X_7 and X_1 in terms of proportion of variance predicted by each variable were determined. It can be noted that of the 96.50 per cent of variance in the criterion variable, 30.02 per cent of variance is accounted by the variable X_8 , 15.08 per cent of variance is accounted by the variable X_6 , 12.65 per cent of variance is accounted by the variable X_2 , 17.46

per cent of variance is accounted by the variable X_7 , and 21.34 per cent of variance is accounted by the variable X_1 .

The partial regression coefficient (B) is 1.275 for *Job Itself*, 1.226 for *Co-Teachers* 1.144 for *Pay and Fringe Benefits*, 1.013 for *Principal* and 1.11 for *Parents and Students*. These values indicate that the scores of Job Satisfaction of Teachers would change by 1.275 units for every unit change of *Job Itself*, 1.226 units for every unit change of *Co-Teachers*, 1.144 units for every unit change of *Pay and Fringe Benefits*, 1.013 units for every unit change of *Principal* and 1.110 units for every unit change of *Parents and Students*.

Since the value of β is less than one, the problem of excessive strength of association cannot be accounted (Multicollinearity). The t -values for B_0 , B_8 , B_6 , B_2 , B_7 and B_1 were significant. Hence these terms are included in the regression equation. The value of the constant that would go into the multiple regression equation that could be written to predict *Job Satisfaction* at this stage is 15.38. The regression equation obtained at this step is

$$y^1 = B_0 + B_1X_1 + B_2X_2 + B_6X_6 + B_7X_7 + B_8X_8$$

$$y^1 = 15.38 + 1.110X_1 + 1.144X_2 + 1.226X_6 + 1.013X_7 + 1.275X_8$$

Where y^1 - *Predictive Score of Job Satisfaction*.

X_1 - Score of the component *Parents and Students*

X_2 - Score of the component *Pay and Fringe Benefits*

X_6 - Score of the component *Co-Teachers*

X_7 - Score of the component *Principal*

X_8 - Score of the component *Job Itself*.

Step 6

The sixth predictor variable entered in the equation is *Working Conditions* (X_3). The results after step 6 show that the value of multiple correlation (R) is 0.991 and this value is significant beyond 0.01 level, F value being 2804.48 for df (6,293). The strength of association between *Job Satisfaction* and *Working Conditions* can be verbally interpreted as *negligible* since the value obtained for coefficient of determination is only 13.08 per cent.

It is seen that multiple R^2 is 0.9830 which indicates that the six predictors *Job Itself, Co-Teachers, Pay and Fringe Benefits, Principal, Parents and Students* and *Working Conditions* put together could explain 98.30 percentage of variance of *Job Satisfaction*. The remaining percentage of variance must be attributed to variables not measured in this equation. The percentage variance has been raised from 96.50 to 98.30, the increment in variance being 1.80.

The relative contribution of the variables X_8, X_6, X_2, X_7, X_1 and X_3 in terms of proportion of variance predicted by each variable were determined. It can be noted that of the 98.30 per cent of variance in the criterion variable, 28.40 per cent of variance is accounted by the variable X_8 , 14.88 per cent of variance is accounted by the variable X_6 , 11.08 per cent of variance is accounted by the Variable X_2 , 16.60 per cent of variance is accounted by the variable X_7 , 21.16 per cent of variance is accounted by the variable X_1 , and 6.21 per cent of variance is accounted by the variable X_3 .

The partial regression coefficient (B) is 1.206 for *Job Itself*, 1.210 for *Co-Teachers*, 1.002 for *Pay and Fringe Benefits*, 0.963 for *Principal*, 1.101 for *Parents and Students* and 1.066 for *Working Conditions*. These values indicate that the scores of *Job Satisfaction* would change by 1.206 units for every unit change in the component *Job Itself*, 1.210 units for every unit change in the component *Co-*

Teachers, 1.002 units for every unit change of *Pay and Fringe Benefits*, 0.963 units for every unit change of *Principal*, 1.101 units for every unit change of *Parents and Students* and 1.066 units for every unit change of *Working Conditions*.

The standardised partial regression coefficient (β) is less than one. Hence the problem of multicollinearity is minimised. The t -values for B_0 , B_8 , B_6 , B_2 , B_7 , B_1 and B_3 were significant at 0.01 level. Hence these terms are included in the regression equation at this stage.

The value of the constant that would go into the multiple regression equation that could be written to predict *Job Satisfaction* at this stage is 5.43. The regression equation in this case is

$$y^1 = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_6X_6 + B_7X_7 + B_8X_8$$

$$y^1 = 5.43 + 1.101X_1 + 1.002X_2 + 1.066X_3 + 1.210X_6 + 0.963X_7 + 1.206 X_8$$

Where y^1 - Predictor score of *Job Satisfaction*

X_1 - Score of the component *Parents and Students*

X_2 - Score of the component *Pay and Fringe Benefits*

X_3 - Score of the component *Working Conditions*

X_6 - Score of the component *Co-Teachers*

X_7 - Score of the component *Principal*

X_8 - Score of the component *Job Itself*.

This equation will help us to find out the individual predictor values y^1 , given the individual values of X_1 , X_2 , X_3 , X_6 , X_7 and X_8 .

Step 7

The seventh predictor variable entered in the equation is *Personal Worth* (X_5). The results after Step 7 show that the value of Multiple Correlation (R) is 0.9970 and this value is significant beyond 0.01 level, F -value being 6901.74 for df

(7,292). The strength of association between *Job Satisfaction* and *Personal Worth* can be verbally interpreted as *negligible* since the value obtained for coefficient of determination is only 7.75 per cent.

It is seen that multiple R^2 is 0.9940, which indicates that the seven predictors *Job Itself*, *Co-Teachers*, *Pay and Fringe Benefits*, *Principal*, *Parents and Students*, *Working Conditions* and *Personal Worth* put together could explain 99.40 percentage of variance of *Job Satisfaction*. The remaining percentage of variance must be attributed to the variable *Opportunities for Advancement*. The percentage of variance has been raised from 98.30 to 99.40, the increment in variance being 1.10.

The relative contribution of the variables X_8 , X_6 , X_2 , X_7 , X_1 , X_3 and X_5 in terms of proportion of variance predicted by each variable were determined. It can be noted that of the 99.40 per cent of variance in the criterion variable, 23.40 per cent of variance is accounted by the variable X_8 , 13.45 per cent of variance is accounted by variable X_6 , 11.71 per cent of variance is accounted by the variable X_2 , 17.46 per cent of variance accounted by the variable X_7 , 19.58 per cent of variance is accounted by the variable X_1 , 6.06 per cent of variance is accounted by the variable X_3 and 7.76 per cent of variance is accounted by the variable X_5 .

The partial regression coefficients (B) are 0.9940 for *Job Itself*, 1.094 for *Co-Teachers*, 1.060 for *Pay and Fringe Benefits*, 1.014 for *Principal*, 1.018 for *Parents and Students*, 1.041 for *Working Conditions*, and 1.159 for *Personal Worth*. These values indicate that the scores of Job Satisfaction would change by 0.9940 units for every unit change of *Job Itself*, 1.094 units for every unit change of *Co-Teachers*, 1.060 units for every unit change of *Pay and Fringe Benefits*, 1.014 units for every unit change of *Principal*, 1.018 units for every unit change of *Parents and Students*, 1.041 units for every unit change of *Working Conditions*, and 1.159 units for every unit change of *Personal Worth*.

The standardised partial regression coefficient (β) is less than one. Hence the problem of multicollinearity is minimised. The t -values for B_0 , B_1 , B_2 , B_3 , B_5 , B_6 , B_7 and B_8 were significant at 0.01 level. Hence these terms are included in the regression equation. The value of the constant that would go into the multiple regression equation that could be written to predict Job Satisfaction at this stage is 4.81. The regression equation in this case is

$$y^1 = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_5X_5 + B_6X_6 + B_7X_7 + B_8X_8$$

$$y^1 = 4.81 + 1.018X_1 + 1.060X_2 + 1.041X_3 + 1.159X_5 + 1.094X_6 + 1.014X_7 + 0.994X_8$$

Where y^1 - *Predictive score of Job Satisfaction - Total*

X_1 - Score of the component *Parents and Students*

X_2 - Score of the component *Pay and Fringe Benefits*

X_3 - Score of the component *Working Conditions*

X_5 - Score of the component *Personal Worth*

X_6 - Score of the component *Co-Teachers*

X_7 - Score of the component *Principal*

X_7 - Score of the component *Principal*

X_8 - Score of the component *Job Itself*.

Step 8

The last predictor variable entered in the analysis is *Opportunities for Advancement (X₄)*. The results after step 8 (Final Step) indicated that multiple correlation (R) is 1. The strength of association between *Job Satisfaction* and *Opportunities for Advancement* can be verbally interpreted as *negligible* since the value obtained for coefficient of determination is zero per cent.

It can be seen that the multiple R^2 is 1. This indicates that the eight predictors of *Job Satisfaction* put together could explain 100 percentage of

variance of *Job Satisfaction*. The percentage of variance has been raised from 99.40 to 100, the increment in variance being 0.60.

The relative contribution of different predictors of Job Satisfaction in terms of proportion of variance predicted by each variable were determined. It can be noted that of the 100 percent of variance in the criterion variable, 23.50 per cent of variance is accounted by the predictor variable *Job Itself*, 12.30 per cent of variance is accounted by the predictor variable *Co-Teachers*, 11.06 per cent of variance is accounted by the Predictor variable *Pay and Fringe Benefits*, 17.23 per cent of variance is accounted by the predictor variable *Principal*, 19.23 per cent of variance is accounted by the predictor variable *Parents and Students*, 5.83 per cent of variance is accounted by the predictor variable *Working Conditions*, 6.69 per cent of variance is accounted by the predictor variable *Personal Worth* and 4.16 per cent of variance is accounted by the predictor variable *Opportunities for Advancement*.

Since the value of β is less than one, the problem of excessive strength of association cannot be accounted (Multicollinearity). The t -values for $B_0, B_1, B_2, B_3, B_4, B_5, B_6, B_7$ and B_8 were found significant at 0.01 level. Hence these terms are included in the regression equation .

The value of the constant B_0 , that would go into the multiple regression equation at this stage is 0. Therefore the regression at this final step is

$$y^1 = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + B_7X_7 + B_8X_8.$$

$$y^1 = 0 + 1X_1 + 1X_2 + 1X_3 + 1X_4 + 1X_5 + 1X_6 + 1X_7 + 1X_8.$$

$$y^1 = y = X_1 + X_2 + X_3 + X_4 + X_5 + X_6 + X_7 + X_8.$$

Where $y^1 = y =$ Score of Job Satisfaction-Total of a Teacher $X_1, X_2, X_3, \dots, X_8$ are the scores obtained for each predictors. At this final step predicted score will be equal to actual score.

4.2.4.4. Summary and Discussion of Stepwise Multiple Regression Analysis for Job Satisfaction of Teachers

Stepwise Multiple Regression Analysis was attempted to identify the best predictors of *Job Satisfaction* of Teachers. Its eight components were taken as the predictor variables. Stepwise multiple regression analysis was carried out up to the eighth step. In the final step the percentage of shared variance reached 100. Hence the predictive capacity is attained an end.

The multiple regression analysis helped the investigator to identify the best predictors of *Job Satisfaction* of a Teachers. The predictors are presented according to their descending order of importance of the Percentage of Variance and Beta weights to predict the Total Job Satisfaction.

Step No.	Predictors	Percentage of variance	Beta Weights
1	Job Itself	62.40	0.790
2	Co-Teachers	13.90	0.398
3	Pay and Fringe Benefits	8.80	0.304
4	Principal	5.70	0.274
5	Parents and Students	5.70	0.296
6	Working Conditions	1.80	0.143
7	Personal Worth	1.10	0.133
8	Opportunities for Advancement	0.60	0.087
Total		100.00	

Among the eight predictor variables the Percentage of Variance is higher for the Job Satisfaction components *Job Itself* (62.40), *Co-Teachers* (13.90) and *Pay*

and Fringe Benefits (8.80). So the first three best predictors of Job Satisfaction are *Job Itself, Co-Teachers* and *Pay and Fringe Benefits*. The least percentage of variance is accounted for the component, *Opportunities for Advancement* (0.60).

4.2.5. IDENTIFICATION OF LATENT FACTORS UNDERLYING IN THE TEACHER STRESS INVENTORY (TSI) AND SCALE OF JOB SATISFACTION (SJS)

This part of the analysis was utilised to describe and interpret the process of identifying the latent factors of Perceived Stress and Job Satisfaction of the sample as measured by the Teacher Stress Inventory (TSI) and Scale of Job Satisfaction (SJS) respectively. *Factor analysis technique* was employed for this objective to realise. The specific factoring methods adopted were *Principal Component Analysis* (PCA) and *Varimax* orthogonal rotation to evolve a terminal solution. These analysis was employed separately for Perceived Stress and Job Satisfaction.

4.2.5.1. Identification of the Latent Factors Underlying in the Teacher Stress Inventory (TSI)

The multivariate statistical technique, *Factor analysis* was used to extract the underlying factors involved in the Teacher Stress Inventory (TSI).

The Input Data

The *Teacher Stress Inventory (TSI)* used in the present study to measure the Perceived Stress of the sample comprises 50 items. These 50 items come under six stressors. They are *Intrinsic to the Job, Role of Teachers, Relationship at Work, Career Development, Organisational Structure* and *Home work Interface*. In practice of research a great number of observed indicators (items) can be reduced to a smaller number of dimensions and can be factor analysed (Tacq, 1997). As per the recommendation of Tacq (1997), the 50 item Teacher Stress

Inventory is reduced to six dimensions as Stressors. The scores on these dimensions are actually the composite score on those items come under each dimensions or Stressors. This raw scores are the *input data* used for factor analysis. The following steps were taken to complete the data reduction.

1. *Computation of a correlation matrix* - Appropriateness of the factor model is evaluated in this step.
2. *Factor extraction* - the number of factors necessary to represent the data and the method for evaluating them was determined.
3. *Rotation* - focussed on transforming the factors to make them more interpretable.

The entire process of factor analysis was done using the computer programme Statistical Package for Social Sciences (SPSS).

Examining the Correlation Matrix

The correlation matrix derived from all the six Stressor variables were examined as an initial step in the factor analysis. It is given as follows:

	Intrinsic to the Job X ₁	Role of Teachers X ₂	Relationship at Work X ₃	Career Development X ₄	Organisational Structure X ₅	Home work Interface X ₆
Intrinsic to the Job X ₁	1.000					
Role of Teachers X ₂	0.032	1.000				
Relationship at Work X ₃	0.141	0.164	1.000			
Career Development X ₄	0.111	0.085	0.118	1.000		
Organisational Structure X ₅	0.002	0.180	0.406	0.078	1.000	
Home work Interface X ₆	0.081	0.046	0.220	0.212	0.285	1.000

The obtained determinant of the correlation matrix is larger than 0.00001 (0.660). This indicated that the matrix can be assumed not to suffer from *multicollinearity* (excessive association).

Measure of Sampling adequacy and Bartlett's test of Sphericity

The *Kaiser-Meyer-Olkin (KMO)* measure of sampling adequacy was found as 0.62. Since it is above 0.5 the data were sufficient for a *satisfactory factor analysis to proceed*.

Bartlett's test of sphericity used to test whether the correlation matrix is an *identity matrix*, that is all diagonal terms are *one* and off diagonal terms are *zero*. The obtained value of the test statistic for sphericity is large (122.91) and significant (0.0000). So it appears *unlikely* that the correlation matrix is an identity matrix.

Initial Statistics for Principal Component Analysis

The initial statistics for Principal Component Analysis like the *communality, eigen values, initial factors extracted, percentage of variance and cumulative percentage* etc. are given in Table 4.45.

TABLE 4.45

Initial Statistics for Principal Component Analysis of TSI

Variables	Communi- nality	*	Factor	Eigen Value	Percen- tage of Variance	Cumulative Percentage
Intrinsic to the Job	1.00000	*	1	1.80010	30.0	30.0
Role of Teachers	1.00000	*	2	1.06434	17.7	47.7
Relationship at Work	1.00000	*	3	0.95674	15.9	63.7
Career Development	1.00000	*	4	0.91260	15.2	78.9
Organisational Structure	1.00000	*	5	0.71107	11.9	90.7
Home work Interface	1.00000	*	6	0.55515	9.3	100.0

As per Table 4.45 the proportion of variance accounted for by the common factors, or the *communality* of the variables are 1. Right side of the asterisks in the table are the factors and related statistics. The total variance explained by each factor is listed as Eigen values and is given in the descending order. An eigen value less than *one* is less important than an observed variable and can be ignored. From the Table 4.45 it is clear that the *first factor* accounts for 30.0 per cent of variance and the *second factor* 17.7 per cent of variance.

Nearly 48 per cent of variance is attributable to the first two factors. The remaining four factors together account for 52 per cent of variance. Hence a model with the first two factors is adequate to represent the data. The remaining factors are insignificant and omitted from further analysis. The retaining of the first two factors are further supported by the scree plot.

In Figure 4-31 the *Scree Plot* is presented. It is the plot of the total variance associated (Eigen values) with each factor.

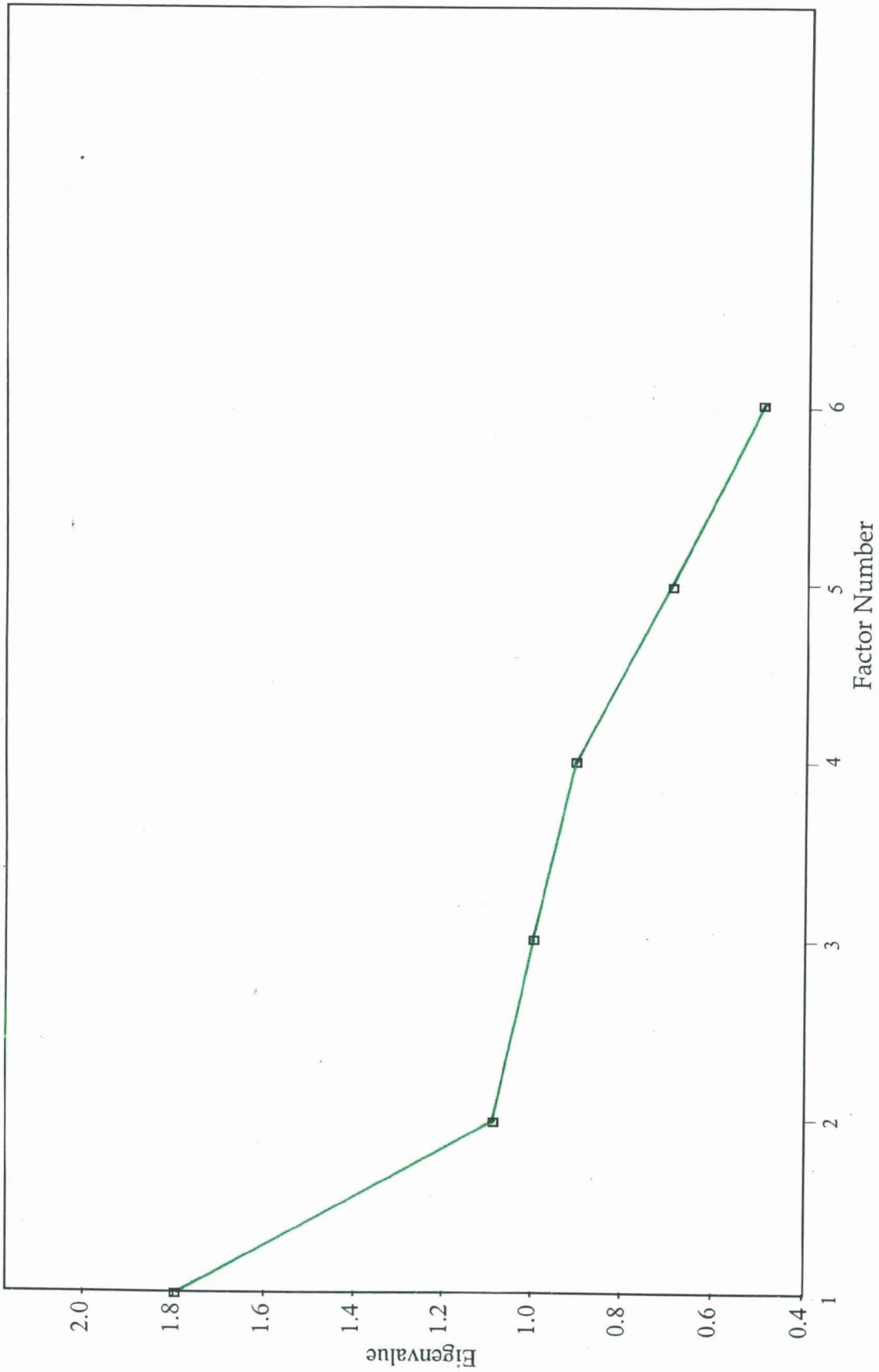


FIGURE 4 - 31 Scree Plot for Factors in the TSI

The Scree plot indicated that a steep slope of the factors having large eigen values and the gradual *trailing off (Scree)* at the rest of the factors. From the plot it can be seen that the scree begins at the second factor. Hence a two-factor model is sufficient for the data.

The Un Rotated Factor Matrix

The unrotated factor matrix is presented in the following. It shows the *loading* of the six Stressors on the two factors extracted. These factor loadings are the correlation coefficients between the variables and the factors when the factors are *orthogonal* (Uncorrelated with each other). It is accepted that higher the absolute value of the loadings (which can never exceed a maximum of *One*) the more the factor contributes to the variable.

The unrotated factor matrix is given in the following:

Variables	Factor 1	Factor 2
Intrinsic to the Job	--	0.66737
Role of Teachers	--	--
Relationship at Work	0.71923	--
Career Development	--	0.55899
Organisational Structure	0.71290	--
Home work Interface	0.61165	--

Gaps in the matrix represent factor loadings with values less than 0.5 because the coefficients below the value 0.5 is suppressed, not taken into consideration.

Factor 1 is the factor with *large factor loading* with the variable *Relationship at Work*. The variable *Career Development* has the *smallest factor loading* with the Factor 2.

The Final Statistics

In Table 4.46 following, the final statistics of the Principal Component Analysis are given. It includes the *communalities* of the variables (Proportion of variance explained by the common factors) together with the percentage of variance accounted for by the *factors retained*, the eigen values and the cumulative percentage of variance (right of the asterisks).

TABLE 4.46

Final Statistics for Principal Component Analysis of TSI

Variables	Communnality	*	Factor	Eigen Value	Percentage of Variance	Cumulative Percentage of variance
Intrinsic to the Job	0.51491	*	1	1.80010	30.0	30.0
Role of Teachers	0.25364	*	2	1.06434	17.7	47.7
Relationship at Work	0.54278	*				
Career Development	0.48575	*				
Organisational Structure	0.66177	*				
Home work Interface	0.40559	*				

As per the final statistics show the communalities indicated how much of the variance in the variables accounted for by the *two Factors* that have been extracted. The highest percentage of variance accounted for by the variable *Organisational Structure* (nearly 66%) and lowest percentage of variance accounted for by the variable *Role of Teachers* (nearly 25%).

The Rotated Factor Matrix

Although the factor matrix obtained in the extraction phase indicates the relationships between the Factors and the individual variables. It is usually difficult to identify meaningful Factors based on the matrix. Hence in order to identify Factors that are substantially meaningful (in the sense that they summarise sets of closely related variables). The *rotation* phase attempts to transform the initial matrix into one that is *easier to interpret*.

Variables	Factor 1	Factor 2
Intrinsic to the Job	--	0.71122
Role of Teachers	--	--
Relationship at Work	0.70576	--
Career Development	--	0.69102
Organisational Structure	0.81347	--
Home work Interface	--	--

In the rotated factor matrix, loading above 0.5 is taken into consideration as high loading and is used for labelling the Factors.

The variance accounted for by the two factors commonly was 47.7 percentage. The *first Factor* accounts for 30.0 per cent of variance and it has the *highest loading* with the variable *Organisational Structure*(0.81347). *The lowest loading* in this Factor is with the variable *Relationship at Work* (0.70576).

Factor 2 accounts for 17.7 percentage of variance. This factor has *highest loading* with the variable *Intrinsic to the Job* (0.71122) and lowest loading with the variable *Career Development* (0.69102). All loadings are considered as high because the absolute value is above 0.5.

Variables having high loading with the factors are sorted out.

Variables having Loading (> 0.5) with Factor 1

Name of Variables	Loadings
Organisational Structure	0.81347
Relationship at work	0.70576

Variables having loading (> 0.5) with Factor 2

Name of Variables	Loadings
Intrinsic to the Job	0.71122
Career Development	0.69102

The rotated factor matrix shows that the variable *Role of Teachers* and *Home work Interface* has no considerable loading (> 0.5) with any of the two Factors.

Factor loading plot (Varimax rotated solution) was constructed and displayed in Figure 4-32.

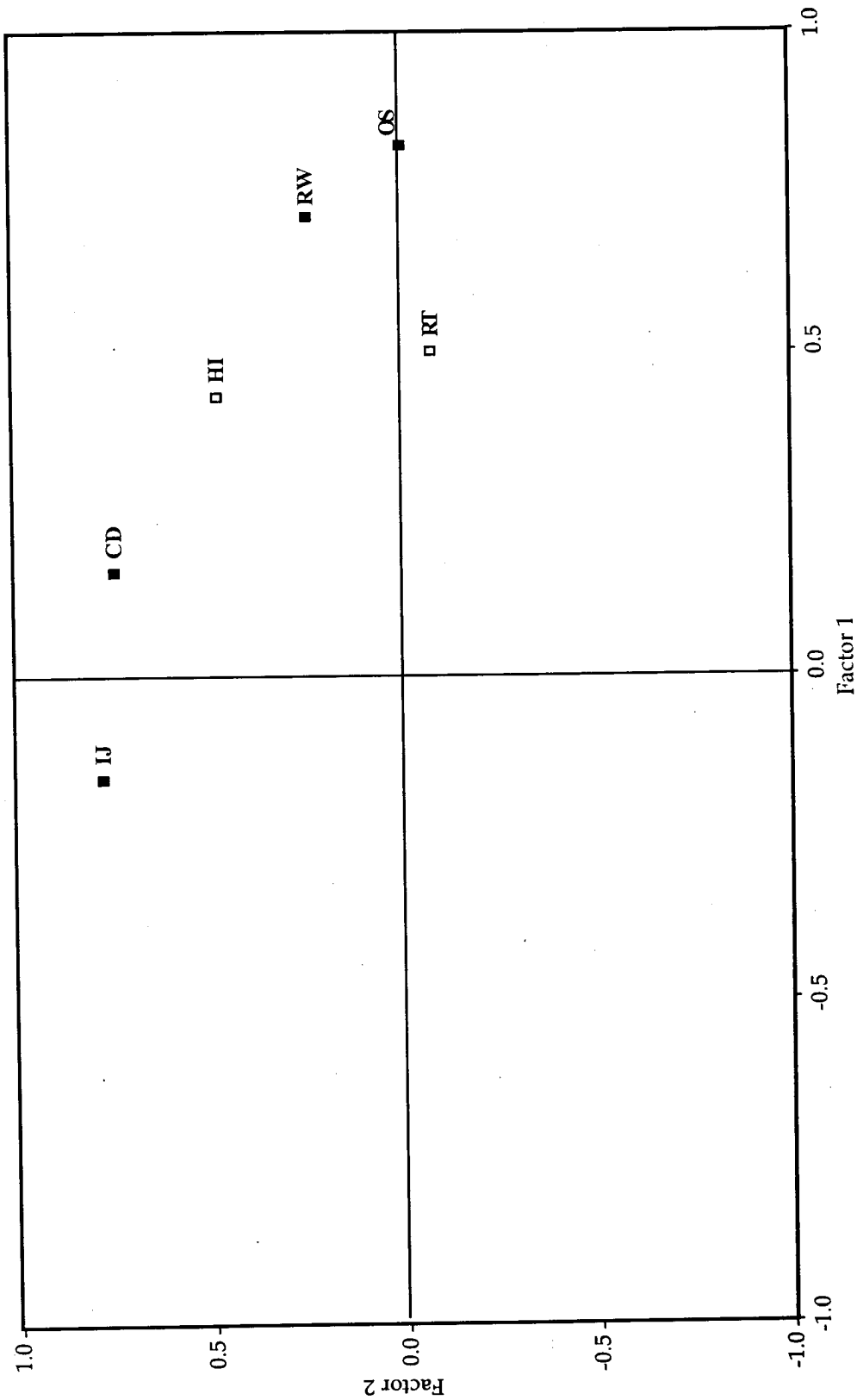


FIGURE 4 - 32 Varimax Rotated Solution for Factors 1 and 2 of TSI

IJ - Intrinsic to the Job
 HI - Home work Interface
 OS - Organisational Structure
 CD - Career Development
 RW - Relationship at Work
 RT - Role of Teachers

After rotation it is evident that a simple factor structure is achieved as seen in the factor loading plot. Clusters of the variables occur near the ends of the axes. Variables *Intrinsic to the Job* and *Career Development* are seen at the end of the axis of Factor 2. It has high loadings with this factor. At the end of the axis of Factor 1, Stressor variables *Organisational Structure* and *Relationship at work* is clustered. Variables *Role of Teachers and Home-work Interface* is not included in any of the two factors, because it has no substantial loadings with any of the factors.

Labeling the Factors

The last step in the factor analysis is giving labels to factors those having high loading with the variable. As per the rotated factor matrix, the variables *Organisational Structure* and *Relationship at Work* have high loading with *Factor 1*. The corresponding items come under these two stressors reflect certain peculiarities (Items 31-41 - Organisational Structure; 20-26 - Relationship at Work). All these items reflect the stressful situations related to the organisational aspects such as Participation in decision making, Performance appraisal, Change in curriculum, Personal freedom, Poor communication, Inadequate feedback about performance, Unfair control system and Lack of effective consultation. It also reflect the stressful situations which are induced by aspects in the person himself/herself. That is, Quality of relationship with Colleagues, Head, Office staff, Pupils and Parents. Hence *Factor 1* is labeled as *Personal Stressor*.

Factor 2 has high loading with the variables *Intrinsic to Job* and *Career Development*. The following items in the Teacher Stress Inventory come under these stressors. Items 1-10 (Intrinsic to the Job) and 27-30 (Career Development). These items indicate the stressful contexts of the person related to the peculiarities of his/her Profession. That is, Class size, Unsuitable building, Noise level, Inadequate resources, Level of participation in decision making, Work load,

Status incongruency, over/under promotion, Job security, etc. Hence Factor 2 is labeled as *Professional Stressor*.

4.2.5.2. Identification of the Latent Factors Underlying in the Scale of Job Satisfaction (SJS)

To identify the underlying factors involved in the Scale of Job Satisfaction (SJS), *Factor analysis* was employed. The specific factoring methods adopted were *Principal Component Analysis* (PCA) and *Varimax* Orthogonal rotation to evolve a terminal solution.

The Input Data

The Scale of Job Satisfaction (SJS) used in the present study to measure the Job Satisfaction of the sample comprises 74 items. These 74 items come under eight Job Satisfaction components. These are *Parents and students, Pay and Fringe Benefits, Working Conditions, Opportunities for Advancement, Personal Worth, Co-Teachers, Principal* and *Job Itself*. In practice of research a great number of observed indicators (Items) can be reduced to a smaller number of dimensions and can be factor analysed (Tacq, 1997). As per the recommendation of Tacq (1997) the 74 item Scale of Job Satisfaction is reduced to eight dimensions as factors of Job Satisfaction. The scores on these dimensions are actually the composite score on those items come under each dimensions or factors of Job Satisfaction. This raw scores are the input data used for factor analysis. The following steps were taken to complete the data reduction.

1. *Computation of a correlation matrix*- Appropriateness of the factor model is evaluated in this step.
2. *Factor extraction*- The number of factors necessary to represent the data and the method for evaluating them was determined.

3. **Rotation-** Focussed on transforming the factors to make them more interpretable.

The entire process of factor analysis was done by using the computer programme Statistical Package for Social Sciences (SPSS).

Examining the correlation Matrix

The correlation matrix derived from all eight Job Satisfaction factor variables were examined as an initial step in the factor analysis. It is given as follows.

	Parents and Students	Pay and Fringe Benefits	Working Conditions	Opportunities for Advancement	Personal Worth	Co-Teachers	Principal	Job Itself
Parents and Students	1.000							
Pay and Fringe Benefits	0.29642	1.000						
Working Conditions	0.19023	0.27236	1.0000					
Opportunities for Advancement	0.27677	0.23246	0.18305	1.0000				
Personal Worth	0.42969	0.07623	0.15286	0.32462	1.0000			
Co-Teachers	0.34829	0.13181	0.14855	0.34319	0.34369	1.0000		
Principal	0.21701	0.06549	0.18152	0.19310	0.17977	0.40511	1.0000	
Job Itself	0.53456	0.21822	0.24815	0.26978	0.56627	0.35397	0.38569	1.0000

The obtained determinant of the correlation matrix is larger than 0.00001 (0.1812). This indicated that the matrix can be assumed not to suffer from multicollinearity (excessive association).

Measure of Sampling adequacy and Bartlett's test of Sphericity

The *Kaiser - Meyer - Olkins* (KMO) measure of sampling adequacy was found as 0.759 . Since it is above 0.5 the data were sufficient for a *Satisfactory factor analysis to proceed.*

Barlett's test of sphericity used to test whether the correlation matrix is an *identity matrix*, that is all diagonal terms are *one* and off diagonal terms are *zero*. The obtained value of the test statistic for sphericity is large (504.73) and significant (0.0000). So it appears *Unlikely* that the correlation matrix is an identity matrix.

Initial Statistics for Principal Component Analysis

The initial statistics for Principal Component Analysis like the *communality, eigen values, initial factors extracted, percentage of variance* and *cumulative percentage* etc., are given in Table 4.47.

TABLE 4.47

Initial Statistics for Principal Component Analysis of SJS

Variables	Communa- lity	*	Factor	Eigen value	Percentage of variance	Cumulative Percentage
Parents and Students	1.00000	*	1	2.98060	37.3	37.3
Pay and Fringe Benefits	1.00000	*	2	1.11004	13.9	51.1
Working Conditions	1.00000	*	3	0.94127	11.8	62.9
Opportunities for Advancement	1.00000	*	4	0.83278	10.4	73.3
Personal Worth	1.00000	*	5	0.73919	9.2	82.5
Co-Teachers	1.00000	*	6	0.56460	7.1	89.6
Principal	1.00000	*	7	0.48944	6.1	95.7
Job Itself	1.00000	*	8	0.34208	4.3	100.0

As per Table 4.47 the proportion of variance accounted for by the common factors, or the *communality* of the variables are 1. Right side of the asterisks in the table are the Factors and related statistics. The total variance explained by each factor is listed as Eigen values and is given in the descending order. An eigen value less than *one* has less importance than an observed variable and can be ignored. From the Table 4.47 it is clear that the *first factor* accounts for 37.3 per cent of variance and the second factor 13.9 per cent of variance.

Around 51 per cent of variance is attributable to the first two factors. The remaining six factors together account for 49 per cent of variance. Hence a model

with the first two factors is adequate to represent the data. The remaining factors are insignificant and omitted from further analysis. The retaining of the first two factors are further supported by the scree plot.

In Figure 4-33 the *Scree plot* is presented it is the plot of the total variance associated (Eigen values) with each factor.

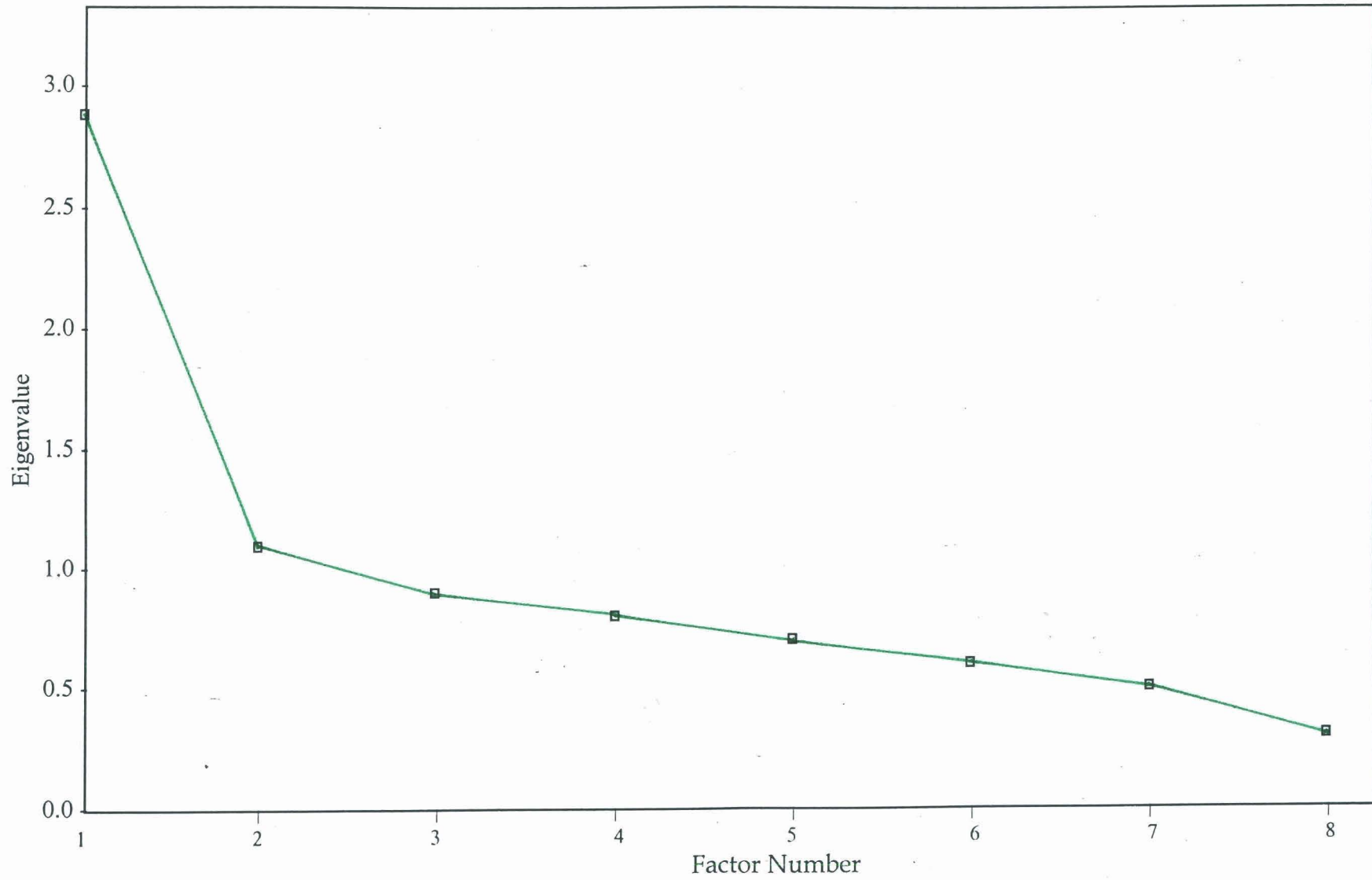


FIGURE 4 - 33 Scree Plot for Factors in the SJS

The Unrotated Factor Matrix

The unrotated factor matrix is presented in the following. It shows the *loading* of the eight factors of Job Satisfaction on the two factors extracted. These factor loadings are the correlation coefficients between the variables and the factors when the factors are orthogonal (Uncorrelated with each other). It is accepted that higher the absolute value of the loadings (which can never exceed a maximum of *One*) the more the factor contributes to the variable.

