APPENDIX

CHAPTER I

INTRODUCTION AND DESIGN OF THE STUDY

Human life to-day is characterized by complex and multifarious activities unlike life in the past. In the past people lived in harmony with nature, which was worshipped and the human activity was friendly towards it. Environment today is exploited and man tries to fight against nature, instead of living in harmony with it. This unnatural approach is the root cause for all the disorders, discomforts and diseases suffered by man. Living in this world today is full of pressures, strains and stress. Stress obviously, is the result of one’s greed, desires and ambitions.

Work is an important aspect of man’s life and behaviour. Most active part of life is spent in work and work-related activities. To-day, stress and anxiety are the pervading features of one’s work-life. Majority of people all over the world experience high psychological stresses. Stress has both
positive and negative job behaviour towards the individuals and the organisation. Positive job behaviour is reflected in increase in productivity, high employee morale, better mental and physical health of the worker and good relationship between the employer and the employee. Negative job behaviour is seen in accidents, absenteeism and high labour turnover. Teaching also has its own strains and stresses. It is no more mere preparing the lessons, lecturing in the classes and evaluating the student. But, to-day teaching includes many aspects apart from the core activities, especially in higher studies. The ‘autonomy’ given to the colleges provide freedom with more responsibilities for the teachers. The heart of an autonomous college is an internal examination system, a grading system, framing the course, committed to excellence in teaching and mutual trust among teachers and between students and teachers. Since the colleges have autonomy, the functions under autonomy have increased to a large extent.

In this connection, the system for record-keeping has to be maintained by the teachers. The colleges should maintain the records-related admission applications, admission list, attendance records, course registration records, autonomous assessment-records, final examination records, pass/fail statements, minutes of various autonomous bodies such as academic council, board of studies, senate, college examination committee, awards committee and other committees for liaison and communication with the university. Apart from this, the colleges have to go for National Academic Accrediation, ISO for academic excellence. This result in more clerical work-load for the teachers apart from their regular teaching work. Since, autonomy has been given to the colleges, the teachers have more work load, along with other psycho-social problems. These problems create more stress and ultimately affect the performance of the teachers.
NEED FOR THE STUDY

The major resource of every country is the human resource. The quality of its human resource depends upon the quality of education, which in turn depends on the quality of teachers. The quality of teachers is connected to their personal qualities like their education, attitude and satisfaction in the job. As mentioned in the ministry of education document “Challenge of Education”, the teacher performance is the most crucial input in the field of education. The National Education Policy 1986 has said, “The status of the teachers reflects the socio-cultural ethos of a society”.

Indian higher education is facing several challenges and the situation is desperate. The college autonomy was introduced to build up academic excellence. But the total success of autonomy rests on the involvement of teachers, which depends on their desire and attitude towards autonomy. When the teachers are stressed because of more work the advantages of academic freedom is easily exceeded by the job stress. Hence the present study makes an attempt of the job stress among college teachers in autonomous colleges.

STATEMENT OF THE PROBLEM

Recently, the country has witnessed turmoil in the education sector with ‘All India Education Bandh’ called by the Federation of ‘Central Universities, Teachers’ Associations, College Teachers’ Organisations and School Teachers’ organisations observed a strike on August 13 2002. The issue involved were “sustained economy, maintenance of academic standards, greater availability and accessibility to deprived students. These are fundamental to the continued health of the higher education system of the country”\(^4\).

The era of downsizing has resulted in few forward thinking, cost-effective organizations but the accompanying workplace upheaval has had unpleasant side effects. Heavy workloads, constant fear of job insecurity, the departure of co-workers and the conflicting demands of work and family have turned many downsized operations into modern day sweat shops. Stress and its manifestation include low morale, high turnover, burnout, excessive absenteeism, violence, substance abuse and hypertension. Teachers were reported to the occupational group with psychiatric morbidity levels that ‘should give some cause for concern. Unless the job stress among the teachers is reduced, it would affect the production of quality student and also the establishment of academic excellence. Therefore, an indepth investigation on job stress among the college teachers especially in autonomous colleges is made the focus of this study.

OBJECTIVES OF THE STUDY

The specific objectives of the present study are presented below:

7. To present the profile of the College teachers along with the social support received by them.

8. To identify and assess the level of job stress among the College teachers.

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9. To measure the job satisfaction levels among the College teachers.

