

# A Literature Assessment on Occupational Stress among Teachers using Statistical Techniques

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**Abstract :** Occupation plays an important key role in every person life. Mostly working professions were struggling in their job for daily living which causes an occupation stress. Occupational stress and occupation related factors are collaborating with the workers to causes a mental and an emotional behavioral change affects the normal routine activities. Occupation Stress is seen frequently when there is lots of opposition with regard to one another. When an individual person gets a job they are not able to deliberate because of the current workload. The teaching stress is one of the most noteworthy and persistent state of apprehensions which affect the performance of the students. This review tries to focus on different existing articles and works which employed various statistical techniques to discover the characteristics, factors, causes and reactions of teacher's stress.

**IndexTerms - Stress, occupational Stress, statistical techniques, factors.**

## I. INTRODUCTION

Teaching has been identified as one of the most stressful professions in today's life. The work of a teacher is a physically and mentally challenging process to across many situations. A teacher needs to use a lot of energy in his daily assignments in the classroom coupled with his personal and family commitments. Teacher forwards a lot of stress due to modern work routine. Modern work routine causes more infinite satisfaction and fulfillment, discontentment and humiliation to the teachers [1]. Occupational stress can be expressed as a state where occupation related factors act together with the worker to modify his or her psychological or physiological condition makes the person mind and body is forced to turn from its normal way of activities. Lesson planning, teaching preparation, Accountability for student performance, Classroom management and discipline, Supervisory role, extracurricular activities conducting and monitoring were responsibilities of teachers. The main aim in education field of teachers is to constructing human beings and also determining the development of civilizations. Self analysis and mutual analysis methods are used recognize the level of stress of individual person [2].

### 1.1 Stress Reactions

Stress is considered as an automatic response to a dangerous situation which are Increased blood pressure, Rapid heartbeat, Reduced blood supply to the skin, Cessation of digestive activities, Increase perspiration, Decrease in immune system's functions, Additional release of sugar, Depression, anxiety, Alcoholism, Drug dependency, Congenital heart diseases and Stress related Diabetes [3].

### 1.2 Causes of Stress

According to a research the most important reasons of teacher stress are Extreme working hours, Too much of workload, increasing class sizes, demands due to inspection and examination, transformation in curriculum and courses, transformation in assessment and testing requirements, Poor management, Workplace harassment, Crumbling schools, students misbehavior activities, threat of violence from students, parents and intruders, Lack of support with administration, form writing and schedule tasks, Lack of support in job safety, Lack of power over the job, load of providing cover, Threat to early leaving agreements, deprecation of profession by politicians & media and Lack of public esteem [4].

### 1.3 Factors of Stress

Individual, organizational and transactional factors which are cause stress in teachers were described in figure1.1. Individual factors are age, gender, marital status, experience in teaching, educational background, religious background and coping strategies. Organizational factors are class size, work demands, role ambiguity, inadequate salary, teaching preparation and

decision making. Transactional factors are teachers’ judgment based on student misbehaviors, peer support, relationship between student and teacher interaction, administrative support and professional satisfaction [5].

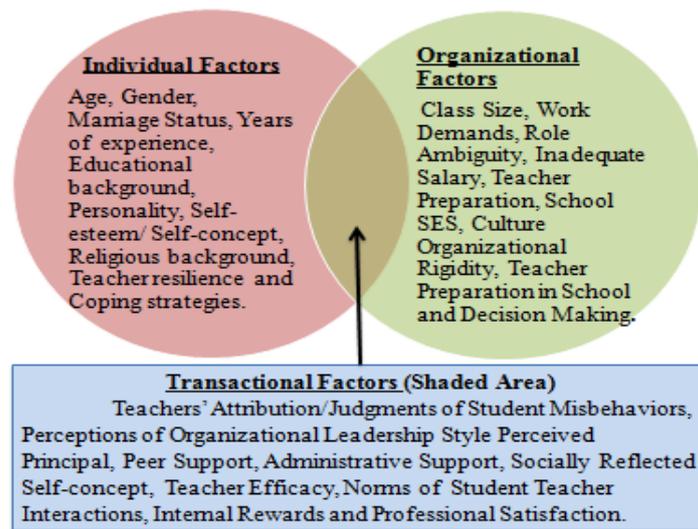


Figure 1.1: Stress causing factors

**II. LITERATURE REVIEW**

Nain et.al [6] has conducted the Study to measure the occupational stress factors of secondary school teachers. Occupational stress related factors were classified through various categories such as role overload, role ambiguity, role conflict, unreasonable group and political pressure, responsibility for persons, under participation, powerlessness, poor peer relations, inherent, hardship low status, exhausting working conditions and unprofitability. Data was collected through Occupational Stress Index. A sample of 200 responses was taken from secondary school teachers of district Mandi in Himachal Pradesh.