The unrotated factor matrix is given in the following.

Variables	Factor 1	Factor 2
Parents and Students	0.71520	-
Pay & Fringe Benefits	-	0.73908
Working Conditions	-	0.54684
Opportunities for Advancement	0.57125	-
Personal Worth	0.68360	-
Co-Teachers	0.65219	-
Principal	0.53495	-
Job Itself	0.78527	-

Gaps in the matrix represents factor loadings with values less than 0.5 because the coefficients below the value 0.5 is suppressed, not taken into consideration.

Factor 1 is the factor with *large factor loading* with the variable *Job Itself* and also is the factor which has *smallest factor loading* with the variable

Principal. In Factor 2 highest, factor loading is with the variable *Pay and Fringe Benefits* and smallest with *Working Conditions*.

The Final Statistics

In Table 4.48, the final statistics of the Principal Component Analysis are given. It includes the *communalities* of the variables (Proportion of variance explained by the common factors) together with the percentage of variance accounted for by the *factors retained*, the eigen values and the cumulative percentage of variance (Right of the asterisks).

TABLE 4.48

Final Statistics for Principal Component Analysis of SJS

Variables	Communal-ity	*	Factor	Eigen value	Percentage variance	Cumulative Percentage
Parents and Students	0.51373	*	1	2.98060	37.3	37.3
Pay and Fringe Benefits	0.71161	*	2	1.11004	13.9	51.1
Working Conditions	0.48094	*				
Opportunities for Advancement	0.33627	*				
Personal Worth	0.53936	*				
Co-Teachers	0.50015	*				
Principal	0.37460	*				
Job Itself	0.63399	*				

As per the final statistics show the communalities indicated how much of the variance in the variables accounted for by the *two factors* that have been extracted. The highest percentage of variance accounted for by the variable *Pay & Fringe Benefits* (around 71%) and lowest percentage of variance accounted for by the variable *Opportunities for Advancement* nearly 34%).

The Rotated Factor Matrix

Although the factor matrix obtained in the extraction phase indicate the relationships between the Factors and individual variables, it is usually difficult to identify meaningful Factors based on the matrix. Hence in order to identify Factors that are substantially meaningful (in the sense that they summarise sets of closely related variables). The *rotation* phase attempts to transform the initial matrix into one that is *easier to interpret*.

Variables	Factor 1	Factor 2
Parents and Students	0.61548	-
Pay and Fringe Benefits	-	0.84317
Working Conditions	-	0.68102
Opportunities for Advancement	-	-
Personal Worth	0.73087	-
Co-Teachers	0.70521	-
Principal	0.61167	-
Job Itself	0.75918	-

In the rotated factor matrix, loading above 0.5 is taken into consideration as high loading and is used for labelling the Factors.

The variance accounted for by the two factors commonly was 51.1 percentage. The first Factor accounts for 37.3 per cent of variance and has the *highest loading* with the variable *Job Itself* (0.75918). The *lowest loading* in this Factor is with the variable *Principal* (0.61167).

Factor 2 accounts for 13.9 percentage of variance. This factor has *highest loading* with the variable *Pay and Fringe Benefits* (0.84317) and *lowest loading* with the variable *Working Conditions* (0.68102). All loadings are considered as high because the absolute value is above 0.5.

Variables having high loading with the factors are sorted out.

Variables having Loading (>0.5) with Factor 1

Name of Variables	Loadings
Job Itself	0.75918
Personal Worth	0.73087
Co-Teachers	0.70521
Parents and Students	0.61548
Principal	0.61167

Variables having loading (>0.5) with Factor 2

Name of Variables	Loadings
Pay and Fringe Benefits	0.84317
Working Conditions	0.68102

The rotated factor matrix shows that the variable *Opportunities for Advancement* has no considerable loading (>0.5) with any of the two factors.

Factor loading plot (Varimax rotated solution) was constructed and displayed in Figure 4-34.

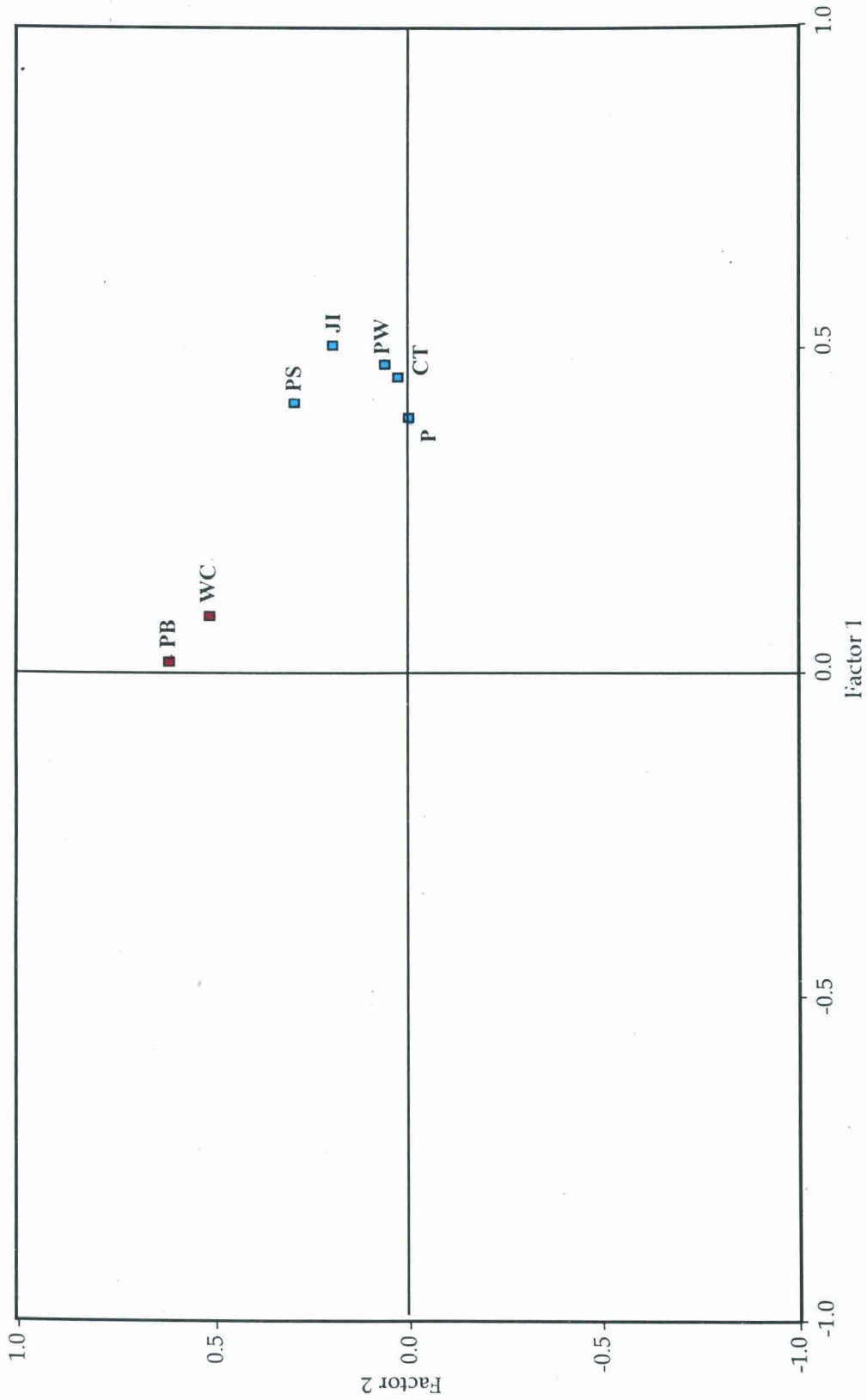


FIGURE 4 - 34 Varimax Rotated Solution for Factors 1 and 2 of SJS

PB - Pay and Fringe Benefits WC - Working Conditions PS - Parents and Students JI - Jobe Itself
 PW - Personal Worth CT - Co-Teachers P - Principal

After rotation it is evident that a simple factor structure is achieved as seen in the factor loading plot. Cluster of the variables occur near the ends of the axes. Variables *Pay and Fringe Benefits* and *Working conditions* are seen at the end of the axis of Factor 2. It has high loading with this factor. At the end of the axis of Factor 1, variables *Parents and Students, Job Itself, Personal Worth, Co-Teachers* and *Principal* is clustered. Variable *Opportunities for Advancement* is not in the two factors because it has no substantial loadings with any of the factor.

Labeling the Factors

The last step in the factor analysis is giving labels to factors those having high loading with the variables. As per the rotated factor matrix, the variables *Parents and Students, Personal Worth, Co-Teachers, Principal* and *Job Itself* have high loading with *Factor 1*. The corresponding items come under these five factors reflect certain peculiarities (Items 1-16 - Parents and Students; 35-38 - Personal Worth; 39-46 - Co-Teachers; 47-58 - Principal; 59-74 - Job Itself). All these items reflect psychological aspects or qualitative aspects within the profession such as Interest of parents, sense of responsibility, recognition from parents, relationship with teachers, quality of the students, interest of students, behaviour of students, interest in the work, self esteem, relationship, co-operation, communication, conduct, relationship, faith, conduct, opportunities given for participation, recognition of work done, management style, feeling of accomplishment, inspiration, variety, opportunity to utilise skill and ability, freedom, morale, responsibility. Hence *Factor1* labeled as *Qualitative element*. Factor 2 has high loading with the variables *Pay and Fringe Benefits* and *Working Conditions*. The following items in the Scale of Job Satisfaction come under these factors. Items 17-24 (Pay and Fringe Benefits); and items 25-30 (Working Conditions). These items indicate the materialistic aspects or quantitative aspects within any profession like Perceived fairness of pay and

fringe benefits like Medical/HRA/DA, leave, etc., financial needs and amount of pay, pension, physical facilities for teachers and students, place of work, attitude of government towards teachers. Hence *Factor 2* is labeled as *Quantitative element*.

Chapter Five

SUMMARY FINDINGS CONCLUSIONS AND SUGGESTIONS

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The present investigation is intended (a) To study the *effect* of various demographic and biographical variables on select variables namely, *Perceived Stress, Job Satisfaction* and *Personality Characteristics* (b) To study the *nature* and *degree of association* between *Perceived Stress* and Independent variables (c) To study the *main* and *interaction effects* of Independent variables on *Perceived Stress* of Teachers (d) To identify the *best predictors* of *Perceived Stress* and *Job Satisfaction* (e) To identify the *latent factors* underlying in the Teacher Stress Inventory (TSI) and Scale of Job Satisfaction (SJS). This chapter therefore provides a *summary of the procedure* adopted for the study, *major findings, conclusions* and *suggestions*. These are presented under the following sections.

5.1. STUDY IN RETROSPECT

5.2. METHODOLOGY

5.3. MAJOR FINDINGS

5.4. CONCLUSIONS AND SUGGESTIONS

5.5. FUTURE RESEARCH DIRECTIONS

5.1. STUDY IN RETROSPECT

The various aspects relating to the present study such as the Problem, Variables, Objectives, Hypotheses etc., are given in brief.

5.1.1. RESTATEMENT OF THE PROBLEM

The presented study was stated as *Perceived Stress of Teachers in Relation to Job Satisfaction and Certain Personality Characteristics*.

5.1.2. VARIABLES

The study was designed with *Job Satisfaction* and *Personality Characteristics* as *Independent* variables and *Perceived Stress* of Teachers as *Dependent* variable.

5.1.3. OBJECTIVES

The objectives of the study upon which the investigation and the procedure is designed are the following.

- 5.1.3.1. To study the *extent* and *levels* of Perceived Stress and Job Satisfaction of Teachers (Total sample and relevant Subsamples).
- 5.1.3.2. To study whether *gender difference* exists in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers for Total sample and Subsamples based on Type, Locale, and Management of Schools.
- 5.1.3.3. To study whether *significant difference* exists in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers with regard to the Type, Locale, and Management of Schools.
- 5.1.3.4. To study whether *significant difference* exists in Perceived Stress and Job Satisfaction of Teachers with regard to the Biographical variables (Age, Educational Qualification, Marital Status, Teaching Experience, Number of Dependents, and Type of Career of the Couples).
- 5.1.3.5. To estimate the *nature* and *degree of association* between Perceived Stress (Stressor wise and Total Stress), Job Satisfaction and Personality

Characteristics for Total sample, Higher Secondary, High School, and Primary School Teachers.

- 5.1.3.6. To study the *main* and *interaction effects* of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers (Total sample, Higher Secondary, High School, and Primary School Teachers).
- 5.1.3.7. To identify the *best predictors* of Perceived Stress and Job Satisfaction of Teachers
- 5.1.3.8. To identify the *latent factors* underlying in the Teacher Stress Inventory (TSI) and Scale of Job Satisfaction (SJS).

5.1.4. HYPOTHESES

The major hypotheses formulated and tested for the study are as follows.

- 5.1.4.1. There will be *significant gender difference* in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers for Total sample and Subsamples based on Type, Locale and Management of Schools.
- 5.1.4.2. There will be *significant difference* in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers with regard to the Type, Locale and Management of Schools.
- 5.1.4.3. There will be *significant difference* in Perceived Stress and Job Satisfaction of Teachers with regard to the Biographical variables (Age, Educational Qualification, Marital Status, Teaching Experience, Number of Dependents and Type of Career of the Couples).
- 5.1.4.4. There will be *significant correlation* between Perceived Stress (Stressor wise and Total Stress), Job Satisfaction and Personality Characteristics

for Total sample, Higher Secondary, High School and Primary School Teachers.

5.1.4.5. There will be *significant main* and *interaction effects* of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers (Total sample, Higher Secondary High School, and Primary School Teachers).

5.1.4.6. Best predictors of Perceived Stress and Job Satisfaction of Teachers can be identified from a set of predictor variables.

5.1.4.7. The *latent factors* underlying in the Teacher Stress Inventory (TSI) and Scale of Job Satisfaction (SJS) can be identified.

5.2. METHODOLOGY

The present study is designed as a descriptive survey. The methodology adopted for the investigation is the following.

5.2.1. THE SAMPLE

The study is carried out on a representative sample of 300 Teachers from the Primary, Secondary and Higher Secondary Schools of Kerala State. *Proportionate stratified sampling technique* was employed. In selecting the sample, due representation was given to the Category of Teachers, Gender, School Locale, Type of Management of Schools (Private or Government) and also to the Biographical aspects (Age, Educational Qualification, Teaching Experience, Marital Status, Number of Dependents and Type of Career of Couples) of Teachers. The sample is drawn from the three districts of Kerala, viz., Kannur, Kozhikode and Malappuram, 100 each from Primary, Secondary and Higher Secondary Schools.

5.2.2. TOOLS USED FOR THE STUDY

The tools used for measuring the variables were the following:

5.2.2.1. Teacher Stress Inventory (Kumar & Kumar, 2001).

Teacher Stress Inventory (TSI) developed by Kumar and Kumar (2001) was used to quantify the Perceived Stress of Teachers of various categories. TSI contains 50 items and these come under six major stressors. The tool is constructed in the Likert Format. Sum of the response for all the 50 items, give an indication of one's Perceived Stress.

5.2.2.2. Scale of Job Satisfaction (Kumar & Kumar, 2001)

Scale of Job Satisfaction (SJS) prepared by Kumar and Kumar (2001) was used to assess the Job Satisfaction of Teachers. The scale comprises of eight major components. Eight components altogether contains 41 positive and 33 negative items. A total of 74 items. Likert Format is adopted for the construction of the scale.

5.2.2.3. 16 PF Questionnaire - Form C - Malayalam Version (Rema & Raveendran, 1989)

The 16 PF Questionnaire Form C (Malayalam Version) was used for the present study, in order to identify the Personality Characteristics of Teachers. It consists of 105 items, each provided with three alternatives of answering. Sixteen functionally independent factors with two dimensions at the extremes are measured by this test. In the present study a composite score on the 16 PF is utilised.

5.2.3. STATISTICAL TECHNIQUES USED

The following statistical techniques were employed to analyse the data for the present study.

5.2.3.1. Percentage Analysis

5.2.3.2. Mean Difference Analysis

5.2.3.3. Pearson's Product Moment Coefficient of Correlation

5.2.3.4. Two-way Analysis of Variance with 3x3 factorial design

5.2.3.5. Scheffe' Test of Post-Hoc Comparison

5.2.3.6. Multiple Regression Analysis - Stepwise

5.2.3.7. Principal Component Factor Analysis

5.3. MAJOR FINDINGS

The major findings of the study are explained in the following sub-sections

5.3.1. EXTENT AND LEVELS OF PERCEIVED STRESS AND JOB SATISFACTION OF TEACHERS

Results of the investigation to find the extent and levels of *Perceived Stress* and *Job Satisfaction* of Teachers are presented in this part of the chapter. The findings will highlight which category of Teachers experience the most Highest, Average and Lowest level of Perceived Stress and Job Satisfaction and in what percentage. The details are presented in the following.

5.3.1.1. Extent and Levels of Perceived Stress of Teachers

Teachers of various categories were studied with respect to the High, Average and Low levels of Perceived Stress. The percentages of various categories of Teachers having the three levels of Perceived Stress were found out and is presented.

Type of Sample	High		Average		Low	
	N	%	N	%	N	%
Total Sample (N=300)	55	18.3	194	64.7	51	17
Higher Secondary (N=100)	16	16	67	67	17	17
High School (N= 100)	15	15	73	73	12	12
Primary School (N= 100)	17	17	66	66	17	17

The *Highest* Perceived Stress is experienced by *18.3 per cent* of Teachers in Total sample. *17 per cent* of the Teachers working in the Primary School are found to experience *High* Perceived Stress level. The least percentage of Teachers who are Highly stressed are *15 per cent* (High School).

The *highest* percentage of Teachers who have Low level of Perceived Stress was *17 per cent*. These are Higher Secondary and Primary School Teachers. *Twelve per cent* of the High School Teachers are the *least* percentage who have *low* level of Perceived Stress.

5.3.1.2. Extent and Levels of Job Satisfaction of Teachers

The three levels of Job Satisfaction of different categories of Teachers were identified. Percentages of Teachers come under each of the three levels of Job Satisfaction (High, Average and Low) were found out and are presented.

Type of Sample	High		Average		Low	
	N	%	N	%	N	%
Total Sample (N=300)	44	14.7	211	70.3	45	15
Higher Secondary (N=100)	17	17	67	67	16	16
High School (N= 100)	15	15	70	70	15	15
Primary (N= 100)	14	14	72	72	14	14

The *highest* percentage of High Job Satisfaction group of Teachers are 17 and they are working in the *Higher Secondary* Schools. The *least* percentage of High Job Satisfaction group was 14 (Primary School Teachers).

Seventy two per cent of the Primary School Teachers are come under the Average Job Satisfaction group. The *least per cent* of this group is 67 (Higher Secondary School Teachers).

About 16 per cent of the Teachers working in the Higher Secondary Schools are in the *Low* Job Satisfaction group which is the largest percentage in this group. The lowest percentage of Teachers come under the Low Job Satisfaction group is 14 (Primary School Teachers).

5.3.2. GENDER DIFFERENCE IN MEAN SCORES OF THE VARIABLES

Gender difference in *Perceived Stress, Job Satisfaction* and *Personality Characteristics* of Teachers were tested for significance with respect to Total sample, Type of School, Locale and Management.

The *t*-values obtained in the comparison of Perceived Stress (stressor wise and Total Stress), Job Satisfaction (Component wise and Total score) and

Personality Characteristics between the Male and Female Teachers are given in the following.

Variables	S A M P L E							
	Total	Higher Secondary	High School	Primary School	Urban	Rural	Govt.	Private
Intrinsic to the Job	0.04	1.17	1.01	0.02	0.89	0.86	0.36	0.23
Role of Teachers	2.97**	0.84	2.37*	1.95	1.43	2.74**	2.06*	2.14*
Relationship at Work	1.49	0.09	1.92	0.77	1.06	1.06	0.35	1.57
Career Development	0.14	0.37	0.17	0.17	0.49	0.53	2.12*	1.21
Organisational Structure	1.56	1.13	1.41	0.28	1.89	0.23	1.21	1.03
Home Work Interface	0.18	0.93	0.42	0.76	0.41	0.59	0.04	0.19
Perceived Stress - Total	1.76	1.29	1.25	0.55	1.54	1.04	1.61	0.97
Parents and Students	0.22	0.65	0.95	0.20	0.94	1.11	0.18	0.45
Pay and Fringe Benefits	1.86	0.89	0.93	1.36	0.24	2.08*	0.75	1.77
Working Conditions	1.57	0.43	2.46*	0.09	0.72	1.45	0.33	1.72
Opportunities for Advancement	2.54*	1.29	1.36	1.77	1.94	1.74	1.34	2.19*
Personal Worth	0.54	0.53	1.95	0.20	1.19	0.34	1.22	0.27
Co-Teachers	0.34	1.33	1.61	0.65	0.30	0.18	0.59	0.88
Principal	0.33	0.16	0.68	0.22	0.04	0.44	0.39	0.14
Job Itself	0.29	0.46	1.24	0.12	0.38	0.05	0.83	0.32
Job Satisfaction - Total	1.09	0.22	2.15*	0.31	0.23	1.29	0.89	0.68
Personality Characteristics	0.13	0.54	1.29	1.58	0.28	0.07	0.27	0.04

* - Significant at 0.05 level;

** - Significant at 0.01 level.

5.3.2.1. Gender Difference in Perceived Stress (Stressor wise and Total Stress)

In the eight comparison done, Gender difference was noticed for the *Total Sample, High School, Rural, Government and Private School Teachers* in the stressor *Role of Teachers*. From the higher mean value it can be said that *Male Teachers* are *more stressed* than *Female Teachers* due to the stressor *Role of Teachers*. Gender difference in the stressor *Career Development* was noted for the *Government School Teachers* only. In this case also *Male Teachers* are found to be *more stressed*, since the higher mean value is associated with Male Teachers.

No Significant gender difference was noticed for the remaining stressors and Perceived Stress (Total).

5.3.2.2. Gender Difference in Job Satisfaction (Component -wise and Total Score)

Significant gender difference exists in the Job Satisfaction components, *Pay and Fringe Benefits* (Rural School Teachers), *Working Conditions* and *Job Satisfaction Total* (High School Teachers), and *Opportunities for Advancement* (Total sample and Private School Teachers). In all these components *Female Teachers* are found to be *more satisfied* because higher mean value is attached with Female Teachers. No significant gender difference was noticed in the remaining components of Job Satisfaction.

Job Satisfaction (Total) of Male and Female Teachers are found to be the *same* except for High School Teachers.

5.3.2.3. Gender Difference in Personality Characteristics

No Significant gender difference was noted in Personality Characteristics of Male and Female Teachers in the Total sample and relevant subsamples.

5.3.3. DIFFERENCE IN PERCEIVED STRESS JOB SATISFACTION AND PERSONALITY CHARACTERISTICS OF TEACHERS

Group difference in Perceived Stress (Stressor wise and Total Stress), Job Satisfaction (Component wise and Total Score) and Personality Characteristics of Teachers were examined for samples based on Non-Biographical and Biographical variables. Investigation of group difference in Personality Characteristics was not conducted for the samples formed on the basis of biographical variables.

5.3.3.1. Difference in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers based on Type, Locale and Management of Schools

Group difference in Perceived Stress (Stressor wise and Total Stress), Job Satisfaction (Component wise and Total Score), and Personality Characteristics was examined for the samples formed on the basis of Type, Locale and Management of schools. The t-values obtained for each comparison are presented in the following.

Variables	SAMPLES COMPARED				
	Higher Secondary Vs High School	Higher Secondary Vs Primary	High School Vs Primary	Urban Vs Rural	Govt. Vs Private
Intrinsic to the Job	0.26	1.76	1.98*	0.88	3.77**
Role of Teachers	0.32	1.84	2.13*	0.44	1.14
Relationship at Work	1.10	1.36	0.31	2.62**	0.72
Career Development	0.87	0.83	0.13	0.22	0.69
Organisational Structure	0.46	1.70	1.30	3.39**	1.85
Home Work Interface	1.18	1.03	0.18	1.32	0.94
Perceived Stress-Total	0.58	1.13	1.68	3.08**	0.75
Parents and Students	1.91	0.84	2.93**	0.29	0.15
Pay and Fringe Benefits	2.59**	0.35	1.73	0.54	0.86
Working Conditions	0.62	0.10	0.76	0.75	1.08
Opportunities for Advancement	1.01	1.44	0.42	0.93	0.22
Personal Worth	0.10	0.93	0.92	0.56	0.06
Co-Teachers	1.88	2.56*	0.85	1.51	1.90
Principal	1.32	0.05	1.44	1.78	2.70**
Job Itself	1.27	0.41	0.83	0.18	0.14
Job Satisfaction - Total	0.49	0.49	1.07	0.86	0.78
Personality Characteristics	1.90	2.13*	0.29	1.87	1.02

* - Significant at 0.05 level

** - Significant at 0.01 level.

a. Difference in Perceived Stress

No significant difference in Perceived Stress (Stressor wise and Total Stress) is noted in the comparison between Higher Secondary - High School Teachers and Higher Secondary - Primary School Teachers. *High School* and *Primary School Teachers* significantly differ in two stressors, *Intrinsic to the Job* and *Role of Teachers*. *Urban* and *Rural School Teachers* show a significant difference in the stressors *Relationship at Work* and *Organisational Structure*. These two group (Urban-Rural) of Teachers differ significantly in the experience of *Total Perceived Stress*. *Government* and *Private* School Teachers significantly differ only in the stressor *Intrinsic to the Job*. In all comparisons the remaining stressors show no significant difference, because no significant t-value is obtained for these stressors.

b. Difference in Job Satisfaction

Pay and Fringe Benefits work as a significant component for the difference in Job Satisfaction, between *Higher Secondary* and *High School Teachers*. The *Relationship between Co-Teachers* is significantly different among *Higher Secondary* and *Primary School Teachers*. Teacher's Relationship with *Parents and Students* is significantly different among *High School* and *Primary School Teachers*. Principal's influence on, Teachers working in *Government* and *Private Schools* are significantly different.

For the remaining components of Job Satisfaction *no significant difference* was noted. Total Job Satisfaction of Teachers among the Groups compared were found to be the same.

c. Difference in Personality Characteristics

Personality Characteristics of Teachers working in Higher Secondary and Primary School were found differ significantly. In all other comparisons Personality Characteristics of Teachers were found to be almost same.

5.3.3.2. Difference in Perceived Stress and Job Satisfaction of Teachers based on Age, Educational Qualification, Marital Status, Teaching Experience, Number of Dependence and Type of Career of Couples

Results of the investigation of group difference in Perceived Stress (Stressor wise and Total Stress) and Job Satisfaction (Component wise and Total score) of Teachers based on Age, Educational Qualification, Marital Status, Teaching Experience, Number of Dependents and Type of Career of Couples are presented.

a. Difference based on Age groups

There exists a *significant difference* in the stressor, *Intrinsic to the Job* for the three groups compared such as Teachers having the age 20-30 & 31-40, 20-30 & 41-50 & 20-30 & 51-60. Since the lesser mean is associated with Teachers having age 20-30 years, it can be said that, Teachers in this age group experience less stress than others. *No significant difference* noted for the remaining stressors and Perceived Stress - Total among the six paired comparison based on four different age groups of Teachers.

No Significant difference in Job Satisfaction (Component wise and Total Score) was noticed between the Teachers with age group 20-30 & 31-40 years. In the comparison between Teachers of age group 20-30 & 41-50 years, significant difference was noted in the two components *Pay and Fringe Benefits* and *Working Conditions*. From the higher mean value, it can be inferred that Teachers with age 20-30 years are more satisfied than Teachers with age 41-50 years. The component *Principal* shows significant difference in the comparison

between Teacher in the age group 20-30 and 51-60 years. *Pay and Fringe Benefits* found to be different between Teachers in the age group 31-40 and 41-50 years. The higher mean value is associated with Teachers having the age between 31-40 years. So they are found to be more satisfied in Pay and Fringe Benefits than those with age between 41-50 years. Between the age group of Teachers 31-40 and 51-60 years, significant difference is noted in the components *Co-Teachers* and *Principal*. And Teacher having age between 51-60 years are found to be more satisfied, because the higher mean value is associated with them. Between 41-50 and 51-60 years age group of Teachers show a significant difference in the components *Parents and Students, Working Conditions* and *Principal*.

No significant difference was noticed in the remaining components and Total Job Satisfaction among the six paired comparison. t-values obtained are presented in the following.

Variables	AGE GROUPS COMPARED					
	20-30 vs 31-40 years	20-30 vs 41-50 years	20-30 vs 51-60 years	31-40 vs 41-50 years	31-40 vs 51-60 years	41-50 vs 51-60 years
Intrinsic to the Job	2.89**	4.23**	2.69**	1.82	1.34	0.41
Role of Teachers	1.92	1.62	1.00	0.07	0.06	0.02
Relationship at Work	0.54	0.58	0.17	0.06	0.23	0.26
Career Development	1.07	0.90	1.34	0.03	0.66	0.54
Organisational Structure	1.16	1.20	0.72	0.08	0.20	0.25
Home work Interface	0.78	1.65	1.88	1.01	1.37	0.59
Perceived Stress - Total	1.81	1.90	1.46	0.22	0.06	0.10
Parents and Students	0.37	0.56	1.32	0.24	1.81	2.00*
Pay and Fringe Benefits	0.74	2.46*	0.65	3.02**	1.12	0.89
Working Conditions	1.00	2.29**	0.09	1.63	0.96	2.11*
Opportunities for Advancement	0.13	0.79	0.29	0.81	0.23	0.28
Personal Worth	0.25	0.35	0.63	0.11	0.95	1.05
Co-Teachers	0.24	1.45	1.93	1.55	2.01*	0.89
Principal	1.23	1.52	3.77**	0.34	3.00**	2.67**
Job Itself	0.44	0.53	0.83	0.09	0.51	0.46
Job Satisfaction - Total	0.39	0.07	0.46	0.44	0.14	0.49

* Significant at 0.05 level

** Significant at 0.01 level

b. Difference based on Educational Qualification

Significant difference is noted only in one stressor, *Intrinsic to the Job*, for the comparison between Teachers having educational qualification TTC & Pre-Degree - Post Graduation. Teachers having qualification TTC & Pre-Degree found to be *more stressed* than Post Graduate Teachers, because higher mean value is associated with them. No significant difference was noticed either for the remaining stressors or for the Perceived Stress (Total)

Among the three paired comparison based on educational qualification of Teachers, significant difference was noticed only for one component of Job Satisfaction, *Co-Teachers* between Graduate and Post Graduate Teachers. And Teachers having Graduation only, are found to be more satisfied regarding this component. Because higher mean value is associated with them. All other components and Job Satisfaction (Total) shows *no significant difference* between the groups compared. t-value obtained in the comparison are as follows.

Variables	EDUCATIONAL QUALIFICATION		
	TTC & PDC Vs Graduation	TTC & PDC Vs PG	Graduation Vs PG
Intrinsic to the Job	1.36	2.45*	1.39
Role of Teachers	0.75	1.08	0.52
Relationship at Work	0.70	1.47	1.02
Career Development	1.34	0.16	1.45
Organisational Structure	0.05	0.63	0.73
Home work Interface	0.28	0.35	0.79
Perceived Stress - Total	0.36	0.82	0.58
Parents and students	1.37	0.42	1.11
Pay and Fringe Benefits	0.79	0.30	1.11
Working Conditions	1.31	0.69	0.81
Opportunities for Advancement	0.41	1.03	1.86
Personal Worth	0.79	0.98	0.24
Co-Teachers	1.32	0.99	2.81**
Principal	0.70	0.14	1.18
Job Itself	0.28	0.85	0.76
Job Satisfaction-Total	0.14	0.26	0.15

* Significant at 0.05 level ** Significant at 0.01 level

c. Difference based on Marital Status

In the comparison of Perceived Stress (Stressors wise and Total Stress) of married and unmarried Teachers, *significant difference* was noticed in two stressors *Intrinsic to the Job* and *Home work Interface*. From the mean values of the corresponding stressors, it can be inferred that *unmarried Teachers* experience *more stress* due to Home-work Interface and less stress from the stressor *Intrinsic to the Job*, than married Teachers. Other stressors and Perceived Stress (Total) show *no significant difference* among these groups.

Only one Job Satisfaction component, *Co-Teachers* shows *significant difference* in the comparison of Married and Unmarried Teachers. Married Teachers are found to be *more satisfied* with their Co-Teachers, because higher mean value is attached with them. Remaining components and Job Satisfaction (Total) show *no significant difference*. t-values obtained for the comparison are the following.

Variables	MARITAL STATUS						t-value	Level of significance
	Married			Unmarried				
	N ₁	M ₁	σ_1	N ₂	M ₂	σ_2		
Intrinsic to the Job	256	28.51	3.94	44	27.09	3.20	2.62	0.01
Role of Teachers	256	27.09	3.52	44	26.66	2.61	0.95	NS
Relationship at Work	256	18.39	3.46	44	18.16	3.27	0.42	NS
Career Development	256	10.17	2.43	44	9.93	2.31	0.62	NS
Organisational Structure	256	30.40	4.73	44	30.52	4.96	0.15	NS
Home work Interface	256	20.72	4.60	44	23.52	3.16	5.04	0.01
Perceived Stress - Total	256	135.28	12.47	44	135.89	10.91	0.33	NS
Parents and Students	256	56.85	6.60	44	54.82	8.17	1.56	NS
Pay and Fringe Benefits	256	26.00	6.06	44	25.64	5.06	0.43	NS
Working Conditions	256	19.32	3.53	44	19.77	3.02	0.89	NS
Opportunities for Advancement	256	13.73	2.23	44	13.09	2.30	1.70	NS
Personal Worth	256	15.41	2.84	44	14.91	3.64	0.88	NS
Co-Teachers	256	29.95	5.02	44	28.05	5.01	2.33	0.05
Principal	256	42.33	7.34	44	40.66	6.85	1.48	NS
Job Itself	256	57.41	7.61	44	57.36	8.29	0.03	NS
Job Satisfaction - Total	256	261.01	25.67	44	254.30	26.33	1.57	NS

NS: Not Significant

d. Difference based on Teaching Experience

In the comparison of Perceived Stress (Stressor wise and Total Stress) between the pairs of Teachers having 1-10 and 11-20 years of experience, *significant difference* is noted in the stressors, *Intrinsic to the Job, Role of Teachers* and *Perceived Stress (Total)*. From the higher mean values it can be said that Teachers having 11-20 years of experience are *more stressed* than Teachers with 1-10 years of experience. Between Teachers having 1-10 and 21-30 years of experience, *significant difference* is found in the stressors - *Intrinsic to the Job* and *Home-work Interface*. In the case of the stressor, *Intrinsic to the Job* higher mean value is associated with Teachers having 21-30 years of experience, so these group experience *more stress* due to this stressor. But for the stressor *Home work Interface* higher mean value is associated with Teachers with an experience of 1-10 years. So Teachers with 1-10 years experience *more stress* due to the stressor *Home-work Interface*. The stressor *Home-work Interface* also shows a *significant difference* for the comparison of Teachers having 11-20 and 21-30 years of experience. *No significant difference* was noticed in other stressors among the six paired comparison. Perceived Stress (Total) shows *no significant difference* in all the paired comparison except for the comparison of Teachers having 1-10 and 11-20 years of experience.

When Job Satisfaction (Component wise and Total score) is compared among the six pairs of Teachers based on years of experience, *significant difference* in the components *Working Conditions* and *Job Itself* was noted between the pairs of Teachers having 1-10 and 11-20 years of experience. *Significant difference* in *Pay and Fringe Benefits* is noticed in the comparison of Teachers with 1-10 and 21-30 years of experience in the profession. The components *Personal Worth* and *Principal* show a *significant difference* in the comparison of Teachers with 1-10 and 31-40 years of experience. Teachers with

11-20 and 21-30 years of experience show a *significant difference* in the component of Job Satisfaction, *Pay and Fringe Benefits*. Teachers having 11-20 and 31-40 years of experience *differ significantly* in the components *Personal Worth* and *Principal*. Only one Job Satisfaction component, *Personal Worth* shows a significant difference in the comparison of Teachers with 21-30 and 31-40 years experience in the teaching profession. In all other comparisons *no significant difference* in Job Satisfaction is observed. The t-values are presented in the break-up.