10. To examine the job stress and its correlates and their impact on job performance.

11. To analyse the discriminant variables among stressful and stressless groups of teachers and

12. To suggest remedial measures for job stress, in autonomous colleges.

LIMITATION OF THE STUDY

1. The present study is confined to the autonomous colleges affiliated to the Madurai Kamaraj University.

2. The variables related to job stress, work stressors, job satisfaction, job performance and the consequences of job stress are selected only with the help of reviews and the experts in the field.

3. The application of rating scale and methods of index preparation depend upon the variables included and the nature of the scale of data.

4. The impact analysis is carried out with an assumption of linear relationship between dependent and independent variables.

5. The scope of the study is limited to arts and science colleges only.

RESEARCH METHODOLOGY

Research in common parlance refers to a search for knowledge. Research is defined as “the manipulation of things, concept or symbols for the purpose of generalizing to extend, correct or verify knowledge, whether that knowledge aids in construction of theory or in practice of an art.”

According to Clifford Woody, research comprises “defining and redefining problems, formulating hypothesis or suggested solutions, collecting, organizing and evaluating data, making deductions and reaching conclusions, and finally carefully testing the conclusions to determine whether they fit the formulating hypothesis.

The research methodology is the way of systematically solving the research problem. It is a science of studying how research is conducted scientifically. Under it, the researcher himself/herself uses the various steps generally adopted to study a research problems, along with the underlying logic behind them. The research methodology in the present study includes, research design, locale of research, sampling procedure, operationalisation and measurement variables, method of data collection and framework of analysis.

RESEARCH DESIGN OF THE STUDY

Research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In fact, the research design is the conceptual structures within which research is conducted; it constitutes the blue print for the collection, measurement and analysis of data. The research design explains the sampling design, observational design, statistical design and operational design followed in research.

For this study, ex-post facto research design has been followed. Singh (1986) explained ex-post facto research “as a design that draws the influences regarding the relationship between variables on

the basis of such independent variables whose manifestations have already occurred. The researcher has no control over the independent variables because they occurred much prior to their producing effort”.

**LOCATE**

While studying the job stress among college teachers, it was felt imperative to select the college teachers in autonomous for colleges since the autonomy for colleges is granted for the purpose of achieving academic excellence, to be future models of colleges. Hence, it was decided to select college teachers working in regular (Government aided) as well as self-financing posts in autonomous colleges affiliated to Madurai Kamaraj University.

**SELECTION OF THE STUDY AREA**

Madurai Kamaraj University was purposively selected as the study area by the researcher for the following reasons.

1. There were no recent exclusive studies about the job stress among college teachers in autonomous colleges affiliated to Madurai Kamaraj University.

2. Madurai Kamaraj University is the second biggest university in Tamil Nadu which consists of a number of autonomous colleges.

3. The researcher is very familiar with the college teachers working in autonomous colleges affiliated to Madurai Kamaraj University.

**SAMPLING PROCEDURE**

In the present study, ten autonomous colleges (science and arts) affiliated to Madurai Kamaraj University have been purposively selected. The colleges are The American College, Fatima College, Lady Doak College, Thiagarajar Arts College, Arul
Anandar College, Sri Meenakshi College, Vivekanantha College, Ayya Nadar Janakiammal Colelge, S.F.R. College and Madura College. The teachers working in regular (Government aided) and self-financing colleges have been included for the study. The total population of the study came to 1258. Out of the total population, 50 per cent of the teachers have been selected as the sample for the present study. So the sample size came to 629. This sample size have been distributed to all 10 colleges at proportionately. In each colleges, the samples are selected at random. Out of the 629 teachers, only 64.71 per cent properly responded to the mailed questionnaire within a stipulated period. The total sample size included for the present study is confined to only 407 teachers. Hence the applied sampling technique is proportionate random sampling.

**Collection of Data**

The pilot study have been constructed among 10 teachers from each college to confirm the quality of content of the questionnaire. On the based of their responses, appropriate charges has been made in the questionnaire. The final questionnaire was drafted based on the suggestion made by the respondents. In total, 629 questionnaire have been mailed to the selected respondents.

