

Predictors of Occupational Stress among the Faculty Members of Private Medical and Engineering Colleges: A Comparative Study

Indoo Singh

Department of Management Studies, Sikkim Manipal Institute of Technology, Gangtok, India

Abstract: *Earlier studies on occupational stress among teachers have focused mainly on school teachers. Stress among teachers in higher education has caught the attention of the researchers only in last few years and especially in the field of medical and engineering education it is still sparse. Therefore, the main objective of this study was to assess the level of occupational stress and perception of various occupational stressors among the faculty members of private medical and engineering colleges. The final sample comprised of 310 faculty members, from seven private colleges (three medical and four engineering) of Uttar Pradesh, India. 69% faculty members reported moderate level of stress. Among the twelve occupational stressors assessed in the study, using Occupational Stress Index, role conflict accounted for maximum variance in the overall occupational stress and under participation emerged as the best predictor. No significant difference was found in the overall perception of stress across gender or between medical and engineering faculty members. However, they differed in the perception of some of the occupational stressors. Implications of this research from the perspective of better stress management among faculty members are discussed.*

Keywords: occupational stress, occupational stressors, faculty members, private medical and engineering colleges

1. Introduction

Stress at work has touched almost all professions. Born out of high competition and its subsequent complexities, stress is a state of affair involving demand on physical or mental energy which can disturb the normal physiological and psychological functioning of an individual. Although stress in moderate doses is necessary as it gives an impetus to increase one's performance and can actually stimulate one's faculties to delve deep into and discover one's true potential, but if the magnitude of the stressor exceeds individual's capacity to cope, it leads to negative moods and emotions and excessive demands made upon the energy, strength and resources of a person leads to distress or burnout [15]. Occupational stress (also termed job stress or work stress) can be defined as the experience of unpleasant, negative emotions such as tension, anxiety, frustration, anger and depression resulting from aspects of work [23]. Work related stress of the employees consequently affects the efficiency of the organizations because when one is under stress one's ability to carry out job responsibilities gets affected. It also has an indirect negative effect on organizational commitment [1]. Unresolved occupational stress results in low job satisfaction, poor work performance, psychological distress, unfocused attention, lack of motivation and intent to quit [19] [27].

The primary difference between occupational stress and many other forms of stress is the nature of the stressors and their interaction with the overall stress process [4]. Occupational stress may be caused by a complex set of reasons. Some of the most visible causes of workplace stress are- job insecurity,

high demand for performance, meeting deadlines, increased workload, work-family conflicts, extremely long work hours, less salary, workplace culture, office politics and conflicts with colleagues. All these factors can actually leave an employee physically and emotionally drained. Reference [6] identified over 40 interacting factors which could be identified as sources of work stress. They grouped these into categories and proposed six major causes of stress at work [5] [7].

These six major categories are: (1) Factors intrinsic to the job: Poor working conditions, long hours, shift work, travel, risk and danger, new technology, work overload (quantitative or qualitative) and work under load. (2) Relationships at work: Unhealthy relationships with the people one works with (peers, subordinates and seniors) due to personality conflicts and feelings of competition. (3) Career development: lack of job security and lack of advancement (personal growth) in the organization. (4) Organizational structure and climate: Lack of participation in decision-making processes, lack of a sense of belonging, lack of effective consultation, poor communication, restrictions on behavior and office politics. (5) Organizational interface with outside: Interface between life outside and life inside the organization like family problems, life crises, financial difficulties, conflict of beliefs and conflict with family demands. (6) Role in the organization: Some of the main role dysfunctions are: i) *Role ambiguity*- when the individual has inadequate information about their work role. ii) *Role conflict* exists when the individual is 'torn' by conflicting job demands or when the individual is required to do things that they do not want to do and that are not part of their job. iii) *Role overload* comprises the number of different roles an

individual needs to fulfill that leads to excessive time demands and uncertainty as to the ability to perform these different roles adequately. iv) *Responsibility* can be differentiated into *responsibility for people* and *responsibility for things* (equipment, budgets, and buildings). As noted by Cartwright and Cooper, too much responsibility exceeding the individual's belief that they are able to manage is a clear source of stress; however, a lack of responsibility may also be a source of stress creating a perception of work under-load. Responsibility for people has been identified as being particularly stressful.