Variables	TEACHING EXPERIENCE GROUPS COMPARED					
	1-10 vs 11-20 years	1-10 vs 21-30 years	1-10 vs 31-40 years	11-20 vs 21-30 years	11-20 vs 31-40 years	21-30 vs 31-40 years
Intrinsic to the Job	3.47**	2.67**	0.89	0.04	0.05	0.04
Role of Teachers	2.05*	0.94	0.92	0.67	0.27	0.53
Relationship at Work	0.95	1.61	0.27	0.84	0.65	1.02
Career Development	1.51	0.85	0.13	0.03	0.47	0.42
Organisational Structure	0.95	0.37	1.01	0.38	0.70	0.83
Home work Interface	0.25	2.22*	1.27	2.32*	1.39	0.20
Perceived Stress - Total	2.59**	1.23	0.79	0.95	0.15	0.25
Parents and Students	0.02	1.63	0.01	1.78	0.00	0.84
Pay and Fringe Benefits	0.79	3.52**	0.16	2.19*	0.39	1.14
Working Conditions	2.67*	1.38	0.82	0.92	0.09	0.38
Opportunities for Advancement	0.39	0.18	0.50	0.50	0.41	0.54
Personal Worth	1.05	0.63	2.02*	0.32	2.53*	2.31*
Co-Teachers	0.36	0.82	0.33	0.51	0.21	0.02
Principal	0.23	0.74	2.15*	0.93	2.28*	1.50
Job Itself	2.09*	1.06	0.18	0.87	0.82	0.36
Job Satisfaction - Total	1.26	1.36	0.86	0.27	1.63	1.72

* Significant at 0.05 level ** Significant at 0.01 level

e. Difference based on Number of Dependents

No significant difference in Perceived Stress (Component wise and Total Stress) was noticed in the comparison of Teachers having number of dependents 1-3 and 4-7. Among the three paired comparison, in the two comparison (1-3 and no dependents, and 4-7 and no dependents) show a *significant difference* in the stressors - *Intrinsic to the Job, Role of Teachers* and *Home-work Interface*. In both comparisons, Teachers who have *no dependents* experience *more stress* due to the stressor *Home-work Interface* and less stress from the stressors *Intrinsic to the Job* and *Role of Teachers* and it is evident from the magnitude of respective means of the stressors. *No significant difference* was noticed for the remaining stressors and Perceived Stress - Total.

In the comparison of Teachers with 1-3 and 4-7 dependents, *significant difference* is noted only in one Job Satisfaction component - *Pay and Fringe Benefits*. In Teachers with 1-3 and *no dependents*, *significant difference* is found in two components (*Opportunities for Advancement* and *Co-Teachers*) and Job Satisfaction Total. The Component *Principal* shows a significant difference in the comparison of Teachers with 4-7 and no dependents. Obtained t-values for all the comparison are given in the break-up.

Variables	NUMBER OF DEPENDENTS		
	1-3 Vs 4-7 Numbers	1-3 Vs No Dependents	4-7 Vs No Dependents
Intrinsic to the Job	0.25	2.92**	2.39*
Role of Teachers	0.75	2.32*	2.72**
Relationship at Work	0.06	1.39	1.18
Career Development	0.09	1.13	0.94
Organisational Structure	1.02	0.17	0.59
Home work Interface	0.92	2.64**	3.15**
Perceived Stress - Total	0.19	1.14	1.12
Parents and Students	1.03	1.65	0.78
Pay and Fringe Benefits	2.51*	0.90	1.32
Working Conditions	0.50	0.54	0.85
Opportunities for Advancement	1.48	2.31*	1.03
Personal Worth	0.88	0.85	1.37
Co-Teachers	1.59	2.92**	1.42
Principal	0.58	1.80	2.00*
Job Itself	0.00	0.56	0.50
Job Satisfaction - Total	1.02	2.24*	1.14

* Significant at 0.05 level

** Significant at 0.01 level

f. Difference Based on Type of Career of Couples

No significant difference in Perceived Stress (Stressor wise and Total Stress) is noted between the three paired comparison based on Type of career of couples.

In the comparison of Job Satisfaction (Component wise and Total Score) between spouse unemployed and Dual Career Couples group, *significant difference is noticed* in the Job Satisfaction component *Pay and Fringe Benefits*. Between Spouse Unemployed and Same Career Couples, *significant difference* is noted in two components - *Parents and Students* and *Pay and Fringe Benefits*. In the two comparisons Teachers whose spouse is unemployed, were found to be *less satisfied* than other two groups, regarding these components. It is evident from the magnitude of mean values. In all other comparisons *no significant difference* in Job Satisfaction is observed. The t-values are presented in the break-up.

Variables	TYPE OF CAREER OF COUPLES		
	Spouse Unemployed Vs Dual Career Couples	Spouse Unemployed Vs Same Career Couples	Same Career Vs Dual Career Couples
Intrinsic to the Job	0.33	0.01	0.39
Role of Teachers	0.30	1.03	1.03
Relationship at Work	0.23	1.18	0.48
Career Development	1.59	1.01	0.42
Organisational Structure	0.12	1.74	1.84
Home work Interface	0.03	1.37	1.77
Perceived Stress -Total	0.30	0.30	0.68
Parents and Students	1.37	2.42*	1.17
Pay and Fringe Benefits	2.74**	2.30*	0.16
Working Conditions	0.13	0.26	0.14
Opportunities for Advancement	1.64	0.80	0.98
Personal Worth	0.08	0.20	0.29
Co-Teachers	0.56	1.07	0.50
Principal	0.03	0.04	0.02
Job Itself	0.38	0.15	0.28
Job Satisfaction - Total	1.10	1.25	0.04

* Significant at 0.05 level.

** Significant at 0.01 level.

5.3.4. EXTENT AND DEGREE OF ASSOCIATION OF JOB SATISFACTION AND PERSONALITY CHARACTERISTICS WITH PERCEIVED STRESS OF TEACHERS

The *extent and degree of association* of each Independent variable, *Job Satisfaction* and *Personality Characteristics* with *Perceived Stress* was studied using Pearson's Product Moment coefficient of correlation. The analysis was done separately for the Total sample, Higher Secondary, High School and Primary School Teachers.

5.3.4.1. Extent and Degree of Association of Job Satisfaction (Total) with Perceived Stress (Stressor wise and Total Stress) of Teachers

Extent and Degree of association of *Job Satisfaction (Total)* with *Perceived Stress (Stressor wise and Total Stress)* were studied for Total sample, Higher Secondary, High School and Primary School Teachers. Through the analysis it is observed that Job Satisfaction (Total) is *negatively correlated* with all the stressors.

In all the samples, it is found that Job Satisfaction (Total) is *significantly and negatively* correlated with Perceived Stress (Total) and with the stressors Relationship at Work and Organisational Structure. The stressors Intrinsic to the Job and Career Development are *significantly and negatively* correlated with Job Satisfaction (Total) except in the subsample High School and Primary School Teachers. Job Satisfaction (Total) is found *significantly and negatively* correlated with the stressor Home work Interface except in the subsample High School Teachers. *No significant* correlation is found with the stressor Role of Teachers. The *r*'s were verbally interpreted as having *marked* correlation (Perceived Stress Total). The obtained *r*'s are presented in the following.

Variables	Total Sample r	Higher Secondary r	High School r	Primary School r
Intrinsic to the Job	-0.129**	-0.201*	-0.023	-0.169
Role of Teachers	-0.005	-0.070	-0.045	-0.074
Relationship at Work	-0.396**	-0.340**	-0.423**	-0.441**
Career Development	-0.177**	-0.415**	-0.082	-0.089
Organisational Structure	-0.427**	-0.402**	-0.451**	-0.462**
Home work Interface	-0.299**	-0.432**	-0.187	-0.277**
Perceived Stress (Total)	-0.464**	-0.513**	-0.396**	-0.503**

*Significant at 0.05 level

** Significant at 0.01 level

5.3.4.2. Extent and Degree of association of Personality Characteristics with Perceived Stress (Stressor wise and Total Stress) of Teachers

Relationship between the Independent variable *Personality Characteristics* and Dependent variable *Perceived Stress* (Stressor wise and Total Stress) was studied for Total sample, Higher Secondary, High School and Primary School Teachers. Personality Characteristics is found to be *negatively correlated* with all the stressors.

Significant and negative correlation was obtained between Personality Characteristics and stressors such as *Relationship at Work, Career Development, Organisational Structure, Home-work Interface* and *Perceived Stress (Total)* for Total sample. Personality Characteristics of *Higher Secondary School Teachers* are found to be *significantly and negatively correlated* with the stressor – *Career Development*, and Personality Characteristics of *High School Teachers* are found

to be *significantly* and *negatively* correlated with the stressor - *Relationship at Work*. *Significant* and *negative* correlation was found between the Personality Characteristic of *Primary School Teachers* and the stressors such as *Relationship at Work*, *Organisational Structure*, *Home-work Interface* and *Perceived Stress (Total)*. It is also noticed that all significant correlations are *negative* and can be verbally interpreted as either *negligible* or *low* correlation. *No significant correlation* is obtained between Personality Characteristics and the stressors *Intrinsic to the Job* and *Role of Teachers* in Total and Subsamples. The obtained *r*'s are consolidated and presented.

Variables	Total Sample r	Higher Secondary r	High School r	Primary r
Intrinsic to the Job	-0.056	-0.017	-0.007	-0.149
Role of Teachers	-0.010	-0.006	-0.010	-0.007
Relationship at Work	-0.184**	-0.183	-0.209*	-0.202*
Career Development	-0.130*	-0.285**	-0.077	-0.054
Organisational Structure	-0.126*	-0.020	-0.116	-0.205*
Home work Interface	-0.160**	-0.160	-0.090	-0.269**
Perceived Stress (Total)	-0.206**	-0.158	-0.154	-0.296**

* Significant at 0.05 level, ** Significant at 0.01 level.

5.3.5. MAIN AND INTERACTION EFFECTS OF JOB SATISFACTION AND PERSONALITY CHARACTERISTICS ON PERCEIVED STRESS OF TEACHERS

In order to find the effect of *Job Satisfaction* and *Personality Characteristics* on *Perceived Stress* of Teachers, Two-way Analysis of Variance with 3x3 factorial design was employed. Analysis of variance was conducted

separately for Total sample, Higher Secondary, High School and Primary School Teachers.

The main effect of *Job Satisfaction* on Perceived Stress of Teachers was found to be *significant* in all the samples considered. *No significant main effect of Personality Characteristics* on Perceived Stress of Teachers was observed in any of the samples (Total sample, Higher Secondary, High School and Primary School Teachers). The interaction effect of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers was found to be statistically not significant. The F-values obtained for each ANOVA are presented in the following.

Sample Source of Variation	Total sample F	Higher Secondary F	High School F	Primary School F
Job Satisfaction	22.37**	4.47*	5.84**	4.58*
Personality Characteristics	1.31	0.25	0.63	0.88
Job Satisfaction x Personality Characteristics	0.55	1.56	0.24	0.06

* Significant at 0.05 level ** Significant at 0.01 level.

In the Post-Hoc comparisons employed on Job Satisfaction the following results obtained. In all samples except among Primary School Teachers *Average or Low Groups* in Job Satisfaction created the difference in the Perceived Stress. Among the Primary School Teachers, *Low Job Satisfaction group* alone created the variation in the Dependent Variable.

When the interaction effect is graphically studied, it is noted that in all cases there exists an interaction effect, but it is statistically not significant. And it is also observed that in all samples Teachers with Less Favourable Personality Characteristics and High Job Satisfaction experience higher Perceived Stress.

5.3.6. PREDICTION OF PERCEIVED STRESS AND JOB SATISFACTION OF TEACHERS

Results of the stepwise multiple regression analysis employed to identify the best predictors of Perceived Stress and Job Satisfaction of Teachers are presented in this part.

5.3.6.1. Best Predictors of Perceived Stress

To identify the best predictors of Perceived Stress, from six stressors, Perceived Stress (Total) was treated as the Dependent variable and six stressors viz, *Intrinsic to the Job, Role of Teachers, Relationship at Work, Career Development, Organisational Structure* and *Home work Interface* as the Independent variables (Predictors). Results of the stepwise multiple regression analysis show that the stressor - *Organisational Structure* is the *best predictor of Perceived Stress*. The next two best predictors are *Home-work Interface* and *Intrinsic to the Job*.

The relative contribution of all six predictor variables were determined and it is presented in the following, along with the percentage of variance and beta weights. Predictors are arranged according to the decreasing order of their predictive capacity.

Step No.	Predictors	Percentage of variance	β
1	Organisational Structure	45.30	0.673
2	Home-work Interface	20.20	0.468
3	Intrinsic to the Job	14.40	0.381
4	Role of Teachers	9.70	0.317
5	Relationship at Work	6.80	0.292
6	Career Development	3.60	0.197

5.3.6.2. Best Predictors of Job Satisfaction

To predict the Job Satisfaction of Teachers, eight components viz., *Parents and Students, Pay and Fringe Benefits, Working Conditions, Opportunities for Advancement, Personal Worth, Co-Teachers, Principal and Job Itself*, were taken as the predictor (Independent) variables and Job Satisfaction Total as the Dependent variable. Here also the stepwise multiple regression analysis was used to identify the best predictors of Job Satisfaction. The result shows that, the component, *Job Itself* is the *best predictor of Job Satisfaction* of Teachers. The next best four predictors are *Co-Teachers, Pay and Fringe Benefits, Principal and Parents and Students*. The predictors are presented in the following, according to their descending order of relative contribution, to predict the Job Satisfaction - Total.

Step No.	Predictors	Percentage of variance	Beta weights
1	Job Itself	62.40	0.790
2	Co-Teachers	13.90	0.398
3	Pay and Fringe Benefits	8.80	0.304
4	Principal	5.70	0.274
5	Parents and Students	5.70	0.296
6	Working Conditions	1.80	0.143
7	Personal Worth	1.10	0.133
8	Opportunities for Advancement	0.60	0.087

5.3.7. IDENTIFICATION OF LATENT FACTORS UNDERLYING IN THE TEACHER STRESS INVENTORY (TSI) AND SCALE OF JOB SATISFACTION (SJS)

The multivariate statistical technique, Factor Analysis was used to extract the underlying factors involved in the Teacher Stress Inventory (TSI) and Scale of Job Satisfaction (SJS). Results are summarised and given in the following sub sections.

5.3.7.1. Identification of Latent Factors Underlying in the Teacher Stress Inventory (TSI)

The Teacher Stress Inventory (TSI) comprising of 50 items under six potential stressors as dimensions was subjected to *Principal Component Factor Analysis* using *Varimax* orthogonal rotation. Through Factor analysis a *two* factor solution extracted. The extracted Factors with the related variables along with the coefficients of factor loading, percentage of variance shared are given as follows.

Name of Variables	Factor Loading	Factor	Percentage of Variance
Organisational Structure	0.81347	Factor 1	30.0
Relationship at Work	0.70576		
Intrinsic to the Job	0.71122	Factor 2	17.7
Career Development	0.69102		

The two Factors evolved were then labeled based on the nature, characteristic and focus of the items come under each stressors. The labels given were *Personal Stressor* for *Factor 1* and *Professional Stressor* for *Factor 2*.

5.3.7.2. Identification of Latent Factors Underlying in the Scale of Job Satisfaction

To identify the Latent factors involved in the Scale of Job Satisfaction (SJS), Principal Component Factor Analysis was used. Scale of Job Satisfaction consists, 74 items under eight components. From these, through Factor Analysis, investigator extracted a *two* factor solution. The extracted Factors with the related variables along with the coefficients of factor loading, percentage of variance shared are given in the following.

Name of Variables	Factor Loading	Factor	Percentage of Variance
Job Itself	0.75918	Factor 1	37.3
Personal Worth	0.73087		
Co-Teachers	0.70521		
Parents and Students	0.61548		
Principal	0.61167		
Pay and Fringe Benefits	0.84317	Factor 2	13.9
Working Conditions	0.68102		

The two factors evolved were then labeled based on the nature, characteristic and focus of the items come under each components. The labels given were *Qualitative element* for *Factor 1* and *Quantitative element* for *Factor 2*.

5.3.8. TENABILITY OF HYPOTHESES

On the light of the major findings drawn out of the study, the tenability of the hypotheses framed for the study are tested.

5.3.8.1. The first hypothesis stated that *there will be significant gender difference in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers for Total sample and Subsamples based on Type, Locale and Management of Schools.*

Significant gender difference in *Perceived Stress* is found in *six* comparisons out of 56 comparisons employed. In *Job Satisfaction* significant gender difference is noticed in *five* comparisons out of 72 comparisons done. *No significant gender difference in Personality Characteristics* is noticed for any of the eight comparisons made. Hence the first hypothesis is *substantiated partially*.

5.3.8.2. The second hypothesis was that *there will be significant difference in Perceived Stress, Job Satisfaction and Personality Characteristics of Teachers with regard to the Type, Locale and Management of Schools.*

Out of 35 comparisons, *Perceived Stress* yielded significant difference in *six* comparisons. Significant difference in *Job Satisfaction* was observed in *four* comparisons out of 45. In the case of *Personality Characteristics* significant difference noticed only for *one* comparison. Totally 85 comparisons done out of which *Perceived Stress, Job Satisfaction and Personality Characteristics* were

found significantly different in 11 comparisons. Hence the second hypothesis is *accepted to a certain extent*.

5.3.8.3. The third hypothesis stated that *there will be significant difference in Perceived Stress and Job Satisfaction of Teachers with regard to the Biographical variables (Age, Educational Qualification, Marital Status, Teaching Experience, Number of Dependents and Type of Career of the Couples)*.

Out of the six paired comparison based on Age, *Perceived Stress* shows *significant difference* in *three* out of 42 comparisons. *Job Satisfaction* significantly differentiates the groups in *nine* out of 54 comparisons. Based on Educational Qualification, *Perceived Stress* significantly differentiates the groups in only in *one* out of 21 comparisons. In one comparison *significant difference* in *Job Satisfaction* was noticed out of 27 based on Educational Qualification.

Significant difference in *Perceived Stress* is noticed for *two* comparisons out of seven and only *one* comparison found significant out of nine in *Job Satisfaction*, when Married and Unmarried Teachers are compared. In the six paired comparison based on Experience, *significant difference* in *Perceived Stress* is found only in *six* out of 42 comparisons. Out of 54 comparisons done based on experience, only *nine* found *significant* in case of *Job Satisfaction*.

In the paired comparison based on Number of Dependents, *Perceived Stress* shows *significant difference* in *six* out of 21 comparisons. In *five* comparisons *significant difference* in *Job Satisfaction* was noticed out of 27 based on Number of Dependents.

No significant difference in *Perceived Stress* was noticed in the 21 comparisons made on the basis of the Type of Career of Couples. *Significant*

difference in Job Satisfaction is noticed only in *three* comparisons out of Twenty seven.

Totally in 18 comparisons, *Perceived Stress* yielded *significant difference* and *Job Satisfaction* in 28 comparisons (Total 46) out of 352 comparisons done. Hence the third hypothesis is *substantiated to a very lesser extent*.

5.3.8.4. Hypothesis 4 is *there will be significant correlation between Perceived Stress (Stressor wise and Total Stress), Job Satisfaction and Personality Characteristics for Total sample, Higher Secondary, High School and Primary School Teachers*.

Twenty eight correlational analysis were employed to examine the extent and degree of association between Job Satisfaction and Perceived Stress (Stressor wise and Total Stress). In which 19*r*'s were *statistically significant*. The sign of all *r*'s were found to be *negative*.

In the case of relationship between Personality Characteristics and Perceived Stress (Stressor wise and Total Stress), out of 28 correlational analysis employed only 11 *r*'s were found significant. The sign of all *r*'s were negative.

For testing the fourth hypothesis out of 56 correlational analysis employed 30 *r*'s were found significant. So this hypothesis is *accepted to a greater extent*.

5.3.8.5. The fifth hypothesis is *there will be significant main and interaction effects of Job Satisfaction and Personality Characteristics on Perceived Stress of Teachers (Total sample, Higher Secondary, High School, and Primary School Teachers)*.

The statistical analysis 3x3 ANOVA shows that among the two independent variables, the main effect of *Job Satisfaction* is significant.

Personality Characteristics has no significant effect on *Perceived Stress* of Teachers.

The interaction effect of *Job Satisfaction* and *Personality Characteristics* on *Perceived Stress* of Teachers is not found significant in any of the samples considered. Thus the first hypothesis is *partially substantiated*.

5.3.8.6. Hypothesis No.6 stated that *Best predictors of Perceived Stress and Job Satisfaction of Teachers can be identified from a set of predictor variables*.

Results of the stepwise multiple regression analysis pointed out that *Perceived Stress* can be *predicted best* using the predictor variable *Organisational Structure* from a set of six predictor variables. Similarly *Job Satisfaction* of Teachers can be predicted best using *Job Itself* as the predictor from a set of eight predictor variables. Thus the sixth hypothesis is accepted.

5.3.8.7. The seventh hypothesis is the *Latent factors underlying in the Teacher Stress Inventory (TSI) and Scale of Job Satisfaction (SJS) can be identified*.

Principle Component Factor Analysis was employed to verify this hypothesis. In the case of *Teacher Stress Inventory (TSI)* the result shows that the extraction of *two* factors having high loading (> 0.5) with the four stressor variables (*Organisational Structure and Relationship at Work* with *Factor 1* and *Intrinsic to the Job and Career Development* with *Factor 2*). The stressor variables *Home work Interface* and *Role of Teachers* have no substantial factor loading (>0.5) with any of the two Factors.

Similarly for the *Scale of Job Satisfaction (SJS)* the result shows the extraction of *two* Factors having high loading (> 0.5) with the seven component variables (*Components Job Itself, Personal Worth, Co-Teachers, Parents and*

Students and Principal with Factor 1 and Pay and Fringe Benefits, and Working Conditions with Factor 2). The component *Opportunities for Advancement* has no substantial factor loading (> 0.5) with any of the two Factors. Hence this hypothesis is accepted fully.

5.4. CONCLUSIONS AND SUGGESTIONS FOR IMPROVING PROFESSIONAL EFFICIENCY OF TEACHERS

In the present century, Stress is an unavoidable experience in human life. Irrespective of gender, age, education and nature of profession, everybody experience Stress in one way or the other. The extent of stress is, however, a matter of degree. Research findings show that stress is more prevalent among service professionals such as Doctors, Police, Teachers etc. A human being experiences Stress, due to various stressors present in the physical, social and psychological environment. Some manage stress, better than others.

In the present study, investigator made an *in depth investigation* into the nature, extent and causes of Perceived Stress of Teachers, in relation to Job Satisfaction, and Personality Characteristics of Teachers. Teachers of various categories viz., Primary, High School, Higher Secondary, Male, Female and Teachers working in Rural, Urban, Government and Private Schools were given representative participation in the study. The biographical variables of the sample such as Age, Gender, Educational qualification, Experience in the teaching profession, Marital status, Number of dependents and Type of Career of Couples etc. were taken in to consideration to facilitate a thorough investigation into the problem mentioned. Effect of various biographical variables, on Personality Characteristics of Teachers were not included in the realm of the present study, because various psychologists undoubtedly proved the existence of the relationship.

In addition to the investigation about the nature, extent and relationship of Job Satisfaction and Personality Characteristics with Perceived Stress of Teachers, the investigator has identified the predictive power of some predictor variables to predict Perceived Stress and Job Satisfaction of Teachers, and also the latent factors underlying in the Teacher Stress Inventory (TSI) and Scale of Job Satisfaction (SJS).

Based on the major findings drawn from the study, the investigator made an attempt to put forth the following conclusions and suggestions regarding the the problem under study.

Gender is proved as one of the variables that has an effect on various stressors and component of Job Satisfaction. Gender difference was not observed in the Personality Characteristics of various categories of Teachers. In the present study it was found that *Male Teachers experiences more stress* due to role ambiguity, role conflict and diverse responsibilities entrusted to them other than Teaching. Some of these responsibilities are to conduct youth festival, sports, and various works outside the organisation. Apart from these the lion share of the domestic responsibility falls on the male teachers. Due to these various responsibilities most of the Male Teachers cannot concentrate fully on Teaching. Studies conducted by Hargens (1984) and Long and Gessaroli (1990) supported the findings of the present study. Female Teachers were found to be more *satisfied regarding various components of Job Satisfaction*, especially the High School Female Teachers, and are *less prone to Stress*. Female Teachers were found to be satisfied regarding the opportunities available to learn more things through the profession. This leads to the interpretation that Female Teachers are satisfied with the limited opportunities.

Government School Teachers are *more stressed* and worried about, lack of facilities in the institution, discipline problems, work load and inadequate

resources, than Teachers working in Private Schools. It is very evident from the Government Policy that, due to financial crisis Government is not providing enough fund for the annual maintenance of the schools and appointment of sufficient staff. But at the same time Government Teachers are *more satisfied* than Private School Teachers with their head of the institution, because they are getting opportunities for decision making and recognition of the work done than Private School Teachers. So, in order to decrease the Stress of Teachers in the Government Sector, Government has to provide essential infrastructural facilities, more fund for the annual repair and maintenance and enough staff. To increase the Job Satisfaction of Private School Teachers, Head of the institution has to take a democratic approach in the administration of the school work.

Urban School Teachers are found to be *more stressed* with the quality of relationship with colleagues, head, office staff, pupils and parents, poor communication among each other and lack of effective consultation, than Rural School Teachers. Studies conducted by Milstein and Golaszewski (1983) supported the finding of the present study. This finding supports the general feeling that in this fast moving competitive world the value of human relation is *constantly decreasing*. So Teachers working in the Urban areas are not an exception.

The young Teachers (Teachers in the age group 20-30 years, or Teacher with only 1-10 years of experience) experience *less stress* from work load, inadequate resources, class size, and level of participation. This may be interpreted as, for these Teachers everything in the profession is a new experience. So naturally these Teachers were more enthusiastic, ready to accept challenges and will try to adjust maximum with the working environment, than older Teachers.

Senior most Teachers (Teachers in the age group 51-60 years or Teachers with an experience of 31-40 years) were *more satisfied* with their head of the institution. Teachers in this age group may be senior most Teachers or Assistant head of the institution. So they will get more opportunities in *decision making* and *recognition of the work done*. Since the head of the institution and these Teachers are in the same age group it might help them to understand each other and keep more *faith* and *confidence* in the relationship.

Teachers with an experience of 31-40 years were found to be more interested in their work and giving more value to their profession than their juniors. This leads to the conclusion that, a Teacher with 31-40 years of service, may normally be the next head or senior most Teachers. They have very good relationship with their head and will be more responsible for all activities in the schools. These Teachers will get more recognition and respect from colleagues and the principal.

Teachers, who have no dependents experience more stress due to the stressor *Home work Interface* and are *less stressed* by the stressors *Intrinsic to the Job* and *Role of Teachers*, than Teachers with 1-3 & 4-7 dependents. Teachers who have no dependents may devote more time for their work in school. So these Teachers will not be stressed by workload, role conflict, class size, and diverse responsibilities entrusted to them. But on the contrary, this devotion for their institution, will create problems in their home. Naturally these Teachers will be in a dilemma of interaction between home and work. The same case is applicable for the unmarried Teachers also.

Teachers whose spouse are employed were found to be *more satisfied* with Pay and Fringe Benefits than those with spouse unemployed. The income of husband and wife will meet easily the financial needs of a family than other group of Teachers.

The Job Satisfaction of Teachers is significantly and negatively related to the Perceived Stress. That is when the Job Satisfaction of Teachers increases, the Perceived Stress level decreases and vice versa.

The Personality Characteristics of Teachers are negatively related to the Perceived Stress. A Teacher with favourable Personality Characteristics experiences *less stress* than those with less favourable Personality Characteristics.

The effect of Job Satisfaction on Perceived Stress of Teachers were found to be significant. That is, a variation in Job Satisfaction is attributable to the corresponding variation in Perceived Stress of a Teacher. It is also found that in most cases the Teachers with Less Job Satisfaction are more prone to Perceived Stress than those with Average or High Job Satisfaction

So it is suggested on the basis of the out come of the present study that,

- i. *effective* and *economical* stress management programmes may be open to Teachers who experience stress from their profession.
- ii. Authorities have to take necessary steps to *increase* Job Satisfaction of Teachers.
- iii. While selecting the Teachers, the Personality Characteristics of each Teacher must be ascertained. Only those with Favourable Personality Characteristics should be selected.

In order to implement the above suggestion it is highly essential to identify, what are the major stressor and determinants of Job Satisfaction.

Of the six stressors selected in the present study (Intrinsic to the Job, Role of Teachers, Relationship at Work, Career Development, Organisational Structure and Home work Interface) each of which has it's on role to make the Teachers

stressed. The study found *Organisational Structure* as the best predictor of Perceived Stress. The leadership style and strategies, communication, the hierarchies, climate and reward and punishment system etc. may be taken for top priority. If the Organisational Structure and functioning is in tune with the minimum stress producing way, the study points out that, Perceived Stress can be reduced considerably.

Investigator also identified the major determinant component of Job Satisfaction from its eight components (Parents and Students, Pay and Fringe Benefits, Working Conditions, Opportunities for Advancement, Personal Worth, Co-Teachers, Principal and Job Itself). Job Itself is found to be the major predictor variable of Job Satisfaction. So Job Satisfaction of Teachers can be increased by giving each individual an opportunity to get a feeling of *accomplishment, inspiration, variety* in the work, *freedom* and *responsibility* in their teaching profession. So while implementing the Stress reduction, and Job Satisfaction programmes these parameters have to be given prime importance.

Age, Experience, Marital status, Number of dependents, Type of Career of Couples etc. have its own bearing with the Perceived Stress of Teachers. Alleviating the negative elements in these factors is a herculean task of the state and the administrators. Hence *managing* and *coping* the Stress more preferably at the *individual level* is directed as per the outcome of the study.

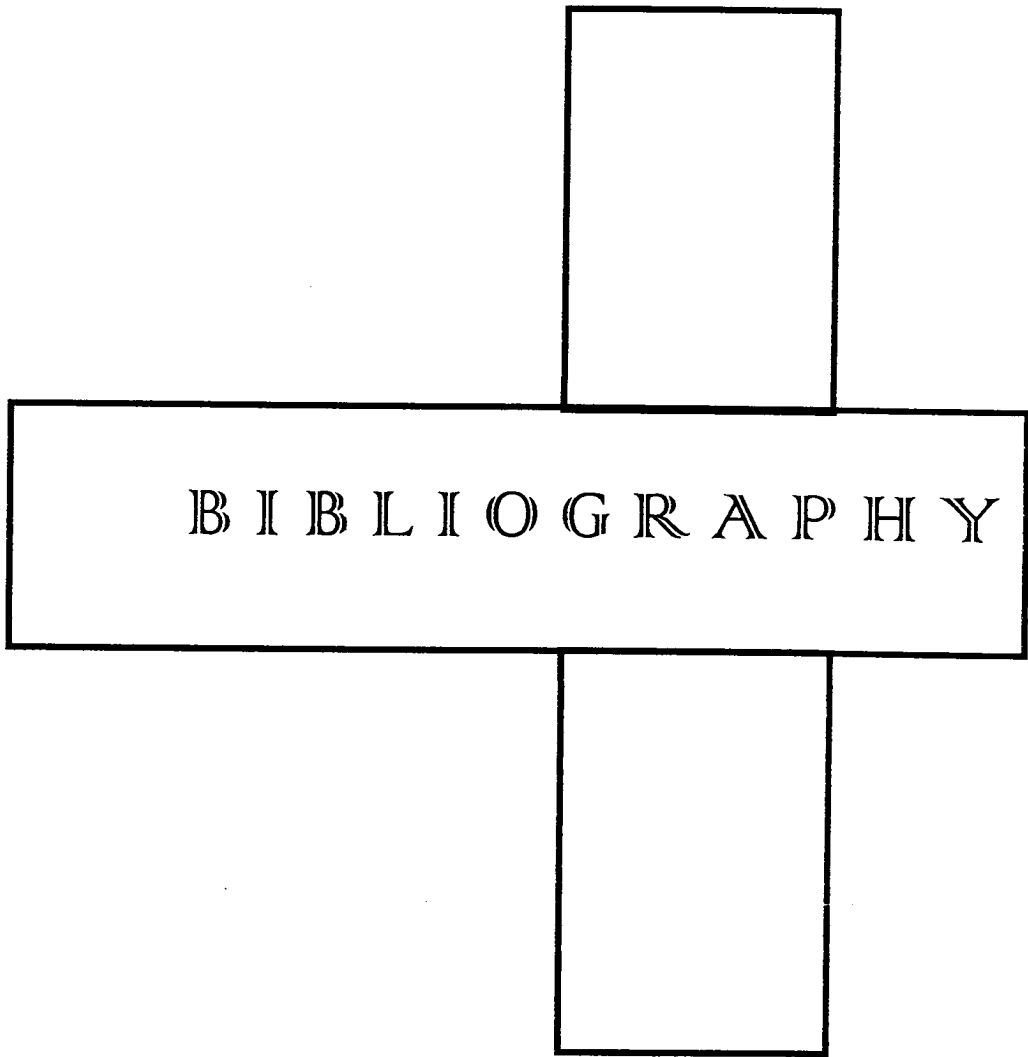
Alleviating Stress in the work place is not possible. Stressful transactions between the person and the environment is emerging at every fraction of a second. But the stress at work can be managed. Time and effort from the part of the individual Teacher is the minimum expenditure. Some of the stress reduction techniques that can be implemented at individual level are *Relaxation, Acupuncture, Exercise, Walking, Yoga, Meditation, Biofeedback, and Recreation*.

5.5. FUTURE RESEARCH DIRECTIONS

The findings of the study have helped to identify the areas of research on Perceived Stress of Teachers that need more attention. On the basis of the findings of the present study, the investigator would like to suggest the following areas for further research.

1. The present study can be replicated for Teachers of colleges.
2. Impact of emotional maturity factors on stress among Teachers can be studied.
3. A study of job related stress and burnout of Teachers
4. Relationship between stress and creativity among Teachers.
5. A comparative study of Teacher Stress and organisational commitment among Teachers and Head of the Institutions.
6. A study of Teacher Stress, Social support and health.
7. An investigation in to the relationship of Perceived Stress with mental health of Teachers.
8. Effect of Organisational climate, locus of control and job involvement on Role Stress among Teachers.
9. Relationship between organisational climate, organisational role stress and their impact upon organisational effectiveness.
10. Perceived Stress of Teachers as a function of field independent -field dependent Cognitive Style and locus of control.
11. A comparative study of coping behaviour among older and younger Teachers.

12. A study of personal and organisational correlates of role stress and coping strategies in School Teachers.
13. Perceived Stress and coping strategies as a function of need for achievement.



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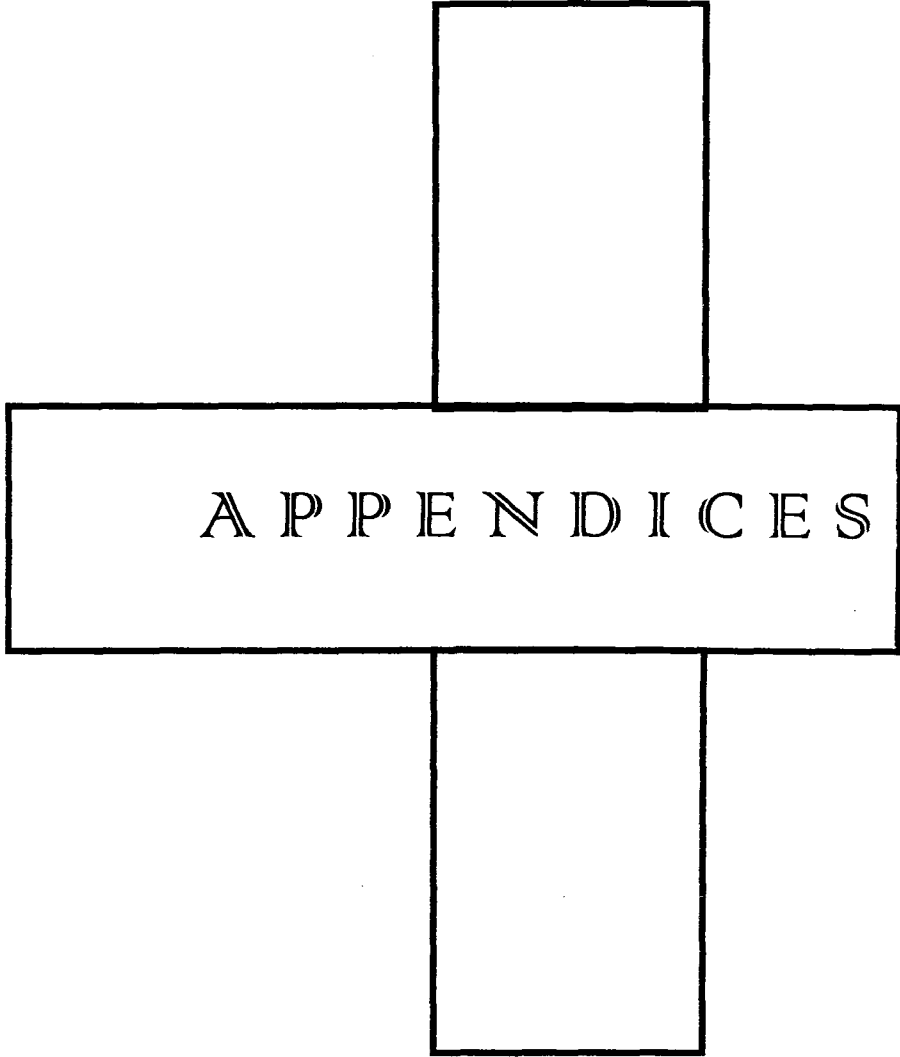
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APPENDICES

PART 2

Sources of Stress in Teaching Profession

Directions: Below are given a number of statements which are related to you and your profession. The statements indicate the amount of *stress* you experience as a teacher. Please read each statement and decide how far you agree with each statement. Separate response sheet is supplied to you for marking your agreement/disagreement. Mark your agreement/disagreement by putting a 'X' mark in the circle provided below your decision against the number of each statement. Kindly attempt all statements. Your responses will be *kept confidential* and used for research purpose. *See the example.*

Example:

I feel tension due to the increased number of students in the class

Strongly Agree	Agree	Un- Decided	Dis- Agree	Strongly DisAgree
○	⊗	○	○	○

Please cooperate

1. I feel tension due to the increased number of students in the class.
2. The increase or decrease in the number of students in the class adversely affect teaching.
3. Due to the increased number of students in the class, I am worried about the effectiveness of teaching.
4. I feel that the difference in the number of students in the class influences the quality of teaching.
5. Congested and dark classrooms decrease the standard of teaching.
6. In this class students cannot sit and learn conveniently.
7. Although the poor condition of the institutional building is brought to the attention of authorities, no favourable action is taken.