**Operationalisation and Measurement of Variables**

The variables selected in the present study are purely descriptive in nature. These variables are quantified with the help of scaling techniques. The variables and their measurement procedures used are presented in detail.

i) Social Support Index
The social support is one of important factors in job stress. It is the support from the work place and home. It ranges from the spouse relationships to support from family and friends to sources of support in work place. In the present study, the social support among the groups are measured with the help of 40 social support variables which are drawn from the reviews. The teachers were asked to rate the above said 40 variables (statements) on a five point scale namely highly agree, agree, moderately agree, disagree and highly disagree. The scores assigned on these scales are 5, 4, 3, 2 and 1 respectively. From the scores, the Social Support Index (SSI) is derived.

\[
SSI = \frac{\sum_{i=1}^{n} SSSV_i}{\sum_{i=1}^{n} MSSSV_i} \times 100
\]

Where

- SSI – Social Support Index
- SSSV – Score on Social Support Variables
- MSSSV – Maximum Score on Social Support Variables
- \(i = 1 \ldots n\) – Number of Variables in Social Support

ii) Job Stress Index

The job stress is an collective outcome of psychological factors on various aspects in a particular work. Since the job stress is the psychological variable and it depends on so many variables, the job stress among the teachers is measured with the help of fifty seven variables (statement) related to job stress. These variables are drawn from various reviews. The teachers were asked to rate the variables on a five-point scale. The job stress index is calculated by:

\[
JSI = \frac{\sum_{i=1}^{n} SJSV_i}{\sum_{i=1}^{n} MSJSV_i} \times 100
\]
Where

\[ \text{JSI} \quad – \text{Job Stress Index} \]
\[ \text{SJSV} \quad – \text{Score on Job Stress Variable} \]
\[ \text{MSJSV} \quad – \text{Maximum Score on Job Stress Variable} \]
\[ i=1\ldots n \quad – \text{Number of Variables in job stress} \]

\( \text{iii) Job Satisfaction Index} \)

Job satisfaction reflects the attitude of the teachers towards various aspects in the job. The attitude may be related to work content, interpersonal relationship, inter-departmental relationship, promotional chances and the working environment. Since the job satisfaction is one of the important factors determining the job stress among the teachers, it is included in the present study. Since the job satisfaction is a collective opinion on various aspects in the job, the present study includes 25 variables to measure it. All these variables are drawn from the related reviews. The job satisfaction index is calculated by:

\[ \text{JSI} = \frac{\sum_{i=1}^{n} \text{SJSV}_i}{\sum_{i=1}^{n} \text{MSJSV}_i} \times 100 \]

Where

\[ \text{JSI} \quad – \text{Job Satisfaction Index} \]
\[ \text{SJSV} \quad – \text{Score on Job Satisfaction Variable} \]
\[ \text{MSJSV} \quad – \text{Maximum Score on Job Satisfaction Variable} \]
\[ i=1\ldots n \quad – \text{Number of Variables in Job Satisfaction} \]

\( \text{iv) Job Performance Index} \)

Job performance is the individual’s ability to perform a particular task. The job performance among the teachers are measured with the help of sixteen variables related to teaching, research, extracurricular activities, public relations and student orientation. The sixteen variables are identified with
the help of previous studies. The teachers were asked to rate the sixteen variables on a five-point scale.

The scores on these sixteen variables are included to calculate the Job Performance Index (IPI).

\[
JPI = \frac{\sum_{i=1}^{n} SJPV_i}{\sum_{i=1}^{n} MSJPV_i} \times 100
\]

Where

- *JPI* – Job Performance Index
- *SJPV* – Score on Job Performance Variables
- *MSJPV* – Maximum Score on Job Performance Variables
- *i* = 1 . . . *n* – Number of Variables in Job Performance Framework of Analysis

For analyzing the data collected, the following statistical tools were used. The selection of statistical tools is based on the nature of scale of data and the objective for which the data are collected.

**T-Test**

In order to test the difference between two means in different samples, the t-test is applied.

\[
t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(n_1 - 1)\sigma S_1^2 + (n_2 - 1)\sigma S_2^2}{n_1 + n_2 - 2} \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}
\]

with degree of freedom = \((n_1 + n_2 - 2)\)

Whereas

- *t* – t statistics
- \(\bar{X}_1\) – Mean of the first sample
- \(\bar{X}_2\) – Mean of the second sample
- \(\sigma S_1^2\) – Variance in the first sample
- \(\sigma S_2^2\) – Variance in the second sample
\[ n_1 - \text{Number of samples in first group} \]
\[ n_2 - \text{Number of samples in second group} \]

The t-test has been used to find out the significant difference among male and female teachers regarding their work stressors, job satisfaction, job performance, consequences of job stress and the measures to reduce the job stress.

2. Oneway Analysis of Variance

The oneway ANOVA can be used to find the significant difference between more than 2 groups and the data in different groups are in the interval scale. The F-statistics is calculated by

\[ F_{ratio} = \frac{\text{Variance between groups}}{\text{Variance within groups}} \]

The F-ratio is compared with the table value of F at required level of significance.

