



JOB STRESS AMONG COLLEGE TEACHERS IN DOABA REGION OF PUNJAB (INDIA)

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Abstract: *Stress is a feeling that's created when we react to particular events. It's the body's way of rising to a challenge and preparing to meet a tough situation with focus, strength, stamina, and heightened alertness. Stress may be good or bad. Employee and Job efficiency depends upon the physical level and mental level of the employee. The aim of this study was to find out the factors that creates stress among college teachers in Doaba region of Punjab. The 60 respondents were selected by random cum convenient sampling method. Data was analyzed with the help of factor analysis and chi square test. The five factors are found that creates the job stress among college teachers in the Doaba region. The most important factor that creates stress is Salary and other benefits followed by working conditions, relations with colleagues, job security and work load So by improving these factors job stress can be reduced among college teachers. The results of this study may be helpful for college's higher authorities to make HR policies for teachers.*

Keywords: *Job Stress, College, Teachers, Gender, Punjab, India*

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INTRODUCTION

Stress is an adverse reaction a person has to excessive pressures or other types of demands placed upon them. Given an excess of pressure, stress can therefore happen to anyone, and should not be seen as a weakness. Instead, an individual needs to be helped to deal with these pressures. The concept of stress was first introduced in the life sciences by Selye Hans in 1936. It was derived from the Latin word 'stringere'; it meant the experience of physical hardship, starvation, torture and pain. Selye Hans, 1974 defined stress as "the non-specific response of the body to any demand placed upon it". Many people still get confused about pressure and stress, yet there's a great deal of difference between the two. We all experience pressure on a daily basis, and need it to motivate us and enable us to perform at our best – ask any athlete or actor. However, if we experience too much pressure without the opportunity to recover, we feel unable to cope and stress is the result. HSE defines Claxton (1989) indicated that teaching is an occupation which is always demanding and changing. Stress has physical and emotional effects on us and can create positive or negative feelings. As a positive influence, stress can help compel us to action; it can result in a new awareness and an exciting new perspective. As a negative influence, it can result in feelings of distrust, rejection, anger, and depression, which in turn can lead to health problems such as headaches, upset stomach, rashes, insomnia, ulcers, high blood pressure, heart disease, and stroke. Stress is the "wear and tear" our bodies experience as we adjust to our continually changing environment. According to Hans Selye, a pioneer researcher in stress reaction, "stress is the human response to changes that occur as a part of daily living." "Stress comes from any situation or circumstance that requires behavioral adjustment. Any change, either good or bad, is stressful, and whether it's a positive or negative change, the physiological response is the same" (Lazarus, 2000).

Stress reactions may result when people are exposed to risk factors at work. Reactions may be emotional, behavioral, cognitive, and/or physiological in nature. When stress reactions persist over a longer period of time, they may develop into more permanent, irreversible health outcomes, such as chronic fatigue, musculoskeletal problems or cardiovascular disease. Furthermore, it can also be deduced that there are two distinct types of stressors; those which are found within the individual, which include personal values, attitudes and self-concepts, and those that originate outside the individual, which include environmental



and work-related stressors. University Durham (1992) defined stress as a process of behavioral, emotional, mental, and physical reactions caused by prolonged, increasing, or new pressures that are significantly greater than the availability of coping strategies.