8. Since I am spending a lot of time in the dustfull classroom condition, a number of health problems arise.
9. Classrooms are so insecure to keep teaching aids those make teaching more effective.
10. Institution has no satisfactory toilet facilities for the teachers and students.
11. Noise from the neighbouring class makes the teaching more tough.
12. ✓ Even though I practiced extreme disciplinary measures, the misbehaviour of students do not come to an end.
13. ✓ Students of my class have the habit of making noise by talking during teaching.
14. ✓ I have dissatisfaction in giving learning activities which influence the discipline of the class.
15. ✓ Teaching in the midst of noisy classroom create mental as well as health problems.
16. Institution has no adequate teaching aids.
17. ✓ A good reference library to clear doubts increase the standard of teaching.
18. It is not possible to use the material supplied by Government and other agencies to increase the quality of learning.
19. Ineffective competence development programmes for teachers to increase the expertise negatively influence teaching.
20. Even though teachers have the circumstances to discuss teaching materials among themselves for better teaching, such discussions are not organised properly.
21. Work load is high due to the lack of sufficient number of teachers.
22. ✓ More preparation for teaching is needed since high intellectual students in the class.
23. A number of instances to get bored doing nothing even though I have classes to engage.
24. ✓ I feel greater boredom during the working days.
25. The boredom from doing nothing in the institution will not motivate teaching.

26. I plan teaching activities beyond the working hours.
27. I spend a lot of time to implement different types of teaching activities.
28. I spend a lot of time for extra reading when new syllabus and teaching methods introduced.
29. Due to the limitations of the inadequate inservice/training/orientation/refresher programmes for teachers to teach through the new curriculum/syllabus, teaching is not effective.
30. I feel worried in the class in changing traditional method of teaching to new teaching methods.
31. I do not think that all parts of the syllabus cannot be transformed into learning activities for students.
32. New curriculum and syllabus totally changes the teaching-learning process in the class.
33. I cannot practice new teaching methods even though that make learning more joyful and meaningful.
34. Lack of mastery and expertise to teach many subjects makes teaching more tough.
35. The delay in appointing the Head/Principal of the institution changes the working structure and style of the institution.
36. As a Government institution, most of the teachers have no commitment in teaching.
37. To concentrate on administrative matters of the institution, the Heads/Principals cannot attend academic matters properly.
38. I am dissatisfied in decentralising institutional responsibilities to teachers other than the traditional style.
39. My position as a teacher is lowered when I am working with and among students.
40. Often I have to teach subjects and perform differently for which I am not trained/experienced.
41. I am forced to teach differently in the traditional teaching methods.

42. Parents of the students demand to teach well the possible part of the subject even though the syllabus is not finished totally.
 43. I have to perform official duties other than teaching.
 44. Often I have to take up the greater responsibilities of the Head/Principal along with teaching.
 45. The charge of co-curricular activities of the institution are often placed upon me.
 46. I cannot get free time to rest, since I am continuously mingle with students.
 47. I am always busy due to my healthy participation in curricular and co-curricular activities of the institution.
 48. I have to handle the disciplinary problems of students in the institution.
 49. I have no time to help my colleagues because of my work load.
 50. I feel aversion to the training/in service/orientation/refresher programmes which are not considering the need, interest and limitations of teachers.
 51. Often I confused what to do in the class due to the limitations of in-service training/orientation/refresher courses to practice new teaching methods.
 52. Failure in effective teaching is caused by the substandard in-service training/orientation/refresher courses.
 53. I feel difficulty to take up administrative duties due to the lack of experience.
 54. Problems arise when making the position of teachers are among the students.
 55. My colleagues help always by understanding my problems.
 56. Parents will not react when they are informed about the misbehaviour of students.
 57. I maintain good relationship with my co-teachers.
 58. I believe the causes of quarrel with some teachers are themselves.
 59. Since I cannot accept and recognise some colleagues, I will not be in the staff room always.
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60. I feel irritated in some of the actions taken by the Head/Principal.
61. I maintain a healthy relationship with the Head/Principal.
62. Office staff of the institution view teachers including myself as enemies.
63. I do not like the unlimited influence of parents in institutional activities.
64. Parents often blame teachers in Parent-Teacher meetings.
65. I have good relationship with parents of some of my students.
66. Due to the behaviour of teachers, students are disinterested in learning.
67. Often I resort to compel and punish students to study.
68. I cannot handle problem students by love and affection.
69. I am a good friend of those students who studied well.
70. Since I am a friend of the students, I can correct them when their activities are beyond the control and limits.
71. There is no possibilities for a promotion in the nearest future if I continue this job.
72. I do not feel desperated not in reaching the highest position in teaching.
73. I believe that teachers have no status in the society.
74. Teachers are responsible for themselves in the lowering status in the society.
75. I feel boredom in continuing in the profession of teaching for a long time.
76. I frustrated about my inability to attend in-service course/training/orientation/refresher programmes needed for promotion.
77. Even though I have higher qualifications, I will not get responsibilities/duties correspond to my qualifications.
78. I am not sincere in teaching due to the lack of transfer to my convenience.
79. I am afraid of continuing the job due to decreasing number of students in the class.
80. There is no job security because of students seek admission to courses offered by other institutions.

81. I have no aversion towards this job due to unexpected transfer.
82. I participate in the policy decisions of the institution.
83. Head/Principal decides all administrative issues.
84. I will welcome the arrangements to examine the quality in teaching.
85. I cannot understand the ways to lift the standard and values of the institutions as compelled by authorities.
86. My expectation about the standard and values of the institution differ greatly from the real standard and values.
87. The new curriculum/syllabus totally changed the atmosphere of the institution.
88. I feel difficulty of the new curriculum/syllabus which exploits the teachers ability totally.
89. I have disagreement in certain aspects of the new curriculum/syllabus.
90. I cannot adopt my style of teaching due to the compulsion of authorities to teach traditionally.
91. I have freedom in choosing teaching activities to teach the new curriculum/syllabus.
92. Often I don't talk with some of my co-teachers.
93. Head/Principal thinks that it is unfair to talk friendly with other teachers.
94. My colleagues will not make opinions about quality of my teaching.
95. The opinion of Head/Principal about the standard of my teaching always insufficient.
96. I cannot justify the extreme control of teachers by the Head/Principal.
97. My institution has expert teachers in certain areas of new curriculum/syllabus/new teaching methods.
98. I cannot attend well in teaching due to illness of a close relative.
99. Teaching become a formality after I take responsibilities of my family due to the unexpected death of father/mother/wife/husband.

100. I don't believe that I cannot keep-up the standard of teaching as expected by the Head/Principal.
101. Even the Head/Principal expects quality and punctuality in teaching from me, often it is not possible due to personal problems.
102. I resort other ways along with teaching to meet the serious financial problems.
103. My family expenditure is beyond the limit of the salary I get.
104. Due to my husband/wife has a different job other than teaching often I cannot attend family properly.
105. Since my husband/wife work far away from home, I have more responsibilities of the family.
106. I am worried about my children since my husband/wife working in two different places/institutions.
107. I am not interested to discuss institutional problems with my husband/wife who is not a teacher.
108. My husband/wife has no interest in matters related to teaching.
109. My family problems negatively influence the effectiveness of teaching.
110. Often I am criticised by others when I leave the institution due to family problems.
111. My husband/wife always complaints about my inability to attend family matters due to the over involvement in teaching.
112. I confused often, in teaching due to the problems of older parents and the education of my children.
113. Since I am an effective teacher, my priority goes first to teaching.
114. I am so confused when I think about how to handle family and institutional problems at a time.

- Thank you for cooperating with this Research Project -

Appendix I A

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
TEACHER STRESS INVENTORY
(DRAFT)

Dr.P.K. Sudheesh Kumar Anilkumar.A.K.

PART I
വ്യക്തിപരമായ വിവരങ്ങൾ

നിങ്ങളെക്കുറിച്ചും, നിങ്ങളുടെ അധ്യാപക ജോലിയെ സംബന്ധിച്ചുമുള്ള വ്യക്തിപരമായ വിവരങ്ങൾ സത്യസന്ധമായി രേഖപ്പെടുത്തണമെന്ന് വിനീതമായി അഭ്യർത്ഥിക്കുന്നു. ഇത്തരം വിവരങ്ങൾ ഈ ഗവേഷണത്തിന് അത്യാവശ്യമാണ്. അവ പേരുകൾ രേഖപ്പെടുത്താതെയും രഹസ്യ സ്വഭാവത്തോടെയും സൂക്ഷിക്കുന്നതാണ്. ഉചിതമായ വസ്തുതകൾ വിട്ടുപോകാതെയും ബാക്കിയുള്ളവ തന്നിരിക്കുന്ന ബോക്സുകളിൽ '✓' അടയാളപ്പെടുത്തിയും ദയവായി രേഖപ്പെടുത്തുക.

1. പുരുഷൻ സ്ത്രീ
2. വയസ്സ് വർഷം
3. വൈവാഹികനില വിവാഹംകഴിഞ്ഞു ഒറ്റയ്ക്ക്
 വിവാഹബന്ധം വേർപെടുത്തി
 വേർപിരിഞ്ഞു വിധവ
4. നിങ്ങളെ ആശ്രയിക്കുന്നവരുടെ എണ്ണം
5. നിങ്ങളുടെ ജീവിതപങ്കാളി ജോലിക്ക് പോകുന്നുണ്ടോ? ഉണ്ട് ഇല്ല
6. നിങ്ങളുടെ ജീവിതപങ്കാളി ടീച്ചർ ആണോ? അതെ അല്ല
7. വിദ്യാഭ്യാസ യോഗ്യത
 ടി.ടി.സി. ബി.എഡ്. പ്രീ-ഡിഗ്രി ഗ്രാജുവേഷൻ
 പോസ്റ്റ് ഗ്രാജുവേഷൻ പി.എച്ച്.ഡി. മറ്റുള്ളവ
8. ഉദ്യോഗപദവി :
9. ഈ പദവിയിൽ നിങ്ങൾ എത്ര വർഷം ജോലി ചെയ്തു:
10. സ്ഥിരം താൽക്കാലികം
11. ആകെ അധ്യാപനപരിചയം വർഷം
12. ഏതു ക്ലാസ്സുകളിൽ പഠിപ്പിക്കുന്നു. പ്രൈമറി
 സെക്കന്ററി
 ഹയർ സെക്കന്ററി
13. നിങ്ങളുടെ സ്ഥാപനം സ്ഥിതി ചെയ്യുന്ന സ്ഥലം കോർപ്പറേഷൻ
 മുനിസിപ്പാലിറ്റി
 പഞ്ചായത്ത്
14. ജില്ല
15. മാനേജ്മെന്റ് പ്രൈവറ്റ്
 ഗവൺമെന്റ്
16. ഒരുദിവസം എത്ര മണിക്കൂർ പ്രവൃത്തിചെയ്യും മണിക്കൂർ
17. നിങ്ങളുടെ ക്ലാസ്സിലെ ഏകദേശ കുട്ടികളുടെ എണ്ണം

Part II
Sources of Stress in Teaching Profession

നിർദ്ദേശങ്ങൾ : നിങ്ങളെ സംബന്ധിച്ചും നിങ്ങളുടെ ജോലിയെ സംബന്ധിച്ചുമുള്ള കുറെ വാചകങ്ങളാണ് താഴെ കൊടുത്തിട്ടുള്ളത്. ഒരു ടീച്ചർ എന്ന നിലയിൽ നിങ്ങൾ അനുഭവിക്കുന്ന ടെൻഷനെയാണ് വാചകങ്ങൾ സൂചിപ്പിക്കുന്നത്. ഓരോ വാചകവും വായിച്ചതിനുശേഷം നിങ്ങൾ എത്രമാത്രം ആ വാചകത്തിൽ പറഞ്ഞിരിക്കുന്ന കാര്യങ്ങളോട് യോജിക്കുന്നു എന്ന് തീരുമാനിക്കുക. നിങ്ങളുടെ യോജിപ്പും വിയോജിപ്പും രേഖപ്പെടുത്തുന്നതിനായി പ്രത്യേകം Response Sheet തന്നിട്ടുണ്ട്. നിങ്ങളുടെ യോജിപ്പോ വിയോജിപ്പോ ഓരോ വാചകങ്ങളുടെയും ചോദ്യ നമ്പരുകൾക്കു നേരെ കൊടുത്തിട്ടുള്ള വൃത്തത്തിൽ 'X' മാർക്ക് ചെയ്ത് രേഖപ്പെടുത്തുക. ദയവായി എല്ലാ വാചകങ്ങളോടും പ്രതികരിക്കുക. നിങ്ങളുടെ പ്രതികരണങ്ങൾ രഹസ്യമായി സൂക്ഷിക്കുന്നതും ഗവേഷണ ആവശ്യത്തിനുമാത്രം ഉപയോഗിക്കുന്നതുമാണ്. ഒരു ഉദാഹരണം നോക്കുക.

ഉദാഹരണം :

ക്ലാസ്സിൽ കൂടുതൽ കുട്ടികൾ ഉള്ളതിനാൽ എനിക്ക് ടെൻഷൻ അനുഭവപ്പെടാറുണ്ട്.

ശക്തമായി യോജിക്കുന്നു	യോജിക്കുന്നു	തീരുമാനമില്ല	വിയോജിക്കുന്നു	ശക്തിയായി വിയോജിക്കുന്നു
O	X	O	O	O

ദയവായി സഹകരിക്കുക

- 1 ക്ലാസ്സിൽ ധാരാളം കുട്ടികൾ ഉള്ളതുകാരണം എനിക്ക് ടെൻഷൻ അനുഭവപ്പെടാറുണ്ട്.
- 2 ക്ലാസ്സിൽ കുട്ടികളുടെ എണ്ണം കൂടുന്നതും കുറയുന്നതും അദ്ധ്യാപനത്തെ പ്രതികൂലമായി ബാധിക്കുന്നു.
- 3 ക്ലാസ്സിൽ ധാരാളം കുട്ടികൾ ഉള്ളതുകാരണം അദ്ധ്യാപനം എത്രമാത്രം ഫലവത്താവുമെന്നതിനെക്കുറിച്ച് ഞാൻ വിഷമിക്കാറുണ്ട്.
- 4 ക്ലാസ്സിലെ കുട്ടികളുടെ എണ്ണത്തിലെ വ്യത്യാസം അദ്ധ്യാപനത്തിന്റെ ഗുണനിലവാരത്തെ സ്വാധീനിക്കുന്നതായി എനിക്ക് അനുഭവപ്പെടാറുണ്ട്.
- 5 തിങ്ങിയിരിക്കുന്നതും ഇരുണ്ടതുമായ ക്ലാസ്സറൂമുകൾ അദ്ധ്യാപനത്തിന്റെ ഗുണനിലവാരം കുറയ്ക്കുന്നു.
- 6 ഇത്തരത്തിലുള്ള ക്ലാസ്സുകളിൽ കുട്ടികൾക്ക് സൗകര്യപ്രദമായി ഇരിക്കുവാനും പഠിക്കുവാനും സാധ്യമല്ല.
- 7 സ്ഥാപനത്തിലെ കെട്ടിടങ്ങളുടെ മോശമായ അവസ്ഥ അധികാരികളുടെ ശ്രദ്ധയിൽപ്പെടുത്തിയിട്ടും അതിനനുകൂലമായ ഒരു നടപടിയും ഉണ്ടായിട്ടില്ല.
- 8 പൊടി നിറഞ്ഞ ക്ലാസ്സുകളിൽ എനിക്ക് വളരെ സമയം ചിലവിടേണ്ടി വരുന്നതിനാൽ ധാരാളം ആരോഗ്യപരമായ പ്രശ്നങ്ങൾ ഉണ്ടാകുന്നു.
- 9 അദ്ധ്യാപനം കൂടുതൽ ഫലവത്താക്കുവാൻ ഉപയോഗിക്കുന്ന പാനോപകരണങ്ങൾ സൂക്ഷിച്ചു വയ്ക്കുവാൻ ക്ലാസ്സറൂമുകൾ സുരക്ഷിതമല്ല.
- 10 സ്ഥാപനത്തിൽ തൃപ്തികരമായ ടോയ്ലറ്റ് സൗകര്യം അദ്ധ്യാപകർക്കോ കുട്ടികൾക്കോ ഇല്ല.
- 11 അടുത്ത ക്ലാസ്സുകളിൽ നിന്നും വരുന്ന ശബ്ദം അദ്ധ്യാപനം കൂടുതൽ വിഷമം പിടിച്ചതാക്കുന്നു.

- 12 ഞാൻ വിവിധ തരത്തിലുള്ള അച്ചടക്ക നടപടികൾ ക്ലാസ്സിൽ എടുത്തിട്ടും, കുട്ടികളുടെ മോശമായ പെരുമാറ്റത്തിന് ഒരു മാറ്റവും ഉണ്ടാകുന്നില്ല.
- 13 എന്റെ ക്ലാസ്സിലെ കുട്ടികൾക്ക്, പഠിപ്പിക്കുന്ന സമയത്ത് സംസാരിച്ച് ശബ്ദമുണ്ടാക്കുന്ന സ്വഭാവമുണ്ട്.
- 14 ക്ലാസ്സിന്റെ അച്ചടക്കത്തെ ബാധിക്കുന്ന തരത്തിലുള്ള പാഠ്യാനുഭവങ്ങൾ കൊടുക്കുന്നതിനോട് എനിക്ക് അസംതൃപ്തിയുണ്ട്.
- 15 വളരെയധികം ശബ്ദമുള്ള ഒരു ക്ലാസ്സിൽ പഠിപ്പിക്കുന്നത് ശാരീരികമായും, മാനസികമായും പ്രശ്നങ്ങൾ ഉണ്ടാക്കുന്നു.
- 16 സ്ഥാപനത്തിൽ ആവശ്യത്തിന് പാനോപകരണങ്ങൾ ഇല്ല.
- 17 ഒരു നല്ല റഫറൻസ് ലൈബ്രറി സംശയനിവാരണത്തിനും അദ്ധ്യാപന നിലവാരം മെച്ചപ്പെടുത്തുന്നതിനും ആവശ്യമാണ്.
- 18 അദ്ധ്യാപന നിലവാരം ഉയർത്തുന്നതിന് വേണ്ടി ഗവൺമെന്റും മറ്റ് ഏജൻസികളും വിതരണം ചെയ്ത സാധനങ്ങൾ ഉപയോഗപ്പെടുത്തുവാൻ എനിക്ക് സാധിക്കുന്നില്ല.
- 19 അദ്ധ്യാപനത്തിലെ പ്രാഗത്ഭ്യം വർദ്ധിപ്പിക്കുന്നതിനു വേണ്ടി നടത്തുന്ന ഫലപ്രദമല്ലാത്ത പ്രോഗ്രാമുകൾ അദ്ധ്യാപനത്തെത്തന്നെ പ്രതികൂലമായി ബാധിക്കുന്നു.
- 20 ആവശ്യമായ പഠനസാമഗ്രികളെക്കുറിച്ച് പരസ്പരം ചർച്ച ചെയ്യുവാനുള്ള ചുറ്റുപാടുകൾ അദ്ധ്യാപകർക്കുണ്ടെങ്കിലും, അത്തരം ചർച്ചകളൊന്നും ശരിയായ രീതിയിൽ സംഘടിപ്പിക്കപ്പെടാറില്ല.
- 21 ആവശ്യത്തിന് അദ്ധ്യാപകർ ഇല്ലാത്തതിനാൽ ജോലിഭാരം കൂടുതലാണ്.
- 22 അതിസമർത്ഥന്മാർ ക്ലാസ്സിൽ ഉള്ളതിനാൽ പഠിപ്പിക്കുവാൻ വേണ്ടി കൂടുതൽ തയ്യാറെടുക്കേണ്ടി വരുന്നു.
- 23 ക്ലാസ്സുകൾ ഉണ്ടായിരുന്നപ്പോഴും ഒന്നും ചെയ്യാനില്ലാതെ പല സന്ദർഭങ്ങളിലും ഞാൻ വെറുതെ ഇരുന്നു ബോറടിച്ചിട്ടുണ്ട്.
- 24 പ്രവൃത്തിദിവസങ്ങളിൽ എനിക്കു കൂടുതൽ ബോറടിക്കുന്നു.
- 25 സ്ഥാപനത്തിൽ ഒന്നും ചെയ്യാനില്ലാതെ ഇരിക്കേണ്ടി വരുന്ന അവസ്ഥ മൂലം ഉണ്ടാകുന്ന ബോറടി അദ്ധ്യാപകരെ പ്രോത്സാഹിപ്പിക്കുന്നില്ല.
- 26 പ്രവൃത്തിസമയങ്ങൾക്കപ്പുറത്തേക്കും ഞാൻ പഠനപ്രക്രിയ ആസൂത്രണം ചെയ്യാറുണ്ട്.
- 27 വ്യത്യസ്ത രീതിയിലുള്ള പഠനപ്രക്രിയ നടപ്പിലാക്കുന്നതിനു വേണ്ടി ഞാൻ ധാരാളം സമയം ചിലവഴിക്കാറുണ്ട്.
- 28 പുതിയ പാഠ്യപദ്ധതികളും അദ്ധ്യാപന രീതിയും നടപ്പിലാക്കിയാൽ അധിക വായനയ്ക്കായി ഞാൻ ധാരാളം സമയം ചിലവഴിക്കാറുണ്ട്.
- 29 അദ്ധ്യാപകർക്കായുള്ള ഇൻസർവ്വീസ് / ട്രെയിനിംഗ് / ഓറിയന്റേഷൻ / റിഫ്രഷർ പ്രോഗ്രാമുകളുടെ അപര്യാപ്തത മൂലം പുതിയ പാഠ്യപദ്ധതിയിലൂടെ ഉള്ള അദ്ധ്യാപനം ഫലപ്രദമല്ല.
- 30 പണ്ടുമുതൽക്കേ തുടർന്നു വരുന്ന അദ്ധ്യാപന രീതിയിൽ നിന്നും പുതിയ രീതിയിലേക്ക് മാറേണ്ടി വരുന്നത് എനിക്ക് വിഷമമുണ്ടാക്കുന്നു.
- 31 സിലബസ്സിൽ പറഞ്ഞിരിക്കുന്ന എല്ലാ കാര്യങ്ങളും പാഠ്യാനുഭവങ്ങളാക്കി മാറ്റാൻ പറ്റുമെന്ന് ഞാൻ വിശ്വസിക്കുന്നില്ല.
- 32 പുതിയ പാഠ്യപദ്ധതിയും സിലബസ്സും ക്ലാസുകളിലെ പഠിപ്പിക്കലും - പഠിക്കലും ആകെ മാറ്റിയിരിക്കുന്നു.

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- 33 പുതിയ അധ്യാപനരീതി പഠനത്തെ കൂടുതൽ സന്തോഷപ്രദവും അർത്ഥവത്തും ആക്കി തീർക്കുമെങ്കിലും ആ രീതിയിൽ പരിശീലിപ്പിക്കുവാൻ എനിക്കു കഴിയുകയില്ല.
- 34 പല വിഷയങ്ങളും പഠിപ്പിക്കുന്നതിനുള്ള പ്രാവീണ്യത്തിന്റെയും വൈദഗ്ദ്ധ്യത്തിന്റെയും അഭാവം അധ്യാപനം കൂടുതൽ ബുദ്ധിമുട്ടുള്ളതാക്കിത്തീർക്കുന്നു.
- 35 ഹൈഡ് മാസ്റ്ററിയോ, പ്രിൻസിപ്പാളിനെയോ നിയമിക്കുവാനുള്ള കാലതാമസം ആ സ്ഥാപനത്തിന്റെ പ്രവർത്തന ശൈലിയിലും പ്രതിഫലിച്ചതായലും മാറ്റം വരുത്തുന്നു.
- 36 ഗവൺമെന്റ് സ്ഥാപനമായതിനാൽ അധിക അധ്യാപകർക്കും അധ്യാപനത്തിൽ ഒരു അർപ്പണബോധവുമില്ല.
- 37 ഭരണപരമായ കാര്യങ്ങളിൽ ശ്രദ്ധിക്കേണ്ടി വരുന്നത്കൊണ്ട് മേലധികാരിയ്ക്ക് കൂട്ടികളുടെ വിദ്യാഭ്യാസപരമായ പ്രശ്നങ്ങളിൽ ശരിയായ ശ്രദ്ധ പതിപ്പിക്കുവാൻ കഴിയുന്നില്ല.
- 38 പണ്ടുമുതൽക്കേയുള്ള രീതിയിൽ നിന്ന് വ്യത്യസ്തമായി സ്ഥാപനത്തിലെ ചുമതലകൾ വിവിധ അധ്യാപകരിലേക്ക് വികേന്ദ്രീകരിക്കുന്നതിൽ ഞാൻ അസംതൃപ്തനാണ്.
- 39 ഞാൻ കൂട്ടികളുടെ കൂടെയോ അവരോടൊപ്പമോ പ്രവൃത്തി ചെയ്യുമ്പോൾ അധ്യാപകനെന്ന എന്റെ സ്ഥാനം താഴ്ന്നു പോവുന്നു.
- 40 പലപ്പോഴും എനിക്കു പരിശീലനമോ, പരിചയമോ ഇല്ലാത്ത വിഷയങ്ങളും പഠിപ്പിക്കേണ്ടി വന്നിട്ടുണ്ട്.
- 41 പഴയ അധ്യാപനരീതിയിൽ നിന്നും വ്യത്യസ്തമായി പഠിപ്പിക്കുവാൻ ഞാൻ നിർബന്ധിതനായിട്ടുണ്ട്.
- 42 സിലബസ്സ് മുഴുവനായി തീരാത്ത സമയത്തും സാധ്യതയുള്ള പാഠഭാഗങ്ങൾ നന്നായി പഠിപ്പിക്കുവാൻ രക്ഷിതാക്കളും കൂട്ടികളും ആവശ്യപ്പെടാറുണ്ട്.
- 43 എനിക്ക് അധ്യാപനജോലി കൂടാതെ ഓഫീസ് ജോലികൾ കൂടെ ചെയ്യേണ്ടി വരുന്നു.
- 44 പലപ്പോഴും അധ്യാപന ജോലിയുടെ കൂടെ തന്നെ മേലധികാരിയുടെ ഭാരിച്ച ഉത്തരവാദിത്വങ്ങളും ഏറ്റെടുക്കേണ്ടി വരുന്നു.
- 45 പാഠ്യപദ്ധതിയുടെ ഭാഗമായി നടത്തപ്പെടുന്ന വിവിധ പരിപാടികളുടെ ചുമതല പലപ്പോഴും എനിക്ക് നിർബന്ധമായും ഏറ്റെടുക്കേണ്ടി വരുന്നു.
- 46 ഞാൻ എപ്പോഴും കൂട്ടികളുമായി ഇടപഴകുന്നതുകൊണ്ട് എനിക്ക് ഒഴിവുസമയം തീരെ കിട്ടാറില്ല.
- 47 സ്ഥാപനത്തിലെ പാഠ്യവും പാഠ്യേതരവുമായ പ്രവൃത്തികളിൽ എന്റെ സജീവ പങ്കാളിത്തം ഉണ്ടാകുന്നതിനാൽ ഞാൻ എപ്പോഴും തിരക്കിലാണ്.
- 48 സ്ഥാപനത്തിലെ അച്ചടക്കപരമായ പ്രശ്നങ്ങൾ എനിക്ക് കൈകാര്യം ചെയ്യേണ്ടതായി വരാറുണ്ട്.
- 49 എന്റെ ജോലിഭാരം കാരണം എന്റെ സഹപ്രവർത്തകരെ സഹായിക്കുവാൻ എനിക്ക് സമയം കിട്ടാറില്ല.
- 50 അധ്യാപകരുടെ ആവശ്യമോ, താല്പര്യമോ, പരിമിതികളോ പരിഗണിക്കാതെ നടത്തുന്ന ട്രെയിനിങ്ങ് / ഇൻസർവ്വീസ് / ഓറിയന്റേഷൻ / റിഫ്രഷർ പ്രോഗ്രാമുകളോട് എനിക്കു വെറുപ്പാണ്.
- 51 ഇൻസർവ്വീസ് ട്രെയിനിങ്ങ് / ഓറിയന്റേഷൻ / റിഫ്രഷർ കോഴ്സുകൾ എന്നിവയുടെ പരിമിതി മൂലം പുതിയ അധ്യാപന രീതികൾ ക്ലാസ്സിൽ നടപ്പിലാക്കുമ്പോൾ ഞാൻ എന്തുചെയ്യണമെന്നറിയാതെ കൂഴഞ്ഞുപോയിട്ടുണ്ട്.
- 52 നിലവാരം കുറഞ്ഞ ഇൻസർവ്വീസ് ട്രെയിനിങ്ങ് / ഓറിയന്റേഷൻ / റിഫ്രഷർ കോഴ്സുകളാണ് ഫലപ്രദമായ അധ്യാപനത്തിന്റെ പരാജയത്തിനു കാരണം.

- 53 പരിചയക്കുറവു കാരണം രേണപരമായ ചുമതലകൾ ഏറ്റെടുക്കുവാൻ എനിക്ക് ബുദ്ധിമുട്ട് അനുഭവപ്പെടാറുണ്ട്.
- 54 അധ്യാപകന്റെ സ്ഥാനം കൂട്ടികൾക്കിടയിലാവുമ്പോൾ പ്രശ്നങ്ങൾ ഉടലെടുക്കുന്നു.
- 55 എന്റെ പ്രശ്നങ്ങൾ മനസ്സിലാക്കി സഹപ്രവർത്തകർ എപ്പോഴും എന്നെ സഹായിക്കുന്നു.
- 56 കൂട്ടികളുടെ അച്ചടക്കമില്ലാത്ത പെരുമാറ്റത്തെക്കുറിച്ച് അറിയിച്ചാലും രക്ഷിതാക്കൾ പ്രതികരിക്കാറില്ല.
- 57 എന്റെ സഹ അധ്യാപകരുമായി ഞാൻ നല്ല ബന്ധം നിലനിർത്തുന്നു.
- 58 ചില അധ്യാപകരോടുള്ള വഴക്കിനു കാരണം അവർതന്നെ ഉണ്ടാക്കിയിട്ടുള്ളതാണെന്ന് ഞാൻ വിശ്വസിക്കുന്നു.
- 59 ചില സഹപ്രവർത്തകരെ സ്വീകരിക്കുവാനും അംഗീകരിക്കുവാനും കഴിയാത്തതുകൊണ്ട് ഞാൻ എപ്പോഴും സ്റ്റാഫ് റൂമിൽ ഇരിക്കാറില്ല.
- 60 മേലധികാരി എടുത്ത ചില നടപടികൾ എന്നെ അലോസരപ്പെടുത്തിയിട്ടുണ്ട്.
- 61 മേലധികാരിയുമായി എനിക്ക് നല്ല ബന്ധമാണ് ഉള്ളത്.
- 62 എന്നെയും മറ്റുള്ള അധ്യാപകരെയും ഓഫീസിലുള്ളവർ ശത്രുക്കൾ ആയിട്ടാണ് കാണുന്നത്.
- 63 സ്ഥാപനത്തിന്റെ പ്രവർത്തനങ്ങളിൽ രക്ഷിതാക്കളുടെ അതിരുകടന്ന സ്വാധീനം എനിക്ക് ഇഷ്ടമല്ല.
- 64 അധ്യാപക-രക്ഷാകർതൃ സമിതി മീറ്റിങ്ങുകളിൽ പലപ്പോഴും രക്ഷിതാക്കൾ അധ്യാപകരെ കുറ്റപ്പെടുത്താറുണ്ട്.
- 65 എന്റെ ചില വിദ്യാർത്ഥികളുടെ രക്ഷിതാക്കളുമായി എനിക്ക് നല്ല ബന്ധമാണ് ഉള്ളത്.
- 66 അധ്യാപകരുടെ സ്വഭാവം കാരണം വിദ്യാർത്ഥികൾക്ക് പഠനകാര്യങ്ങളിൽ താല്പര്യമില്ല.
- 67 പലപ്പോഴും ഞാൻ കുട്ടികളെ പഠിക്കുവാനായി നിർബന്ധിക്കുകയും ശിക്ഷിക്കുകയും ചെയ്യാറുണ്ട്.
- 68 പ്രശ്നങ്ങൾ ഉണ്ടാക്കുന്ന കുട്ടികളെ സ്നേഹത്തോടെയും വാത്സല്യത്തോടെയും കൈകാര്യം ചെയ്യുവാൻ എനിക്കു കഴിയാറില്ല.
- 69 ഞാൻ നല്ലവണ്ണം പഠിയ്ക്കുന്ന വിദ്യാർത്ഥികളുടെ ഒരു നല്ല സുഹൃത്താണ്.
- 70 ഞാൻ വിദ്യാർത്ഥികളുടെ സുഹൃത്തായതിനാൽ, അവരുടെ പ്രവർത്തനങ്ങൾ നിയന്ത്രണാതീതമാവുമ്പോൾ അവരെ ശരിയായ വഴിക്ക് കൊണ്ടുവരാൻ എനിക്ക് കഴിയും.
- 71 ഞാൻ ഈ ജോലിയിൽ തുടർന്നാലും അടുത്ത കാലത്തെങ്ങും ഉദ്യോഗക്കയറ്റത്തിനുള്ള സാധ്യതയില്ല.
- 72 അധ്യാപനജോലിയിലെ ഉന്നത സ്ഥാനങ്ങളിൽ എത്താൻ കഴിയാത്തതിൽ എനിക്കു നിരാശയില്ല.
- 73 അധ്യാപകർക്ക് സമൂഹത്തിൽ യാതൊരു സ്ഥാനവുമില്ലെന്ന് ഞാൻ വിശ്വസിക്കുന്നു.
- 74 അധ്യാപകർ തന്നെയാണ് സമൂഹത്തിലെ അവരുടെ താഴ്ന്ന സ്ഥാനത്തിന് കാരണം.
- 75 ദീർഘകാലമായി അധ്യാപനജോലിയിൽ തുടരുന്നത് എന്നിൽ മടുപ്പുള്ളവാക്കിയിട്ടുണ്ട്.
- 76 പ്രമോഷൻ ആവശ്യമായ ഇൻസർവ്വീസ് കോഴ്സ് / ട്രെയിനിങ്ങ് / ഓറിയന്റേഷൻ / റിഫ്രഷർ പ്രോഗ്രാം എന്നിവയിൽ പങ്കെടുക്കുവാനുള്ള എന്റെ കഴിവില്ലായ്മയിൽ ഞാൻ വിഷണ്ണനാണ്.
- 77 എനിക്ക് ഉയർന്ന യോഗ്യതയുണ്ടെങ്കിലും, എന്റെ യോഗ്യതയ്ക്കനുസരിച്ച് ഉത്തരവാദിത്വമോ/ചുമതലയോ എനിക്കു ലഭിക്കുകയില്ല.