2. Literature Survey

Reference [13] examined occupational stress across a number of different occupations. These authors identified six occupations (out of 26 included in the study) as being the most stressful regarding poor health and lowered job satisfaction. These occupations were: ambulance, teachers, social services, customer service call centers, prison officers and police. Reference [26] in her study on occupational stress among employees from different careers found that doctors and teachers are highly stressed as compared to the employees from other professions. Both the teachers and the doctors face a significant amount of workload. Teaching has been identified as a particularly stressful occupation with studies suggesting that teachers experience disproportionately high levels of stress in comparison to other occupations [3]. With increasing competition teachers are showing symptoms of burnout, which directly or indirectly affect their teaching performance [24].

Earlier research on teachers' occupational stress has been studied mainly at school level. Research on stress among university teaching staff has been focused only in last few years, and in India it is still sparse especially in the field of medical and technical education. Reference [11] examined staff perceptions of occupational stress in universities. These authors highlighted the fact that traditionally university teaching has been regarded as a low-stress occupation; however with the increased workloads, reduced resources and pressure of producing good results due to tough competition this is no longer the case. A series of focus groups conducted in a number of universities across Australia identified high levels of occupational stress among university staff, with a significant proportion of staff reporting debilitating levels of stress [10]. The university staff identified the consequences of stress as a decrease in the quality of education and research.

A similar study was undertaken within 14 universities in the United Kingdom by reference [30]. In comparison to normative data, the university staff was highly stressed, particularly by work relationships, lack of control and resources, communication, work overload and pay and benefits, and they also tended to suffer more from psychological ill health. In a national survey of occupational

stress in Australian universities, reference [31] reported that over 50% of the 8,732 university staff who participated in this study was at risk of psychological illness, compared with only 19% of the Australian population as a whole. The authors highlighted diminishing recourses, increased teaching loads and student-staff ratios, job insecurity, pressure to attract external funding, poor management and a lack of recognition as key contributors to occupational stress in universities.

Reference [22] studied occupational stress and professional burnout of 955 university teachers from nine state universities in South India (Tamil Nadu and Andhra Pradesh). The results revealed that 74% of the university teachers experienced moderate to high levels of occupational stress and 86% of teachers showed professional burnout. Study by reference [27] to investigate the level of professional burnout among the university teachers found that they have high levels of emotional exhaustion. Similar finding was revealed by reference [29] when they examined the level of perceived occupational stress and burnout in 56 male teachers of an engineering college.

3. Rationale and Objectives of the Study

In India, medical and engineering related studies have always attracted many students, as these two professions are considered to be very prestigious, offering good returns and now with global opportunities the demand has increased even more. The shortage of seats for general category students in government colleges due to various reservation policies has led to the establishment of large number of private colleges across the country. Keeping the competition in view the faculty members in private colleges, often, have more workload than those of the government colleges. Also, the functioning of private and government colleges differs a lot. Therefore, the main objective of this study was to assess the level of stress and explore various occupational stressors among the faculty members of private medical and engineering colleges. Curriculum and competition wise medical courses are more demanding than engineering studies and medical faculty members have to work as doctors and teachers both, therefore, it was hypothesized that medical and engineering faculty members will differ in their stress levels and perception of occupational stressors. The secondary objective of the study was to find if there were any gender differences in the perception of occupational stress among the faculty members.

4. Methods

The present research is exploratory and empirical in nature. The population of reference for this study comprised of all faculty members working in private medical and engineering colleges of Uttar Pradesh, India. With cities like Gaziabad, Meerut, Bareilly, Kanpur and Lucknow having many private professional colleges, Uttar Pradesh becomes a major

representative of professional education in North India. Population wise also it is the largest state in India.

