A Study on Occupational Stress Among Teachers in Selective Engineering Colleges Affiliated to Anna University of Technology, Trichy

C. Muthuvelayutham¹ and H. Mohanasundaram²

¹DODE, Anna University of Technology Coimbatore, Coimbatore – 641 047, Tamil Nadu, India ²Sengunther B-School for Women, Tiruchengode - 637 205, Tamil Nadu, India E-mail :hmsundaram2010@gmail.com (Received on 25 September 2011 and accepted on 28 December 2011)

Abstract - This study focus on finding out the perceived level of occupational stress among teachers in selective engineering colleges affiliated to Anna University of Technology, Trichy. Stress is the major factor which affects the health and efficiency of a teacher. So the researcher prepared a questionnaire to measure the level of occupational stress among teachers. For conducting the survey twenty eight colleges having crossed five years were chosen to collect samples. Out of the total (2065) population 422 teachers having completed two years of service in their present institution were circulated questionnaire for data collection. Collected data were analysed through SPSS software. Finally researcher found that some sociodemographic variables have an impact on occupational stress index of teachers. So the management should take necessary steps to reduce occupational stress among teachers because it will result in increased job satisfaction and quality of education.

Keywords: Engineering College, Faculty Members, Occupational Stress

I. INTRODUCTION

It is the known fact that pressure is the part of all work situation and pressure, which can lead to stress that in turn, undermine performance, adversely affects the health and also has a negative impact on personal and social life.

Stress is an inevitable and unavoidable component of life due to increasing complexities and competitiveness in living standards. The speed at which change is taking place in the world today is certainly overwhelming and breathe taking. In the fast changing world of today, no individual is free from stress and no profession is stress free. Everyone experiences stress, whether it is within the family, business, organization, study, work, or any other social or economical activity. Stress, long considered alien to Indian lifestyle, is now a major health problem / hazard.

II. REVIEW OF LITERATURE

Research conducted in the United Kingdom (UK), Unites States of America (USA), Australia and New Zealand has identified several key stressors commonly associated with stress among academic staff. These include work overload, time constraints, lack of promotion opportunities, inadequate recognition, inadequate salary, changing job role, inadequate management and/or participation in management, inadequate resources and funding and student interactions (Blix, Cruise, Mitchel, & Blix, 1994; Boyd & Wylie, 1994; Cross & Carroll, 1990; Daniels & Guppy, 1994; Doyle & Hind, 1998; Kinman, 1998).

Kinman (1998), in her survey for the Association of University Teachers (AUT), suggests that the impact of the changing nature of the academic's work and the resulting work overload, longer working hours, and job insecurity has led to increased stress in this occupational group. Research and publication demands (Blix, Cruise,Mitchell& Blix, 1994) as significant sources of job stress.

Teacher stress has been viewed as an interactive process which occurs between teachers and their teaching environment which leads to excessive demands being placed on them and resulting in physiological and psychological distress (Forlin & Hattie, 1996). The consequences of stress include health problems and reduction in work performance effectiveness (Quick & Quick, 1984).

Salami (2006) also identified heavy workload, working under pressure, large classes, students' disruption of lectures and delayed and inadequate salaries as sources of stress among college of education lecturers in Nigeria. In fact, a bit of stress is necessary to gain outstanding success. Because of this, successful people are those who convert their stress to creative energy and creative power (Krüger, 1993).

Various studies have highlighted that time pressure with regards to administrative demands and excessive paper work are major sources of stress for teachers, as there is inadequate time for preparation; unrealistic deadlines imposed and issues concerning the workload of teachers (Dinham, 1993; Kyriacou, 2001; Louden, 1987; Pithers & Soden, 1999; Punch & Tuetteman, 1996).

Certain demographic and career faculty characteristics are considered to affect job-related stress and, consequently job performance. These characteristics may be characterized as either personal or professional in nature. Some of these personal characteristics may include age, gender, and marital status. Professional characteristics may include teaching field, academic rank, tenure status, and years of service at an institution (Bayer & Braxton, 1998; Gmelch, Wilke, & Lovrich, 1986; Happ & Yoder, 1991; Iiacqua, Schumacher, & Li, 1995; Jenkins, 1996; Thomspon & Dey, 1998). Organizational policies, the structure and the climate of the organization, physical conditions and process are the basic factors of stress in the organization (Luthans,1994). Kahn and Cooper (1993) also indicate that limited opportunities for advancement, insufficient performance feedback, performance assessment measures being inadequate and biased control systems and culture within the organisation, may be perceived as potential stressors.

