Upshot of Occupational Stress on Work Life Balance of Employees Working in Information Technology Organizations in Chennai

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Abstract

India's information technology (IT) industry is the world's largest sourcing destination, which accounts for approximately 67% of the US$ 124-130 billion market. The Indian IT industry provides direct employment to 3 million people and indirect employment to about 10 million. Most of the projects handled by the IT companies are for the companies located in developed countries; hence, the companies need to match their working hours and working style according to their international clients' requirements. In order to fetch more projects, software companies promise their clients the delivery of the projects in the shortest span possible, which may lead to tough deadlines. This paper attempted to explore the impact of occupational stress on the work - life balance of employees working in IT organizations in Chennai city. This study followed descriptive research design with a sample of 600 employees from various IT companies located at DLF IT Park, Chennai. The data were analyzed through independent samples *t* - test and structural equation modelling approach. The outcome of the analysis revealed that there was an impact of occupational stress on the work-life balance of the employees. It was concluded that minimizing occupational stress may lead to better work-life balance.

Key words : **occupational stress, work-life balance, information technology, job stress**

JEL Classification : L0, L2, M1

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The term 'stress' is an inevitable factor which may affect every individual's personal and professional life. Stress may be caused due to personal and / or occupational factors. Stress which is caused owing to occupational factors is known as 'occupational stress'. The hyper competitive business world has made tremendous changes in the work culture of every organization in order to provide highly competitive products and services to their customers, which, in turn, has brought remarkable changes in the work environment of every organization such as increased working hours, work load, targets, short deadlines, etc. Every individual spends considerable amount of their personal time for earning through occupation or business, in order to improve their

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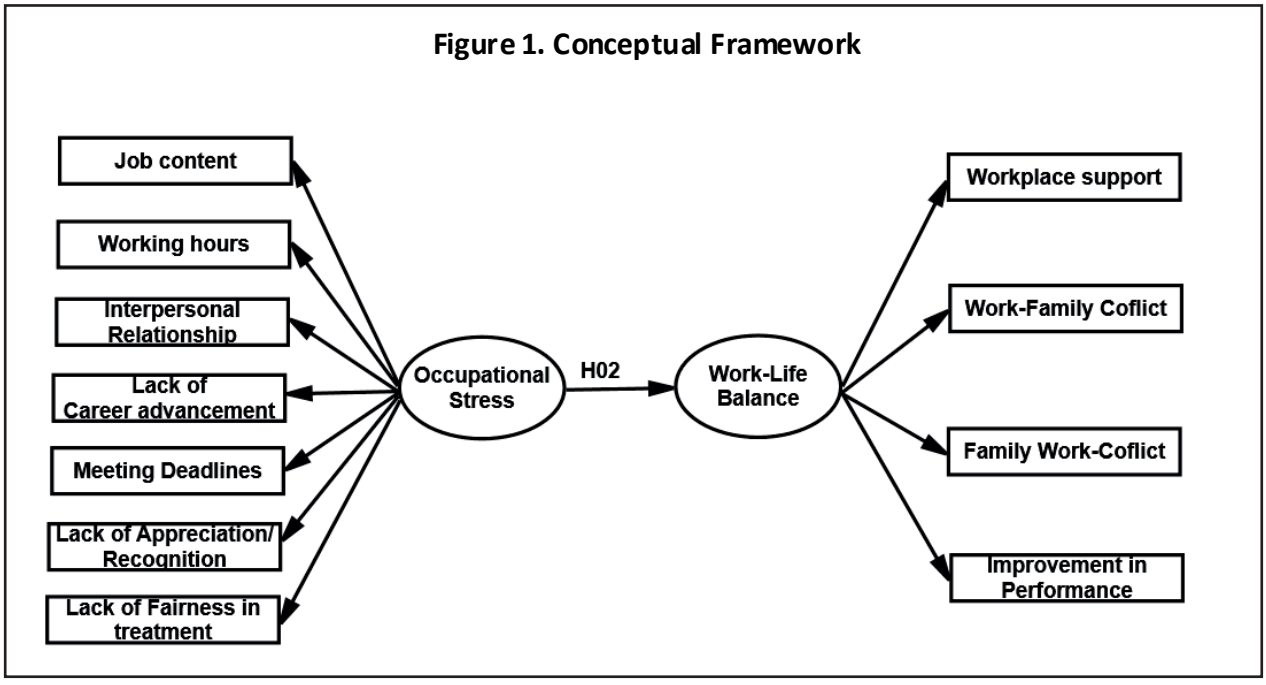
livelihood and to provide a comfortable life with all basic and / or luxury amenities to their dependents. In the present scenario, it is a million dollar question that whether an individual working in any industry is able to balance their personal and professional lives. In particular, the information technology industry is crucial in nature, because the employees are working in projects sourced from developed countries such as United States, United Kingdom, Germany, etc., so they have to work according to another country's business hours and holidays, etc.