4.1 Participants and Procedure

The important representative cities of UP, having at least one private medical college and five private engineering colleges were selected through internet. Well established colleges within these cities were then selected on the basis of their infrastructure and courses offered. Approachability factors were also taken into consideration. The cities selected were Gaziabad, Lucknow, Kanpur, Meerut and Bareilly. Twelve colleges (6 each of medical and engineering) were shortlisted and contacted for seeking permission to conduct the study but only seven colleges (3 medical and 4 engineering) granted permission. Approval for the investigation was acquired from the principal, director and the chairman of these colleges. Faculty members were selected randomly from the various departments of their respective colleges. They were contacted by the researcher through the HODs of the respective departments and after general introduction the research questionnaire (OSI) was handed over to them. The confidentiality of the information obtained from the respondents was guaranteed. Completed questionnaires were collected after a few days. The final sample consisted of 310 faculty members (137 medical and 173 engineering). Gender wise distribution was 130 females and 180 males.

4.2 Research Tool

To measure the occupational stress among faculty members Occupational Stress Index (OSI, 1984) developed by Dr. A.K. Srivastava and Dr. A.P. Singh of Banaras Hindu University was administered. The reliability of the scale is 0.93 and the validity is 0.79. The scale consists of total 46 items (28 positive and 18 negative) with response categories of strongly disagree, disagree, undecided, agree and strongly agree. The minimum score can be 48 and maximum can be 180. The subscales of the test measure twelve areas of stress in work environment. In the present study Cronbach's Alpha for total scale was $\alpha=0.908$ and for the subscales it was: 1. *Role Overload* ($\alpha=0.781$) 2. *Role Ambiguity* ($\alpha=0.721$) 3. *Role Conflict* ($\alpha=0.783$) 4. *Unreasonable group pressure* ($\alpha=0.851$) 5. *Responsibility for Persons* ($\alpha=0.734$) 6. *Under Participation* ($\alpha=0.776$) 7. *Powerlessness* ($\alpha=0.734$) 8. *Poor Peer Relations* ($\alpha=0.743$) 9. *Intrinsic Impoverishment* ($\alpha=0.881$) 10. *Low Status* ($\alpha=0.744$) 11. *Strenuous Working Conditions* ($\alpha=0.951$) 12. *Unprofitability* ($\alpha=0.836$). An example of an item is: "I get less salary in comparison to the quantum of my work".

4.3 Data Analysis

Data analysis was done using statistical software (SPSS, 16.0 version). Pearson *r* correlation, regression analysis and t-test were used to determine the relationship, predictive value and difference in the variables under study.

5. Results and Discussion

As indicated in Table 1 the mean age of the total faculty members ($N = 310$) was 33.97 years ($S.D = 10.74$). The minimum age of the total sample was 24 years and maximum age was 68 years. There was a significant difference in the mean age of medical faculty (40.50 years) as compared to the mean age of engineering faculty (29.36 years), showing that engineering faculty members are comparatively much younger than medical faculty members. The gender ratio was male ($N=180$) 58% versus female ($N = 130$) 42%. The mean age of female faculty members (31.47 years, $SD = 6.88$) was also found to be lower than the mean age of male faculty members (36.44 years, $SD = 12.29$) indicating that males probably prefer to explore other professions before joining the teaching profession.

Table 1: Age of Faculty Members

Category	N	Min	Max	Mean	SD
Medical	137	25	68	40.50	11.22
Engineering	173	24	64	29.36	6.96
Male	180	24	68	36.44	12.29
Female	130	24	61	31.47	6.88
Total	310	24	68	33.97	10.76

Table 2 provides category wise descriptive statistics of perceived Occupational Stress (OS) level among faculty members. The mean of OS scores for the total sample was 117.30 ($SD= 14.87$). Statistical analyses revealed the normal distribution of the data.