TABLE I COMPONENTS OF JOB STRESS IN THE VIEW OF VARIOUS RESEARCHERS

AUTHOR	COMPONENT
Nema.G, Nagar D & Mandhanya Y (2000)	1.Excessive or high workload 2.unrealistic deadlines 3. Poor working relationships 4. Lack of control over work activities 5. Job insecurity 6. Lack of carrier opportunities 7. Multiple reporting
Northern Territory Govt. Report(2003)	1.Failure to inform about significant change 2.poor physical working environment 3.longer working hours.
Johnson et.al (2005)	1.psychological well being 2.physical health 3.job satisfaction
Park (2007)	1.low personal income 2. Low level of education 3.work more physically demanding and less satisfaction
Williams (2003)	1.uncertain job security 2.fear of lay-off
Harrington (2001)	1.health effects shift work causes 2.disruption of circadian rythm 3.reduction in quality and quantity of sleep, fatigue, anxiety, depression & increased neuroticism.
Gemmil & Heisler (1972)	1.Inseurity of job or promotion 2.ambiguity of supervisors evaluations. 3.too heavy work load, too less authority.
Evers, Tomic & Brouwers (2005) & Kokkinos, Panayiotou & Dazoglou (2005)	1.Disciplinary problems 2.apathy 3.overcrowdedd classrooms 4.unvoluntary transfers 5.inadequate salaries 6.lack of administrative support.
Krause (1994)	1.Lack of resources 2.lack of time 3.excessive meetings 4.large class sizes 5.lack of assistance6. lack of support
Kahan & Cooper (1993)	1.limited opportunities for development 2.insufficient performance feedback 3.inadequate assessment measures 4.biased control system 4.culture within organisation
Rutter, Hezberg & Paice (2002)	1.High self expectation 2.securing financial support for research 3.insufficient development 4. Inadequate salary 5. Slow progress on career advancement 6. Long meetings 7. Frequent interruptions.



RESEARCH METHODOLOGY

Sample unit and sample size: It was, for the purpose of this study, decided to select a sample of 50 college teacher respondents from Doaba region of Punjab. A sample of 50 respondents was chosen through the convenience cum random sampling technique.

Research instrument: The study was conducted with pre structured questionnaire (Annexure 1) Twenty three items were used for data collection regarding job stress. A five-point scale with 1 being “strongly disagree” and being 5 “strongly agree” was used. Hence a higher score indicated greater agreement with a statement than a lower score. To know the satisfaction level of respondents fifty three number item was formulated. To facilitate answering, the questions were developed in simple words.

Data analysis tools: The information collected from the survey has been analysed using different techniques. The various statistical tools as factor analysis and Chi-Square test have been used in the present study.

OBJECTIVES OF THE STUDY

The present study has been carried out with the following objectives:

1. To study the factors that cause Job Stress;
2. To study the relationship between Job stress and Gender;
3. To suggest some measures to reduce the level of job stress in colleges.

HYPOTHESIS FORMULATION

A study investigated stress, job satisfaction and organisational climate in 2500 medical practitioners and auxiliary personnel in Germany. Job stress and dissatisfaction was measured using a 12-item questionnaire developed from previous work by the authors. Participants were randomly selected from national listings and 5000 were sent a questionnaire. It was reported that female doctors perceived higher .levels of work stress compared to their male counterparts, and that female auxiliary personnel reported lower levels of stress compared to the male auxiliary personnel (Gardiner and Tiggemann, 1999). An Australian cross-sectional study investigated stress, mental health, and leadership styles, in 60 female and 60 male managers in male and female dominated industries. Male dominated industries included academia, automotive industry, IT, accounting consultancies and the timber industry. Female dominated industries included childhood education, nursing and hair dressing. The female and male participants were not matched. Job stress



was measured using three scales from the Survey of Work Pressure and the GHQ was used to measure mental health. Women reported overall higher levels of job stress than men, but did not experience worse mental health. Female managers in male-dominated industries reported the greatest level of pressure from discrimination. It is concluded that the gender and the gender ratio of the industry influence stress, leadership style and mental health among managers. The authors highlight that the findings need to be replicated, and due to the small sample size there are limitations as to the ability to generalise to other male and female dominated industries. Davidson & Cooper conducted a study investigating occupational stress in managers in various work sectors within the UK. Initially, 60 female managers were interviewed, and then 696 female managers and 185 male managers completed a stress questionnaire, based on the findings from the interviews and previous research. Stress outcomes were measured using the GHQ, drug use and job satisfaction. It was found that female managers reported higher levels of stress than male managers, and they also experienced higher pressure levels than men from the work, home/social and individual arenas (Davidson and Cooper, 1984). Davidson, Cooper & Baldini, Davidson et al. (1995) studied stress in 126 female and 220 male graduate managers using the OSI. The female participants reported significantly higher scores on the seven subscales relating to sources of pressure compared to the male participants. The female managers were also more at risk of physical and mental ill health and had lower job satisfaction scores. The authors conclude that the female managers are under considerably more pressure than their male counterparts managers are under considerably more pressure than their male counterparts (Davidson et al., 1995).