OSI		Sum of Squares	df	Mean Square	F	Sig.
I often have headaches and	Between Groups	12.926	3	4.309	2.718	.044
migraines	Within Groups	662.732	418	1.585		
	Total	675.659	421			
I feel tired even when I wake after	Between Groups	15.654	3	5.218	3.464	.016
an adequate sleep	Within Groups	629.721	418	1.507		
	Total	645.374	421			
Having repetitions in teaching	Between Groups	9.292	3	3.097	2.629	.050
assignments	Within Groups	492.473	418	1.178		
	Total	501.765	421			
Lack of information about what is going on	Between Groups	14.600	3	4.867	4.598	.004
	Within Groups	442.452	418	1.058		
	Total	457.052	421			
	Between Groups	16.961	3	5.654	4.520	.004
Lack of time to undertake research	Within Groups	522.852	418	1.251		
	Total	539.813	421			
Assignment of duties that take me	Between Groups	8.633	3	2.878	2.663	.048
away from my office	Within Groups	451.765	418	1.081		
	Total	460.398	421			
	Between Groups	10.970	3	3.657	3.704	.012
Frequent changes in Management policies	Within Groups	412.613	418	.987		
	Total	423.583	421			
I often make complaints with	Between Groups	10.201	3	3.400	2.733	.043
colleagues about work related things	Within Groups	520.017	418	1.244		
	Total	530.218	421			

	TABLE I A	GE VS OCCUPATI	ONAL STRESS IN	dex - Teachers
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III. METHODOLOGY

To analyse the perceived level of occupational stress among teachers in selective engineering colleges affiliated to Anna University Trichy, the researcher has used descriptive research design. Descriptive research studies are concerned with describing the characteristics of a particular individual, or a group (C.R.Kothari, 2007). For conducting the survey twenty eight colleges having crossed five years were chosen to collect samples. Out of the total population faculty members having completed two years of service in their present institution were circulated questionnaire. There are 2065 teachers working with two years of experience in present institution during 2011. Out of which 422 samples were collected from the list. Here the researcher has used stratified random sampling to collect the samples from the universe. For collecting the data researcher has used questionnaire where he has categorized the questions into two perspectives (demographic variables, occupational stress index) which will enable the researcher to understand and analyse the perceived level of occupational stress among teachers. Finally the researcher has used SPSS software for analyzing the data and the results are interpreted on the basis of outputs.

IV. ANALYSIS AND INTERPRETATIONS

 H_0 : There is no significant difference between the age group(s) with that of occupational stress index of teachers.

 H_1 : There is a significant difference between the age group(s) with that of occupational stress index of teachers.

From the above Table I it is inferred that in one-way ANOVA, the total variation is partitioned into two components. Between groups represents variation of the group means around the overall mean and within groups represents variation of the individual scores around their respective group means, significance indicates the significance level of the F-test. Small significance value (<.05) indicate group difference, from the above table, it is inferred that the significance level is observed to be less than .05. Hence, null hypothesis is rejected and alternate hypothesis is accepted and inferred that there is a significant difference observed between the age with that of occupational stress index of teachers.

OSI		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	17.383	1	17.383	11.091	.001
I often have headaches and migraines	Within Groups	658.275	420	1.567		
	Total	675.659	421			
I feel that I do not have	Between Groups	7.858	1	7.858	5.754	.017
enough time for teaching	Within Groups	573.592	420	1.366		
preparation	Total	581.450	421			
Having repetitions in teaching assignments	Between Groups	8.700	1	8.700	7.411	.007
	Within Groups	493.065	420	1.174		
	Total	501.765	421			
	Between Groups	6.737	1	6.737	5.309	.022
Teaching large classes / more students	Within Groups	532.981	420	1.269		
	Total	539.718	421			
	Between Groups	6.101	1	6.101	4.889	.028
I often make complaints with colleagues about work related	Within Groups	524.117	420	1.248		
things	Total	530.218	421			

TABLE II ANOVA RESULT FOR THE SEX AND OCCUPATIONAL STRESS INDEX - TEACHERS

OSI		Sum of Squares	df	Mean Square	F	Sig.
It is difficult to achieve my	Between Groups	18.693	3	6.231	4.283	.005
career goals in this	Within Groups	608.143	418	1.455		
organisation	Total	626.836	421			
I feel that I do not have enough time for teaching preparation	Between Groups	12.723	3	4.241	3.117	.026
	Within Groups	568.727	418	1.361		
	Total	581.450	421			
	Between Groups	15.580	3	5.193	3.702	.012
Inadequate facilities (office, library, labs)	Within Groups	586.449	418	1.403		
	Total	602.028	421			

TALBE III ANOVA RESULT FOR THE EDUCATIONAL QUALIFICATION AND OSI - TEACHERS

From the above Table II, it is inferred that the significance level is observed to be less than 0.05. Hence, null hypothesis is rejected and alternate hypothesis is accepted and inferred that there is a significant difference observed between the sex with that of occupational stress index of teachers. From the above Table III, it is inferred that the significance level is observed to be less than.05. Hence, null hypothesis is rejected and alternate hypothesis is accepted and inferred that there is a significant difference observed between the educational qualifications with that of occupational stress index of teachers.