Table 2: Descriptive Statistics: Level of Occupational Stress among Faculty Members

Categories	N	Min	Max	Mean	SD
Medical	137	79	156	117.88	14.27
Engineering	173	71	156	116.83	15.36
Female	130	79	156	117.95	13.91
Male	180	71	156	116.82	15.55
Total	310	71	156	117.30	14.87

The percentage of faculty members with different levels of OS is shown in Table 3. Out of total 310 faculty members, 16 % reported high level of OS, 69% reported moderate and 15% reported low level of OS, which indicates that the majority of faculty members reported moderate level of OS. The trend was nearly same for all categories (medical, engineering and male) except for females where high stress was perceived by only 12% (less than the other categories) whereas perception of moderate stress was 74% which is higher than the other categories. As stress is subjective in nature and to some extent it is useful (eustress), a moderate level of stress can be managed by the faculty members if they have better knowledge about their stressors and their effects.

Table 3: Percentage of faculty members with different levels of Occupational Stress

Categories	N	Low (%) Score Range (< 102)	Moderate (%) Score Range (102-131)	High (%) Score Range (131 >)
Medical	137	14	72	14
Engineering	173	16	67	17
Female	130	14	74	12
Male	180	16	66	18
Total	310	15	69	16

Table 4: Correlations between Occupational Stressors and overall Occupational Stress among faculty members

Occupational Stressor	r
Role Conflict	.709**
Role Ambiguity	.701**
Intrinsic Impoverishment	.645**
Group Pressure	.563**
Under Participation	.547**
Low Status	.535**
Strenuous Working Conditions	.530**
Role Overload	.520**
Powerlessness	.493**
Interpersonal Relations	.466**
Unprofitability	.434**
Responsibility for Persons	.056 (ns)

Note: N = 310; **p < 0.01; ns = not significant

Table 4 provides correlations between different Occupational Stressors and overall OS among faculty members. Role Conflict revealed highest correlation (r = 0.709) while Responsibility for Persons did not show any significant correlation with OS. This could be probably because the faculty members perceive their main responsibility as teaching. However, they do have responsibility for students' growth but the items in the questionnaire were only for personnel working under them. Therefore, this factor was not perceived as significant predictor of overall OS by the faculty members.

Table 5 provides insight into the specific factors that contribute maximum towards OS among faculty members. Step wise regression analysis of Occupational Stressors as independent variables and OS as dependent variable revealed that *Role Conflict* accounted for the highest variance (50.3%) in OS among the faculty members. Grouped with Role Ambiguity, Intrinsic Impoverishment, Group Pressure, Under Participation, Strenuous Working Conditions and Role Overload it accounted for 94% of the variance in overall OS among faculty members. Therefore, managing these factors may considerably reduce the feeling of OS among faculty members. Among these factors *Under Participation* ($\beta = .291$, $p < .001$) emerged as the best predictor for OS. This indicates that most of the faculty members perceive that their opinion and suggestions are not considered while taking important

decisions. This also creates a feeling of *powerlessness*. For this the authorities should consider their suggestions and opinions in decision making as much as possible

As the faculty members in medical and engineering colleges are trained for medical and engineering profession but are actually involved in teaching, this could create a feeling of *role ambiguity* among them. It was also reported by most of the respondents that they get conflicting instructions from different authorities under whom they work and quite often they have to do the work which ought to be done by others. Such issues lead to a feeling of *role conflict*. Regular evaluation of students due to frequent examinations, meeting deadlines, pressure of completing syllabus in time and producing good results may lead to psychological and physical strain generating a feeling of *role overload* or work overload among the faculty. The findings are somewhat convergent to the findings of the study conducted by reference [8] to examine the sources of role stress among doctors working in Indira Gandhi Medical College and Hospital, Shimla (India) where role overload, self-role distance, role isolation, inter-role distance, role stagnation, role expectation conflict, role ambiguity and role inadequacy were the major sources of role stress among doctors.