H₀) College teachers perception about job stress is independent of gender.

DATA ANALYSIS AND INTERPRETATION

A total of 50 (Table 2) teacher respondent participated in the survey. Majority of respondents were male employees (60%). Majority of the respondents were of age above 45 (52%) and most of them (40%) have been working for more than 10 years. 11% respondents are working at salary up to 20,000. Majority of respondents have qualification PG with NET and are assistant professors.



TABLE-2 DEMOGRAPHIC PROFILE OF RESPONDENT

AGE	Frequency	Percent
25-35	8	16
35-45	16	32
Above 45	26	52
Gender	Frequency	Percent
Male	30	60
Female	20	40
Salary	Frequency	Percent
10,000-20,000	11	22
20,000-30,000	19	38
Above 30,000	20	40
Tenure	Frequency	Percent
2-5 years	12	24
5-10 years	18	36
Above 10 years	20	40
Qualification	Frequency	Percent
PG with NET	30	60
Ph.D	20	40
Status of Employment	Frequency	Percent
Assistant professor	28	56
Associate professor	22	44

FACTOR ANALYSIS

KMO (Kaiser – Meyer- Olkin) measure of sampling adequacy: The KMO measure of sampling adequacy is an index used to examine the appropriateness of the factor analysis. The values between 0.5 to 1.0 indicate that factor analysis is suitable and appropriate.

The overall significance of correlation matrices is tested with Barlett’s test of Sphericity, significant at 1% ($p < 0.000$) that supports the validity of data. Table 3 shows KMO measure of sampling adequacy and Barlett’s test of sphericity. Calculated value of KMO measure of sampling adequacy is .588. This indicates that the sample is adequate for applying the factor analysis. So factor analysis is applied to extract various factors using principle of component analysis.

Table-3 KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.588
Bartlett's Test of Sphericity	Approx. Chi-Square	433.002
	Df	231
	Sig.	.000



Extraction of Factors: factors are extracted on the basis of Eigen value. Only those factors which have Eigen values greater than 1 are retained, and other factors are not included. An Eigen value represents the amount of variance associated with the factor. Total variance explained is 67.388%.

TABLE-4 TOTAL VARIANCE EXPLAINED

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
Factors	1	4.899	33.270	33.270	4.899	33.270	33.270
	2	2.576	11.708	44.978	2.576	11.708	44.978
	3	1.941	8.823	52.801	1.941	8.823	52.801
	4	1.731	7.868	60.669	1.731	7.868	60.669
	5	1.478	6.719	67.388	1.478	6.719	67.388

Extraction Method: Principal Component Analysis.

From the table 4, five factors have been extracted and total variance explained by these factors together is 67.388%, the remaining is due to the other factors which are beyond the scope of the study. The results were obtained through orthogonal rotation with varimax method and all factors loading greater than 0.4 (ignoring the sign) were retained.

NAMING OF FACTORS

Table 5 shows the factor loading on the various statements. This approach helps in detecting the structure in the relationship between variable i.e to classify the variables. All the variables have been given appropriate names according to the variables that have been loaded on each factor. The names of the factors, the statement labels and factor loadings are summarized below (Table-5)

Salary and other benefits

It was clear from the table that most important factor as perceived by college teachers was “Salary and other benefits”, consists of 8 statements with loading in the range of .685 to .829. It accounts for 33.270% of the total variance. It has items related to gross emoluments offered by the institute are commensurate with one’s responsibility, training and experience, enough time for teaching preparation, lack of time to undertake research, income alone is enough to meet family needs, performance appraisal and promotions are based upon objective criteria and institute offers training and development opportunities.