Table 2.1: Percentage distribution of Occupational stress level

S.No	Level of Occupational Stress	No of Teachers	Percentages
1	High Level of Stress	71	35.5%
2	Moderate Level of Stress	67	33.5%
3	Low Level of Stress	62	31%

Data was evaluated through hypothesis testing and percentage distributions of stress level were described in table 2.1. The result shows that Out of 200 secondary school teachers 71 secondary school teachers are working under big stress in the schools. The result also exposed that female secondary school teachers have occupational stress is more than male secondary school teachers.

Kavita et.al [7] has proposed a comparative study between Primary and Secondary School Teachers to identify the level of stress based on demographic factors. Demographic factors were such as marital status, age, experience of teaching and education qualification. Data was collected through Teacher Stress Inventory and Self Report Teacher Stress Questionnaire. A sample of 268 responses was taken from primary and secondary schools in a district in Selangor. Data was evaluated through hypothesis testing. The result shows that secondary school teachers perceived extra stress in all stress factors which are relationship with parents, relationship with co-worker, occupation load, time limit, student mind-set, gratitude and maintain and lack of resources than primary school teachers. The finding also specified that high education qualification with experienced teachers (11-15 years) and middle age group (31-50 years) teachers have extra stress The result also exposed that a major variation in the mean stress level scores for single and married teachers.

Pijus et.al [8] has conducted the comparative study between teachers and administrators to identify the work-stress with respect to few demographic and job factors. Demographic factors were Gender, Age-group, Work-Position, Service Experience, Marital Status, Job Status, Additional Responsibilities, Area of Residence, Income Experience, Educational Qualifications, and Family Status. Occupational stress related factors were classified through various categories such as Role Overload, Role Ambiguity, Role Conflict, Unreasonable Group and Political Pressure, Responsibility for Persons, Under Participation, Powerlessness, Poor

Peer Relations, Intrinsic Impoverishment, Low Status and Strenuous Working Conditions. Data was collected through Occupational Stress Index Questionnaire. Stratified sampling technique used to select the samples of 110 responses of Privately Managed Business Schools in West Bengal.

Table 2.2: Percentage distribution of stress level

Work Position	Level of Stress		
	Low	Moderate	High
Administrator	20.51	48.72	30.77
Teacher	14.08	54.93	30.99

Data was evaluated through ANOVA test and percentage distribution of stress level were described in table 2.2. ANOVA outcomes show that age, experience and area of residence are most powerful demographic factor to cause high stress in work place. Role Overload and Role Ambiguity are most powerful job factor to cause high stress in work place.

Shivananda et.al [9] has conducted the comparative study between government and private school teachers to identify the Occupational stress. Occupational stress was classified through various categories such as Time management, Work related stressors, Professional distress, Discipline and motivation, Professional investment, Emotional manifestations, Fatigue manifestations, Cardiovascular manifestations, Gastronomical manifestations and Behavioral manifestations. Data was collected through Teacher Stress Inventory. A sample of 160 teacher's responses was selected by randomization method. Data was evaluated through hypothesis testing. The result shows that teacher whose age above 45 years have extra stress as comparing to the age group1 (36-45 years) and age group2 (25-35 years). The result also exposed that maximum in the area of professional distress in government and private school teachers.

Sumanta et.al [10] has offer the study to measure the level of stress among school teachers based on different socio demographic variables and also find out the variation in stress of teachers were living in urban, suburban and rural areas. Socio demography factors were age, sex, religion, educational level, teaching experience, salary, working environment and work pressure. Data was collected through Work tension scale and self-reported questionnaire. A sample of 338 teachers responses was taken from rural, urban and semi urban area of West Bengal. Cluster sampling method was used to select the samples. Data was evaluated through hypothesis testing.