It was reported by the faculty members that there are many tasks which they do unwillingly due to pressure from the authorities. These things create a feeling of *group pressure*. Lack of resources, meeting deadlines and work overload may create a feeling of *strenuous working conditions*. The faculty members also reported that there is not much opportunity for personal growth and their efforts are seldom rewarded. This may lead to the feeling of *intrinsic impoverishment*. Most of the faculty members expressed satisfaction in *interpersonal relationship* with their colleagues. They also felt that their job has enhanced their *social status*. Therefore, these factors although significant, were not found to be strong predictors of occupational stress.

Table 5: ANOVA and Predictive Value (β) of Occupational Stressors contributing towards overall Occupational Stress among faculty members

Stressors	R	R ²	ΔR^2	F	df	β
Step 1 RC	.709	.503	-	311.94	1,308	.227
Step 2 RA						.189
In-Im						.230
GP						.218
UP						.291
SWC						.205
RO	.970	.940	.337	680.61	7, 302	.205

Note: 1. All values of F and β are significant at $p < 0.001$, 2. RC = Role Conflict, RA = Role Ambiguity, In-Im = Intrinsic Impoverishment, GP = Group Pressure, UP = Under Participation, SWC = Strenuous Working Condition, RO = Role Overload, 3. Inter personal relations, Unprofitability,

Powerlessness and Low status collectively contributed only 6% variance towards overall OS.

Table 6 indicates that there was no difference in the perception of occupational stressors among medical and engineering faculty members except for *low status* ($t = 2.205^*$) where engineering faculty members scored higher than that of medical faculty. According to social norms working as engineers is considered to be more prestigious than working as teachers and this could subconsciously affect the feelings of engineering faculty members, whereas, in case of medical faculty even if they are taking classes in medical colleges they are still working as doctors. Another reason could be that medical faculty is more experienced (minimum five years of clinical experience is required before being eligible for taking classes) hence receives more respect.

Table 6 also indicates that there was no difference in the perception of occupational stressors among male and female faculty members except for two factors, namely Role Overload ($t = 2.482$) and Unprofitability ($t = 2.245$). Females scored higher than males in both the factors. Family responsibilities along with the job may create a feeling of role overload more in females than in males. This feeling of role overload may also lead to the feeling of unprofitability. The findings are in line with the study conducted by reference [25] on medical professionals working in privately managed professional hospitals and study by reference [14] on secondary school teachers which showed no significant gender difference in the perception of overall occupational stress. Reference [8] found no significant difference between the stress levels among male and female doctors except in cases of inter-role distance and role inadequacy, which was found more in male doctors. Thus, we can say that with the changing social scenario females are becoming equally competent in handling demands of their work environment.

Gender studies on perception of stress have shown mixed results. Many researchers have given evidences that there is substantial difference in terms of the stress that is perceived and felt by both the genders. The gender based differences have also been noticed in terms of intensity and frequency of stress [12] [29]. Evidences also suggest that women and men are stressed by different types of situations. Men are more likely to list finances (worries about salaries and benefits) and work-related events as the main source of their stress, whereas women are more likely to list the nature of work, interpersonal relationships, family and health-related events as their major stressors [17]. It has been observed that the differences between men and women are not only attributed to biological factors, but also to social factors. For instance, men are socially conditioned to be more independent, problem-focused, and less likely to express their emotions. Women, on the other hand are encouraged to be more dependent, emotional, empathetic and supportive of others. Therefore they increase their span of social networks as compared to that of men [9].