Theoretical Background and Literature Survey

(1) Occupational Stress : Occupational stress is a foremost hazard for various employees those who are working in the IT sector. Enlarged assignments, economizing, overtime, aggressive environments of work nature, and various shifts in working process are some of the roots of stressful working circumstances. Occupational stress is otherwise known as 'work stress' or 'job stress'. Job has a major impact on employees' psychological and physical well - being in many professions (Kinman & Jones, 2003; Kumari, Verma, & Verma, 2012). The earlier studies also revealed that job stress constitutes large emotional cost to employee well - being and sets a substantial financial burden on organizational performance (Menon & Raithatha, 2012 ; Skakon, Nielsen, Borg, & Guzman, 2010).

(2) Worklife - Balance : The term 'work- life balance' refers to what extent an individual is involved in and satisfied equally with their job and personal roles. Work-life balance for individuals belonging to educational institutions is of great importance as it creates knowledge for all sectors of the society. Lack of balance in family and work life among academics will be harmful for all other sectors (Greenhaus, Collins, & Shaw, 2003). According to Veenhoven (1989), an effective balance in job and personal life makes a person more content and happier. Chandel and Kaur (2015) said that organizational initiatives are important in maintaining work-life balance of employees. Earlier research studies revealed that a higher desire to achieve more leads people to make extreme efforts - they increase their working timings and they lose their work - life balance. It ultimately reduces

Figure 1. Conceptual Framework



the level of satisfaction among professionals and increases the level of stress experienced by them (Beehr & Newman, 1978). It is evident that integrating and maintaining work - life balance into our lives is the current need of the hour (Mukhtar, 2012). In common, the combination of high demands in a job and a low amount of control over the conditions can lead to stress (Rao & Chandraiah, 2012).

(3) Conceptual Model and Hypotheses Development : The conceptual model of the research is developed based on the literature survey in which two main constructs and their components are integrated together as shown in the Figure 1.

Each path between the constructs and components represents the hypothetical relationship to be verified using structural equation modeling.

Sample and Method

This study follows the descriptive research design. The survey method of data was implemented to gather the primary data. The structured questionnaire was adopted to accumulate the primary data from the sample of 600 employees working in IT companies located at DLF IT Park, Chennai city. The population of the study included the employees working in various information technology companies located at the DLF IT Park, Chennai. The respondents included the employees from different departments and positions from chosen Information

Table 1. Demographic Profile of the Respondents

S. No	Particulars	Frequency	%
1.	**Age Group**		
	Up to 25 Years	114	19
	25 - 35 Years	226	38
	36 - 45 Years	158	26
	More than 45 Years	102	17
2.	**Gender**		
	Male	266	44
	Female	334	56
3.	**Job Positions**		
	Junior Level	259	43
	Middle Level	196	33
	Senior Level	145	24
4.	**Departments**		
	Software Development	301	50
	Technical Support	213	36
	Administration	86	14
5.	**Number of Dependents**		
	None	56	9
	One	113	19
	Two	286	48
	More than two	145	24
	Total	**600**	**100.0**

Technology organizations. The research survey was conducted in the period from August - September 2016. The primary data collected was organized, edited, tabulated, and analyzed using software packages such as IBM SPSS 22.0 and IBM AMOS 23.0.