Table 2.3: Percentage distribution of Occupational stress level

Level of stress	No of teachers	percentages	Female (%)	Male (%)
No	80	23.77	21	29
Mild	127	37.57	32	39
Moderate	89	26.33	31	23
Severe	42	12.42	16	9

The table 2.3 shows that 37.57% teachers were affected by mild level stress. Majority of female were affected by Moderate and severe stress level than male. Finally the result also revealed that sex- Female, age group - 50-60 years, urban area, private School, headmaster & assistant headmaster and top salaried teachers were affected from high level of stress.

Rashmi et.al [11] has carried out the study to identify the major reasons of occupational stress among female secondary school teachers and also find out the different stress reducing activities. Data was collected through self structured questionnaire and interview. A sample of 60 teacher's responses was taken from secondary schools in tezpur town of Assam. teachers' reseponses considering the main causes were large class size (93.33%), problem in managing students behavior (83.33%), lack of opportunities (73.33%), lack of healthy interaction and shortage of time limit to cover the syllabus(66.67%), inadequate salary(60%), lack of inner satisfaction(55%), lack of teaching aids(50%), heavy work load and lack of family support(41.67%), financial problems(36.67%) and family interference in career(33.33%). teachers' reseponses regarding different stress reducing

activities were Sleeping (100%), Watching TV and listening to music(96.67%), Talking with friends(63.33%), Shopping (48.33%) and Travelling to places of natural beauty(40%).

Alfred et.al [12] has projected the study to associate the level of stress among school teachers with selected demographic variables. Demographic variables were age, religion, gender, marital status, type of family, type of residence, educational status and year of experience. Allen Elkin stress scale used to collect the data from selected school teachers at Vellore. Sample of 80 teachers responses were selected through convenient sampling technique. Data was evaluated through Descriptive and inferential statistics. The results show that a majority of teachers were affected by moderate level of stress and also described in figure 2.1. The results also revealed that educational status and years of experience are cause severe stress in school teachers.

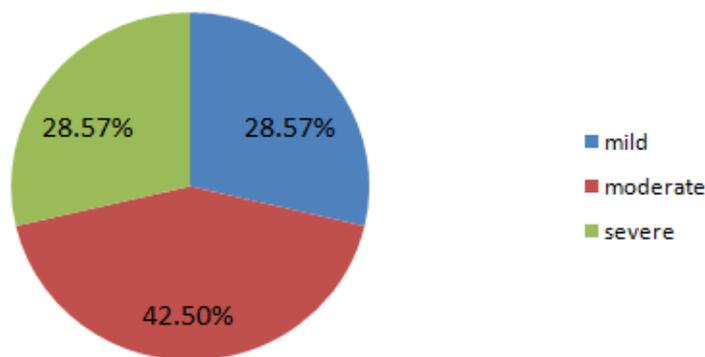


Figure2.1: level of stress

Neelam et.al [13] has conducted the study to find and compare the level of stress among JKBOSE & CBSE School Teachers who were working in Jammu District. Data was collected through Occupational Stress Index. Sample of 180 teachers responses were selected through simple random sampling method. Data was evaluated through statistical methods such as Mean, Standard Deviation, Sedum and ‘Z’ test. Occupational stress was classified through various categories such as 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. The results show that CBSE schools teachers have scored higher stress on Role Overload, Role Ambiguity, Role Conflict, Group and Political Pressure, Strenuous Working Conditions and Unprofitability. The results also revealed that JKBOSE schools teachers have scored higher stress on Powerlessness.

Qaiser et.al [14] has conducted the study is used to observe and evaluate the occupational stress of male and female secondary school heads in Khyber Pakhtunkhwa. Data was collected through Occupational Stress Index. Sample of 402 secondary school heads responses were selected through multi-stage sampling technique. Data was evaluated through statistical methods such as mean, standard deviation and inferential statistics.