Table 6: Difference in the perception of occupational stressors between medical and engineering faculty members and across gender

Stressors	Med	Engr.	t-test	Males	Fem.	t-test
	N=137	N=173		N=180	N=130	
	Mean	Mean		Mean	Mean	
RO	16.74	16.21	1.347	16.03	17.01	2.482**
RA	9.11	8.57	1.994	8.84	8.76	0.280
RC	12.17	12.11	0.193	12.38	11.80	1.916
GP	11.01	10.70	1.077	10.87	10.78	0.304
RP	8.88	8.67	0.844	8.71	8.83	0.488
UP	11.82	11.83	0.005	11.92	11.70	0.598
PL	9.17	9.12	0.196	9.28	8.94	1.286
IR	9.28	9.47	0.679	9.38	9.09	1.943
In-Im	8.79	8.97	0.740	8.69	9.17	1.943
LS	6.25	6.73	2.205*	6.46	6.70	1.221
Un-P	6.05	6.15	0.525	5.88	6.37	2.245**
SWC	8.50	8.34	0.665	8.36	8.48	0.506
Total OS	117.88	116.83	0.617	116.82	117.95	0.661

Note: * $p < 0.05$; ** $p < 0.01$; RO = Role Overload, RA = Role Ambiguity, RC = Role Conflict, GP = Group Pressure, RP = Responsibility for Persons, UP = Under Participation, PL = Powerlessness, IR = Inter personal relations, In-Im = Intrinsic Impoverishment, LS = Low status, Un-P = Unprofitability, SWC = Strenuous Working Condition

6. Implications and Recommendations

The findings of this study provide an insight into various occupational stressors that contribute significantly in the perception of overall occupational stress among medical and engineering faculty members. The more one understands the stressors, the better one can find solutions to reduce the impact of these stressors. Faculty members and the management need to work collectively in this direction. As stress is subjective, if they understand these issues they can change cognitively or behaviorally in the manner which may reduce the feeling of stress and enhance work efficiency. For example, to cope with role related stress faculty members need to plan their work and manage their resources more efficiently. Taking help from others can also be considered. Being assertive may reduce the feeling of role conflict. They also need to be clear in their priorities and understand that as faculty members they have more responsibilities than as doctors or engineers. The authorities also need to understand that if there are conflicting opinions, they need to be discussed in a positive manner for better conflict resolution. Unnecessary group pressure should be avoided and faculty members need to be given some freedom to work in a manner which enhances their efficiency. There should be ample opportunities for their professional growth within the organization and their efforts need to be rewarded when they deserve. This will help in enhancing their self esteem, especially among engineering faculty members as they reported feeling of low status more than the medical faculty. These measures will also help in developing good rapport between the faculty members and the authorities,

which indirectly contributes towards commitment and better performance.

As stress and emotions are interrelated [16], incorporating Emotional Intelligence Training Programme may also help the faculty members to be more adapting and understanding in these matters which will make them feel less stressed. Medical and engineering faculty members did not differ in the perception of stressors; this indicates that teachers working in higher education, especially in private professional institutes have common issues which need to be addressed. As there was no significant gender difference found in the overall perception of stress, it is also recommended that gender biases in staff appointments and allocating responsibilities should be avoided.

7. Limitations and Future Scope

This study has certain limitations. Firstly, the study was based on self report measure and social desirability often comes into play in such measures. There were certain sensitive items in the questionnaire like quantum of work, salary satisfaction, conflicting instructions from seniors, working environment etc. which may not have been responded with full honesty by some of the respondents as the questionnaires were mostly collected through the HODs. Keeping this in view the percentage of faculty members with high level of stress could be actually more than the reported percentage. However, many of the faculty members had reported these issues honestly without any hesitation. Secondly, the sample was restricted only to private institutes as the functioning of private colleges differs from that of government colleges. There were geographical constraints as well because the sample was limited to institutes situated within Uttar Pradesh, India. Therefore, it is suggested that future researchers could conduct this type of study in other states and with the faculty members at government colleges as well to provide more evidence to generalize findings from this study.