Working conditions

Factor two consist of eight items covering 11.708% of the total variance. The lowest loading is .685 and highest variance is .804. The factor has been named as working conditions offered by the organisation and it includes work timings are inflexible, sufficient time for teaching preparation, lack of time to undertake research, unable to get sufficient breaks, personal harassment and institute allow attending conferences and workshops.

Relations with colleagues

The factor includes four items. The factor loading from .696 to .754. The factor explains 8.823% of the total variance. The factor explains friction and anger between colleagues, least interference from the job and colleagues and colleagues help in case of difficulty.

Job security

The factor includes three items. The factor loading ranges from .588 to .829 and explains 7.868% of total variance. Three statements constitute this factor namely no worry about termination of job, income from job is sufficient to meet family needs and institute offers training and development programmes.

Work load

This is the next important factor includes five items, which accounts for 6.719% of variance. The lowest loading is .597 and highest is .848. The factor suggests enough time for teaching preparation, lack of time to undertake research, lost sense of humour, grinding of teeth due to excess work.

TABLE-5 NAMING OF FACTORS

	Factor loading	% of variance	Mean
Factor I- Salary and other benefits		33.270	
Gross Emoluments offered by the institute are commensurate with one's responsibility, education, training and experience.	.700		3.20
I have enough time for teaching preparation.	.692		4.20
Lack of time to undertake research.	.799		4.30
The income from job alone is enough to meet my family needs.	.829		3.56
Institute allows me to attend conferences and workshops.	.685		4.28
Institute offers training and development programmes.	.588		3.68
Performance appraisal and promotions are based on objective criteria.	.661		3.84
Gross Emoluments and other benefits compare well with	.819		3.70



those available in other organisations.			
Authority and management appreciate my achievements.	.756		4.22
Factor II- Working Conditions		11.708	
Work timings are inflexible.	.769		3.90
I have enough time for teaching preparation.	.692		4.20
There is no need to worry about termination of job at any time.	.762		3.40
Lack of time to undertake research.	.799		4.30
Assignment of duties that take me away from my family.	.804		3.54
Unable to get sufficient breaks.	.727		3.74
I am subject to personal harassment in the form of unkind words or behaviour.	.779		3.20
Institute allows me to attend conferences and workshops.	.685		4.28
Factor III-Relations with colleagues		8.823	
If work gets difficult my colleagues helps me.	.696		4.12
There is friction or anger between colleagues.	.722		3.46
I receive the respect at work place I deserve from my colleagues.	.738		4.22
While performing the job there is least interference from the boss and colleagues.	.754		3.98
Factor IV- Job security		7.868	
There is no need to worry about termination of job at any time.	.762		3.40
The income from job alone is enough to meet my family needs.	.829		3.56
Institute offers training and development programmes.	.588		3.68
Factor V- Work Load		6.719	
I have enough time for teaching preparation.	.692		4.20
Lack of time to undertake research.	.799		4.30
Sometimes I feel like grinding my teeth due to excess work.	.597		3.54
Assignment of duties that take me away from my family.	.804		3.54
I have lost my sense of humour	.848		3.34

RELATIONSHIP BETWEEN GENDER AND JOB STRESS

Relationship between gender and job stress using Chi Square Test

Table 6 showed that to know the impact of gender on Job Stress, chi square Test is used.

The formula of Chi Square Test is used to know the expected values as:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

O = the frequencies observed

E = the frequencies expected

∑ = the 'sum of'



Calculation of Chi Square Test:

Level O significance =5% ; Degree of freedom= (r-1) (c-1) = (5-1)*(2-1) =4*1=4

Table Value=9.49 ; Calculated value= 2.1598 (see Table 7)

Decision: As the calculated value is less than the tabulated value our Null hypothesis is accepted i.e. there is no significant relationship between Gender and job stress.