In the present study, the one way ANOVA has been used to analyse the significant difference among the teachers under different profiles, organisation profile with their job stress index, work stressors, job satisfaction and job performance individually.

3. Factor Analysis

The factor analysis is a multivariance method. It is a statistical technique to identify the analyzing factors among a large number of interdependent variables. It seeks to extract common factor variances from a given set of observations. It splits a number of attributes or variables into a smaller group of uncorrelated factors. It determines which variables belong together. This method is suitable for the cases with huge number of variables having a high degree of correlation. It is generally used for the purpose of classification of data into meaningful factors.
In the present study, the factor analysis has been applied to classify variables related to social support, job stress, work stressors, job satisfaction and job performance into meaningful factors.

4. Multiple Regression

The multiple regression technique is applied to analyse the cause and effect of the relationship between the dependent and the independent variables, which are in the interval scale. The Ordinary Least Square (OLS) has been applied to find out the result of the multiple regression model. The form of the model is

\[ Y = a + b_1 X_1 + b_2 X_2 + \ldots + b_n X_n + e \]

Where

- \( Y \) – dependent variable
- \( X_1, X_2, \ldots X_n \) – Independent variables
- \( b_1, b_2, \ldots b_n \) – regression co-efficients of Independent variables
- \( a \) – constant and
- \( e \) – error term

The multiple regression is applied to evaluate

i) Impact of social support on job stress

ii) Impact of profile variables on job stress

iii) Impact of organisation variable on job stress

iv) Impact of job stress on job satisfaction

v) Impact of job satisfaction on job stress

vi) Impact of various dimensions in job stress on job stress index and

vii) Impact of job stress on job performance

5. Discriminate Analysis (A Two Group Model)

The objective of discriminate analysis is to separate a population into two distinct groups or two distinct conditionalities. After such a separation is made, one should be able to discriminate between
the groups. The discriminant analysis can be applied when the dependent variable is in nominal scale and the independent variables are in interval scale.

The unstandardised canonical discriminant function was estimated by

\[ Z = a + b_1 X_1 + \ldots + b_n X_n \]

Where \( Z \) – Discriminant criterion
\( X_1, X_2, \ldots X_n \) – Discriminant variables
\( b_1, b_2, \ldots b_n \) – Discriminant co-efficients

The Wilks Lambda was calculated as a multi-variant measure of group difference over discriminant variables. The relative discriminating power of the variables was calculated by

\[ I_j = K_j (X_{j1} - X_{j2}) \]

Where
\( I_j \) – The important value of the \( j^{th} \) variable.
\( K_j \) – Unstandardised discriminant co-efficient of the \( j^{th} \) variable
\( X_{jk} \) – Mean of the \( j^{th} \) variable for the \( k^{th} \) group

The relative importance of a variable \( R_j \) is given by

\[ R_j = \frac{I_j}{\sum_{j=i} \frac{I_j}{\sum_{j=1} I_j}} \]

The two-group discriminant analysis has been administered to identify the important discriminant variables among stressful and stressless groups of teachers.

CHAPTERIZATION

The present study has been organized into seven chapters.

Chapter-I introduces the topic chosen, need for the study, statement of the problem, objectives of the study and limitations of the study. It also deals with the research methodology which consists of
research design, sampling procedure, operational definition, collection of data and framework of analysis.

Chapter-II focuses on the theoretical framework. It describes the autonomy of colleges in India and Tamil Nadu.

Chapter-III examines the concepts used in the present study and also the reviews of previous empirical studies.

Chapter-IV discusses the profile of the college teachers. It includes both personal and organizational profiles. The social support received by the college teachers is discussed in this chapter.

Chapter-V examines the job stress, work stressors, job satisfaction and job performance among the teachers. The association between profiles of teachers and the job stress, work stressors, job satisfaction and job performance is analysed in this chapter.

Chapter-VI includes the job stress and its correlates, consequences of job stress and the measures to reduce the job stress of teachers. It also covers the discriminant variables of the stressful and stressless groups among the teachers.

Chapter-VII presents a summary of findings along with concluding observations, policy implications and directions for future research.

CHAPTER–II
COLLEGE AUTONOMY IN INDIA

The concept and implementation of the scheme of autonomous college have come to stay for the last twenty years in the realm of Higher Education in India. The autonomous colleges have emerged as an alternative to the system of affiliated colleges. The system of affiliating the colleges to a university was designed at a time when the