OSI		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	13.074	3	4.358	3.795	.010
I find myself grinding my teeth	Within Groups	479.988	418	1.148		
	Total	493.062	421			
It is difficult to achieve my	Between Groups	18.433	3	6.144	4.221	.006
career goals in this	Within Groups	608.404	418	1.456		
organisation	Total	626.836	421			
I feel that I do not have enough time for teaching preparation	Between Groups	24.753	3	8.251	6.195	.000
	Within Groups	556.698	418	1.332		
	Total	581.450	421			
	Between Groups	36.619	3	12.206	9.102	.000
Increased caffeine intake (coffee, tea, etc.)	Within Groups	560.585	418	1.341		
()	Total	597.204	421			
	Between Groups	20.552	3	6.851	5.516	.001
Teaching large classes / more students	Within Groups	519.166	418	1.242		
more students	Total	539.718	421			
Insufficient institutional	Between Groups	18.987	3	6.329	5.304	.001
recognition and support for	Within Groups	498.759	418	1.193		
research	Total	517.746	421			

TABLE IV ANOVA RESULT FOR THE DEPARTMENTS AND OCCUPATIONAL STRESS INDEX - TEACHERS

From the above Table IV, it is inferred that the significance level is observed to be less than 0.05. Hence, null hypothesis is rejected and alternate hypothesis is accepted and inferred that there is a significant difference observed between the departments with that of occupational stress index of teachers. From the above Table V, it is inferred that the significance level is observed to be less than 0.05. Hence, null hypothesis is rejected and alternate hypothesis is accepted and inferred that there is a significant difference observed between the designations with that of occupational stress index of teachers.

OSI		Sum of Squares	df	Mean Square	F	Sig.
I feel that I do not have enough time for teaching preparation	Between Groups	17.669	4	4.417	3.267	.012
	Within Groups	563.781	417	1.352		
	Total	581.450	421			
	Between Groups	13.962	4	3.491	2.784	.026
Receiving inadequate salary to meet financial needs	Within Groups	522.910	417	1.254		
	Total	536.872	421			

TABLE V ANOVA RESULT FOR THE DESIGNATION VS OCCUPATIONAL STRESS INDEX - TEACHERS

From the above Table VI, it is inferred that the significance level is observed to be less than 0.05. Hence, null hypothesis is rejected and alternate hypothesis is accepted and inferred that there is a significant difference observed between the designations with that of occupational stress index of teachers.

From the Table VII, it is inferred that the significance level is observed to be less than.05.Hence, null hypothesis is rejected and alternate hypothesis is accepted and inferred that there is a significant difference observed between the lecture hours with that of occupational stress index of teachers.

V. FINDINGS

- 1. There is a significant difference observed between the age with that of occupational stress index of teachers.
- 2. There is a significant difference observed between the sex with that of occupational stress index of teachers.
- 3. There is a significant difference observed between the educational qualifications with that of occupational stress index of teachers.
- 4. There is a significant difference observed between the departments with that of occupational stress index of teachers.
- 5. There is a significant difference observed between the designations with that of occupational stress index of teachers.

- 6. There is a significant difference observed between the teaching experiences with that of occupational stress index of teachers.
- 7. There is a significant difference observed between the lecture hours with that of occupational stress index of teachers.

VI. SUGGESSIONS

Occupational stress among teachers can be reduced when the following areas are addressed: Health problems, repetitions in teaching assignments, not enough time for teaching preparations, assignment of duties that take me away from my college, frequent changes in policies, poor interpersonal relationship, heavy work load, resource constraint, insufficient recognitions and support for career growth, inadequate salary.

VII. CONCLUSION

From the above findings it is concluded that some socio demographic variables have an impact on occupational stress index. Management should focus on how the perceived level of occupational stress among teachers can be reduced because it will result in increased job satisfaction and quality of education. Finally the management the faculty the students' community will benefit when the occupational stress among teachers are reduced.