The Table 1 summarizes the demographic profile of the respondents ; 19% of the respondents were aged up to 25 years ; 38% of the respondents belonged to the age group of 25-35 years ; 26% of the respondents belonged to the age group of 36-45 years, and few respondents (i.e. 17%) came under the age group of more than 45 years. Majority (56%) of the respondents were female and rest of them were male ; 43% of the respondents were working in junior level positions ; whereas 33% of them were working in middle level positions, and remaining of them were working in senior level positions in selected IT organizations.

With regard to the departments/ divisions of the respondents, majority (50%) of the respondents were working in software development, 36% of them were working in technical support, and rest of them were working in the administration departments. Forty eight percent (48%) of the respondents revealed that they had two dependents, whereas 24% stated that they had more than two dependents; 19% replied that they had only one dependent, and very few (9%) replied that they did not have any dependents in their family.

Results and Discussion

The analysis part of the research paper has application of two statistical tools namely, independent samples *'t'* test and structural equation modeling approach. The independent samples *'t'* test was used to analyze if is there any significant difference between the gender of the employees towards the perception of occupational stress and work-life balance ; whereas, structural equation modeling (SEM) was used to explore the relationship between the components of occupational stress and work-life balance.

(1) *'t'* - Test for Independent Samples

↳ **$H_0$1:** There is no significant difference among male and female employees with respect to their perception towards occupational stress and work-life balance in the IT industry.

↳ **H_a1:** There is a significant difference among male and female employees with respect to their perception towards occupational stress and work-life balance in the IT industry.

The Table 2 presents the results of independent samples *t* - test, which reveals that the significance values of working hours, interpersonal relationships, lack of career advancement, meeting deadlines, occupational stress, lack of appreciation, lack of fairness in treatment, workplace support, work-family conflict, and family-work conflict are less than 0.05, therefore, $H_0$1 is rejected at the 5% level of significance. Therefore, it is recognized that there is a significant difference between male and female employees with respect to their perception towards occupational stress and work-life balance in the IT industry with regard to the above mentioned factors. It also exposes that male employees had higher level of occupational stress and lesser level of work-life balance than that of their female counterparts who were working in the IT industry in Chennai. These results are in line with the research results obtained by Chaturvedi (2011).

However, the significance values of job content, satisfaction with work - life balance, and improvement in performance are greater than 0.05, hence the $H_0$1 hypothesis is accepted at the 5% level of significance. Therefore, it is accepted that there is no significant difference between male and female employees with respect to job content, satisfaction with work-life balance, and improvement in performance. These results confirm the study results obtained by Walia and Narang (2015).

Table 2. Results of Independent Samples *t* - test

Factors	Gender	Mean & Std. Deviation	*t* - value	*p* - value
Job Content	Male	10.31 (3.625)	1.110	0.267
	Female	10.02 (2.881)		
Working Hours	Male	9.81 (5.745)	2.935	0.003*
	Female	8.49 (5.282)		
Interpersonal Relationship	Male	7.48 (4.108)	3.173	0.002*
	Female	6.56 (3.003)		
Lack of Career Advancement	Male	8.09 (4.599)	3.661	<0.001*
	Female	6.89 (3.421)		
Meeting Deadlines	Male	9.83 (5.769)	3.402	0.001*
	Female	8.33 (5.061)		
Lack of Appreciation	Male	9.13 (5.352)	2.353	0.019*
	Female	8.15 (4.831)		
Lack of Fairness in Treatment	Male	9.22 (5.452)	2.444	0.015*
	Female	8.19 (4.899)		
Occupational Stress	Male	63.92 (29.198)	3.215	0.001*
	Female	56.65 (26.044)		
Workplace Support	Male	8.76 (5.065)	2.457	0.016*
	Female	9.16 (4.987)		
Work-Family Conflict	Male	7.67 (4.729)	1.163	0.010*
	Female	8.62 (3.849)		
Family-Work Conflict	Male	8.47 (4.134)	2.844	0.009*
	Female	9.41 (5.171)		
Satisfaction with Work-Life Balance	Male	9.94 (4.977)	1.521	0.129
	Female	9.32 (4.908)		
Improvement in Performance	Male	8.02 (3.574)	0.595	0.552
	Female	7.84 (3.594)		