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- 78 എന്റെ സൗകര്യത്തിനനുസരിച്ച് സ്ഥലമാറ്റം ലഭിക്കാത്തതിനാൽ എനിക്ക് ജോലിയോട് ആത്മാർത്ഥത പുലർത്താൻ കഴിയുന്നില്ല.
- 79 ക്ലാസ്സിലെ കുട്ടികളുടെ എണ്ണം കുറഞ്ഞു വരുന്നതിനാൽ എനിക്ക് ഈ ജോലിയിൽ തുടരാനാവുമോ എന്ന് ഞാൻ ഭയപ്പെടുന്നു.
- 80 മറ്റു സ്ഥാപനങ്ങൾ വാഗ്ദാനം ചെയ്യുന്ന കോഴ്സുകളിലേക്ക് കുട്ടികൾ പോകുന്നതിനാൽ ജോലിയ്ക്ക് യാതൊരു സുരക്ഷിതത്വവുമില്ല.
- 81 അപ്രതീക്ഷിതമായ സ്ഥലംമാറ്റം കാരണം പോലും എനിക്ക് ഈ ജോലിയോട് വെറുപ്പില്ല.
- 82 സ്ഥാപനത്തിന്റെ നയപരമായ തീരുമാനങ്ങളിൽ ഞാൻ പങ്കെടുക്കാറുണ്ട്.
- 83 എല്ലാ ഭരണപരമായ കാര്യങ്ങളും മേലധികാരിയാണ് തീരുമാനിക്കുന്നത്.
- 84 അധ്യാപനത്തിന്റെ ഗുണനിലവാരം പരിശോധിക്കുന്നതിനായുള്ള തയ്യാറെടുപ്പുകളെ ഞാൻ സ്വാഗതം ചെയ്യുന്നു.
- 85 മേലധികാരികൾ നിഷ്കർഷിക്കുന്നതുപോലെ സ്ഥാപനത്തിന്റെ നിലയും മൂല്യവും ഉയർത്തുവാനുള്ള വഴികൾ എനിക്കു മനസ്സിലാവുന്നില്ല.
- 86 സ്ഥാപനത്തിന്റെ നിലവാരത്തെക്കുറിച്ചും മൂല്യത്തെക്കുറിച്ചും എനിക്കുണ്ടായിരുന്ന ധാരണയും, യഥാർത്ഥനിലവാരവും മൂല്യവും തമ്മിൽ വലിയ വ്യത്യാസമുണ്ട്.
- 87 പുതിയ പാഠ്യപദ്ധതി / സിലബസ്സ് സ്ഥാപനത്തിന്റെ അന്തരീക്ഷത്തെ ആകെ മാറ്റിയിട്ടുണ്ട്.
- 88 അധ്യാപകരുടെ കഴിവിനെ പരിപൂർണ്ണമായും ചൂഷണം ചെയ്യുന്ന പുതിയ പാഠ്യപദ്ധതി / സിലബസ്സ് എനിക്കു ബുദ്ധിമുട്ടുണ്ടാക്കുന്നു.
- 89 പുതിയ പാഠ്യപദ്ധതി / സിലബസ്സ് - ന്റെ ചില കാഴ്ചപ്പാടുകളോട് എനിക്ക് വിരോധിപ്പിച്ചുണ്ട്.
- 90 പണ്ടുമുതൽക്കേ തുടർന്നു വരുന്ന രീതികളിൽ പഠിപ്പിക്കാനുള്ള അധികാരികളുടെ നിർബന്ധം മൂലം എനിക്ക് എന്റേതായ രീതിയിൽ പഠിപ്പിക്കുവാൻ കഴിയുന്നില്ല.
- 91 പുതിയ പാഠ്യപദ്ധതി / സിലബസ്സ് പഠിപ്പിക്കുവാനുള്ള പ്രവർത്തനങ്ങൾ തിരഞ്ഞെടുക്കുന്നതിൽ എനിക്കു സ്വാതന്ത്ര്യം ഉണ്ട്.
- 92 എന്റെ ചില സഹ അധ്യാപകരോട് ഞാൻ സംസാരിക്കാറില്ല.
- 93 അധ്യാപകരുമായി സൗഹൃദസംഭാഷണം നടത്തുന്നത് നല്ലതല്ലെന്നാണ് മേലധികാരിയുടെ വിചാരം.
- 94 എന്റെ അധ്യാപനത്തിന്റെ ഗുണനിലവാരത്തെക്കുറിച്ച് സഹപ്രവർത്തകർ അഭിപ്രായം പറയുകയില്ല.
- 95 എന്റെ അധ്യാപനരീതിയെക്കുറിച്ച് മേലധികാരിയുടെ അഭിപ്രായം എപ്പോഴും അപര്യാപ്തമാണ്.
- 96 മേലധികാരി അധ്യാപകരെ അങ്ങേയറ്റം നിയന്ത്രിക്കുന്നത് എനിക്ക് സ്വീകരിക്കുവാൻ കഴിയുകയില്ല.
- 97 പുതിയ പാഠ്യപദ്ധതി / സിലബസ്സ് / അധ്യാപനരീതി എന്നിവയിൽ അത്യധികം പ്രാഗത്ഭ്യമുള്ളവരുടെ സേവനം എന്റെ സ്ഥാപനത്തിൽ ഉണ്ടായിരുന്നു.
- 98 അടുത്ത ബന്ധുവിന്റെ അസുഖം കാരണം എനിക്ക് അധ്യാപനത്തിൽ നല്ലവണ്ണം ശ്രദ്ധിക്കുവാൻ കഴിയുന്നില്ല.
- 99 അച്ഛന്റെ / അമ്മയുടെ / ഭാര്യയുടെ / ഭർത്താവിന്റെ അപ്രതീക്ഷിതമായ മരണംകൊണ്ട് കുടുംബത്തിന്റെ ഉത്തരവാദിത്വം ഞാൻ ഏറ്റെടുക്കേണ്ടതായി വന്നതിനാൽ അധ്യാപനം ഒരു വഴിപാടായി തീർന്നിരിക്കുന്നു.

- 100 മേലധികാരിയുടെ പ്രതീക്ഷകൾക്കനുസരിച്ച് അധ്യാപനത്തിന്റെ ഗുണനിലവാരം നിലനിർത്താൻ എനിക്കു കഴിയില്ലെന്ന് ഞാൻ വിശ്വസിക്കുന്നില്ല.
- 101 മേലധികാരി എന്നിൽ നിന്ന് പ്രതീക്ഷിക്കുന്നതുപോലെ, അധ്യാപനത്തിൽ ഗുണവും സമയനിഷ്ഠയും പാലിക്കുവാൻ വ്യക്തിപരമായ കാരണങ്ങളാൽ എനിക്ക് സാധിക്കുകയില്ല.
- 102 ഗുരുതരമായ സാമ്പത്തിക പ്രശ്നങ്ങളെ അഭിമുഖീകരിക്കുവാൻ അധ്യാപനത്തോടൊപ്പം തന്നെ ഞാൻ മറ്റു വഴികളെയും ആശ്രയിക്കുന്നു.
- 103 എന്റെ കുടുംബത്തിന്റെ ചിലവ് എനിക്കു കിട്ടുന്ന ശമ്പളത്തേക്കാൾ അധികമാണ്.
- 104 എന്റെ ഭർത്താവിന് / ഭാര്യയ്ക്ക് അധ്യാപനജോലി അല്ലാത്ത മറ്റു ജോലി ആയതിനാൽ, എനിക്ക് പലപ്പോഴും കുടുംബം ശ്രദ്ധിക്കാൻ കഴിയാറില്ല.
- 105 എന്റെ ഭർത്താവ് / ഭാര്യ വീട്ടിൽ നിന്നും വളരെ ദൂരെ ജോലി ചെയ്യുന്നതിനാൽ എനിക്ക് കുടുംബത്തിന്റെ കൂടുതൽ ഉത്തരവാദിത്വം ഏറ്റെടുക്കേണ്ടി വരുന്നു.
- 106 എന്റെ ഭർത്താവും / ഭാര്യയും, ഞാനും രണ്ട് വ്യത്യസ്ത സ്ഥലങ്ങളിൽ / സ്ഥാപനങ്ങളിൽ ജോലി ചെയ്യുന്നതിനാൽ എന്റെ കുട്ടികളെക്കുറിച്ച് എനിക്ക് വേവലാതി ഉണ്ട്.
- 107 അധ്യാപകനല്ലാത്ത എന്റെ ഭർത്താവ് / ഭാര്യയുമായി സ്ഥാപനത്തിലെ പ്രശ്നങ്ങൾ ചർച്ച ചെയ്യുന്നതിൽ എനിക്ക് താത്പര്യം ഇല്ല.
- 108 എന്റെ ഭർത്താവ് / ഭാര്യയ്ക്ക് അധ്യാപനവുമായി ബന്ധപ്പെട്ട കാര്യങ്ങളോട് താത്പര്യം ഇല്ല.
- 109 എന്റെ കുടുംബപ്രശ്നങ്ങൾ അധ്യാപനത്തിന്റെ ഫലത്തെ പ്രതികൂലമായി ബാധിച്ചിട്ടുണ്ട്.
- 110 എന്റെ കുടുംബപ്രശ്നങ്ങൾ കാരണം എനിക്ക് സ്ഥാപനത്തിൽ നിന്ന് പോരേണ്ടി വരുമ്പോൾ പലപ്പോഴും മറ്റുള്ളവരാൽ ഞാൻ വിമർശനവിധേയനായിട്ടുണ്ട്.
- 111 അധ്യാപനത്തിൽ അമിതമായി മുഴുകുന്നതുകാരണം കുടുംബകാര്യങ്ങൾ നോക്കാൻ എനിക്കു കഴിയാത്തതിൽ എന്റെ ഭർത്താവ് / ഭാര്യയ്ക്ക് എപ്പോഴും പരാതിയാണ്.
- 112 എന്റെ പ്രായമായ രക്ഷിതാക്കളുടെ പ്രശ്നങ്ങളും കുട്ടികളുടെ വിദ്യാഭ്യാസവും കാരണം അധ്യാപന കാര്യങ്ങളിൽ എന്തു ചെയ്യണമെന്നറിയാതെ പലപ്പോഴും ഞാൻ വിഷമിക്കാറുണ്ട്.
- 113 ഞാൻ നല്ലൊരു ടീച്ചറായതിനാൽ, എന്റെ ആദ്യപരിഗണന അധ്യാപനത്തിനാണ്.
- 114 ഒരേ സമയത്തു തന്നെ കുടുംബത്തിലെയും സ്ഥാപനത്തിലെയും പ്രശ്നങ്ങൾ കൈകാര്യം ചെയ്യേണ്ടതിനെപ്പറ്റി ചിന്തിക്കുമ്പോൾ എന്തുചെയ്യണമെന്നറിയാതെ ഞാൻ വിഷമിക്കാറുണ്ട്.

- ഈ ഗവേഷണ പ്രൊജക്ടുമായി സഹകരിച്ചതിനു നിങ്ങൾക്കു നന്ദി. -

APPENDIX 1 B

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

TEACHER STRESS INVENTORY
RESPONSE SHEET (DRAFT)

Item No.	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Item No.	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Item No.	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	39.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	77.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	40.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	78.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	41.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	79.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	42.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	80.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	43.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	81.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	44.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	82.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	45.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	83.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	46.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	84.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	47.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	85.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	48.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	86.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	49.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	87.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	50.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	88.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	51.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	89.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	52.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	90.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	53.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	91.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	54.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	92.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	55.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	93.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	56.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	94.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	57.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	95.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	58.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	96.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	59.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	97.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	60.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	98.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	61.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	99.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	62.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	100.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	63.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	101.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	64.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	102.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	65.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	103.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	66.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	104.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	67.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	105.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	68.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	106.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	69.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	107.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	70.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	108.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	71.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	109.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	72.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	110.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	73.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	111.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	74.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	112.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	75.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	113.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	76.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	114.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX I C

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

TEACHER STRESS INVENTORY
RESPONSE SHEET (DRAFT)

ക്രമ നമ്പർ	അല്ലെങ്കിൽ യാതൊന്നുമില്ല	യാതൊന്നുമില്ല	കുറച്ചു	വളരെ കുറച്ചു	വളരെ കൂടുതൽ	ക്രമ നമ്പർ	അല്ലെങ്കിൽ യാതൊന്നുമില്ല	യാതൊന്നുമില്ല	കുറച്ചു	വളരെ കുറച്ചു	വളരെ കൂടുതൽ	ക്രമ നമ്പർ	അല്ലെങ്കിൽ യാതൊന്നുമില്ല	യാതൊന്നുമില്ല	കുറച്ചു	വളരെ കുറച്ചു	വളരെ കൂടുതൽ
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	39.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	77.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	40.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	78.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	41.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	79.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	42.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	80.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	43.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	81.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	44.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	82.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	45.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	83.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	46.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	84.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	47.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	85.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	48.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	86.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	49.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	87.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	50.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	88.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	51.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	89.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	52.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	90.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	53.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	91.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	54.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	92.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	55.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	93.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	56.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	94.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	57.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	95.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	58.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	96.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	59.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	97.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	60.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	98.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	61.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	99.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	62.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	100.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	63.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	101.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	64.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	102.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	65.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	103.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	66.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	104.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	67.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	105.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	68.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	106.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	69.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	107.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	70.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	108.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	71.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	109.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	72.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	110.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	73.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	111.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	74.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	112.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	75.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	113.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	76.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	114.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

PART 2

Sources of Stress in Teaching Profession

Directions: Below are given a number of statements which are related to you and your profession. The statement indicate the amount of *stress* you experience as a teacher. Please read each statement and decide how far you agree with each statement. Separate response sheet is supplied to you for marking your agreement/disagreement. Mark your agreement/disagreement by putting a 'X' mark in the circle provided below your decision against the number of each statement. Kindly attempt all statements. Your responses will be *kept confidential* and used for research purpose. *See the example.*

Example:

I feel tension due to the increased number of students in the class

Strongly Agree	Agree	Un-Decided	Dis-Agree	Strongly DisAgree
○	⊗	○	○	○

Please cooperate

1. I feel tension due to the increased number of students in the class.
2. The increase or decrease in the number of students in the class adversely affect teaching.
3. Although the poor condition of the institutional building is brought to the attention of authorities, no favourable action is taken.
4. Institution has no satisfactory toilet facilities for the teachers and students.
5. Even though I practiced extreme disciplinary measures, the misbehaviour of students do not come to an end.
6. Students of my class have the habit of making noise by talking during teaching.
7. It is not possible to use the material supplied by Government and other agencies to increase the quality of learning.

8. Ineffective competence development programmes for teachers to increase the expertise negatively influence teaching.
9. Work load is high due to the lack of sufficient number of teachers.
10. A number of instances to get bored doing nothing even though I have classes to engage.
11. New curriculum and syllabus totally changes the teaching-learning process in the class.
12. Lack of mastery and expertise to teach many subjects makes teaching more tough.
13. I am dissatisfied in decentralising institutional responsibilities to teachers other than the traditional style.
14. Often I have to teach subjects and perform differently for which I am not trained/experienced.
15. Parents of the students demand to teach well the possible part of the subject even though the syllabus is not finished totally.
16. I am always busy due to my healthy participation in curricular and co-curricular activities of the institution.
17. I have no time to help my colleagues because of my work load.
18. Failure in effective teaching is caused by the substandard in-service training/orientation/refresher courses.
19. I feel difficulty to take up administrative duties due to the lack of experience.
20. Parents will not react when they are informed about the misbehaviour of students.
21. I believe the causes of quarrel with some teachers are themselves.
22. I feel irritated in some of the actions taken by the Head/Principal.
23. Office staff of the institution view teachers including myself as enemies.
24. Parents often blame teachers in Parent-Teacher meetings.
25. Due to the behaviour of teachers, students are disinterested in learning.
26. I cannot handle problem students by love and affection.

27. I do not feel desperated not in reaching the highest position in teaching.
28. I feel boredom in continuing in the profession of teaching for a long time.
29. Even though I have higher qualifications, I will not get responsibilities/ duties correspond to my qualifications.
30. There is no job security because of students seek admission to courses offered by other institutions.
31. Head/Principal decides all administrative issues.
32. I cannot understand the ways to lift the standard and values of the institutions as compelled by authorities.
33. My expectation about the standard and values of the institution differ greatly from the real standard and values.
34. The new curriculum/syllabus totally changed the atmosphere of the institution.
35. I feel difficulty of the new curriculum/syllabus which exploits the teachers ability totally.
36. I have disagreement in certain aspects of the new curriculum/syllabus.
37. I cannot adopt my style of teaching due to the compulsion of authorities to teach traditionally.
38. Head/Principal thinks that it is unfair to talk friendly with other teachers.
39. The opinion of Head/Principal about the standard of my teaching always insufficient.
40. I cannot justify the extreme control of teachers by the Head/Principal.
41. My institution has expert teachers in certain areas of new curriculum/syllabus/new teaching methods.
42. Teaching become a formality after I take responsibilities of my family due to the unexpected death of father/mother/wife/husband.
43. Even the Head/Principal expects quality and punctuality in teaching from me, often it is not possible due to personal problems.
44. My family expenditure is beyond the limit of the salary I get.

45. Since my husband/wife work far away from home, I have more responsibilities of the family.
46. I am worried about my children since my husband/wife working in two different places/institutions.
47. I am not interested to discuss institutional problems with my husband/wife who is not a teacher.
48. My husband/wife has no interest in matters related to teaching.
49. My husband/wife always complaints about my inability to attend family matters due to the over involvement in teaching.
50. I am so confused when I think about how to handle family and institutional problems at a home.

- Thank you for cooperating with this Research Project -

Appendix II A
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
TEACHER STRESS INVENTORY
(FINAL)

Dr.P.K. Sudheesh Kumar **Anilkumar.A.K.**

PART I
വ്യക്തിപരമായ വിവരങ്ങൾ

നിങ്ങളെക്കുറിച്ചും, നിങ്ങളുടെ അധ്യാപക ജോലിയെ സംബന്ധിച്ചുമുള്ള വ്യക്തിപരമായ വിവരങ്ങൾ സത്യസന്ധമായി രേഖപ്പെടുത്തണമെന്ന് വിനീതമായി അഭ്യർത്ഥിക്കുന്നു. ഇത്തരം വിവരങ്ങൾ ഈ ഗവേഷണത്തിന് അത്യാവശ്യമാണ്. അവ പേരുകൾ രേഖപ്പെടുത്താതെയും രഹസ്യ സ്വഭാവത്തോടെയും സൂക്ഷിക്കുന്നതാണ്. ഉചിതമായ വസ്തുതകൾ വിട്ടുപോകാതെ ബാക്കിയുള്ളവ തന്നിരിക്കുന്ന ബോക്സുകളിൽ '✓' അടയാളപ്പെടുത്തിയും ദയവായി രേഖപ്പെടുത്തുക.

1. പുരുഷൻ സ്ത്രീ
2. വയസ്സ് വർഷം
3. വൈവാഹികനില വിവാഹംകഴിഞ്ഞു ഒറ്റയ്ക്ക്
 വിവാഹബന്ധം വേർപെടുത്തി
 വേർപിരിഞ്ഞു വിധവ
4. നിങ്ങളെ ആശ്രയിക്കുന്നവരുടെ എണ്ണം
5. നിങ്ങളുടെ ജീവിതപങ്കാളി ജോലിക്ക് പോകുന്നുണ്ടോ? ഉണ്ട് ഇല്ല
6. നിങ്ങളുടെ ജീവിതപങ്കാളി ടീച്ചർ ആണോ? അതെ അല്ല
7. വിദ്യാഭ്യാസ യോഗ്യത
 ടി.ടി.സി. ബി.എഡ്. പ്രീ-ഡിഗ്രി ഗ്രാജുവേഷൻ
 പോസ്റ്റ് ഗ്രാജുവേഷൻ പി.എച്ച്.ഡി. മറ്റുള്ളവ
8. ഉദ്യോഗപദവി :
9. ഈ പദവിയിൽ നിങ്ങൾ എത്ര വർഷം ജോലി ചെയ്തു.
10. സ്ഥിരം താൽക്കാലികം
11. ആകെ അധ്യാപനപരിചയം വർഷം
12. ഏതു ക്ലാസ്സുകളിൽ പഠിപ്പിക്കുന്നു. പ്രൈമറി
 സെക്കന്ററി
 ഹയർ സെക്കന്ററി
13. നിങ്ങളുടെ സ്ഥാപനം സ്ഥിതി ചെയ്യുന്ന സ്ഥലം കോർപ്പറേഷൻ
 മുനിസിപ്പാലിറ്റി
 പഞ്ചായത്ത്
14. ജില്ല
15. മാനേജ്മെന്റ് പ്രൈവറ്റ്
 ഗവൺമെന്റ്
16. ഒരുദിവസം എത്ര മണിക്കൂർ പ്രവൃത്തിചെയ്യും മണിക്കൂർ
17. നിങ്ങളുടെ ക്ലാസ്സിലെ ഏകദേശ കുട്ടികളുടെ എണ്ണം

Part II
Sources of Stress in Teaching Profession

നിർദ്ദേശങ്ങൾ : നിങ്ങളെ സംബന്ധിച്ചും നിങ്ങളുടെ ജോലിയെ സംബന്ധിച്ചുമുള്ള കുറെ വാചകങ്ങളാണ് താഴെ കൊടുത്തിട്ടുള്ളത്. ഒരു ടീച്ചർ എന്ന നിലയിൽ നിങ്ങൾ അനുഭവിക്കുന്ന ടെൻഷനെയെന്ന് വാചകങ്ങൾ സൂചിപ്പിക്കുന്നത്. ഓരോ വാചകവും വായിച്ചതിനുശേഷം നിങ്ങൾ എത്രമാത്രം ആ വാചകത്തിൽ പറഞ്ഞിരിക്കുന്ന കാര്യങ്ങളോട് യോജിക്കുന്നു എന്ന് തീരുമാനിക്കുക. നിങ്ങളുടെ യോജിപ്പും വിയോജിപ്പും രേഖപ്പെടുത്തുന്നതിനായി പ്രത്യേകം Response Sheet തന്നിട്ടുണ്ട്. നിങ്ങളുടെ യോജിപ്പോ വിയോജിപ്പോ ഓരോ വാചകങ്ങളുടെയും ചോദ്യ നമ്പറുകൾക്കു നേരെ കൊടുത്തിട്ടുള്ള വൃത്തത്തിൽ 'X' മാർക്ക് ചെയ്ത് രേഖപ്പെടുത്തുക. ദയവായി എല്ലാ വാചകങ്ങളോടും പ്രതികരിക്കുക. നിങ്ങളുടെ പ്രതികരണങ്ങൾ രഹസ്യമായി സൂക്ഷിക്കുന്നതും ഗവേഷണ ആവശ്യത്തിനുമാത്രം ഉപയോഗിക്കുന്നതുമാണ്. ഒരു ഉദാഹരണം നോക്കുക.

ഉദാഹരണം :

ക്ലാസ്സിൽ കൂടുതൽ കുട്ടികൾ ഉള്ളതിനാൽ എനിക്ക് ടെൻഷൻ അനുഭവപ്പെടാറുണ്ട്.

ശക്തമായി യോജിക്കുന്നു	യോജിക്കുന്നു	തീരുമാനം ഇല്ല	വിയോജിക്കുന്നു	ശക്തിയായി വിയോജിക്കുന്നു
O	X	O	O	O

ദയവായി സഹകരിക്കുക

- 1 ക്ലാസ്സിൽ ധാരാളം കുട്ടികൾ ഉള്ളതു കാരണം എനിക്ക് ടെൻഷൻ അനുഭവപ്പെടാറുണ്ട്.
- 2 ക്ലാസ്സിൽ കുട്ടികളുടെ എണ്ണം കൂടുന്നതും കുറയുന്നതും അദ്ധ്യാപനത്തെ പ്രതികൂലമായി ബാധിക്കുന്നു.
- 3 സ്ഥാപനത്തിലെ കെട്ടിടങ്ങളുടെ മോശമായ അവസ്ഥ അധികാരികളുടെ ശ്രദ്ധയിൽപ്പെടുത്തിയിട്ടും അതിനനുകൂലമായ ഒരു നടപടിയും ഉണ്ടായിട്ടില്ല.
- 4 സ്ഥാപനത്തിൽ തൃപ്തികരമായ ടോയ്ലറ്റ് സൗകര്യം അദ്ധ്യാപകർക്കോ കുട്ടികൾക്കോ ഇല്ല.
- 5 ഞാൻ വിവിധ തരത്തിലുള്ള അച്ചടക്ക നടപടികൾ ക്ലാസ്സിൽ എടുത്തിട്ടും, കുട്ടികളുടെ മോശമായ പെരുമാറ്റത്തിന് ഒരു മാറ്റവും ഉണ്ടാകുന്നില്ല.
- 6 എന്റെ ക്ലാസ്സിലെ കുട്ടികൾക്ക്, പഠിപ്പിക്കുന്ന സമയത്ത് സംസാരിച്ച് ശബ്ദമുണ്ടാക്കുന്ന സ്വഭാവമുണ്ട്.
- 7 അദ്ധ്യാപന നിലവാരം ഉയർത്തുന്നതിന് വേണ്ടി ഗവൺമെന്റും മറ്റ് ഏജൻസികളും വിതരണം ചെയ്ത സാധനങ്ങൾ ഉപയോഗപ്പെടുത്തുവാൻ എനിക്ക് സാധിക്കുന്നില്ല.
- 8 അദ്ധ്യാപനത്തിലെ പ്രാഗത്ഭ്യം വർദ്ധിപ്പിക്കുന്നതിനു വേണ്ടി നടത്തുന്ന ഫലപ്രദമല്ലാത്ത പ്രോഗ്രാമുകൾ അദ്ധ്യാപനത്തെത്തന്നെ പ്രതികൂലമായി ബാധിക്കുന്നു.
- 9 ആവശ്യത്തിന് അദ്ധ്യാപകർ ഇല്ലാത്തതിനാൽ ജോലിഭാരം കൂടുതലാണ്.
- 10 ക്ലാസ്സുകൾ ഉണ്ടായിരുന്നപ്പോഴും ഒന്നും ചെയ്യാനില്ലാതെ പല സന്ദർഭങ്ങളിലും ഞാൻ വെറുതെ ഇരുന്നു ബോറടിച്ചിട്ടുണ്ട്.
- 11 പുതിയ പാഠ്യപദ്ധതിയും സിലബസ്സും ക്ലാസുകളിലെ പഠിപ്പിക്കലും - പഠിക്കലും ആകെ മാറ്റിയിരിക്കുന്നു.

- 12 പല വിഷയങ്ങളും പഠിപ്പിക്കുന്നതിനുള്ള പ്രാവീണ്യത്തിന്റെയും വൈദഗ്ധ്യത്തിന്റെയും അഭാവം അധ്യാപനം കൂടുതൽ ബുദ്ധിമുട്ടുള്ളതാക്കിത്തീർക്കുന്നു.
- 13 പണ്ടുമുതൽക്കേയുള്ള രീതിയിൽ നിന്ന് വ്യത്യസ്തമായി സ്ഥാപനത്തിലെ ചുമതലകൾ വിവിധ അധ്യാപകരിലേക്ക് വികേന്ദ്രീകരിക്കുന്നതിൽ ഞാൻ അസംതൃപ്തനാണ്.
- 14 പലപ്പോഴും എനിക്ക് പരിശീലനമോ, പരിചയമോ ഇല്ലാത്ത വിഷയങ്ങളും പഠിപ്പിക്കേണ്ടി വന്നിട്ടുണ്ട്.
- 15 സിലബസ്സ് മുഴുവനായി തീരാത്ത സമയത്തും സാധ്യതയുള്ള പാഠഭാഗങ്ങൾ നന്നായി പഠിപ്പിക്കുവാൻ രക്ഷിതാക്കളും കുട്ടികളും ആവശ്യപ്പെടാറുണ്ട്.
- 16 സ്ഥാപനത്തിലെ പാഠ്യവും പാഠ്യേതരവുമായ പ്രവൃത്തികളിൽ എന്റെ സജീവ പങ്കാളിത്തം ഉണ്ടാകുന്നതിനാൽ ഞാൻ എപ്പോഴും തിരക്കിലാണ്.
- 17 എന്റെ ജോലിഭാരം കാരണം എന്റെ സഹപ്രവർത്തകരെ സഹായിക്കുവാൻ എനിക്ക് സമയം കിട്ടാറില്ല.
- 18 നിലവാരം കുറഞ്ഞ ഇൻസർവ്വീസ് ട്രെയിനിങ്ങ് / ഓറിയന്റേഷൻ / റിഫ്രഷർ കോഴ്സുകളാണ് ഫലപ്രദമായ അധ്യാപനത്തിന്റെ പരാജയത്തിനു കാരണം.
- 19 പരിചയക്കുറവു കാരണം ഭരണപരമായ ചുമതലകൾ ഏറ്റെടുക്കുവാൻ എനിക്ക് ബുദ്ധിമുട്ട് അനുഭവപ്പെടാറുണ്ട്.
- 20 കുട്ടികളുടെ അച്ചടക്കമില്ലാത്ത പെരുമാറ്റത്തെക്കുറിച്ച് അറിയിച്ചാലും രക്ഷിതാക്കൾ പ്രതികരിക്കാറില്ല.
- 21 ചില അധ്യാപകരോടുള്ള വഴക്കിനു കാരണം അവർതന്നെ ഉണ്ടാക്കിയിട്ടുള്ളതാണെന്ന് ഞാൻ വിശ്വസിക്കുന്നു.
- 22 മേലധികാരി എടുത്ത ചില നടപടികൾ എന്നെ അലോസരപ്പെടുത്തിയിട്ടുണ്ട്.
- 23 എന്നെയും മറ്റുള്ള അധ്യാപകരെയും ഓഫീസിലുള്ളവർ ശത്രുക്കൾ ആയിട്ടാണ് കാണുന്നത്.
- 24 അധ്യാപക-രക്ഷാകർതൃ സമിതി മീറ്റിങ്ങുകളിൽ പലപ്പോഴും രക്ഷിതാക്കൾ അധ്യാപകരെ കുറ്റപ്പെടുത്താറുണ്ട്.
- 25 അധ്യാപകരുടെ സ്വഭാവം കാരണം വിദ്യാർത്ഥികൾക്ക് പഠനകാര്യങ്ങളിൽ താല്പര്യമില്ല.
- 26 പ്രശ്നങ്ങൾ ഉണ്ടാക്കുന്ന കുട്ടികളെ സ്നേഹത്തോടെയും വാത്സല്യത്തോടെയും കൈകാര്യം ചെയ്യുവാൻ എനിക്ക് കഴിയാറില്ല.
- 27 അധ്യാപനജോലിയിലെ ഉന്നത സ്ഥാനങ്ങളിൽ എത്താൻ കഴിയാത്തതിൽ എനിക്ക് നിരാശയില്ല.
- 28 ദീർഘകാലമായി അധ്യാപനജോലിയിൽ തുടരുന്നത് എന്നിൽ മടുപ്പുള്ളവാക്കിയിട്ടുണ്ട്.
- 28 എനിക്ക് ഉയർന്ന യോഗ്യതയുണ്ടെങ്കിലും, എന്റെ യോഗ്യതയ്ക്കനുസരിച്ച് ഉത്തരവാദിത്വമോ / ചുമതലയോ എനിക്ക് ലഭിക്കുകയില്ല.
- 30 മറ്റു സ്ഥാപനങ്ങൾ വാഗ്ദാനം ചെയ്യുന്ന കോഴ്സുകളിലേക്ക് കുട്ടികൾ പോകുന്നതിനാൽ ജോലിയ്ക്ക് യാതൊരു സുരക്ഷിതത്വവുമില്ല.
- 31 എല്ലാ ഭരണപരമായ കാര്യങ്ങളും മേലധികാരിയാണ് തീരുമാനിക്കുന്നത്.
- 32 മേലധികാരികൾ നിഷ്കർഷിക്കുന്നതുപോലെ സ്ഥാപനത്തിന്റെ നിലയും മുഖ്യവും ഉയർത്തുവാനുള്ള വഴികൾ എനിക്ക് മനസ്സിലാവാറില്ല.
- 33 സ്ഥാപനത്തിന്റെ നിലവാരത്തെക്കുറിച്ചും മുഖ്യത്തെക്കുറിച്ചും എനിക്ക് ഉണ്ടായിരുന്ന ധാരണയും, യഥാർത്ഥനിലവാരവും മുഖ്യവും തമ്മിൽ വലിയ വ്യത്യാസമുണ്ട്.

APPENDIX II B

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

TEACHER STRESS INVENTORY
RESPONSE SHEET (FINAL)

Item No.	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Item No.	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	26.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	27.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	28.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	29.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	30.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	31.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	32.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	33.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	34.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	35.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	36.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	37.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	38.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	39.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	40.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	41.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	42.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	43.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	44.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	45.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	46.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	47.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	48.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	49.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	50.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX II C

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

TEACHER STRESS INVENTORY
RESPONSE SHEET (FINAL)

ക്രമ നമ്പർ	അല്ലെങ്കിൽ യാവുന്നത്ര	യാവുന്നത്ര	നിശ്ചയിച്ചിട്ടില്ല	യാവുന്നത്ര	അല്ലെങ്കിൽ വിലയിരുത്തൽ	ക്രമ നമ്പർ	അല്ലെങ്കിൽ യാവുന്നത്ര	യാവുന്നത്ര	നിശ്ചയിച്ചിട്ടില്ല	യാവുന്നത്ര	അല്ലെങ്കിൽ വിലയിരുത്തൽ
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	26.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	27.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	28.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	29.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	30.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	31.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	32.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	33.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	34.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	35.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	36.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	37.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	38.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	39.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	40.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	41.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	42.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	43.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	44.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	45.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	46.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	47.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	48.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	49.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	50.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix III
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
SCALE OF JOB SATISFACTION
(DRAFT)

Dr. P.K. Sudheesh Kumar

Mr. Anilkumar A.K.

The objective of this scale is to know about your job satisfaction as a teacher. Therefore knowledge of your feeling and attitudes about your job is necessary. Following pages contain a number of statements on various aspects of your job. Each statement carries five responses viz., Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree. Please read each statement carefully and indicate your attitude by ticking only one alternative that is the most appropriate for you. Separate response sheet is attached with this scale. Mark your response by putting a 'X' mark in the circle given against the question number in the response sheet. See the example:

Example:

I have a good relationship with my students.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
○	⊗	○	○	○

There are no right or wrong answers. Whatever reflects your personal views best is the right answer for us. Please be sure to answer all questions, without omitting any.

Before starting to answer please furnish some personal information. The informations are very crucial to the purpose of this research.

Your answer will be treated as strictly confidential and for the research purpose only.

1. Name (optional)
2. Name of School (optional) 3. District
4. Age Years 5. Sex M F
6. Marital Status 7. No. of Dependents
8. Educational Qualifications
9. Present Designation 10. Working experience in this post
11. Permanent/Temporary 12. Total Service
13. Level at which you are teaching

Primary
Secondary
Higher Secondary

 14. Type of Management

Government
Private
15. Locale of Institution

Corporation
Municipality
Panchayath
16. Whether your partner working or not? Yes No
17. Whether your partner a teacher or not? Yes No
18. Approximate number of students IN your class :

1. I am worried due to parent's disinterest in the study matters of their children.
2. I find it easy to control the students in the classroom due to their parent's interest in the study matters of their children.
3. Excessive interest of the parents in the studies of their children has often created difficulties for me.
4. I am aware that the parents are not very concerned about the future of the child.
5. I am happy that a good majority of the parents are really concerned about the studies of their children, and so they frequently visit the school to monitor the progress made by the student.
6. There is a good participation by the parents in the PTA meetings.
7. Parents, often criticize many programmes undertaken by the teachers which is taken for the better future of the students.
8. Parents often blame the teachers by believing only what their children say.
9. With regard to the future of the students, I have a good relationship with parents.
10. Whenever I tried sincerely for the well being of the students I was recognised by the parents.
11. The parents are not willing to accept the ability of the teacher as their children are provided with private tuition.
12. Whenever the children perform well in the examination due to my sincere efforts, the credit is often taken up by the parents themselves or by the tuition teacher.
13. I am dissatisfied with the student's low standard of learning.
14. I like teaching because there are bright students in the class.
15. I find teaching easy as the students have a considerable knowledge of what they have been taught in the lower classes.
16. I am worried about the fact that a good majority of students show lack of interest in academic subjects.

17. I am interested in teaching because the students show much interest in academic subjects.
18. Lack of interest from the part of students in teaching has affected my interest in teaching also.
19. I am satisfied about the behaviour of students towards me.
20. I am dissatisfied with the conduct between boys and girls.
21. I am sorry about the misconduct of students towards some teachers.
22. I have a good relationship with my students.
23. I am like a brother/sister to my students.
24. I am frustrated about the degradation of teacher pupil relationship.
25. I receive less salary than what I really deserve.
26. I am satisfied when my salary is compared to those jobs which require the same qualification as myself.
27. My work load and the salary I receive do not tally in any way.
28. My other fringe benefits (HRA/Medical/DA etc.) are not attractive.
29. We get enough casual, earned and medical leave.
30. Allowances applicable to other government employees are also extended to a teacher.
31. There is a wide gap between my salary and my economic requirements.
32. I am happy with the cash I receive in hand after all the deduction.
33. In this changed circumstances it is difficult to maintain a good standard of living with the salary I receive.
34. We get enough pension at retirement.
35. We are apprehensive whether we would get our pension regularly after retirement.
36. The security due to pension makes me optimistic about my life after retirement.
37. There are adequate washing and toilet facilities in the school.

38. We have a well furnished staff room.
39. We are sorry that the school does not have good library.
40. I feel troubled because my working place is far away from my native place.
41. There are enough means of conveyance from my place of work to my residence.
42. During rainy season journey to my working place is difficult.
43. Government usually take care in arranging the infrastructural facilities while implementing educational reforms.
44. Often I feel difficulties to carry on with the class due to noise from the neighbouring classes.
45. Lack of enough furniture for the students has created dissatisfaction within myself.
46. We have well light and airy class rooms.
47. The Government has a positive attitude towards the teachers.
48. I am unhappy that the government has not set apart any amount for maintenance of school buildings, which is not the case with other set ups.
49. I am satisfied with the promotion based on seniority.
50. I am worried about the promotion system based merely on seniority and not by considering qualifications.
51. I am unhappy about a junior teacher, who is more educated than me, getting a promotion.
52. Training programmes are sufficient to understand the modern tendencies in the field of knowledge.
53. We have undergone training programmes to improve our teaching skills.
54. I feel that entry into teaching profession has made me go intellectually backward.
55. I took to teaching profession as I could not get any other occupation.
56. If I have given the opportunity to select an occupation from a number of choices, I would definitely give first preference to teaching profession.

57. Teaching in the same class for a long time creates monotony among the teachers.
58. Teaching is a good job when compared to other jobs.
59. My profession is suitable to my personality.
60. Often I feel indifferent to my profession.
61. Even though I am aware about my responsibilities, the circumstances in the school is not allowing me to fulfil it.
62. I feel happy to work together with my colleagues.
63. My colleagues respect my opinion.
64. Due to groupism a friendly atmosphere is absent in the staff room.
65. My colleagues are neither co-operative nor supportive.
66. My colleagues help me to increase the level of satisfaction in my job.
67. Due to the lack of co-operation among ourselves, we find it difficult to take up some common ventures, which need wholehearted co-operation.
68. There is good communication between me and my colleagues.
69. I do not share my problems with my colleagues.
70. Lack of communication results in many misunderstanding among the teachers.
71. The way my co-workers get along with each other is satisfactory.
72. I am unhappy about the attitude of some teachers to the students.
73. The friendly attitude of the teachers creates a family atmosphere in the school.
74. The Heads/Principal does not give reasons for any change in my work.
75. Heads/Principal adopts an autocratic approach in the administration of the school.
76. I am satisfied in the method of decision making by the Head/Principal, during the times of troubles.
77. I am satisfied with the way in which my Head/Principal behaves to the teachers.