Table 2.4: Occupational Stress Factors male and female school heads

Occupational Stress Factors	MALE		FEMALE	
	MEAN	SD	MEAN	SD
Role Overload	3.54	1.1	3.68	1.25
Role Ambiguity	2.54	1.25	2.93	1.45
Role Conflict	3.25	1.24	3.6	1.31
Unreasonable Group & Political Pressure	3.53	1.07	3.51	1.21
Responsibility for Persons	2.91	1.26	2.81	1.26
Under Participation	3.23	1.23	3.52	1.27
Powerlessness	2.58	1.4	2.6	1.5
Peer Group Relations	2.67	1.26	2.58	1.34
Intrinsic Impoverishment	2.68	1.21	2.84	1.36
Low Status	2.56	0.99	2.77	1.22
Strenuous Working Condition	3.38	1.13	3.73	1.24
Unprofitability	3.46	1.14	3.68	1.26

Both male and female secondary school heads Occupational stress were compared through various factors such as work overload, role conflict, strenuous working conditions, unreasonable political pressure, under participation, and unprofitability and also described in table 2.4. Finally the result shows that female secondary school heads were affected by more occupationally stressed with respect to role conflict, role ambiguity, under participation, and strenuous working condition.

Fleura et.al [15] has planned the study is used to identify the workplace stress and stress related variables among primary and secondary teachers in Kosovo. Stress related variables were age, gender, role of marital status, educational level and working experience. Data was collected through National Stress Awareness Day (NSAD) Stress Questionnaire and one self-report questionnaire. Sample of 799 teachers responses were taken from primary and secondary schoolteachers in Kosovo. Data was evaluated through Multiple Standard Regression Analysis. The results showed that a majority of teachers were affected by moderate level of stress and also described in table 2.5. Specific stress factors such as Lack of control, Lack of respect from others, Job insecurity, Work overload, Family problems, Undisciplined students, Unsatisfactory relationship with colleagues, Lack of respect from supervisors, Too much administrative work, Unclear responsibilities, Physical working environment and Inadequate wages were cause too much of stress.

Table 2.5: Percentage distribution of Occupational stress level

S.No	Level of Occupational Stress	No of Teachers	Percentages
1	High Level of Stress	265	33.2%
2	Moderate Level of Stress	304	38%
3	Low Level of Stress	82	10.3%

Ansarul et.al [16] has conducted the regarding occupational stress of primary government and private school teachers. Data was collected through Occupational Stress Scale regularized by Dr. Sajid Jamal and Dr. Abdul Raheem. A sample of 100 teachers responses were selected from government and private schools of Tehsil Laksar, District-Haridwar. Data was evaluated through statistical methods such as Mean, Standard Deviation and t-test.

Table 2.6: Percentage distribution of Occupational stress level

S.No	Level of Occupational Stress	No of Teachers	Percentages
1	Highly Stressed	65	65%
2	Moderately Stressed	20	20%
3	Low Level of Stress	15	15%

Level of Occupational Stress among primary school teachers are described in table 2.6. Finally the result shows that the private primary school teachers have been affected by highly stressed as comparing to government primary school teachers.

Mariya et.al [17] has conducted the study on demographic differences and occupational stress of secondary school teachers. Demographic variables were gender, qualification, salary, teaching experience, subjects taught and marital status. Data was collected through Teachers Occupational Stress Scale. A sample of 608 secondary school teachers responses were selected from eastern, central and western U.P schools of India. Data was evaluated through statistical methods such as Mean, Standard Deviation, One-way ANOVA and t-test. Finally the result also revealed that gender - male, qualification - trained graduate teachers, teaching experience - 6-10 years of experienced teachers, salary - lower monthly salaried teachers were affected from high level of stress.

### III. CONCLUSION

Stress plays a significant role in education field. In this paper, an analysis is mainly focused on the level of stress and affecting factors among teachers at different locations. This survey explores several techniques used to express the level of stress in teaching career. Major factors that affect teaching job were large class size, problem in managing students behavior, lack of

opportunities, lack of healthy interaction, lack of time limit to cover the syllabus, inadequate salary, lack of inner satisfaction, lack of teaching aids, heavy work load and lack of family support, financial problems and family interference in career. Gender, Age, Marital Status, Job Status, location, salary, Educational Qualifications, Family Status, Work Position and Service Experience were used as Demographic Factors. Stress management is the mostly needed for teachers to avoid problems in teaching field. The aim of the future plan is to collect proper data from several school and college teachers in Chennai and implement the machine learning techniques to find the level of stress in their life.

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