Table 6 Relationship between Gender and job stress

Gender Job stress	Male	Female	Total
Strongly agree	9(12)	4(5.2)	13
Agree	10(9.6)	6(6.4)	16
Neutral	5(4.8)	3(3.2)	8
Disagree	4(5.4)	5(3.6)	9
Strongly Disagree	2(2.4)	2(1.6)	4
Total	30	20	50

***significant value at 95% level of significance**

Table 7 calculation of Chi Square value

Observed frequency (O)	Expected Frequency(E)	(O-E)²/E
9	12	.75
10	9.6	.017
5	4.8	.0083
4	5.4	.36
2	2.4	.067
4	5.2	.28
6	6.4	.025
3	3.2	.0125
5	3.6	.54
2	1.6	.1
	Calculated Value	2.1598

DISCUSSION AND FINDINGS

Five factors have been found that creates job stress among the college teacher i.e. Salary and other benefits, working conditions, Relations with colleagues, Job security and Work load. Salary and other benefits carry maximum variance that means salary plays an important role in one’s economic status if not satisfied it creates stress.

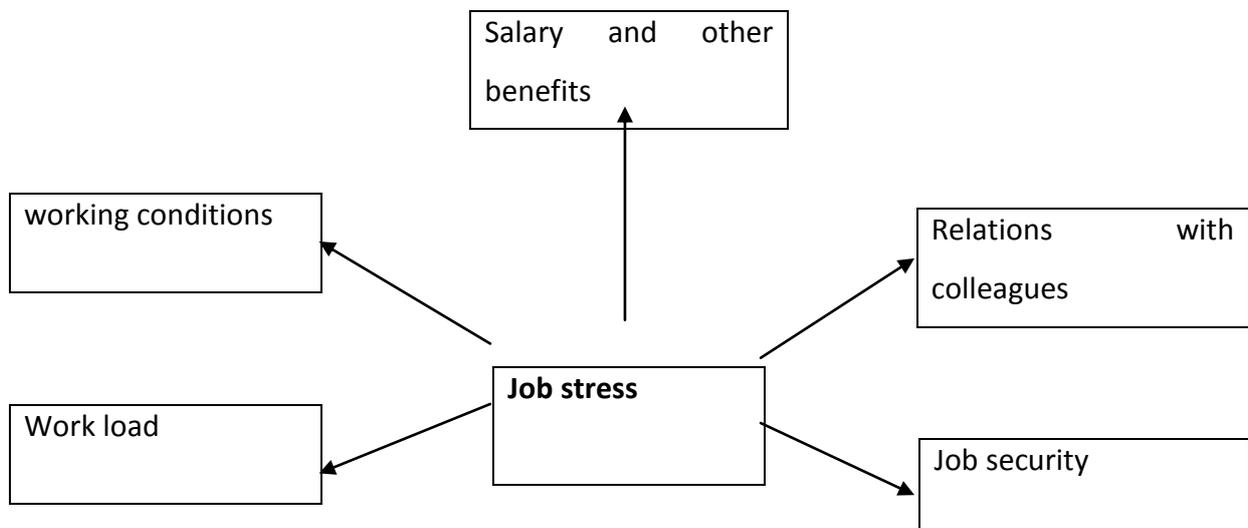
Null hypothesis that College teachers’ perception about job stress in independent of gender has been accepted, there is no relationship between job stress and gender. It means male and female has same perception about their job stress .One earning hand may not be able



to survive due to high cost of living similarly both male and female have to earn to fulfil their desires. They both suffer from same kind of stress.

CONCLUSION

The most important factor that creates stress is Salary and other benefits followed by working conditions, relations with colleagues, job security and work load So by improving these factors job stress can be reduces among college teachers. A model can be formed with the help of factors found in this study. The results of this study is consistent with which was found by researcher in other countries.



RECOMMENDATIONS

- Organisations must improve the salary structure according to cost of living.
- Pension and other retirement benefits must be provided so that employees feel secured.
- Employee should be provided opportunities for career development and research.

LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

The study has been confined to Doaba regions only and based on the subjective opinion of the respondents and truth of the answers given by them cannot be assessed, so the findings of the study cannot be generalized. Both the time and cost factors have been the constraints while conducting of the study. The sample is small that may not represent the whole universe. The future studies can be conducted on schools teachers and impact of job stress on job satisfaction, performance and commitment.



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