78. The Head/Principal is impartial to all of us.
79. I am unhappy over the fact that the Head/Principal is an exacting person.
80. The Head/Principal gives contradictory orders from time to time.
81. I have faith in the competency of my Head/Principal in taking decisions.
82. I am unhappy about the fact that the Head/Principal is unwilling to take many of us into confidence.
83. The Head/Principal finds time to listen to my personal grievances and help me with possible solutions.
84. The authorities are interested in understanding the problems of the teachers.
85. I feel sorry for not having built a healthy relationship with the authorities.
86. The authorities encourage me to come forward with my suggestions to raise the standard of the job.
87. While taking decisions, authorities will consider my suggestions also.
88. Due to inferiority complex, the Head/Principal does not consult us, while decisions are taken.
89. My talents and activities are often disregarded by the principal/head.
90. I am unhappy about the undue criticism raised by the Head/Principal about my teaching.
91. Entrusting me with various extracurricular activities gives me the idea that my talents are recognised by the Head/Principal.
92. I do not feel complete satisfaction in my job.
93. I feel that I am successful.
94. Teaching plays a major role in creating a feeling of self-attainment.
95. This job does not offer me the inspiration to bring the best out of me.
96. This job offers me the inscription to attain recognition in he society through successful performance.
97. Often I am not interested to rectify my limitations in my teaching every year.

98. My profession is not giving the chance to handle variety of duties.
99. Taking the same lessons very year brings monotony.
100. The presence of new students every year brings novelty in teaching.
101. Teaching does not give me the opportunity to utilize my talents effectively.
102. I get enough opportunities to bring up the students according to my abilities.
103. I am satisfied with the opportunity to make use of the teaching methods and teaching aids developed by myself while taking classes.
104. My work activities generally are determined and scheduled by myself.
105. My job offers little freedom in implementing my decisions.
106. Teaching profession is offering opportunities to take leadership.
107. I am dissatisfied with the position given by the society for the teachers.
108. I often feel that through teaching I am involved in some sort of a social service.
109. Teaching plays a prominent role in attaining fame and position in the society.
110. My work activities consist mainly of things that I like to do.
111. Collection of money in the school has greatly dissatisfied me.
112. I am forced to perform certain activities against my conscience due to pressure from the authorities.
113. Since my responsibilities are clearly defined I feel lack of work overload.
114. When compare to other jobs, teaching profession has more responsibilities.

Appendix III A

**UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION**

**SCALE OF JOB SATISFACTION
(DRAFT)**

Dr. P.K. Sudheesh Kumar	Anilkumar. A.K.
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ഒരു ടീച്ചർ എന്ന നിലയിൽ നിങ്ങൾക്കു ജോലിയിൽ നിന്നു ലഭിയ്ക്കുന്ന സംതൃപ്തിയെക്കുറിച്ച് അറിയുകയാണ് ഈ സ്കെയിലിന്റെ ഉദ്ദേശ്യം. അതിനാൽ നിങ്ങൾക്കു ജോലിയെക്കുറിച്ചുള്ള മനോഭാവവും, ജോലിയിൽ ഉണ്ടായിട്ടുള്ള അനുഭവങ്ങളും അറിയേണ്ടത് അത്യാവശ്യമാണ്. അദ്ധ്യാപകരുടെ ജോലിയുമായി ബന്ധപ്പെട്ട വിവിധ ഘടകങ്ങളെക്കുറിച്ച് പരാമർശിക്കുന്ന വാചകങ്ങളാണ് ഇനിയുള്ള പേജുകളിൽ കൊടുത്തിട്ടുള്ളത്. ഓരോ വാചകങ്ങളോടും അഞ്ചു തരത്തിൽ പ്രതികരിക്കാവുന്നതാണ്. അതായത്, ഞാൻ ശക്തമായി യോജിക്കുന്നു, യോജിക്കുന്നു, തീരുമാനമില്ല, വിധേയമാകുന്നു, ശക്തമായി വിധേയമാകുന്നു എന്നിങ്ങനെ. ഓരോ വാചകങ്ങളും ശ്രദ്ധിച്ച് വായിച്ചതിനുശേഷം നിങ്ങളുടെ അഭിപ്രായങ്ങൾ തന്നിട്ടുള്ള ഉത്തരക്കടലാസ്സിൽ അതാതു ചോദ്യ നമ്പരുകൾക്കു താഴെ കൊടുത്തിട്ടുള്ള വൃത്തത്തിൽ 'X' ചെയ്ത് കൊണ്ട് രേഖപ്പെടുത്തുക.

ഉദാഹരണത്തിന് :

കുട്ടികൾക്ക് പഠനകാര്യങ്ങളിൽ താല്പര്യം ഉണ്ട്.

ശക്തമായി യോജിക്കുന്നു	യോജിക്കുന്നു	തീരുമാനമില്ല	വിധേയമാകുന്നു	ശക്തിയായി വിധേയമാകുന്നു
○	⊗	○	○	○

ശരിയായ ഉത്തരങ്ങളോ തെറ്റായ ഉത്തരങ്ങളോ ഈ വാചകങ്ങൾക്കില്ല. നിങ്ങളുടെ കാഴ്ചപ്പാട് പ്രകാരമുള്ള പ്രതികരണമാണ് ഏറ്റവും ശരിയായ ഉത്തരം. ദയവായി എല്ലാം ചോദ്യങ്ങൾക്കും ഉത്തരം നൽകണമെന്ന് അപേക്ഷിക്കുന്നു.

നിങ്ങളുടെ വ്യക്തിപരമായ ചില വിവരങ്ങൾ കൂടി ഈ ഗവേഷണത്തിന് അനിവാര്യമാണ്. നിങ്ങൾ നൽകുന്ന വിവരങ്ങൾ പരമരഹസ്യമായി സൂക്ഷിക്കുന്നതും അതോടൊപ്പം ഗവേഷണ ആവശ്യത്തിനു മാത്രമായി ഉപയോഗിക്കുന്നതുമാണ്.

1. പേര്
(നിർബന്ധമില്ല)
2. സ്കൂളിന്റെ പേര്
(നിർബന്ധമില്ല)
3. ജില്ല
4. വയസ്സ് വർഷം
5. ആൺ / പെൺ
6. വൈവാഹികനില
7. നിങ്ങളെ ആശ്രയിക്കുന്നവരുടെ എണ്ണം
8. വിദ്യാഭ്യാസ യോഗ്യത
9. ഇപ്പോഴത്തെ ഉദ്യോഗസ്ഥനില
10. ഈ പദവിയിൽ നിങ്ങൾ എത്രവർഷം ജോലി ചെയ്തു
11. സ്ഥിരം / താൽക്കാലികം
12. ആകെ അദ്ധ്യാപനപരിചയം (വർഷത്തിൽ)
13. നിങ്ങൾ പഠിപ്പിക്കുന്ന ക്ലാസ്സ്

പ്രൈമറി
സെക്കന്ററി
ഹയർ സെക്കന്ററി
14. മാനേജ്മെന്റിന്റെ സ്വഭാവം

പ്രൈവറ്റ്
ഗവൺമെന്റ്
15. സ്ഥാപനം സ്ഥിതിചെയ്യുന്നത്

കോർപ്പറേഷനിൽ
മുനിസിപ്പാലിറ്റിയിൽ
പഞ്ചായത്തിൽ
16. നിങ്ങളുടെ ജീവിത പങ്കാളി ജോലിക്ക് പോകുന്നുണ്ടോ? ഉണ്ട് / ഇല്ല
17. നിങ്ങളുടെ ജീവിതപങ്കാളി ടീച്ചർ ആണോ? അതെ / അല്ല
18. നിങ്ങളുടെ ക്ലാസ്സിലെ കുട്ടികളുടെ ഏകദേശ എണ്ണം

- 1 രക്ഷിതാക്കൾക്ക് അവരുടെ കുട്ടികളുടെ പഠനകാര്യങ്ങളിൽ താല്പര്യം ഇല്ലാത്തത് എന്നെ വിഷമിപ്പിക്കാറുണ്ട്.
- 2 രക്ഷിതാക്കൾക്ക് കുട്ടികളുടെ പഠനകാര്യങ്ങളിൽ താല്പര്യം ഉള്ളതുകൊണ്ട് എനിക്ക് അവരെ ക്ലാസ്സിൽ നിയന്ത്രിക്കുവാൻ കൂടുതൽ പ്രയത്നിക്കേണ്ടി വരാറില്ല.
- 3 കുട്ടികളുടെ പഠനകാര്യങ്ങളിൽ രക്ഷിതാക്കൾക്കുള്ള അമിത താല്പര്യം പലപ്പോഴും എനിക്ക് വിഷമം സൃഷ്ടിച്ചിട്ടുണ്ട്.
- 4 കുട്ടികളുടെ ഭാവിയെക്കുറിച്ച് രക്ഷിതാക്കൾക്ക് ഉത്തരവാദിത്വബോധമില്ല എന്ന് എനിക്കറിയാം.
- 5 ഭൂരിഭാഗം രക്ഷിതാക്കൾക്കും കുട്ടികളുടെ ഭാവിയെക്കുറിച്ച് ഉത്തരവാദിത്വബോധം ഉള്ളതിനാൽ അവർ ഇടയ്ക്കിടെ സ്കൂളിൽ വന്ന് കുട്ടികളുടെ പഠനവിവരങ്ങൾ അന്വേഷിക്കുന്നതിൽ എനിക്ക് സംതൃപ്തിയുണ്ട്.
- 6 അധ്യാപക - രക്ഷാകർത്തൃ സമിതി മീറ്റിങ്ങുകളിൽ ഭൂരിഭാഗം രക്ഷിതാക്കളും താല്പര്യപൂർവ്വം പങ്കെടുക്കാറുണ്ട്.
- 7 വിദ്യാർത്ഥികളുടെ നന്മയ്ക്കായി ഞാൻ ചെയ്യുന്ന പലകാര്യങ്ങളും രക്ഷിതാക്കൾ വിമർശിക്കാറുണ്ട്.
- 8 കുട്ടികൾ പറയുന്ന കാര്യങ്ങൾ മാത്രം വിശ്വസിച്ചു പലപ്പോഴും രക്ഷിതാക്കൾ അധ്യാപകനെ കുറ്റപ്പെടുത്തുന്നു.
- 9 വിദ്യാർത്ഥികളുടെ ഭാവിയെക്കുറിച്ച് എനിക്ക് രക്ഷിതാക്കളുമായി നല്ല ബന്ധമാണ് ഉള്ളത്.
- 10 ഞാൻ കുട്ടികൾക്കു വേണ്ടി ആത്മാർത്ഥമായി പ്രവർത്തിച്ചപ്പോഴെല്ലാം രക്ഷിതാക്കളുടെ അംഗീകാരം എനിക്കു ലഭിച്ചിട്ടുണ്ട്.
- 11 ഭൂരിഭാഗം കുട്ടികൾക്കും ഇന്ന് പ്രൈവറ്റ് സ്കൂളുകൾ ഉള്ളതിനാൽ രക്ഷിതാക്കൾ അധ്യാപകന്റെ കഴിവുകളെ അംഗീകരിക്കുവാൻ വിമുഖത കാണിക്കുന്നു.
- 12 ഞാൻ എത്ര നല്ലവണ്ണം പഠിപ്പിച്ചാലും, കുട്ടികൾക്ക് നല്ലമാർക്ക് കിട്ടുമ്പോൾ, അതിന്റെ അംഗീകാരം രക്ഷിതാക്കൾ സ്വയം ഏറ്റെടുക്കുകയോ, സ്കൂളുകൾ ടീച്ചർക്കു നൽകുകയോ ചെയ്യുന്നു.
- 13 വിദ്യാർത്ഥികളുടെ താഴ്ന്ന പഠനനിലവാരത്തിൽ ഞാൻ അസംതൃപ്തനാണ്.
- 14 സമർത്ഥരായ കുട്ടികൾ ക്ലാസ്സിൽ ഉള്ളതിനാൽ അധ്യാപനം എനിക്ക് ഇഷ്ടമാണ്.
- 15 കുട്ടികൾക്ക് താഴ്ന്ന ക്ലാസ്സുകളിൽ പഠിപ്പിച്ച കാര്യങ്ങളെക്കുറിച്ച് ഏകദേശ ധാരണ ഉള്ളതിനാൽ എനിക്കവരെ പഠിപ്പിക്കുവാൻ ഇഷ്ടമാണ്.
- 16 ഭൂരിഭാഗം വിദ്യാർത്ഥികളും പഠനകാര്യങ്ങളിൽ താല്പരരല്ലാത്തത് എന്നെ വിഷമിപ്പിക്കുന്നുണ്ട്.
- 17 പഠനകാര്യങ്ങളിൽ കുട്ടികൾക്ക് താല്പര്യം ഉള്ളതുകൊണ്ട് അവരെ പഠിപ്പിക്കാൻ എനിക്കും താല്പര്യമാണ്.
- 18 കുട്ടികളുടെ പഠനകാര്യങ്ങളിലെ താല്പര്യമില്ലായ്മ എന്റെ പഠിപ്പിക്കുവാനുള്ള താല്പര്യത്തെ ബാധിച്ചിട്ടുണ്ട്.
- 19 കുട്ടികൾക്ക് എന്നോടുള്ള പെരുമാറ്റത്തിൽ ഞാൻ സംതൃപ്തനാണ്.
- 20 ആൺകുട്ടികളും പെൺകുട്ടികളും തമ്മിലുള്ള പെരുമാറ്റത്തിൽ ഞാൻ സംതൃപ്തനല്ല.
- 21 കുട്ടികൾ ചില അധ്യാപകരോട് മോശമായി പെരുമാറുന്നതിൽ എനിക്ക് ദുഃഖമുണ്ട്.
- 22 ഞാനും എന്റെ വിദ്യാർത്ഥികളും തമ്മിൽ നല്ല ബന്ധമാണുള്ളത്.
- 23 എന്റെ വിദ്യാർത്ഥികൾക്ക് ഞാനൊരു മുതിർന്ന സഹോദരനെ / സഹോദരിയെ പോലെയാണ്.
- 24 അധ്യാപക-വിദ്യാർത്ഥി ബന്ധം ഏറ്റവും മോശമായ നിലയിലേക്ക് തരം താണതിൽ എനിക്ക് വിഷമമുണ്ടായിട്ടുണ്ട്.

- 25 ഞാൻ അർഹിക്കുന്നതിലും കുറവാണ് എനിക്കു കിട്ടുന്ന ശമ്പളം.
- 26 തുല്യയോഗ്യത ആവശ്യമുണ്ടെങ്കിൽ മറ്റു ജോലികൾക്കു കിട്ടുന്ന ശമ്പളവുമായി താരതമ്യം ചെയ്യുമ്പോൾ എന്റെ ശമ്പളത്തിൽ ഞാൻ സന്തുഷ്ടനാണ്.
- 27 എന്റെ ജോലിഭാരവും ശമ്പളവും തമ്മിൽ യാതൊരു ബന്ധവും എനിക്കു കാണുവാൻ സാധിക്കുന്നില്ല.
- 28 എനിക്കു ലഭിക്കുന്ന മറ്റു ശമ്പള ആനുകൂല്യങ്ങൾ ആകർഷകമല്ല (HRA / Medical / DA etc)
- 29 ഞങ്ങൾക്ക് പര്യാപ്തമായ കാഷ്ചൽ ലീവ്, ഏൺഡ് ലീവ്, മെഡിക്കൽ ലീവ് എന്നിവ ഉണ്ട്.
- 30 മറ്റു സർക്കാർ ഉദ്യോഗസ്ഥർക്കു ലഭിക്കുന്ന ആനുകൂല്യങ്ങൾ അധ്യാപകർക്കും ലഭിക്കുന്നുണ്ട്.
- 31 എന്റെ സാമ്പത്തികാവശ്യങ്ങളും എനിക്കു ലഭിക്കുന്ന ശമ്പളവും തമ്മിൽ വലിയ വ്യത്യാസമുണ്ട്.
- 32 എല്ലാ പിടുത്തങ്ങളും കഴിഞ്ഞ് എന്റെ കൈയിൽ കിട്ടുന്ന ശമ്പളം എനിക്ക് സംതൃപ്തി തരുന്നില്ല.
- 33 ഇന്നത്തെ മാറിയ ജീവിതസാഹചര്യത്തിൽ എനിക്കു ലഭിച്ചുകൊണ്ടിരിക്കുന്ന ശമ്പളം കൊണ്ട് ഒരു വിധം നന്നായി ജീവിക്കുക ബുദ്ധിമുട്ടുള്ള കാര്യമാണ്.
- 34 ഞങ്ങൾ വിരമിക്കുമ്പോൾ പര്യാപ്തമായ പെൻഷൻ ഞങ്ങൾക്കു ലഭിക്കുന്നു.
- 35 വിരമിച്ചു കഴിഞ്ഞാൽ ശരിയാവുന്ന പെൻഷൻ ലഭിക്കുമോ എന്ന ആശങ്ക എനിക്കുണ്ട്.
- 36 പെൻഷൻ സമ്പ്രദായം ഉള്ളതുകൊണ്ട് വിരമിച്ചു കഴിഞ്ഞാൽ ഉള്ള ജീവിതസ്ഥിതിയെക്കുറിച്ച് എനിക്ക് ശ്രദ്ധപുരട്ടി വിശ്വസമാണ് ഉള്ളത്.
- 37 പ്രാഥമികാവശ്യങ്ങൾക്കു പര്യാപ്തമായ സൗകര്യങ്ങൾ സ്കൂളിലുണ്ട്.
- 38 ഞങ്ങൾക്ക് നല്ല സജ്ജീകരണങ്ങളോടുകൂടിയ ഒരു സ്റ്റാഫ് മുറി ഉണ്ട്.
- 39 ഞങ്ങളുടെ സ്കൂളിൽ പര്യാപ്തമായ ഒരു ലൈബ്രറി ഇല്ലാത്തത് വിഷമം സൃഷ്ടിക്കുന്നു.
- 40 എന്റെ സ്വന്തം നാട്ടിൽനിന്നും ജോലി സ്ഥലം വളരെ ദൂരെ ആയതിനാൽ എനിക്ക് വിഷമം തോന്നാറുണ്ട്.
- 41 എന്റെ ജോലിസ്ഥലത്തേക്ക് ഞാൻ താമസിക്കുന്ന സ്ഥലത്തുനിന്നും പര്യാപ്തമായ യാത്രാസൗകര്യങ്ങൾ ഉണ്ട്.
- 42 മഴക്കാലങ്ങളിൽ എന്റെ ജോലിസ്ഥലത്തേക്കുള്ള യാത്ര ബുദ്ധിമുട്ടു നിറഞ്ഞതാണ്.
- 43 വിദ്യാഭ്യാസ പരിഷ്കാരങ്ങൾ നടപ്പാക്കുമ്പോൾ, അവയ്ക്കു വേണ്ട സൗകര്യങ്ങളും ഒരുക്കുന്നതിൽ ഗവൺമെന്റ് ശ്രദ്ധിക്കാറുണ്ട്.
- 44 മറ്റു ക്ലാസ്സിലെ കുട്ടികളുടെ ശബ്ദം കാരണം പലപ്പോഴും എനിക്ക് ക്ലാസ്സെടുക്കുന്നതിൽ അസംതൃപ്തി ഉണ്ടായിട്ടുണ്ട്.
- 45 ക്ലാസ്സിൽ കുട്ടികൾക്ക് ഇരിക്കാൻ മതിയായ ഡസ്കും ബഞ്ചും ഇല്ലാത്തതിൽ എനിക്ക് അസന്തുഷ്ടിയുണ്ട്.
- 46 നല്ലവണ്ണം കാറ്റും വെളിച്ചവും കിട്ടുന്ന തരത്തിലുള്ള ക്ലാസ്സ് മുറികളാണ് ഞങ്ങൾക്കുള്ളത്.
- 47 ഗവൺമെന്റിന് അധ്യാപകരോട് അനുഭാവപൂർണ്ണമായ മനോഭാവമാണ് ഉള്ളത്.
- 48 ഗവൺമെന്റ്, മറ്റു സ്ഥാപനങ്ങൾക്ക് കൊടുക്കുന്ന തുകപോലെ സ്കൂൾ കെട്ടിടങ്ങളുടെ അറ്റകുറ്റ പണികൾക്കു തുക വകയിരുത്താത്തതിൽ ഞാൻ അത്യപ്തനാണ്.
- 49 സീനിയോറിറ്റി അടിസ്ഥാനമാക്കിയുള്ള ഉദ്യോഗക്കയറ്റത്തിൽ ഞാൻ സംതൃപ്തനാണ്.

Y

- 50 സീനിയോറിറ്റി മാത്രം മാനദണ്ഡമാക്കി കഴിവില്ലാത്തവർക്ക് ഉദ്യോഗക്കയറ്റം നൽകുന്നതിൽ എനിക്ക് നിരാശ തോന്നിയിട്ടുണ്ട്.
- 51 എന്നേക്കാൾ ജൂനിയറായ ഒരു വ്യക്തിക്ക് അധികവിദ്യാഭ്യാസ യോഗ്യതയുള്ളതുകൊണ്ട് ലഭിച്ച ഉദ്യോഗക്കയറ്റം എന്നിൽ അസംതൃപ്തി ഉണ്ടാക്കിയിട്ടുണ്ട്.
- 52 വിജ്ഞാനമേഖലയിൽ ഉണ്ടായിക്കൊണ്ടിരിക്കുന്ന പുതിയ പ്രവണതകളെക്കുറിച്ച് അറിയാൻ പരിശീലന പരിപാടികൾ പര്യാപ്തമാണ്.
- 53 അധ്യാപനത്തിനു വേണ്ട കഴിവുകൾ അഭിവൃദ്ധിപ്പെടുത്തുന്നതിനുള്ള പരിശീലന പരിപാടികൾ ഞങ്ങൾക്കു ലഭിച്ചിട്ടുണ്ട്.
- 54 അധ്യാപകജോലിയിൽ പ്രവേശിച്ചതു മൂലം ബുദ്ധിപരമായി പിന്നോക്കം പോയതായി എന്നിങ്ങനെ വേർതിരിച്ചിട്ടുണ്ട്.
- 55 മറ്റുജോലികൾ ലഭിക്കാതിരുന്നതുകൊണ്ടു മാത്രമാണ് ഞാൻ അധ്യാപകജോലിക്കു തയ്യാറായത്.
- 56 അനേകം ജോലികളിൽ നിന്ന് ഒന്നു തിരഞ്ഞെടുക്കേണ്ടി വന്നാൽ ഞാൻ ആദ്യം തിരഞ്ഞെടുക്കുന്നത് അധ്യാപകജോലി ആയിരിക്കും.
- 57 വളരെക്കാലം ഒരേ ക്ലാസ്സിൽ തന്നെ പഠിപ്പിക്കേണ്ടി വരുന്നത് അധ്യാപകരിൽ മടുപ്പുളവാക്കുന്നു.
- 58 മറ്റുജോലികളുമായി താരതമ്യം ചെയ്യുമ്പോൾ അധ്യാപകജോലി ഏറ്റവും നല്ല ഒരു ജോലിയാണ്.
- 59 എന്റെ ജോലി എന്റെ വ്യക്തിത്വത്തിന് യോജിച്ചതാണ്.
- 60 ഞാൻ ചെയ്യുന്ന പ്രവൃത്തികളോട് പലപ്പോഴും ഒരു നിർവ്വീകാരത എന്നിങ്ങനെ വേർതിരിച്ചിട്ടുണ്ട്.
- 61 എന്റെ സഹപ്രവർത്തകരുമൊന്നിച്ച് പ്രവൃത്തി ചെയ്യുന്നത് സന്തോഷം തരുന്നൂ.
- 62 എന്റെ അഭിപ്രായങ്ങൾ സഹപ്രവർത്തകർ മാനിക്കാറുണ്ട്.
- 63 സ്റ്റാഫ് റൂമിൽ പല കാരണങ്ങൾ കൊണ്ടും ഞങ്ങൾ വ്യത്യസ്ത ഗ്രൂപ്പുകൾ ആയതിനാൽ സൗഹൃദാന്തരീക്ഷമല്ല നിലവിലുള്ളത്.
- 64 എന്റെ സഹപ്രവർത്തകർ പരസ്പരം സഹായിക്കുന്നവരോ പിന്തുണയ്ക്കുന്നവരോ അല്ല.
- 65 എന്റെ ജോലിയിലെ സംതൃപ്തി വർദ്ധിപ്പിക്കുന്നതിന് സഹപ്രവർത്തകർ സഹായകമാകുന്നു.
- 66 ഞങ്ങൾ തമ്മിൽ പരസ്പരസഹകരണം കുറവായതിനാൽ കൂട്ടായ പ്രവർത്തനം ആവശ്യമുള്ള കാര്യങ്ങൾ ഏറ്റെടുത്തു നടത്തുവാൻ ബുദ്ധിമുട്ടുണ്ട്.
- 67 ഞാനും സഹപ്രവർത്തകരും തമ്മിൽ പരസ്പരം നല്ലവണ്ണം ആശയവിനിമയം നടത്താറുണ്ട്.
- 68 ഞാൻ എന്റെ പ്രശ്നങ്ങൾ ഒന്നും തന്നെ മറ്റു സഹപ്രവർത്തകരുമായി പങ്കുവയ്ക്കാറില്ല.
- 69 അധ്യാപകർ തമ്മിൽ ആശയവിനിമയം കുറവായതു കാരണം പല തെറ്റിദ്ധാരണകളും ഉണ്ടാകാറുണ്ട്.
- 70 എന്റെ സഹപ്രവർത്തകർ പരസ്പരം സംതൃപ്തികരമായ രീതിയിൽ ആണ് പെരുമാറുന്നത്.
- 71 കൂട്ടികളോടുള്ള ചില അധ്യാപകരുടെ പെരുമാറ്റം എന്നിൽ അസംതൃപ്തി ഉളവാക്കിയിട്ടുണ്ട്.
- 72 അധ്യാപകർ തമ്മിലുള്ള സൗഹാർദ്ദപൂർണ്ണമായ പെരുമാറ്റം കൊണ്ട് സ്കൂൾ മറ്റൊരു വീടു പോലെ എന്നിങ്ങനെ തോന്നിയിട്ടുണ്ട്.
- 73 എന്റെ ജോലിയിൽ വരുത്തുന്ന മാറ്റങ്ങളെക്കുറിച്ച് മേലധികാരി ഒരു കാരണവും പറയാറില്ല.

- 74 സ്കൂളിന്റെ ഭരണപരമായ കാര്യങ്ങളിൽ മേലധികാരിക്ക് ഒരു ഏകാധിപത്യ സമീപനമാണ് ഉള്ളത്.
- 75 പ്രശ്നങ്ങൾ ഉണ്ടാകുമ്പോൾ ധൈര്യപൂർവ്വം നടപടിയെടുക്കുന്ന മേലധികാരിയുടെ രീതിയിൽ എനിക്ക് സംതൃപ്തിയുണ്ട്.
- 76 എന്റെ മേലധികാരിയുടെ അധ്യാപകരോടുള്ള പെരുമാറ്റത്തിൽ ഞാൻ സംതൃപ്തനാണ്.
- 77 അധ്യാപകരോടൊപ്പം മേലധികാരി പക്ഷഭേദമില്ലാതെ പെരുമാറുന്നു.
- 78 മേലധികാരി വളരെ കർക്കശ സ്വഭാവമുള്ള ആളായതിനാൽ ഞാൻ അസംതൃപ്തനാണ്.
- 79 മേലധികാരി പലപ്പോഴും പരസ്പരവിരുദ്ധങ്ങളായ നിർദ്ദേശങ്ങൾ തരുന്നു.
- 80 തീരുമാനങ്ങൾ എടുക്കുന്ന കാര്യത്തിൽ മേലധികാരിയുടെ കഴിവിൽ എനിക്കു വിശ്വാസമുണ്ട്.
- 81 മേലധികാരി തങ്ങളിൽ പലരെയും വിശ്വാസത്തിൽ എടുക്കാത്തതിൽ ഞാൻ അസംതൃപ്തനാണ്.
- 82 എന്റെ വ്യക്തിപരമായ പ്രശ്നങ്ങളും പരാതികളും കേൾക്കുന്നതിനും പരിഹരിക്കുന്നതിനും മേലധികാരി താല്പര്യവും സമയവും കണ്ടെത്താറുണ്ട്.
- 83 അധ്യാപകരുടെ പ്രശ്നങ്ങൾ മനസ്സിലാക്കുന്നതിന് മേലധികാരിയ്ക്ക് താല്പര്യമുണ്ട്.
- 84 മേലധികാരിയുമായി നല്ലൊരു വ്യക്തിബന്ധം ഉണ്ടാക്കുവാൻ കഴിയാത്തതിൽ എനിക്ക് വിഷമമുണ്ട്.
- 85 ജോലിയുടെ ഗുണനിലവാരം ഉയർത്തുന്നതിന് വേണ്ട നിർദ്ദേശങ്ങൾ നൽകുന്നതിന് മേലധികാരി എന്നെ പ്രോത്സാഹിപ്പിക്കാറുണ്ട്.
- 86 മേലധികാരി തീരുമാനങ്ങൾ എടുക്കുമ്പോൾ എന്റെ അഭിപ്രായങ്ങൾ പരിഗണിക്കാറുണ്ട്.
- 87 പ്രിൻസിപ്പാളിന് അപകർഷതാബോധം ഉള്ളതുകൊണ്ട് തീരുമാനങ്ങൾ എടുക്കുമ്പോൾ ഞങ്ങളോട് ചോദിക്കാറില്ല.
- 88 എന്റെ കഴിവുകളെയും പ്രവർത്തനങ്ങളെയും പലപ്പോഴും പ്രിൻസിപ്പാൾ അംഗീകരിക്കാറില്ല.
- 89 ഞാൻ പഠിപ്പിക്കുന്നതിനെക്കുറിച്ച് പ്രിൻസിപ്പാൾ നിരന്തരം വിമർശനങ്ങൾ ഉന്നയിക്കുന്നതിനാൽ ഞാൻ സന്തോഷവാനല്ല.
- 90 പാഠ്യേതരകാര്യങ്ങളിൽ പലതിനും എന്നെ ചുമതലപ്പെടുത്തുന്നതിൽ നിന്നും മേലധികാരി എന്റെ കഴിവുകളെ അംഗീകരിക്കുന്നതായി ഞാൻ മനസ്സിലാക്കിയിട്ടുണ്ട്.
- 91 എന്റെ തൊഴിൽ പൂർണ്ണമായ സംതൃപ്തി എനിക്കു നൽകുന്നില്ല.
- 92 അധ്യാപന ജോലിയിൽ ഞാൻ വിജയിച്ചിട്ടുണ്ടെന്ന് എനിക്ക് ബോധ്യപ്പെട്ടിട്ടുണ്ട്.
- 93 ജീവിതത്തിൽ പലതും നേടാൻ കഴിഞ്ഞു എന്ന തോന്നൽ ഉളവാക്കുന്നതിന് അധ്യാപനജോലി പ്രധാന പങ്കു വഹിച്ചിട്ടുണ്ട്.
- 94 എന്റെ ഏറ്റവും മികച്ച പ്രവർത്തനങ്ങൾക്ക് ഈ തൊഴിൽ പ്രചോദനമാകുന്നു.
- 95 തൊഴിലിൽ കൂടുതൽ വിജയങ്ങൾ നേടി സമൂഹത്തിന്റെ അംഗീകാരം നേടാൻ അധ്യാപനജോലി എനിക്കു പ്രചോദനം നൽകിയിട്ടുണ്ട്.
- 96 ഓരോ വർഷവും പഠിപ്പിക്കുന്ന കാര്യങ്ങളിൽ ഉണ്ടാകുന്ന എന്റെ ന്യൂനതകൾ കണ്ടെത്തി പരിഹരിക്കുവാൻ എനിക്കു തോന്നാറില്ല.

- 97 വിവിധ തരത്തിലുള്ള ചുമതലകൾ ചെയ്യുന്നതിനുള്ള അവസരം എന്റെ ജോലി തരുന്നില്ല.
- 98 എല്ലാവർഷവും ഒരേ പാഠഭാഗം തന്നെ പഠിപ്പിക്കേണ്ടി വരുന്നതിൽ ഞാൻ അസംതൃപ്തനാണ്.
- 99 എല്ലാവർഷവും കുട്ടികൾ മാറിമാറി വരുന്നതുകൊണ്ട് എനിക്കു ക്ലാസ്സെടുക്കുമ്പോൾ പുതുതമ തോന്നാറുണ്ട്.
- 100 എന്റെ കഴിവുകൾ ഫലപ്രദമായി ഉപയോഗിക്കുവാനുള്ള അവസരം അധ്യാപകജോലി തരുന്നില്ല.
- 101 എന്റെ കഴിവുകൾക്കനുസരിച്ച് വിദ്യാർത്ഥികളെ ഉയർത്തിക്കൊണ്ടു വരാനുള്ള ധാരാളം അവസരം എനിക്കു ലഭിക്കുന്നുണ്ട്.
- 102 ഞാൻ സ്വയം വികസിപ്പിച്ചെടുത്ത അധ്യാപനരീതി, മോഡലുകൾ തുടങ്ങിയവ കുട്ടികളെ പഠിപ്പിക്കുമ്പോൾ ഉപയോഗിക്കുവാൻ കഴിഞ്ഞതിൽ എനിക്ക് സംതൃപ്തിയുണ്ട്.
- 103 എന്റെ പ്രവർത്തനങ്ങൾ പൊതുവേ ഞാൻ സ്വയം തീരുമാനിക്കുകയും നടപ്പിലാക്കുകയുമാണ് ചെയ്യുന്നത്.
- 104 സ്വന്തം തീരുമാനങ്ങൾ നടപ്പിലാക്കുന്നതിനുള്ള അവസരം അധ്യാപകജോലിയിൽ കുറവാണ്.
- 105 നേതൃത്വം ഏറ്റെടുക്കാൻ പറയുന്ന അവസരങ്ങൾ അധ്യാപനജോലി പ്രദാനം ചെയ്യുന്നില്ല.
- 106 അധ്യാപകർക്ക് സമൂഹം നൽകുന്ന പദവിയിൽ ഞാൻ അസംതൃപ്തനാണ്.
- 107 കുട്ടികളെ പഠിപ്പിക്കുന്നതിലൂടെ ഞാൻ സാമൂഹ്യസേവനം ചെയ്യുന്നു എന്ന് എനിക്ക് പലപ്പോഴും തോന്നിയിട്ടുണ്ട്.
- 108 സമൂഹത്തിൽ പദവിയും പ്രശസ്തിയും നേടുന്നതിന് അധ്യാപനജോലി നല്ലൊരു പങ്ക് വഹിക്കുന്നു.
- 109 ഞാൻ ചെയ്യുവാൻ ഇഷ്ടപ്പെടുന്ന കാര്യങ്ങൾ മാത്രമേ എന്റെ ജോലിയിൽ അധികവും ഉൾക്കൊണ്ടിട്ടുള്ളൂ.
- 110 സ്കൂളിൽ നടത്തുന്ന പല പിരിവുകളും എനിൽ അസംതൃപ്തി ഉണ്ടാക്കിയിട്ടുണ്ട്.
- 111 പലകാര്യങ്ങളും ഇഷ്ടമല്ലാതിരുന്നിട്ടും മേലധികാരിയുടെ നിർബന്ധത്തിനു വഴങ്ങി എനിക്കു ചെയ്യേണ്ടി വന്നിട്ടുണ്ട്.
- 112 ജോലിയിൽ എന്റെ ഉത്തരവാദിത്വങ്ങൾ വ്യക്തമായി നിർവ്വചിച്ചിട്ടുള്ളതിനാൽ ജോലിഭാരം എനിക്കു കുറവാണ്.
- 113 മറ്റേതു ജോലിയെക്കാളും അധ്യാപനജോലിയിൽ ഉത്തരവാദിത്വം കൂടുതലാണ്.
- 114 എന്റെ ഉത്തരവാദിത്വങ്ങളെപ്പറ്റി എനിക്കു പൂർണ്ണബോധ്യമുണ്ടെങ്കിലും അവ നിറവേറ്റാൻ പറയുന്ന സാഹചര്യം സ്കൂളിൽ ഇല്ല.