8. Conclusion

As the world is advancing technologically, organizational expectations are also increasing and due to tough competition the need for meeting these challenges has become vital. With this drive to achieve, many psychological aspects have become apparent and coping with stress is one of them. In the current study role conflict, role ambiguity, intrinsic impoverishment, group pressure, under participation, strenuous working conditions and role overload were found to be most significant predictors accounting for maximum variance in overall perception of occupational stress among faculty members. The study also revealed that medical and engineering faculty members are equally stressed and have common perception of stressors probably because as teachers their role and responsibilities are common. Working in private sector may also lead to common perception of stressors. Majority of the

faculty members reported moderate level of stress, hence it will be easier to manage the stressors if these issues are discussed and incorporated into faculty development programme. Findings of gender studies regarding occupational stress are quite inconsistent. While some studies have found females to complain more of burnout than males [21] others have reported males to have higher stress and anxiety than the females [18]. At the same time there are studies reporting no significant gender differences in the overall perception of occupational stress [14] [8] [25]. The findings of the present study also revealed no significant gender difference in the overall perception of stress. This shows that with the changes in socio-cultural norms, females are becoming equally competent in handling occupational stress although there can be domain specific gender differences in the perception of stress.

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References

- [1] Aghdasi S., Kiamanesh A. R., & Ebrahim A. N., "Emotional Intelligence and Organizational Commitment: Testing the Mediatory Role of Occupational Stress and Job Satisfaction", *Procedia-Social and Behavioural Sciences*, 29, pp. 1965-1976, 2011.
- [2] Azeem, S.M. & Nazir, N.A., "A Study of Job Burnout among University Teachers", *Psychology Developing Societies*, 20 (1), pp. 51-64, 2008.
- [3] Burke, R.J. & Greenglass, E., "Work stress, social support, psychological burnout and emotional and physical well-being among teachers", *Psychology, Health & Medicine*, 1(2), pp. 193-205, 1996.
- [4] Chang K., "Less Stressed at Work- Research on the Efficacy of Job Stress Coping Strategies", *Advances In Management*, 4 (11), pp. 31-40, 2011.