Note: * indicates 5 % level of significance

Figure 2. Unstandardized Coefficients of SEM Model

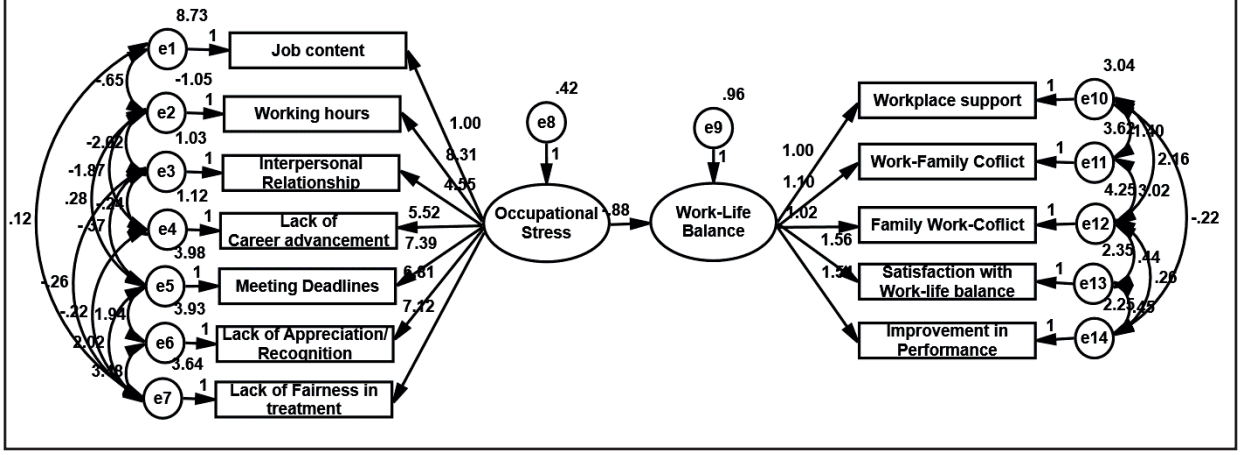


Figure 3. Standardized Coefficients of SEM Model

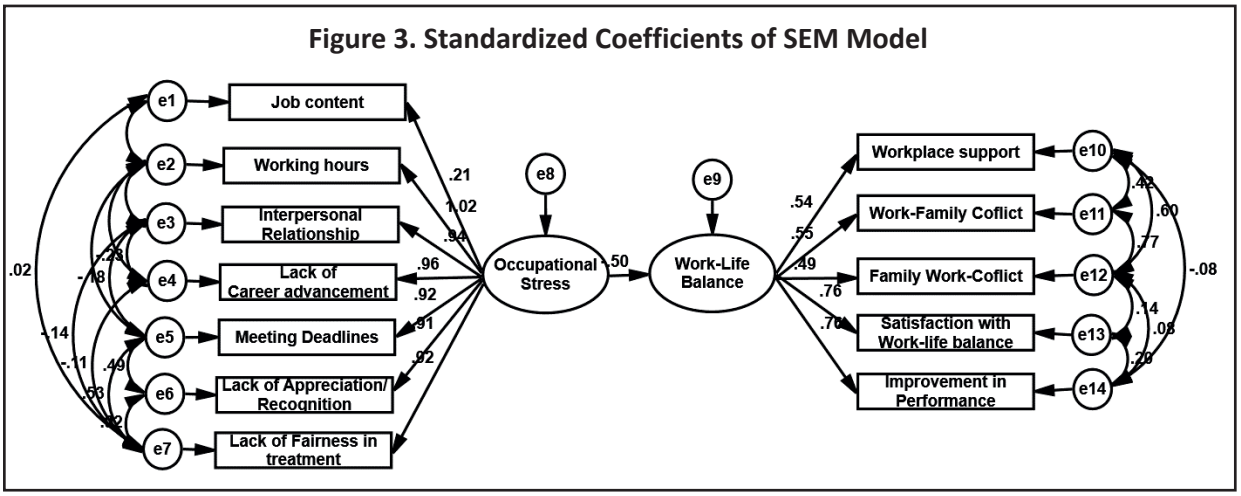


Table 3. Effect of Employees' Occupational Stress on Work-Life Balance with Standardized and Unstandardized Estimates

Measured Variable	Latent Variable	Standardized Estimates	Unstandardized Estimates	*p* - sig. value
Work-Life Balance	Occupational Stress	-0.501	-0.877	<0.001**
Job Content	Occupational Stress	0.213	1.000	-
Lack of Fairness in Treatment	Occupational Stress	0.923	7.116	<0.001**
Working Hours	Occupational Stress	1.019	8.314	<0.001**
Lack of Appreciation	Occupational Stress	0.911	6.813	<0.001**
Interpersonal Relationships	Occupational Stress	0.945	4.554	<0.001**
Meeting Deadlines	Occupational Stress	0.922	7.393	<0.001**
Lack of Career Advancement	Occupational Stress	0.959	5.520	<0.001**
Workplace Support	Work-Life Balance	0.544	1.000	-
Improvement in Performance	Work-Life Balance	0.758	1.543	<0.001**
Work-Family Conflict	Work-Life Balance	0.546	1.098	<0.001**
Satisfaction with Work-Life Balance	Work-Life Balance	0.755	1.564	<0.001**
Family-Work Conflict	Work-Life Balance	0.489	1.022	<0.001**

Note: ** designates significant at the 1% level

(2) Structural Equation Modeling for Ascertaining the Impact of Occupational Stress on Work-Life Balance : The effect of occupational stress on work-life balance among employees working in IT companies in Chennai was tested using structural equation modeling approach. Structural equation modeling is a proficient method of evaluating the measurement error where it can be integrated mutually in observed and latent variables. Therefore, the association among measured variables namely job content, working hours, interpersonal relationship, lack of career advancement, meeting deadlines, lack of appreciation, lack of fairness in treatment, workplace support, work-family conflict, family-work conflict, satisfaction with work-life balance, and improvement in performance and latent variables namely occupational stress and work-life balance were integrated in structural equation modeling. The Figure 2 and Figure 3 illustrate the SEM model based on unstandardized and standardized regression coefficients.

The current research hypotheses have been demarcated on the source of the model fit summary which is sketched underneath and by means of preceding research conducted on the effect of occupational stress on work-life balance, the subsequent hypotheses are projected :

↳ **H_o2:** Employees' occupational stress has a negative impact on their work-life balance.
↳ **H_a2:** Employees' occupational stress has no impact on their work-life balance.

The Table 3 summarizes the effect of employees' occupational stress on work-life balance with standardized and unstandardized estimates. It is observed that the unstandardized regression coefficient of occupational stress is -0.877, which signifies the partial effect over work-life balance by considering that the other variables are not having an influence over WLB (work - life balance). The negative sign of the estimate denotes that work-life balance will decline by -0.877 for every unit rise in occupational stress at the 1% level of significance.