APPENDIX III B

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF JOB SATISFACTION
RESPONSE SHEET (DRAFT)

Item No.	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Item No.	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Item No.	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	39.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	77.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	40.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	78.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	41.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	79.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	42.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	80.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	43.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	81.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	44.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	82.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	45.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	83.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	46.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	84.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	47.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	85.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	48.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	86.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	49.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	87.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	50.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	88.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	51.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	89.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	52.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	90.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	53.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	91.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	54.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	92.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	55.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	93.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	56.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	94.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	57.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	95.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	58.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	96.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	59.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	97.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	60.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	98.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	61.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	99.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	62.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	100.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	63.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	101.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	64.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	102.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	65.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	103.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	66.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	104.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	67.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	105.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	68.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	106.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	69.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	107.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	70.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	108.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	71.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	109.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	72.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	110.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	73.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	111.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	74.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	112.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	75.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	113.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	76.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	114.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX III C

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF JOB SATISFACTION
RESPONSE SHEET (DRAFT)

(ക്ര. നമ്പർ)	സംസ്കാരത്തിന്റെ നിലവാരം	തൊഴിലിന്റെ തരം	തൊഴിലിന്റെ സ്ഥലം	തൊഴിലിന്റെ സമയം	തൊഴിലിന്റെ വേതനം	(ക്ര. നമ്പർ)	സംസ്കാരത്തിന്റെ നിലവാരം	തൊഴിലിന്റെ തരം	തൊഴിലിന്റെ സ്ഥലം	തൊഴിലിന്റെ സമയം	തൊഴിലിന്റെ വേതനം	(ക്ര. നമ്പർ)	സംസ്കാരത്തിന്റെ നിലവാരം	തൊഴിലിന്റെ തരം	തൊഴിലിന്റെ സ്ഥലം	തൊഴിലിന്റെ സമയം	തൊഴിലിന്റെ വേതനം
1.	○	○	○	○	○	39.	○	○	○	○	○	77.	○	○	○	○	○
2.	○	○	○	○	○	40.	○	○	○	○	○	78.	○	○	○	○	○
3.	○	○	○	○	○	41.	○	○	○	○	○	79.	○	○	○	○	○
4.	○	○	○	○	○	42.	○	○	○	○	○	80.	○	○	○	○	○
5.	○	○	○	○	○	43.	○	○	○	○	○	81.	○	○	○	○	○
6.	○	○	○	○	○	44.	○	○	○	○	○	82.	○	○	○	○	○
7.	○	○	○	○	○	45.	○	○	○	○	○	83.	○	○	○	○	○
8.	○	○	○	○	○	46.	○	○	○	○	○	84.	○	○	○	○	○
9.	○	○	○	○	○	47.	○	○	○	○	○	85.	○	○	○	○	○
10.	○	○	○	○	○	48.	○	○	○	○	○	86.	○	○	○	○	○
11.	○	○	○	○	○	49.	○	○	○	○	○	87.	○	○	○	○	○
12.	○	○	○	○	○	50.	○	○	○	○	○	88.	○	○	○	○	○
13.	○	○	○	○	○	51.	○	○	○	○	○	89.	○	○	○	○	○
14.	○	○	○	○	○	52.	○	○	○	○	○	90.	○	○	○	○	○
15.	○	○	○	○	○	53.	○	○	○	○	○	91.	○	○	○	○	○
16.	○	○	○	○	○	54.	○	○	○	○	○	92.	○	○	○	○	○
17.	○	○	○	○	○	55.	○	○	○	○	○	93.	○	○	○	○	○
18.	○	○	○	○	○	56.	○	○	○	○	○	94.	○	○	○	○	○
19.	○	○	○	○	○	57.	○	○	○	○	○	95.	○	○	○	○	○
20.	○	○	○	○	○	58.	○	○	○	○	○	96.	○	○	○	○	○
21.	○	○	○	○	○	59.	○	○	○	○	○	97.	○	○	○	○	○
22.	○	○	○	○	○	60.	○	○	○	○	○	98.	○	○	○	○	○
23.	○	○	○	○	○	61.	○	○	○	○	○	99.	○	○	○	○	○
24.	○	○	○	○	○	62.	○	○	○	○	○	100.	○	○	○	○	○
25.	○	○	○	○	○	63.	○	○	○	○	○	101.	○	○	○	○	○
26.	○	○	○	○	○	64.	○	○	○	○	○	102.	○	○	○	○	○
27.	○	○	○	○	○	65.	○	○	○	○	○	103.	○	○	○	○	○
28.	○	○	○	○	○	66.	○	○	○	○	○	104.	○	○	○	○	○
29.	○	○	○	○	○	67.	○	○	○	○	○	105.	○	○	○	○	○
30.	○	○	○	○	○	68.	○	○	○	○	○	106.	○	○	○	○	○
31.	○	○	○	○	○	69.	○	○	○	○	○	107.	○	○	○	○	○
32.	○	○	○	○	○	70.	○	○	○	○	○	108.	○	○	○	○	○
33.	○	○	○	○	○	71.	○	○	○	○	○	109.	○	○	○	○	○
34.	○	○	○	○	○	72.	○	○	○	○	○	110.	○	○	○	○	○
35.	○	○	○	○	○	73.	○	○	○	○	○	111.	○	○	○	○	○
36.	○	○	○	○	○	74.	○	○	○	○	○	112.	○	○	○	○	○
37.	○	○	○	○	○	75.	○	○	○	○	○	113.	○	○	○	○	○
38.	○	○	○	○	○	76.	○	○	○	○	○	114.	○	○	○	○	○

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF JOB SATISFACTION
(FINAL)

Dr. P.K. Sudheesh Kumar

Mr. Anilkumar A.K.

The objective of this scale is to know about your job satisfaction as a teacher. Therefore knowledge of your feeling and attitudes about your job is necessary. Following pages contain a number of statements on various aspects of your job. Each statement carries five responses viz., Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree. Please read each statement carefully and indicate your attitude by ticking only one alternative that is the most appropriate for you. Separate response sheet is attached with this scale. Mark your response by putting a 'X' mark in the circle given against the question number in the response sheet. See the example:

Example:

I have a good relationship with my students.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
○	<input checked="" type="radio"/>	○	○	○

There are no right or wrong answers. Whatever reflects your personal views best is the right answer for us. Please be sure to answer all questions, without omitting any.

Before starting to answer please furnish some personal information. The informations are very crucial to the purpose of this research.

Your answer will be treated as strictly confidential and for the research purpose only.

1. Name (optional)
2. Name of School (optional) 3. District
4. Age Years 5. Sex M F
6. Marital Status 7. No. of Dependents
8. Educational Qualifications
9. Present Designation 10. Working experience in this post
11. Permanent/Temporary 12. Total Service
13. Level at which you are teaching

Primary
Secondary
Higher Secondary

 14. Type of Management

Government
Private
15. Locale of Institution

Corporation
Municipality
Panchayath
16. Whether your partner working or not? Yes

No	<input type="text"/>
----	----------------------
17. Whether your partner a teacher or not? Yes

No	<input type="text"/>
----	----------------------
18. Approximate number of students IN your class :

1. I find it easy to control the students in the classroom due to their parent's interest in the study matters of their children.
2. Excessive interest of the parents in the studies of their children has often created difficulties for me.
3. I am aware that the parents are not very concerned about the future of the child.
4. There is a good participation by the parents in the PTA meetings.
5. Parents often blame the teachers by believing only what their children say.
6. With regard to the future of the students, I have a good relationship with parents.
7. Whenever I tried sincerely for the well being of the students I was recognised by the parents.
8. The parents are not willing to accept the ability of the teacher as their children are provided with private tuition.
9. I like teaching because there are bright students in the class.
10. I find teaching easy as the students have a considerable knowledge of what they have been taught in the lower classes.
11. I am interested in teaching because the students show much interest in academic subjects.
12. Lack of interest from the part of students in teaching has affected my interest in teaching also.
13. I am satisfied about the behaviour of students towards me.
14. I am dissatisfied with the conduct between boys and girls.
15. I have a good relationship with my students.
16. I am like a brother/sister to my students.
17. I am satisfied when my salary is compared to those jobs which require the same qualification as myself.
18. My work load and the salary I receive do not tally in any way.
19. My other fringe benefits (HRA/Medical/DA etc.) are not attractive.
20. Allowances applicable to other government employees are also extended to a teacher.
21. I am happy with the cash I receive in hand after all the deduction.
22. In this changed circumstances it is difficult to maintain a good standard of living with the salary I receive.
23. We get enough pension at retirement.

24. The security due to pension makes me optimistic about my life after retirement.
25. There are adequate washing and toilet facilities in the school.
26. We are sorry that the school does not have good library.
27. There are enough means of conveyance from my place of work to my residence.
28. Lack of enough furniture for the students has created dissatisfaction within myself.
29. We have well light and airy class rooms.
30. The Government has a positive attitude towards the teachers.
31. I am satisfied with the promotion based on seniority.
32. I am unhappy about a junior teacher, who is more educated than me, getting a promotion.
33. Training programmes are sufficient to understand the modern tendencies in the field of knowledge.
34. I feel that entry into teaching profession has made me go intellectually backward.
35. I took to teaching profession as I could not get any other occupation.
36. If I have given the opportunity to select an occupation from a number of choices, I would definitely give first preference to teaching profession.
37. My profession is suitable to my personality.
38. Often I feel indifferent to my profession.
39. I feel happy to work together with my colleagues.
40. Due to groupism a friendly atmosphere is absent in the staff room.
41. My colleagues help me to increase the level of satisfaction in my job.
42. Due to the lack of co-operation among ourselves, we find it difficult to take up some common ventures, which need wholehearted co-operation.
43. There is good communication between me and my colleagues.
44. Lack of communication results in many misunderstanding among the teachers.
45. The way my co-workers get along with each other is satisfactory.
46. The friendly attitude of the teachers creates a family atmosphere in the school.
47. Heads/Principal adopts an autocratic approach in the administration of the school.
48. I am satisfied in the method of decision making by the Head/Principal, during the times of troubles.
49. The Head/Principal is impartial to all of us.

50. I am unhappy over the fact that the Head/Principal is an exacting person.
51. The Head/Principal gives contradictory orders from time to time.
52. I have faith in the competency of my Head/Principal in taking decisions.
53. The authorities are interested in understanding the problems of the teachers.
54. I feel sorry for not having built a healthy relationship with the authorities.
55. While taking decisions, authorities will consider my suggestions also.
56. Due to inferiority complex, the Head/Principal does not consult us, while decisions are taken.
57. My talents and activities are often disregarded by the principal/head.
58. Entrusting me with various extracurricular activities gives me the idea that my talents are recognised by the Head/Principal.
59. I do not feel complete satisfaction in my job.
60. Teaching plays a major role in creating a feeling of self-attainment.
61. This job does not offer me the inspiration to bring the best out of me.
62. This job offers me the inscription to attain recognition in he society through successful performance.
63. My profession is not giving the chance to handle variety of duties.
64. The presence of new students every year brings novelty in teaching.
65. Teaching does not give me the opportunity to utilize my talents effectively.
66. I get enough opportunities to bring up the students according to my abilities.
67. My job offers little freedom in implementing my decisions.
68. Teaching profession is offering opportunities to take leadership.
69. I am dissatisfied with the position given by the society for the teachers.
70. Teaching plays a prominent role in attaining fame and position in the society.
71. My work activities consist mainly of things that I like to do.
72. I am forced to perform certain activities against my conscience due to pressure from the authorities.
73. When compare to other jobs, teaching profession has more responsibilities.
74. Even though I am aware about my responsibilities, the circumstances in the school is not allowing me to fulfil it.

Appendix IV A

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF JOB SATISFACTION
(FINAL)

Dr. P.K. Sudheesh Kumar Anilkumar. A.K.

ഒരു ടീച്ചർ എന്ന നിലയിൽ നിങ്ങൾക്കു ജോലിയിൽ നിന്നു ലഭിക്കുന്ന സംതൃപ്തിയെക്കുറിച്ച് അറിയുകയാണ് ഈ സ്കെയിലിന്റെ ഉദ്ദേശ്യം. അതിനാൽ നിങ്ങൾക്കു ജോലിയെക്കുറിച്ചുള്ള മനോഭാവവും, ജോലിയിൽ ഉണ്ടായിട്ടുള്ള അനുഭവങ്ങളും അറിയേണ്ടത് അത്യാവശ്യമാണ്. അദ്ധ്യാപകരുടെ ജോലിയുമായി ബന്ധപ്പെട്ട വിവിധ ഘടകങ്ങളെക്കുറിച്ച് പരാമർശിക്കുന്ന വാചകങ്ങളാണ് ഇനിയുള്ള പേജുകളിൽ കൊടുത്തിട്ടുള്ളത്. ഓരോ വാചകങ്ങളോടും അഞ്ചു തരത്തിൽ പ്രതികരിക്കാവുന്നതാണ്. അതായത്, ഞാൻ ശക്തമായി യോജിക്കുന്നു, യോജിക്കുന്നു, തീരുമാനമില്ല, വിധേയമാകുന്നു, ശക്തമായി വിധേയമാകുന്നു എന്നിങ്ങനെ. ഓരോ വാചകങ്ങളും ശ്രദ്ധിച്ച് വായിച്ചതിനുശേഷം നിങ്ങളുടെ അഭിപ്രായങ്ങൾ തന്നിട്ടുള്ള ഉത്തരക്കടലാസ്സിൽ അതതു ചോദ്യ നമ്പരുകൾക്കു താഴെ കൊടുത്തിട്ടുള്ള വൃത്തത്തിൽ 'X' ചെയ്ത് കൊണ്ട് രേഖപ്പെടുത്തുക.

ഉദാഹരണത്തിന് :

കുട്ടികൾക്ക് പഠനകാര്യങ്ങളിൽ താല്പര്യം ഉണ്ട്.

ശക്തമായി യോജിക്കുന്നു	യോജിക്കുന്നു	തീരുമാനമില്ല	വിധേയമാകുന്നു	ശക്തിയായി വിധേയമാകുന്നു
0	X	0	0	0

ശരിയായ ഉത്തരങ്ങളോ തെറ്റായ ഉത്തരങ്ങളോ ഈ വാചകങ്ങൾക്കില്ല. നിങ്ങളുടെ കാഴ്ചപ്പാട് പ്രകാരമുള്ള പ്രതികരണമാണ് ഏറ്റവും ശരിയായ ഉത്തരം. ദയവായി എല്ലാം ചോദ്യങ്ങൾക്കും ഉത്തരം നൽകണമെന്ന് അപേക്ഷിക്കുന്നു.

നിങ്ങളുടെ വ്യക്തിപരമായ ചില വിവരങ്ങൾ കൂടി ഈ ഗവേഷണത്തിന് അനിവാര്യമാണ്. നിങ്ങൾ നൽകുന്ന വിവരങ്ങൾ പരമരഹസ്യമായി സൂക്ഷിക്കുന്നതും അതോടൊപ്പം ഗവേഷണ ആവശ്യത്തിനു മാത്രമായി ഉപയോഗിക്കുന്നതുമാണ്.

1. പേര് (നമുവയ്യെ)
2. ന്കുളിയെ (നമുവയ്യെ)
3. ജില്ല
4. വയസ്സ് വർഷം
5. ആൺ / പെൺ
6. വൈവാഹികനല്ല
7. ന്കുളിയെ ആൺകുളിയെ വയസ്സ് വർഷം
8. തിഗയെ വയസ്സ്
9. ജോലിയെ തിഗയെ വയസ്സ്
10. ജോലിയെ തിഗയെ വയസ്സ്
11. ന്കുളിയെ / തിഗയെ വയസ്സ്
12. ആൺകുളിയെ (വയസ്സ്)
13. ന്കുളിയെ വയസ്സ് വയസ്സ് വയസ്സ്
14. തിഗയെ വയസ്സ് വയസ്സ്
15. ന്കുളിയെ വയസ്സ് വയസ്സ് വയസ്സ്
16. ന്കുളിയെ വയസ്സ് വയസ്സ് വയസ്സ്
17. ന്കുളിയെ വയസ്സ് വയസ്സ്
18. ന്കുളിയെ വയസ്സ് വയസ്സ്

- 1 രക്ഷിതാക്കൾക്ക് കുട്ടികളുടെ പഠനകാര്യങ്ങളിൽ താല്പര്യം ഉള്ളതുകൊണ്ട് എനിക്ക് അവരെ ക്ലാസ്സിൽ നിയന്ത്രിക്കുവാൻ കൂടുതൽ പ്രയത്നിക്കേണ്ടി വരാറില്ല.
- 2 കുട്ടികളുടെ പഠനകാര്യങ്ങളിൽ രക്ഷിതാക്കൾക്കുള്ള അമിത താല്പര്യം പലപ്പോഴും എനിക്ക് വിഷമം സൃഷ്ടിച്ചിട്ടുണ്ട്.
- 3 കുട്ടികളുടെ ഭാവിയെക്കുറിച്ച് രക്ഷിതാക്കൾക്ക് ഉത്തരവാദിത്വബോധമില്ല എന്ന് എനിക്കറിയാം.
- 4 അധ്യാപക - രക്ഷാകർതൃ സമിതി മീറ്റിങ്ങുകളിൽ ഭൂരിഭാഗം രക്ഷിതാക്കളും താല്പര്യപൂർവ്വം പങ്കെടുക്കാറുണ്ട്.
- 5 കുട്ടികൾ പറയുന്ന കാര്യങ്ങൾ മാത്രം വിശ്വസിച്ചു പലപ്പോഴും രക്ഷിതാക്കൾ അധ്യാപകനെ കുറ്റപ്പെടുത്തുന്നു.
- 6 വിദ്യാർത്ഥികളുടെ ഭാവിയെകരുതി എനിക്ക് രക്ഷിതാക്കളുമായി നല്ല ബന്ധമാണ് ഉള്ളത്.
- 7 ഞാൻ കുട്ടികൾക്കു വേണ്ടി ആത്മാർത്ഥമായി പ്രവർത്തിച്ചപ്പോഴെല്ലാം രക്ഷിതാക്കളുടെ അംഗീകാരം എനിക്കു ലഭിച്ചിട്ടുണ്ട്.
- 8 ഭൂരിഭാഗം കുട്ടികൾക്കും ഇന്ന് പ്രൈവറ്റ് ട്യൂഷൻ ഉള്ളതിനാൽ രക്ഷിതാക്കൾ അധ്യാപകന്റെ കഴിവുകളെ അംഗീകരിക്കുവാൻ വിമുഖത കാണിക്കുന്നു.
- 9 സമർത്ഥരായ കുട്ടികൾ ക്ലാസ്സിൽ ഉള്ളതിനാൽ അധ്യാപനം എനിക്ക് ഇഷ്ടമാണ്.
- 10 കുട്ടികൾക്ക് താഴ്ന്ന ക്ലാസ്സുകളിൽ പഠിപ്പിച്ച കാര്യങ്ങളെക്കുറിച്ച് ഏകദേശ ധാരണ ഉള്ളതിനാൽ എനിക്കവരെ പഠിപ്പിക്കുവാൻ ഇഷ്ടമാണ്.
- 11 പഠനകാര്യങ്ങളിൽ കുട്ടികൾക്ക് താല്പര്യം ഉള്ളതുകൊണ്ട് അവരെ പഠിപ്പിക്കാൻ എനിക്കും താല്പര്യമാണ്.
- 12 കുട്ടികളുടെ പഠനകാര്യങ്ങളിലെ താല്പര്യമില്ലായ്മ എന്റെ പഠിപ്പിക്കുവാനുള്ള താല്പര്യത്തെ ബാധിച്ചിട്ടുണ്ട്.
- 13 കുട്ടികൾക്ക് എന്നോടുള്ള പെരുമാറ്റത്തിൽ ഞാൻ സംതൃപ്തനാണ്.
- 14 ആൺകുട്ടികളും പെൺകുട്ടികളും തമ്മിലുള്ള പെരുമാറ്റത്തിൽ ഞാൻ സംതൃപ്തനല്ല.
- 15 ഞാനും എന്റെ വിദ്യാർത്ഥികളും തമ്മിൽ നല്ല ബന്ധമാണുള്ളത്.
- 16 എന്റെ വിദ്യാർത്ഥികൾക്ക് ഞാനൊരു മുതിർന്ന സഹോദരനെ / സഹോദരിയെ പോലെയാണ്.
- 17 തുല്യയോഗ്യത ആവശ്യമുള്ള മറ്റുജോലികൾക്കു കിട്ടുന്ന ശമ്പളവുമായി താരതമ്യം ചെയ്യുമ്പോൾ എന്റെ ശമ്പളത്തിൽ ഞാൻ സന്തുഷ്ടനാണ്.
- 18 എന്റെ ജോലിഭാരവും ശമ്പളവും തമ്മിൽ യാതൊരു ബന്ധവും എനിക്കു കാണുവാൻ സാധിക്കുന്നില്ല.
- 19 എനിക്കു ലഭിക്കുന്ന മറ്റു ശമ്പള ആനുകൂല്യങ്ങൾ ആകർഷകമല്ല (HRA / Medical / DA etc)
- 20 മറ്റു സർക്കാർ ഉദ്യോഗസ്ഥർക്കു ലഭിക്കുന്ന ആനുകൂല്യങ്ങൾ അധ്യാപകർക്കും ലഭിക്കുന്നുണ്ട്.
- 21 എല്ലാ പിടുത്തങ്ങളും കഴിഞ്ഞ് എന്റെ കൈയിൽ കിട്ടുന്ന ശമ്പളം എനിക്ക് സംതൃപ്തി തരുന്നില്ല.
- 22 ഇന്നത്തെ മാറിയ ജീവിതസാഹചര്യത്തിൽ എനിക്കു ലഭിച്ചുകൊണ്ടിരിക്കുന്ന ശമ്പളം കൊണ്ട് ഒരുവിധം നന്നായി ജീവിക്കുക ബുദ്ധിമുട്ടുള്ള കാര്യമാണ്.
- 23 ഞങ്ങൾ വിരമിക്കുമ്പോൾ പര്യാപ്തമായ പെൻഷൻ ഞങ്ങൾക്കു ലഭിക്കുന്നു.
- 24 പെൻഷൻ സമ്പ്രദായം ഉള്ളതുകൊണ്ട് വിരമിച്ചു കഴിഞ്ഞാൽ ഉള്ള ജീവിതസ്ഥിതിയെക്കുറിച്ച് എനിക്ക് ശുഭാപ്തി വിശ്വാസമാണ് ഉള്ളത്.

- 25 പ്രാഥമികാവശ്യങ്ങൾക്കു പര്യാപ്തമായ സൗകര്യങ്ങൾ സ്കൂളിലുണ്ട്.
- 26 ഞങ്ങളുടെ സ്കൂളിൽ പര്യാപ്തമായ ഒരു ലൈബ്രറി ഇല്ലാത്തത് വിഷമം സൃഷ്ടിക്കുന്നു.
- 27 എന്റെ ജോലിസ്ഥലത്തേക്ക് ഞാൻ താമസിക്കുന്ന സ്ഥലത്തുനിന്നും പര്യാപ്തമായ യാത്രാസൗകര്യങ്ങൾ ഉണ്ട്.
- 28 ക്ലാസ്സിൽ കുട്ടികൾക്ക് ഇരിക്കാൻ മതിയായ ഡസ്കും ബഞ്ചും ഇല്ലാത്തതിൽ എനിക്ക് അസന്തുഷ്ടിയുണ്ട്.
- 29 നല്ലവണ്ണം കാറ്റും വെളിച്ചവും കിട്ടുന്ന തരത്തിലുള്ള ക്ലാസ്സ് മുറികളാണ് ഞങ്ങൾക്കുള്ളത്.
- 30 ഗവൺമെന്റിന് അധ്യാപകരോട് അനുഭാവപൂർണ്ണമായ മനോഭാവമാണ് ഉള്ളത്.
- 31 സീനിയോറിറ്റി അടിസ്ഥാനമാക്കിയുള്ള ഉദ്യോഗക്കയറ്റത്തിൽ ഞാൻ സംതൃപ്തനാണ്.
- 32 എന്നേക്കാൾ ജൂനിയറായ ഒരു വ്യക്തിക്ക് അധികവിദ്യാഭ്യാസ യോഗ്യതയുള്ളതുകൊണ്ട് ലഭിച്ച ഉദ്യോഗക്കയറ്റം എന്നിൽ അസംതൃപ്തി ഉണ്ടാക്കിയിട്ടുണ്ട്.
- 33 വിജ്ഞാനമേഖലയിൽ ഉണ്ടായിക്കൊണ്ടിരിക്കുന്ന പുതിയ പ്രവണതകളെക്കുറിച്ച് അറിയാൻ പരിശീലന പരിപാടികൾ പര്യാപ്തമാണ്.
- 34 അധ്യാപകജോലിയിൽ പ്രവേശിച്ചതു മുലം ബുദ്ധിപരമായി പിന്നോക്കം പോയതായി എനിക്കനുഭവപ്പെട്ടിട്ടുണ്ട്.
- 35 മറ്റുജോലികൾ ലഭിക്കാതിരുന്നതുകൊണ്ടു മാത്രമാണ് ഞാൻ അധ്യാപകജോലിക്കു തയ്യാറായത്.
- 36 അനേകം ജോലികളിൽ നിന്ന് ഒന്നു തിരഞ്ഞെടുക്കേണ്ടി വന്നാൽ ഞാൻ ആദ്യം തിരഞ്ഞെടുക്കുന്നത് അധ്യാപകജോലി ആയിരിക്കും.
- 37 എന്റെ ജോലി എന്റെ വ്യക്തിത്വത്തിന് യോജിച്ചതാണ്.
- 38 ഞാൻ ചെയ്യുന്ന പ്രവൃത്തികളോട് പലപ്പോഴും ഒരു നിർവ്വീകാരത എനിക്കനുഭവപ്പെടുന്നു.
- 39 എന്റെ സഹപ്രവർത്തകരുമൊന്നിച്ച് പ്രവൃത്തി ചെയ്യുന്നത് സന്തോഷം തരുന്നു.
- 40 സ്റ്റാഫ് റൂമിൽ പല കാരണങ്ങൾ കൊണ്ടും ഞങ്ങൾ വ്യത്യസ്ത ഗ്രൂപ്പുകൾ ആയതിനാൽ സൗഹൃദാന്തരീക്ഷമല്ല നിലവിലുള്ളത്.
- 41 എന്റെ ജോലിയിലെ സംതൃപ്തി വർദ്ധിപ്പിക്കുന്നതിന് സഹപ്രവർത്തകർ സഹായകമാകുന്നു.
- 42 ഞങ്ങൾ തമ്മിൽ പരസ്പരസഹകരണം കുറവായതിനാൽ കൂട്ടായ പ്രവർത്തനം ആവശ്യമുള്ള കാര്യങ്ങൾ ഏറ്റെടുത്തു നടത്തുവാൻ ബുദ്ധിമുട്ടുണ്ട്.
- 43 ഞാനും സഹപ്രവർത്തകരും തമ്മിൽ പരസ്പരം നല്ലവണ്ണം ആശയവിനിമയം നടത്താറുണ്ട്.
- 44 അധ്യാപകർ തമ്മിൽ ആശയവിനിമയം കുറവായതു കാരണം പല തെറ്റിദ്ധാരണകളും ഉണ്ടാകാറുണ്ട്.
- 45 എന്റെ സഹപ്രവർത്തകർ പരസ്പരം സംതൃപ്തികരമായ രീതിയിൽ ആണ് പെരുമാറുന്നത്.
- 46 അധ്യാപകർ തമ്മിലുള്ള സൗഹാർദ്ദപൂർണ്ണമായ പെരുമാറ്റം കൊണ്ട് സ്കൂൾ മറ്റൊരു വീടു പോലെ എനിക്കു തോന്നിയിട്ടുണ്ട്.
- 47 സ്കൂളിന്റെ ഭരണപരമായ കാര്യങ്ങളിൽ മേലധികാരിക്ക് ഒരു ഏകാധിപത്യ സമീപനമാണ് ഉള്ളത്.
- 48 പ്രശ്നങ്ങൾ ഉണ്ടാകുമ്പോൾ ധൈര്യപൂർവ്വം നടപടിയെടുക്കുന്ന മേലധികാരിയുടെ രീതിയിൽ എനിക്ക് സംതൃപ്തിയുണ്ട്.

- 49 അദ്ധ്യാപകരോടൊപ്പം മേലധികാരി പക്ഷഭേദമില്ലാതെ പെരുമാറുന്നു.
- 50 മേലധികാരി വളരെ കർക്കശ സ്വഭാവമുള്ള ആളായതിനാൽ ഞാൻ അസംതൃപ്തനാണ്.
- 51 മേലധികാരി പലപ്പോഴും പരസ്പരവിരുദ്ധങ്ങളായ നിർദ്ദേശങ്ങൾ തരുന്നു.
- 52 തീരുമാനങ്ങൾ എടുക്കുന്ന കാര്യത്തിൽ മേലധികാരിയുടെ കഴിവിൽ എനിക്കു വിശ്വാസമുണ്ട്.
- 53 അദ്ധ്യാപകരുടെ പ്രശ്നങ്ങൾ മനസ്സിലാക്കുന്നതിന് മേലധികാരിയ്ക്ക് താല്പര്യമുണ്ട്.
- 54 മേലധികാരിയുമായി നല്ലൊരു വ്യക്തിബന്ധം ഉണ്ടാക്കുവാൻ കഴിയാത്തതിൽ എനിക്ക് വിഷമമുണ്ട്.
- 55 മേലധികാരി തീരുമാനങ്ങൾ എടുക്കുമ്പോൾ എന്റെ അഭിപ്രായങ്ങൾ പരിഗണിക്കാറുണ്ട്.
- 56 പ്രിൻസിപ്പാളിന് അപകർഷതാബോധം ഉള്ളതുകൊണ്ട് തീരുമാനങ്ങൾ എടുക്കുമ്പോൾ ഞങ്ങളോട് ചോദിക്കാറില്ല.
- 57 എന്റെ കഴിവുകളെയും പ്രവർത്തനങ്ങളെയും പലപ്പോഴും പ്രിൻസിപ്പാൾ അംഗീകരിക്കാറില്ല.
- 58 പാഠ്യേതരകാര്യങ്ങളിൽ പലതിനും എന്നെ ചുമതലപ്പെടുത്തുന്നതിൽ നിന്നും മേലധികാരി എന്റെ കഴിവുകളെ അംഗീകരിക്കുന്നതായി ഞാൻ മനസ്സിലാക്കിയിട്ടുണ്ട്.
- 59 എന്റെ തൊഴിൽ പൂർണ്ണമായ സംതൃപ്തി എനിക്കു നൽകുന്നില്ല.
- 60 ജീവിതത്തിൽ പലതും നേടാൻ കഴിഞ്ഞു എന്ന തോന്നൽ ഉളവാക്കുന്നതിന് അദ്ധ്യാപനജോലി പ്രധാന പങ്കു വഹിച്ചിട്ടുണ്ട്.
- 61 എന്റെ ഏറ്റവും മികച്ച പ്രവർത്തനങ്ങൾക്ക് ഈ തൊഴിൽ പ്രചോദനമാകുന്നില്ല.
- 62 തൊഴിലിൽ കൂടുതൽ വിജയങ്ങൾ നേടി സമൂഹത്തിന്റെ അംഗീകാരം നേടാൻ അദ്ധ്യാപനജോലി എനിക്കു പ്രചോദനം നൽകിയിട്ടുണ്ട്.
- 63 വിവിധ തരത്തിലുള്ള ചുമതലകൾ ചെയ്യുന്നതിനുള്ള അവസരം എന്റെ ജോലി തരുന്നില്ല.
- 64 എല്ലാവർഷവും കുട്ടികൾ മാറിമാറി വരുന്നതുകൊണ്ട് എനിക്കു ക്ലാസ്സെടുക്കുമ്പോൾ പുതുതമ തോന്നാറുണ്ട്.
- 65 എന്റെ കഴിവുകൾ ഫലപ്രദമായി ഉപയോഗിക്കുവാനുള്ള അവസരം അദ്ധ്യാപകജോലി തരുന്നില്ല.
- 66 എന്റെ കഴിവുകൾക്കനുസരിച്ച് വിദ്യാർത്ഥികളെ ഉയർത്തിക്കൊണ്ടു വരാനുള്ള ധാരാളം അവസരം എനിക്കു ലഭിക്കുന്നുണ്ട്.
- 67 സ്വന്തം തീരുമാനങ്ങൾ നടപ്പിലാക്കുന്നതിനുള്ള അവസരം അദ്ധ്യാപകജോലിയിൽ കുറവാണ്.
- 68 നേതൃത്വം ഏറ്റെടുക്കാൻ പറ്റുന്ന അവസരങ്ങൾ അദ്ധ്യാപനജോലി പ്രദാനം ചെയ്യുന്നില്ല.
- 69 അദ്ധ്യാപകർക്ക് സമൂഹം നൽകുന്ന പദവിയിൽ ഞാൻ അസംതൃപ്തനാണ്.
- 70 സമൂഹത്തിൽ പദവിയും പ്രശസ്തിയും നേടുന്നതിന് അദ്ധ്യാപനജോലി നല്ലൊരു പങ്ക് വഹിക്കുന്നു.
- 71 ഞാൻ ചെയ്യുവാൻ ഇഷ്ടപ്പെടുന്ന കാര്യങ്ങൾ മാത്രമേ എന്റെ ജോലിയിൽ അധികവും ഉൾക്കൊണ്ടിട്ടുള്ളൂ.
- 72 പലകാര്യങ്ങളും ഇഷ്ടമല്ലാതിരുന്നിട്ടും മേലധികാരിയുടെ നിർബന്ധത്തിനു വഴങ്ങി എനിക്കു ചെയ്യേണ്ടി വന്നിട്ടുണ്ട്.
- 73 മറ്റേതു ജോലിയെക്കാളും അദ്ധ്യാപനജോലിയിൽ ഉത്തരവാദിത്വം കൂടുതലാണ്.
- 74 എന്റെ ഉത്തരവാദിത്വങ്ങളെപ്പറ്റി എനിക്കു പൂർണ്ണബോധ്യമുണ്ടെങ്കിലും അവ നിറവേറ്റാൻ പറ്റുന്ന സാഹചര്യം സ്കൂളിൽ ഇല്ല.

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APPENDIX IV B

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF JOB SATISFACTION
RESPONSE SHEET (FINAL)

Item No.	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Item No.	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	38.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	39.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	40.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	41.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	42.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	43.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	44.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	45.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	46.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	47.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	48.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	49.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	50.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	51.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	52.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	53.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	54.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	55.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	56.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	57.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	58.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	59.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	60.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	61.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	62.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	63.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	64.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	65.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	66.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	67.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	68.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	69.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	70.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	71.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	72.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	73.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	74.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX IV C

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF JOB SATISFACTION
RESPONSE SHEET (FINAL)

ക്രമ നമ്പർ (ക്രമ നമ്പർ)	തൃപ്തിപ്പെടുന്നില്ല (തൃപ്തിപ്പെടുന്നില്ല)	തൃപ്തിപ്പെടുന്നു (തൃപ്തിപ്പെടുന്നു)	മിതമായി തൃപ്തിപ്പെടുന്നു (മിതമായി തൃപ്തിപ്പെടുന്നു)	തൃപ്തിപ്പെടുന്നില്ല (തൃപ്തിപ്പെടുന്നില്ല)	തൃപ്തിപ്പെടുന്നു (തൃപ്തിപ്പെടുന്നു)	ക്രമ നമ്പർ (ക്രമ നമ്പർ)	തൃപ്തിപ്പെടുന്നില്ല (തൃപ്തിപ്പെടുന്നില്ല)	തൃപ്തിപ്പെടുന്നു (തൃപ്തിപ്പെടുന്നു)	മിതമായി തൃപ്തിപ്പെടുന്നു (മിതമായി തൃപ്തിപ്പെടുന്നു)	തൃപ്തിപ്പെടുന്നില്ല (തൃപ്തിപ്പെടുന്നില്ല)	തൃപ്തിപ്പെടുന്നു (തൃപ്തിപ്പെടുന്നു)
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	38.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	39.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	40.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	41.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	42.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	43.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	44.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	45.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	46.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	47.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	48.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	49.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	50.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	51.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	52.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	53.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	54.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	55.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	56.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	57.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	58.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	59.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	60.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	61.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	62.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	63.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	64.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	65.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	66.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	67.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	68.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	69.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	70.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	71.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	72.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	73.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	74.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix V

DEPARTMENT OF PSYCHOLOGY
UNIVERSITY OF CALICUT
KERALA - 673 635

16 PF QUESTIONNAIRE
Form C

Rema & Anitha Raveendran

നിർദ്ദേശങ്ങൾ:

നിങ്ങളുടെ താത്പര്യങ്ങളേയും സമീപനരീതികളേയും കുറിച്ചറിയാനുള്ള ഏതാനും ചോദ്യങ്ങളാണ് ഈ ചോദ്യാവലിയിൽ കൊടുത്തിരിക്കുന്നത്. മനോഭാവങ്ങളിലും താത്പര്യങ്ങളിലും ഓരോ വ്യക്തിയും വ്യത്യസ്തനായിരിക്കുന്നുവെന്നതിനാൽ ശരിയോ തെറ്റോ ആയ ഉത്തരങ്ങളില്ല.

ഓരോ ചോദ്യത്തിനും മൂന്ന് സാദ്ധ്യതകൾ ഉത്തരങ്ങളായി കൊടുത്തിട്ടുണ്ട്. അവയിൽ നിങ്ങൾക്ക് യോജിക്കുന്നത് ഉത്തരക്കടലിടസിൽ നിർദ്ദിഷ്ട സ്ഥാനത്ത് [X] എന്ന അടയാളപ്പെടുത്തി സൂചിപ്പിക്കുക. 'ബി' ഉത്തരങ്ങൾ കഴിയുന്നതും ഒഴിവാക്കുക.

ഉത്തരമെഴുതുമ്പോൾ താഴെപ്പറയുന്ന കാര്യങ്ങൾ ശ്രദ്ധിക്കുക

1. സത്യസന്ധവും നിങ്ങളെ സംബന്ധിച്ച് ശരിയായ ഉത്തരങ്ങൾ മാത്രം നൽകുക.
2. ഇത് സമയപരിധി ഇല്ലാത്ത ഒരു ടെസ്റ്റാണെങ്കിലും കഴിയുന്നത്ര വേഗതയിൽ ചെയ്തുകൊടുക്കാൻ ശ്രമിക്കണം. ചോദ്യങ്ങളെക്കുറിച്ച് കൂടുതൽ ചിന്തിച്ച് സമയം കളയാതെ ഓരോ ചോദ്യവും വായിക്കുമ്പോൾ തോന്നുന്ന ആദ്യത്തെ പ്രതികരണം രേഖപ്പെടുത്തണം.
3. ഉണ്ട് [എ] അല്ലെങ്കിൽ ഇല്ല [സി] എന്ന ഉത്തരങ്ങൾ തെരഞ്ഞെടുക്കാൻ തീരെ നിർവ്യാഹമില്ലെങ്കിൽ മാത്രമേ (ബി) ഉത്തരങ്ങൾ ഉപയോഗിക്കാവൂ.
4. എല്ലാ ചോദ്യങ്ങൾക്കും ഉത്തരമെഴുതാൻ പ്രത്യേകം ശ്രദ്ധിക്കുക. നിങ്ങളുടെ ഉത്തരങ്ങൾ പരമ രഹസ്യമായി സൂക്ഷിക്കുന്നതായിരിക്കും.