OSI		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	12.934	4	3.234	2.366	.052
I work hard but accomplish little	Within Groups	569.919	417	1.367		
	Total	582.853	421			
	Between Groups	18.685	4	4.671	3.461	.008
I feel that I do not have enough time for teaching preparation	Within Groups	562.765	417	1.350		
	Total	581.450	421			
	Between Groups	13.131	4	3.283	2.989	.019
Feeling pressure to compete with my colleagues	Within Groups	458.044	417	1.098		
	Total	471.175	421			
	Between Groups	13.271	4	3.318	2.832	.024
Having repetitions in teaching assignments	Within Groups	488.495	417	1.171		
	Total	501.765	421			
Lack of information about what is going on	Between Groups	13.471	4	3.368	3.166	.014
	Within Groups	443.581	417	1.064		
	Total	457.052	421			
	Between Groups	14.710	4	3.678	3.222	.013
Behavioral Problems (students) in classrooms	Within Groups	476.003	417	1.141		
	Total	490.713	421			
	Between Groups	14.690	4	3.673	3.436	.009
Assignment of duties that take me away from my office	Within Groups	445.708	417	1.069		
	Total	460.398	421			
Insufficient institutional recognition and support for research	Between Groups	13.155	4	3.289	2.718	.029
	Within Groups	504.592	417	1.210		
	Total	517.746	421			
I often make complaints with	Between Groups	15.423	4	3.856	3.123	.015
colleagues about work related	Within Groups	514.795	417	1.235		
things	Total	530.218	421			

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OSI		Sum of Squares	df	Mean Square	F	Sig.
Feeling pressure to	Between Groups	7.487	2	3.744	3.383	.035
compete with my colleagues	Within Groups	463.688	419	1.107		
	Total	471.175	421			
Excessive paperwork	Between Groups	7.912	2	3.956	3.283	.038
	Within Groups	504.840	419	1.205		
	Total	512.751	421			
	Between Groups	9.203	2	4.601	4.081	.018
Frequent changes to timetable or courses	Within Groups	472.392	419	1.127		
	Total	481.595	421			

TABLE VII ANOVA RESULT FOR THE LECTURE HOURS AND OCCUPATIONAL STRESS INDEX - TEACHERS

REFERENCES

- G. Kinman, Pressure points: A survey into the causes and consequences of occupational stress in the UK academic and related staff. London: Association of University Teachers, 1998.
- [2] A.E. Bayer and J.M. Braxton, "The Normative Structure of Community College Teaching: A Marker of Professionalism", *Journal of Higher Education*, Vol. 69, pp. 187-206, 1998.
- [3] C. Forlin, G. Douglas and J. Hattie, "Inclusive practices: How accepting are teachers?", *International Journal of Disability*, *Development and Education*, Vol. 43, No.2, pp. 119-133, 1996.
- [4] J.C. Quick and J.D.Quick, Organizational stress and preventive management. New York: McGraw-Hill, 1984.
- [5] J.A. Iiacqua, P. Schumacher and H.C. Li, "Factors Contributing To Job Satisfaction in Higher Education", *Education*, Vol. 116, pp. 51-62.
- [6] C. Kyriacou, "Teacher stress: Directions for future research", *Educational Research*, Vol. 53, No.1, pp. 27-35, 2001.
- [7] S.O.Salami, "Management of Stress Among Trainee-Teachers Through Cognitive Behavior Therapy", *Personality Study and Group Behaviour*, Vol. 26, pp. 1-25, 2006.

- [8] C. Doyle, and P. Hind, "Occupational Stress, Burnout and Job Status in Female Academics", *Gender, Work and Organisations*, Vol.5, pp. 67-82,1998.
- C. McInnis, "Change and Diversity in Work Patterns Of Australian Academics", *Higher Education*, Vol. 8, pp. 105-117, 1999.
- [10] A.G. Blix, R.J. Cruise, B.M. Mitchell and G.G. Blix, "Occupational stress among university teachers", *Educational Research*, Vol. 36, pp.157-169, 1994.
- [11] S. Forrest and E. Jepson, "Individual Contributory Factors in Teacher Stress: The Role of Achievement Striving and Occupational Commitment", *British Journal of Educational Psychology*, Vol. 76, pp.183-197,2006.
- [12] R. Lewis, "Teachers coping with the stress of classroom discipline", Social Psychology of Education, Vol.3, pp.155-171, 1999.
- [13] R.L. Kahn and C.L. Cooper, Stress in the Dealing Room: High performers under pressure, Routledge: London and New York., 1993.
- [14] F.Luthans, Organizational behavior. Boston: Mc Graw Hill Publishing, 1994.