- [5] Cooper, C.L., & Cartwright, S., "An intervention strategy for workplace stress", *Journal of Psychosomatic Research*, 43 (1), pp. 7-16, 1997.
- [6] Cooper, C.L., & Marshall, J., "Sources of managerial and white collar stress," In C. L. Cooper & R. Payne (Eds.), *Stress at Work*, pp. 81-105, John Wiley & Sons, Chichester, 1978.
- [7] Cooper, C.L., Dewe, P.J., & O'Driscoll, M.P., *Organizational Stress: A Review and Critique of Theory, Research and Applications*, Sage Publications, Thousand Oaks, 2001.
- [8] Dasgupta, H., & Kumar, S., *Role Stress among Doctors Working in a Government Hospital in Shimla (India)*, *European Journal of Social Sciences*, 9 (3), pp. 356-370, 2009.
- [9] Day, A.L. & Livingstone, H.A., "Gender differences in perceptions of stressors and utilization of social support among university students", *Canadian Journal of Behavioral Science*, 35 (2), pp. 73-83, 2003.
- [10] Gardner, L., "Emotional Intelligence and Occupational Stress, Unpublished doctoral dissertation, 2005. Available: <http://www.researchbank.swinburne.edu.au/vital/access/services>. [Accessed: August 12, 2013].
- [11] Gillespie, N.A., Walsh, M., Winefield, A.H., Dua, J., & Stough, C., "Occupational stress in universities: Staff perceptions of the causes, consequences and moderators of stress", *Work and Stress*, 15 (1), pp. 53-72, 2001.
- [12] Hogan, J. M., Carlson, J. G., & Dua, J., "Stressors and Stress Reactions among University Personnel", *International Journal of Stress Management*, 9(4), pp. 289-310, 2002.
- [13] Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C., "The experience of work-related stress across occupations", *Journal of Managerial Psychology*, 20 (2), pp. 178-187, 2005.
- [14] Jude, A.M., "Emotional Intelligence, Gender and Occupational Stress among Secondary School Teachers in Ondo State, Nigeria", *Pakistan Journal of Social Sciences*, 8(4), pp. 159-165, 2011.
- [15] Lazarus, R.S., & Folkman, S., *Stress, Appraisal and Coping*, Springer Publishing Company, New York, 1984.
- [16] Lazarus, R.S., *Stress and Emotion: A New Synthesis*, Springer, New York, 1999.
- [17] Matud, P.M., "Gender differences in stress and coping style," *Personality and Individual Differences*, 37 (7), pp. 1401-1415, 2004.
- [18] Mondal, J., Shrestha, S., & Bhaila, A., "School Teachers: Job stress and Job Satisfaction, Kaski, Nepal", *International Journal of Occupational Safety and Health*, 1(1), pp. 27-33, 2011.
- [19] Morris J.E. & Long B.C., "Female Clerical Workers' Occupational Stress: The Role of Person and Social Resources, Negative Affectivity and Stress Appraisals," *Journal of Counseling Psychology*, 49(4), pp. 395-410, 2002.
- [20] Pandey, R. & Tripathi, S., "Occupational stress and burnout in engineering college teachers," *Journal of Indian Academy of Applied Psychology*, 27 (2), pp. 63-73, 2001.
- [21] Ravichandran, R., & Rajendran, R., "Perceived sources of stress among the teachers", *Journal of the Indian Academy of Applied Psychology*, 33(1), pp. 133-136, 2007.
- [22] Reddy, G.L. & Poornima, R., "Occupational Stress and Professional Burnout of University Teachers in South India, *International Journal of Educational Planning and Administration*, 2(2), pp. 109-124, 2012.
- [23] Salami S.O., "Occupational Stress and Well-being: Emotional Intelligence, Self-efficacy, Coping, Negative Affectivity and Social Support as Moderators", *The Journal of International Social Research*, 3(12), 2010.
- [24] Shukla A. & Trivedi T., "Burnout in Indian Teachers", *Asia Pacific Education Review*, 9(3), pp. 320-334, 2008.
- [25] Singh, S. K. & Singh, S., "Managing Role Stress through Emotional Intelligence: A Study of Indian Medico Professionals," *International Journal of Indian Culture and Business Management*, 1 (4), pp. 377-396, 2008.
- [26] Singla, G., "A study of the occupational stress among Employees from different Careers of Chandigarh, M.Ed. Dissertation, DCS, Punjab University, Chandigarh, 2006. Available: <http://www.repuplication.com/ijepa.htm> [Accessed: December 03, 2014].
- [27] Siu, O., "Occupational Stressors and Well-being among Chinese Employees: The Role of Organizational Commitment", *Applied Psychology: An International Review*, 51(4), pp. 527-544, 2002.
- [28] Srivastava, A.K. & Singh, A.P., *Occupational Stress Index (OSI)*, Banaras Hindu University, Manovaijyanic Parikshan Sansthan, Varanasi, India, 1984.
- [29] Tamres, L. K., Janicki, D., & Helgeson, V. S., "Sex differences in coping behavior: A meta-analytic review and an examination of relative coping", *Personality and Social Psychology Review*, 6 (1), pp. 2-30, 2002.
- [30] Tytherleigh, M.Y., Webb C., Cooper, C.L., & Ricketts, C., "Occupational stress in UK higher education institutions: A comparative study of all staff categories. *Higher Education Research and Development*, 24 (1), pp. 41-61, 2005.
- [31] Winefield, A.H., Gillespie, N., Stough, C., Dua, J., & Hapuararchchi, J., *Occupational Stress in Australian universities: A national survey (Ed.)*, The National Tertiary Education Union, Victoria, 2002.

Author Profile



Indoo Singh is a Gold Medalist in MA Psychology and is presently enrolled as Research Scholar in the Department of Management Studies, Sikkim Manipal University, Sikkim, India. Recipient of

Rajeev Gandhi Vidya Gold Award, she has been the principal of a senior secondary public school in Lucknow and has a teaching experience of more than 20 years at school and college levels. She has delivered radio talks and conducted various workshops for teachers, parents and students on academic and behavioral issues. Her research interests are Health and Educational Psychology.



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