1. മുൻപുപോയിരുന്നതിനേക്കാൾ കൂടുതൽ ഘർഷണത്തി ഇപ്പോൾ നിങ്ങൾക്കുണ്ടോ?
(എ) ഉണ്ട് (ബി) കുറച്ച് [സി] ഇല്ല
2. മറ്റുള്ളവരിൽനിന്നുപോലും മാറി ഒരു സന്യാസിയെപ്പോലെ ഒരാൾ ജീവിക്കുവാൻ നിങ്ങൾക്ക് സംശയമുണ്ടോ?
(എ) അതെ [ബി] ചിലപ്പോൾ (സി) ഇല്ല
3. ആകാശം താഴെയുണ്ടെന്നും മഞ്ഞുകാലത്ത് പുടാണെന്നും പറയുന്ന ഒരാൾ ഒരു കറവാളിയെ എന്തു വിളിക്കും?
(എ) അക്രമി (ബി) പുണ്യവാളൻ [സി] മോലം
4. വൃത്തിഹീനരായ ആളുകളെ കണ്ടാൽ നിങ്ങൾ സ്വീകരിക്കുമോ?
(എ) സ്വീകരിക്കും [ബി] ചിലപ്പോൾ മാത്രം (സി) അവരോട് വെറുപ്പ് തോന്നും.
5. പരിചാരകരുടെ ജീവിതം മെച്ചപ്പെടുന്നത് കുറഞ്ഞു നിങ്ങൾ ഇഷ്ടപ്പെടുമോ?
(എ) അതെ (ബി) ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
6. ആഘോഷാവസരങ്ങളിൽ തമാശയും കഥകളും മറ്റുള്ളവർ ആദ്യം പറയട്ടെ എന്നാണോ നിങ്ങൾ കരുതുക?
(എ) അതെ [ബി] ചിലപ്പോഴൊക്കെ [സി] അല്ല
7. നിങ്ങളുടെ ദൈനംദിനാവശ്യം കഴിഞ്ഞു മിച്ചം പണമുണ്ടെങ്കിൽ മറ്റുള്ളവരെ സഹായിക്കുന്നതിനായി ഉപയോഗിക്കാറുണ്ടോ?
(എ) അതെ [ബി] ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
8. എന്തെങ്കിലും ചടങ്ങിൽ നിങ്ങളെ കണ്ടുമുട്ടിയാൽ നിങ്ങളുടെ പരിചയക്കാരിൽ അത് വാസ്തവത്തിൽ സന്തോഷമുളവാക്കുമോ?
(എ) അതെ (ബി) ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
9. താഴെപ്പറയുന്നതിലേതുവീഡത്തിൽ വ്യായാമം ചെയ്യാൻ നിങ്ങൾ ഇഷ്ടപ്പെടും?
(എ) സൈക്കിൾസവാരിയും നീന്തലും (ബി) 'എ'യും 'സി'യും (സി) കളിയും ഗൃഹിയും.

- 10. ആളുകളുടെ പറച്ചിലും പ്രവൃത്തിയും തമ്മിലുള്ള പൊരുത്തക്കേട് കാണുമ്പോൾ നിങ്ങൾക്ക് പരിഹാസം തോന്നാറുണ്ടോ?
(എ) ഉണ്ട് (ബി) വല്ലപ്പോഴും [സി] ഇല്ല
- 11. നിങ്ങളുടെ കട്ടിക്കാലത്ത് ഓരോ ദിവസവും സ്ത്രീകളിൽ പോകുമ്പോൾ വിഷമം തോന്നിയിട്ടുണ്ടോ?
(എ) ഉണ്ട് (ബി) ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
- 12. നിങ്ങൾ പ്രകടിപ്പിക്കുന്ന രെട്രോഗ്രാഫ് മറുപടികൾ ശ്രദ്ധിക്കാതെ പോയാൽ നിങ്ങൾ എന്തുചെയ്യും?
(എ) സാരമില്ല എന്നു വയ്ക്കും [ബി] എ'യ്ക്കും 'സി'യ്ക്കും 'ഇടക്ക്' [സി] മറുപടികൾ ശ്രദ്ധിക്കുന്നതുവരെ അതാവർത്തിക്കും.
- 13. ആരെങ്കിലും നിങ്ങളോട് മോശമായി പെരുമാറിയെന്നു തോന്നിയാൽ നിങ്ങൾ—
(എ) അതത്ര ഗൗരവമുള്ളതല്ലെന്നു കരുതി മിണ്ടാതിരിക്കും. [ബി] 'എ'ക്കും 'സി'ക്കും 'ഇടക്ക്' [സി] നിങ്ങളുടെ നിലപാട് (അഭിപ്രായം) അയാളെ വ്യക്തമായി ബോധ്യപ്പെടുത്തും.
- 14. ആരെയെങ്കിലും നിങ്ങൾ പരിചയപ്പെട്ടാൽ
(എ) അയാളോട് നിങ്ങൾ രാഷ്ട്രീയത്തെക്കുറിച്ചും സാമൂഹിക ചിന്താഗതിയെക്കുറിച്ചും സൗഹാർദ്ദത്തോടെ സംവാദം നടത്തും. (ബി) 'എ'ക്കും 'സി'ക്കും 'ഇടക്ക്' (സി) നിങ്ങളോട് തമാശ പറയാൻ അനുവദിക്കും.
- 15. നിങ്ങൾ സ്വയം ചെയ്യാൻ തീർക്കണമെന്നു പ്രതിജ്ഞ ചെയ്തു ജോലികൾ പരസഹായം തേടാതെ സ്വയം ചെയ്യാൻ തീർക്കുന്നതിൽ അഭിമാനം കൊള്ളാറുണ്ടോ?
(എ) ഉണ്ട് (ബി) ചിലപ്പോഴൊക്കെ (സി) ഇല്ല
- 16. ഭൂതകാലത്തെക്കുറിച്ചു ചോദിക്കുന്നതു സമയം പാഴാക്കലാണെന്നു തോന്നുന്നുണ്ടോ?
(എ) ഉണ്ട് (ബി) ചിലപ്പോഴൊക്കെ (സി) ഇല്ല
- 17. ധാരാളം സമയമുണ്ടെന്നറിയാമെങ്കിൽ കൂടി ഒരു തീവണ്ടിയാത്രക്കൊരുമ്പോൾ നിങ്ങൾ തിരക്കിടുകയും അസ്വസ്ഥനാകുകയും ചെയ്യാറുണ്ടോ?
(എ) ഉണ്ട് [ബി] ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
- 18. മാതാപിതാക്കളോട് നൈമിഷികമായിട്ടെങ്കിലും നിങ്ങൾക്ക് വെറുപ്പ് തോന്നിയിട്ടുണ്ടോ?
(എ) ഉണ്ട് (ബി) ചിലപ്പോഴൊക്കെ (സി) ഇല്ല
- 19. ജോലിക്കാരിൽനിന്നോ ഉപഭോക്താക്കളിൽനിന്നോ ദിവസം മുഴുവനും പരാതി കേൾക്കേണ്ടിവരുന്ന ഒരു ജോലി നിങ്ങൾ ഏറ്റെടുക്കുമോ?
(എ) അതെ (ബി) ചിലപ്പോൾ (സി) ഇല്ല
- 20. താഴെപ്പറയുന്നവയിൽ 'ഏകദേശം' എന്ന പദത്തിന്റെ വിപരീതമായിട്ടുള്ളതേത്?
(എ) യാദൃച്ഛികം (ബി) കൃത്യം (സി) ഏകദേശം.
- 21. കൂടുതൽ ശക്തിയും ഊർജ്ജവും ആവശ്യമുള്ള സമയങ്ങളിൽ അവ ആവശ്യത്തിന് നിങ്ങൾക്കുണ്ടാകാറുണ്ടോ?
(എ) ഉണ്ട് (ബി) കുറച്ച് (സി) ഇല്ല
- 22. കൂടുതൽ ലൈംഗികതയുള്ളവലച്ചിത്രങ്ങൾകണ്ടാൽ നിങ്ങൾക്ക് ലജ്ജയും കുററബോധവും തോന്നാറുണ്ടോ?
(എ) ഉണ്ട് (ബി) കുറച്ച് (സി) ഇല്ല
- 23. ധാരാളം ആളുകൾ പങ്കെടുക്കുന്ന സൽക്കാരവേളകളിലോ ആഘോഷാവസരങ്ങളിലോ നിങ്ങൾ പോകാറുണ്ടോ?
(എ) അതെ (ബി) ചിലപ്പോഴൊക്കെ (സി) ഇല്ല
- 24. നിങ്ങളുടെ അഭിപ്രായം—
(എ) ചില ജോലികൾ മറ്റു ജോലികളുടെയത്ര ശ്രദ്ധയോടെ ചെയ്യേണ്ട ആവശ്യമില്ല (ബി) 'എ'യ്ക്കും 'സി'യ്ക്കും 'ഇടക്ക്' (സി) ഏതു ജോലിയും ചെയ്യുന്നെങ്കിൽ നന്നായി ചെയ്യണം.

- 25. തെങ്ങവിലുടെ നടക്കുമ്പോൾ മറ്റുള്ളവർ നിങ്ങളെ ശ്രദ്ധിക്കുന്നത് നിങ്ങൾക്കിഷ്ടമാണോ?
(എ) അതെ (ബി) ചിലപ്പോഴൊക്കെ (സി) അല്ല
- 26. താഴെപ്പറയുന്നതിൽ ആരായിത്തീരാനാണ് നിങ്ങൾ ആഗ്രഹിക്കുന്നത്?
(എ) പട്ടാമിതർ (ബി) 'എ'യോ 'സി'യോ (സി) ഉയർന്ന സൈനികോദ്യോഗസ്ഥൻ.
- 27. ചില നിസ്സാര കാര്യങ്ങളിൽ ഒരു അയൽവാസി നിങ്ങളെ പററിക്കുകയാണെങ്കിൽ അയാളെ കുറപ്പെടുവിക്കുന്നതിനേക്കാൾ നല്ലത് അയാളുമായി ലോഹ്യത്തിൽ കഴിയുകയാണ്?
(എ) അതെ (ബി) ചിലപ്പോഴൊക്കെ (സി) ഇല്ല
- 28. താഴെപ്പറയുന്നവയിൽ നിങ്ങൾ കാണാനിഷ്ടപ്പെടുന്നതേത്?
(എ) പല്ല പരാണ സിനിമ [ബി] 'എ'യോ 'സി'യോ [സി] സാമൂഹ്യ പുരോഗതിയെ ലക്ഷ്യമാക്കുന്ന നല്ല സിനിമയോ നടകമോ
- 29. നിങ്ങളെ ഒരു ജോലിയേച്ചിച്ചാൽ മറ്റാരുമില്ലാത്ത രീതിയിൽ തന്നെ അപ ചെയ്യും അല്ലെങ്കിൽ രാജി വയ്ക്കും എന്ന് ശരിക്കുമോ?
[എ] അതെ [ബി] ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
- 30. ക്ഷീണിച്ചുപോകുമെന്നു കരുതി നിങ്ങൾ ആവേശകരമായ കാര്യങ്ങളിൽനിന്നു അകന്നു നില്ക്കാനാഗ്രഹിക്കുമോ?
(എ) അതെ [ബി] ചിലപ്പോഴൊക്കെ (സി) ഇല്ല
- 31. താഴെപ്പറയുന്നവയിൽ ഏതു കളിക്കാനാണ് നിങ്ങൾ ഇഷ്ടപ്പെടുക
(എ) ചെസ്സ് (ബി) 'എ'യോ 'സി'യോ (സി) ഫുട്ബോൾ
- 32. കഞ്ഞിത്തൊട്ടി വാക്സിനേഷൻ ചെയ്യുന്നതു ക്രമമായാണെന്നും മാതാപിതാക്കൾക്ക് അത് തടയാനുള്ള അവകാശം ഉണ്ടാകണം എന്നും നിങ്ങൾ കരുതുന്നുവോ?
(എ) അതെ [ബി] രണ്ടിനുമിടക്ക് [സി] ഇല്ല
- 33. താഴെപ്പറയുന്നവരിലേതിൽ വിശ്വസിക്കുന്നതാണ് കൂടുതൽ നല്ലത്?
[എ] ഇൻഷുറൻസ് [ബി] രണ്ടിനുമിടക്ക് (സി) വ്യക്തിപരമായ ഭാഗ്യം
- 34. മനോവിഷമങ്ങൾ പെട്ടെന്ന് മറയ്ക്കുന്ന ആളാണോ നിങ്ങൾ?
[എ] അതെ [ബി] ഇടത്തരം (സി) അല്ല
- 35. നിങ്ങൾ ചെയ്യുന്ന തെറ്റാണെന്ന് ബോധ്യമായാൽ അത് ഏറ്റുപറയാൻ പ്രയാസം തോന്നാറുണ്ടോ?
[എ] ഉണ്ട് (ബി) ചിലപ്പോഴൊക്കെ (സി) ഇല്ല
- 36. ഒരു റെഡീസിൽ നിങ്ങൾ പണിയെടുക്കാൻ ഇഷ്ടപ്പെടുന്നതേത്—
(എ) സാങ്കേതികവകുപ്പിൽ (ബി) രണ്ടിനുമിടക്ക് (സി) ഇൻറർവ്യൂ ചെയ്യുകയും ആളുകളെ ജോലിക്കെടുക്കുകയും ചെയ്യുന്ന ഭരണവകുപ്പിൽ
- 37. താഴെപ്പറയുന്നവയിൽ ഏതു വാക്ക് മറ്റു രണ്ടു വാക്കുകളോട് യോജിക്കുന്നില്ല
(എ) പുച്ഛ (ബി) അരികെ (സി) സൂര്യൻ
- 38. മോശമായ ആരോഗ്യംമൂലം നിങ്ങളുടെ പരിപാടികളിൽ പങ്കെടുക്കാൻ മറ്റുള്ളവർ വരുത്തേണ്ടിവരാറുണ്ടോ?
(എ) ഉണ്ട് (ബി) മിക്കപ്പോഴും (സി) ഇല്ല
- 39. വ്യക്തിപരമായ ആവശ്യങ്ങൾക്ക് ജോലിക്കാരെ വേർതിരിച്ച് നിങ്ങൾക്കിഷ്ടമാണോ?
(എ) അതെ (ബി) ചിലപ്പോഴൊക്കെ (സി) അല്ല
- 40. നന്നായി പെരുമാറാൻ കഴിയാത്തവരുമൂലം നിങ്ങൾ കൂടുതൽനിന്നും ഒറ്റപ്പെടാറുണ്ടോ?
(എ) ഉണ്ട് (ബി) ചിലപ്പോഴൊക്കെ (സി) ഇല്ല

- 41. സദാചാരനിയമങ്ങൾ മനുഷ്യൻ കൂടുതൽ കർശനമായി പാലിക്കണമെന്ന് നിങ്ങൾക്ക് തോന്നുന്നുണ്ടോ?
(എ) അതെ (ബി) ചിലപ്പോഴൊക്കെ (സി) ഇല്ല
- 42. നിങ്ങൾ ചിലപ്പോഴൊക്കെ മിണ്ടാൻ കഴിയാത്തത്ര കോപിഷ്ടനാകാറുണ്ടോ?
(എ) ഉണ്ട് (ബി) രണ്ടിനുമിടക്ക് (സി) ഇല്ല
- 43. ശാരീരികാദ്ധ്വാനം അധികം ആവശ്യമുള്ള പ്രവൃത്തികൾ പെട്ടെന്ന് ക്ഷീണിക്കാതെ, മറ്റുള്ളവരേക്കാൾ കൂടുതൽ ചെയ്യാൻ നിങ്ങൾക്ക് കഴിയുമോ?
(എ) അതെ (ബി) ചിലപ്പോഴൊക്കെ (സി) ഇല്ല
- 44. സാഹചര്യങ്ങൾ വളരെ പ്രതികൂലമാവുന്ന അവസ്ഥയിലും മിക്ക സാക്ഷികളും സത്യം പറയാൻ തയ്യാറാവുമെന്ന് നിങ്ങൾ കരുതുന്നുവോ?
(എ) അതെ (ബി) കുറവൊക്കെ (സി) ഇല്ല
- 45. ചിന്തിക്കുമ്പോൾ അങ്ങോട്ടമിങ്ങോട്ടും നടക്കുന്നത് നിങ്ങളുടെ ചിന്തയെ സഹായിക്കുമെന്ന് തോന്നുന്നുവോ?
(എ) അതെ (ബി) ചിലപ്പോഴൊക്കെ (സി) ഇല്ല
- 46. താഴെപ്പറയുന്നവയിൽ ഏതു കാര്യത്തിലാണ് നമ്മുടെ രാഷ്ട്രം കൂടുതൽ ധനം വിനിയോഗിക്കേണ്ടത്?
(എ) യുദ്ധോപകരണങ്ങൾക്കായി (ബി) രണ്ടിനും (സി) വിദ്യാഭ്യാസത്തിനായി
- 47. ഒരു സായാഹ്നം ചെലവഴിക്കാൻ താഴെപ്പറയുന്നവയിൽ ഏതു നിങ്ങൾ ഇഷ്ടപ്പെടും.
(എ) വാശിയേറിയ ചീട്ടുകളി [ബി] രണ്ടും (സി) കഴിഞ്ഞ അപധിക്കാല ചിത്രങ്ങൾ കാണുക
- 48. താഴെപ്പറയുന്നവയിൽ നിങ്ങൾ കൂടുതലായി വായിക്കാൻ ഇഷ്ടപ്പെടുന്നതേതു?
(എ) ഒരു നല്ല ചരിത്രനോവൽ [ബി] രണ്ടും ഒരുപോലെ (സി) ആഗോളവിദ്വേഷങ്ങൾ എങ്ങനെ ഉപയോഗിക്കുമെന്നതിനെക്കുറിച്ച് ഒരു ശാസ്ത്രജ്ഞന്റെ ലേഖനം.
- 49. ഈ ലോകത്തിൽ നല്ല മനുഷ്യരാണ് വിസ്തൃതങ്ങളേക്കാൾ കൂടുതലെന്ന് നിങ്ങൾ വിശ്വസിക്കുന്നുവോ?
(എ) അതെ (ബി) കുറവൊക്കെ [സി] ഇല്ല
- 50. സ്വന്തം ജോലിയിൽ നിങ്ങൾ മറ്റു പലരേക്കാളും കൂടുതലായി കഴിവു, സാമർത്ഥ്യവും പ്രകടിപ്പിക്കാറുണ്ടോ?
(എ) അതെ (ബി) മിക്കപ്പോഴും [സി] ഇല്ല
- 51. മറ്റൊരേയും കാണാൻ തോന്നാത്തവിധം ദുഃഖിതനും നിരസാഹ്വാനമായി ചിലപ്പോഴെങ്കിലും നിങ്ങൾക്ക് സ്വയം അനുഭവപ്പെടാറുണ്ടോ?
(എ) വളരെ കൃത്യമായി (ബി) ചിലപ്പോഴൊക്കെ (സി) മിക്കപ്പോഴും.
- 52. നിങ്ങൾ ചെയ്യുന്നത് പൂർണ്ണ ബോധ്യമുള്ളപ്പോഴൊക്കെ അത് എളുപ്പമായി ചെയ്യാൻ നിങ്ങൾക്ക് കഴിയുമോ?
(എ) അതെ (ബി) ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
- 53. താഴെപ്പറയുന്നവയിൽ ഏതു ജോലി നിങ്ങൾ ഇഷ്ടപ്പെടുന്നു.
(എ) ഓഫീസിലെ മാനേജർ [ബി] 'എ'ക്കും 'സി'ക്കും ഇടക്ക് [സി] കെട്ടിടങ്ങളുടെ പ്ലാൻ വരക്കുന്ന ആർക്കിടെക്ട്
- 54. കറുപ്പ് ചാരനിർമ്മിതനോട് എന്നപോലെ വേദനക്ക്
(എ) മുറിവ് (ബി) രോഗം [സി] അസ്വസ്ഥത
- 55. ഉറക്കത്തിൽ സംസാരിക്കുകയോ നടക്കുകയോ ചെയ്യാതെ സുഖനിദ്രയുള്ള ആളാണോ നിങ്ങൾ
(എ) അതെ (ബി) ചിലപ്പോഴൊക്കെ (സി) അല്ല
- 56. സുഹൃത്തിനോട് മനഃപൂർവ്വം നന്നെ പറഞ്ഞശേഷം നിങ്ങൾക്ക് അയാളെ ലജ്ജയില്ലാതെ അഭിമുഖീകരിക്കാൻ കഴിയുമോ?
(എ) അതെ (ബി) ചിലപ്പോൾ [സി] ഇല്ല

- 57. സാധുഗീക പടങ്ങുകൾ സംഘടിപ്പിക്കുന്നതിനു നിങ്ങൾ എപ്പോഴെങ്കിലും ഉൾജ്ജ്വലമായി പങ്കെടുത്തിട്ടുണ്ടോ?
(എ) ഉണ്ട് (ബി) വല്ലപ്പോഴും (സി) ഇല്ല
- 58. നിങ്ങൾ കൂടുതൽ ആരാധിക്കുന്നതെന്ത്?
[എ] ബുദ്ധിമാനന്ദ വിശ്വസിക്കാനാവാത്ത രൊളെ (ബി) രണ്ടിനുമിടക്ക് (സി) പ്രലോനങ്ങളെ അതിജീവിക്കാനുള്ള മനുഷ്യകൃത്യങ്ങളെ ഒരു സാധാരണക്കാരനെ
- 59. ന്യായമായ ഒരു പരാതി ഉന്നയിച്ചുകഴിഞ്ഞാൽ നിങ്ങൾക്ക് സാധാരണയായി സംതൃപ്തി തോന്നാറുണ്ടോ?
(എ) ഉണ്ട് (ബി) ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
- 60. നിതരാഹപ്പെടുത്തുന്ന ചുറ്റുപാടുകൾ നിങ്ങളെ കരച്ചിലിന്റെ വക്കവരെ എത്തിക്കാറുണ്ടോ?
(എ) ഉണ്ട് (ബി) വല്ലപ്പോഴും (സി) ഇല്ല
- 61. നമ്മൾ വിചാരിക്കുന്നതിലധികം സൗഹൃദം പല വിദേശരാജ്യങ്ങൾക്കും നമ്മോടുണ്ടെന്ന് നിങ്ങൾ കരുതുന്നുണ്ടോ?
(എ) അതെ [ബി] ചിലപ്പോഴൊക്കെ (സി) ഇല്ല
- 62. മറ്റുള്ളവരിൽ നിന്നു കൂടുതൽ സ്വന്തം ചിന്തകളിൽ മുഴുകാൻ ഇഷ്ടപ്പെടുന്ന അവസരങ്ങൾ എല്ലാ ദിവസവും ഉണ്ടാകാറുണ്ടോ?
(എ) ഉണ്ട് [ബി] ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
- 63. ശാന്തനായിരിക്കുന്ന സമയങ്ങളിൽ നിങ്ങൾ അംഗീകരിക്കുന്ന ചെറിയ നിയമങ്ങളും നിയന്ത്രണങ്ങളും മറ്റും ചിലപ്പോൾ നിങ്ങളെ അലട്ടാറുണ്ടോ?
(എ) ഉണ്ട് [ബി] കഠിനമായിട്ട് [സി] ഇല്ല
- 64. ശിക്ഷിക്കപ്പെടാൻ ആഗ്രഹിക്കാത്ത രീതിയിൽ നല്ലതാണ് ശിക്ഷ നൽകിയുള്ള പഴയ വിദ്യാഭ്യാസ സമ്പ്രദായം എന്ന് നിങ്ങൾ കരുതുന്നുണ്ടോ?
(എ) അതെ (ബി) ചിലപ്പോഴൊക്കെ (സി) ഇല്ല
- 65. നിങ്ങൾ സ്വയം വിവേകത്തിൽ മുട്ടുതലായി പഠിച്ചത്?
(എ) ക്ലാസ്സിൽ പോയിട്ട് (ബി) രണ്ടിനുമിടക്ക് (സി) പുസ്തകം വായിച്ച്
- 66. ചെറിയ സാമൂഹിക ബാധ്യതകളിൽ നിന്നും കഴിയുന്നത്ര അകന്നുനിൽക്കാനാണോ നിങ്ങൾ ശ്രമിക്കുക?
(എ) അതെ (ബി) ചിലപ്പോഴൊക്കെ (സി) അല്ല
- 67. ഒരു പ്രശ്നം കൂടുതൽ പ്രയാസമുള്ളതായി തോന്നിയാൽ നിങ്ങൾ -
(എ) വേറൊരു പ്രശ്നമെടുക്കും (ബി) 'എ'ക്കും 'സി'ക്കും ഇടക്ക് (സി) അതേ പ്രശ്നത്തെ വേറൊരു രീതിയിൽ സമീപിക്കും
- 68. വ്യക്തമായ കാരണങ്ങളില്ലാതെ തന്നെ നിങ്ങൾക്ക് അതിയായ ആധി, കോപം, ചിരി ഇവ ഉണ്ടാകാറുണ്ടോ?
(എ) ഉണ്ട് (ബി) ചിലപ്പോൾ (സി) ഇല്ല
- 69. ചില സമയങ്ങളിൽ മറ്റു സന്ദർഭങ്ങളിലുള്ളതു നന്നായി ശ്രദ്ധ കേന്ദ്രീകരിക്കാൻ കഴിയാറില്ലെന്ന് നിങ്ങൾക്ക് തോന്നുന്നുണ്ടോ.
[എ] അതെ [ബി] ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
- 70. മറ്റുള്ളവരുടെ സൗകര്യം കണക്കിലെടുത്ത് നിങ്ങൾ പ്രവൃത്തികളുടെ സമയം ക്രമീകരിക്കുമോ?
[എ] അതെ [ബി] ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
- 71. ഈ സംഖ്യാശ്രേണി പൂർത്തിയാക്കാൻ നിങ്ങൾ ഏതു സംഖ്യകൾ കൂട്ടിച്ചേർക്കും? 1,2,3,6,5
[എ] 10 [ബി] 5 [സി] 7
- 72. മറ്റുള്ളവരുടെ പ്രവൃത്തികളെ നിങ്ങൾ വിമർശിക്കാറുണ്ടോ?
[എ] ഉണ്ട് [ബി] വല്ലപ്പോഴും [സി] ഇല്ല

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- 73. അഹംഭാവികളും ഡംഭോന്മുഖരായവരുടെ സാന്നിദ്ധ്യം നിങ്ങളെ അസ്വസ്ഥനാക്കാറുണ്ടോ?
[എ] ഉണ്ട് [ബി] വല്ലപ്പോഴും [സി] ഇല്ല
- 74. ഏതപസരത്തിലും യാത്രചെയ്യുവാൻ നിങ്ങൾ ഇഷ്ടപ്പെടുന്നുണ്ടോ?
(എ) അതെ (ബി) വല്ലപ്പോഴും (സി) ഇല്ല
- 75. പെട്ടെന്നുണ്ടായ വേദനകൊണ്ടോ രക്തം കണ്ടിട്ടോ എപ്പോഴെങ്കിലും നിങ്ങൾക്ക് മോഹാലസ്യം പോലെ വന്നിട്ടുണ്ടോ?
[എ] ഉണ്ട് [ബി] ചിലപ്പോഴെല്ലാം [സി] ഇല്ല
- 76. ആരകാലിക പ്രശ്നങ്ങളെക്കുറിച്ച് മറ്റുള്ളവരുമായി സംസാരിച്ചിരിക്കാൻ നിങ്ങൾക്കിഷ്ടമാണോ?
(എ) അതെ (ബി) ചിലപ്പോഴൊക്കെ (സി) ഇല്ല
- 77. താഴെപ്പറയുന്നവയിൽ ആരാകാൻ നിങ്ങൾ ഇഷ്ടപ്പെടുന്നു?
(എ) എഞ്ചിനീയർ (ബി) രണ്ടും ഒരുപോലെ (സി) സാമൂഹികസീദ്ധാന്തങ്ങൾ പഠിപ്പിക്കുന്ന ടീച്ചർ
- 78. മറ്റുള്ളവരുടെ പ്രശ്നങ്ങളിൽ ഇടപെടുകയോ അതു പരിഹരിക്കാൻ ശ്രമിക്കുകയോ ചെയ്യാനുള്ള പ്രവണത നിങ്ങൾക്ക് സ്വയം നിയന്ത്രിക്കേണ്ടിവരാറുണ്ടോ?
[എ] ഉണ്ട് [ബി] ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
- 79. നിങ്ങളുടെ അയൽക്കാരിൽ എത്രപേരോട് സംസാരിക്കുന്നത് ബോധിയായി നിങ്ങൾക്കനുഭവപ്പെടാറുണ്ട്?
(എ) എല്ലാവരോടും തന്നെ (ബി) ചിലരോട് [സി] ആരോടും ഇല്ല
- 80. നിങ്ങൾ വായിക്കുന്നതിൽ പ്രചരണത്തിന്റെ അംശങ്ങൾ ഉണ്ടെങ്കിൽ മറ്റുള്ളവർ ചൂണ്ടിക്കാണിച്ചുതരാതെ നിങ്ങളത് മനസ്സിലാക്കുമോ?
(എ) അതെ (ബി) ചിലപ്പോൾ (സി) ഇല്ല
- 81. ഏതു കഥയിലും ഒരു ഗുണപാഠമുണ്ടായിരിക്കണമെന്ന് നിങ്ങൾ കരുതുന്നുവോ?
[എ] അതെ (ബി) ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
- 82. ഏതു വ്യവസായത്തിലും കൂടുതൽ പ്രശ്നമുണ്ടാകുന്നത് താഴെ പറയുന്നവയിൽ ഏതു കൂട്ടരാണ് നിങ്ങളുടെ വിശ്വാസ്യം?
(എ) നിലവിലുള്ള രീതികളെ മാറ്റുകയും വ്യത്യസ്തപ്പെടുത്തുകയും ചെയ്യുന്നവർ (ബി) ഇരുതരക്കാരും [സി] പുതിയ രീതികൾ നടപ്പിലാക്കാൻ വിസമ്മതിക്കുന്നവർ.
- 83. പ്രായോഗികമല്ലേ എന്ന സംശയം കാരണം സ്വന്തം അഭിപ്രായങ്ങളും ആശയങ്ങളും പ്രായോഗികമാക്കുവാൻ നിങ്ങൾ ചിലപ്പോൾ മടിക്കാറുണ്ടോ?
(എ) ഉണ്ട് (ബി) കുറയൊക്കെ [സി] ഇല്ല.
- 84. നിങ്ങളെ കാണുന്നതുതന്നെ വെറുപ്പാണെന്നുമട്ടിൽ ചില അഹംഭാവികളായ ആളുകൾ പെരുമാറാറുണ്ടോ?
[എ] ഉണ്ട് [ബി] ചിലപ്പോഴൊക്കെ (സി) ഇല്ല.
- 85. മറ്റുള്ളവരുടെ മുമ്പിൽ നാണക്കപ്പെടാതെകൊണ്ടുവരികയ്ക്കുവാനുള്ള വിശ്വസനീയമായ ഓർമ്മശക്തിയുടെ ഉടമയാണോ നിങ്ങൾ?
[എ] അതെ [ബി] ഇടത്തരം [സി] ഇല്ല.
- 86. മറ്റുള്ളവർ നിങ്ങളോട് പെരുമാറുന്നതിനേക്കാൾ മോശമായ രീതിയിലാണോ നിങ്ങൾ അവരെ കരുതുക?
(എ) അതെ [ബി] ചിലപ്പോൾ (സി) അല്ല.
- 87. സംസാരിക്കുമ്പോൾ മറ്റുള്ളവരെക്കാൾ സാവധാനത്തിലാണോ നിങ്ങൾ പ്രതികരിക്കുക?
(എ) അതെ (ബി) ചിലപ്പോൾ (സി) അല്ല.
- 88. ഒരു വാച്ചിന്റെ രണ്ടു സൂചികൾ 65 മിനുട്ട് കൂടുമ്പോൾ ഒരുമിടുന്നു എങ്കിൽ വാച്ച് ഓടുന്നതാണ്?
(എ) മെല്ലെയാണ് (ബി) കൃത്യമായാണ് [സി] വേഗത്തിലാണ്.
- 89. മറ്റുള്ളവർക്കുവേണ്ടി കാര്യനിർവ്വഹണത്തിൽ നിങ്ങൾക്ക് വല്ലാത്ത ക്ഷോഭം വരുമോ?
(എ) അതെ (ബി) ചുരുക്കമായി (സി) ഇല്ല.

- 90. നിങ്ങൾ അഹംഭാവിയും അല്പനമാണെന്നു മറ്റുള്ളവർ കരുതാറുണ്ടോ?
[എ] ഉണ്ട് [ബി] വല്ലപ്പോഴും [സി] ഇല്ല
- 91. ജോലി ചെയ്യാനുള്ള ശരിയായ സാമഗ്രികൾ കിട്ടിയില്ലെങ്കിൽ പരാതി പറയേണമെന്നു സാവധാനത്തിലാണോ നിങ്ങൾ തീരുമാനിക്കുക?
[എ] അതെ [ബി] ചിലപ്പോഴൊക്കെ [സി] അല്ല
- 92. വീട്ടിൽ നിങ്ങൾ...
[എ] വിശ്രമസമയം കൊച്ചുവർത്തമാനം പറഞ്ഞു ഉല്ലസിക്കും. [ബി] രണ്ടും [സി] പ്രത്യേക ജോലികൾ ചെയ്യാൻ ഉപയോഗിക്കും.
- 93. മറ്റുള്ളവരുമായി സൗഹൃദം സ്ഥാപിക്കുന്നതിൽ നിങ്ങൾ മെല്ലെയാണോ?
[എ] അതെ [ബി] വല്ലപ്പോഴും [സി] അല്ല
- 94. ആളുകൾ കവിതയിൽ പറയാൻ ശ്രമിക്കുന്ന കാര്യങ്ങൾ സാധാരണ ഗദ്യത്തിൽ നേരെ പറഞ്ഞാൽ പോരെ എന്നു നിങ്ങൾ ചിന്തിക്കാറുണ്ടോ?
[എ] ഉണ്ട് [ബി] ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
- 95. സൗഹൃദം ഭാവിക്കുന്നവർ ചിലപ്പോൾ ചതിക്കുമെന്നു നിങ്ങൾ സംശയിക്കാറുണ്ടോ?
[എ] ഉണ്ട് [ബി] കുറെയൊക്കെ [സി] ഇല്ല
- 96. നിങ്ങളിൽ കാര്യമായ യാതൊരു മാറ്റമുണ്ടാക്കാതെയോണോ നിങ്ങളുടെ ഈ വർഷത്തെ ഏറ്റവും നാടകീയമായ അനുഭവങ്ങൾ കടന്നുപോകുന്നത്?
[എ] അതെ [ബി] ചിലപ്പോഴൊക്കെ [സി] അല്ല
- 97. നിങ്ങൾ സാവധാനമാണോ സംസാരിക്കുക?
[എ] അതെ [ബി] ചിലപ്പോഴൊക്കെ [സി] അല്ല
- 98. നിങ്ങൾക്കു ചില കാര്യങ്ങളിൽ ഉള്ള യേശു അനിഷ്ടമോ നിയന്ത്രിക്കാൻ കഴിയാതെ വരാറുണ്ടോ? ഉദാഹരണമായി ഒരു മൃഗം, ഒരു പ്രത്യേക സ്ഥലം മുതലായവ
[എ] അതെ [ബി] ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
- 99. ഒരു സംഘത്തിൽ താഴെ പറയുന്നവയിലേതൊരാൾ നിങ്ങൾ ഇഷ്ടപ്പെടും.
[എ] സാങ്കേതികപുരോഗതികളേവേണ്ടി പണിയെടുക്കുന്നയാൾ [ബി] രണ്ടിലേതെങ്കിലും [സി] റിക്കാർഡുകൾ സൂക്ഷിക്കുകയും നിയമങ്ങൾ പാലിക്കപ്പെടുന്നോ എന്ന് പരിശോധിക്കുകയും ചെയ്യുന്ന ആൾ
- 100. ഒരു സാമൂഹിക പ്രശ്നത്തെപ്പറ്റിയുള്ള വോട്ടെടുപ്പിൽ ഏതെങ്കിലും രേഖപ്പെടുത്തണമെന്നു തീരുമാനിക്കാൻ നിങ്ങൾ താഴെ പറയുന്നവയിൽ ഏതു വായിക്കും.
[എ] അതെക്കുറിച്ചുള്ള ഒരു നല്ല നോവൽ വായിക്കും. [ബി] രണ്ടിലേതെങ്കിലും. [സി] സ്ഥിതി വിവരക്കണക്കുകളും മറ്റും വായിക്കും. അല്ലെങ്കിൽ ഒരു പന്തുകൾ വായിക്കും.
- 101. രാത്രിയിൽ നിങ്ങൾ തികച്ചും അജ്ഞാതരവം അർത്ഥശൂന്യവും ആയ സ്വപ്നങ്ങൾ കാണാറുണ്ടോ?
[എ] ഉണ്ട് [ബി] ചിലപ്പോൾ [സി] ഇല്ല
- 102. വീട്ടിൽ തികച്ചും ഏകാകിയായികറച്ചു സമയം ചിലവഴിക്കേണ്ടിവന്നാൽ ആധിപത്യം വേലുണ്ടാകുമോ?
[എ] അതെ [ബി] ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
- 103. തീരെ ഇഷ്ടമില്ലാത്ത ആളുകളോട് സൗഹൃദം ഭാവിച്ചു അവരെ നിങ്ങൾ വഞ്ചിക്കാൻ ശ്രമിക്കാറുണ്ടോ?
[എ] ഉണ്ട് [ബി] ചിലപ്പോഴൊക്കെ [സി] ഇല്ല
- 104. ഏതാണ് മറ്റു രണ്ടിനോടും യോജിക്കാത്തത്?
[എ] ഓടുക [ബി] കാണുക [സി] തൊടുക
- 105. സീതയുടെ അമ്മ മോഹന്റെ അച്ഛന്റെ പെങ്ങളായാൽ മോഹൻ സീതയുടെ അച്ഛനോടുള്ള ബന്ധം.
[എ] സഹോദരൻ [ബി] അനന്തിവൻ [സി] അമ്മാവൻ/ചിറപ്പൻ

NB 2986