The unstandardized regression coefficient of job content is 1.000, which signifies the effect over occupational stress, considering the other variables as constant. Occupational stress increases by 1.000 for each unit increase in job content among the employees who were working in the IT companies in Chennai and this coefficient value is not significant at the 5% level. Likewise, the regression coefficient of lack of fairness in treatment is 7.116, which signifies the amplified effect of lack of fairness in treatment on occupational stress by assuming other variables as constant. Therefore, the occupational stress rises by 7.116 units for each unit increase in lack of fairness in treatment (at the 1% level of significance).

The unstandardized regression coefficient value of working hours is 8.314, which represents the augmented effect of working hours on occupational stress. Consequently, it is observed that job stress will increase by 8.314 times for every unit of increase in working hours of employees engaged in the IT companies (where the significance is at 1%). Moreover, lack of appreciation, which has a coefficient of 6.813, denotes the outcome on occupational stress by having additional variables as constant. Hereafter, it is revealed that stress in occupation will rise by 6.813 times for every unit increase in lack of appreciation (where the significance level is at 1%).

Interpersonal relationships, which has a regression coefficient value of 4.554, signifies the amplified outcome of interpersonal relationships on occupational stress. Hence, every unit of increase in conflict in interpersonal relationships would increase the occupational stress by 4.554 units, which shows that improper or conflicted interpersonal relationships among the employees may lead to occupational stress at the 1% level of significance. The coefficients of meeting deadlines and lack of career advancement are 7.393 and 5.520, respectively, which symbolizes the effect on occupational stress holding the other variables as constant. Hence, it is witnessed that occupational stress would increase by 7.393 and 5.520 units for every unit increase in meeting deadlines and lack of career advancement of the employees at 1% level of significance.

Workplace support has a coefficient value of 1.000, which represents the same effect on work-life balance, by assuming the other variables as constant. Work-life balance would increase by 1.000 for every unit increase in workplace support and it is not significant at the 1% level. This optimistic sign of the estimate implies that work-life balance would increase by 1.564 times for every unit increase in work - life satisfaction among the employees

Table 4. Fit Summary of the Research Model

S. No	Model Fitness Indices	Value	Result
1	Significance *(p)* Value	0.162	Acceptable
2	Chi-square / *DF*	3.082	Acceptable
3	Root Mean Square Error of Approximation	0.041	Acceptable
4	Root Mean Square Residuals	0.049	Adequate
5	Comparative Fitness Index	0.913	Adequate
6	Goodness of Fitness Index	0.954	Acceptable
7	Adjusted Goodness of Fitness Index	0.912	Adequate
8	Tucker-Lewis Index	0.953	Acceptable
9	Normed Fitness Index	0.969	Adequate

of the IT companies, where the significant value is at the 1% level. Work-family conflict and family-work conflict coefficient values are 1.098 and 1.564 units, respectively, which represents their impact on work-life balance activities, holding the other variables as constant. Hence, the impact on work-life balance would increase by 1.098 and 1.564 units for every unit increase in work-family conflicts and family-work conflicts faced by the employees of the IT industry, where the coefficient value is significant at the 1% level.

The Table 4 shows the model fit summary of the research model. From the Table 4, it is understood that the intended significance *(p)* value is 0.162, which is superior to 0.05 which specifies perfect fit. Whereas, goodness of fit index and adjusted goodness of fit index values are more than 0.90, which indicates it as a decent acceptable model fit. The premeditated value of comparative fit index (CFI) is 0.913, which also represents a worthy fit to the model and where the value is 0.049, it indicates the root mean square residuals as worthy. Moreover, the root mean square error of approximation has been assigned with a value of 0.041, which specifies that it is also a good acceptable model, which indicates that hypothesis H02 is accepted. Hence, the results of this research prove that occupational stress has a negative impact on the work-life balance of the employees, which is analogous with the results of earlier research studies conducted by Saeed and Farooqi (2014) and Narang (2016).

Managerial Implications

In the present times, majority of the people are employed to earn their livelihood, which means better living, but the present industry scenario expects the availability of employees for work 24x7. Occupational stress is the exterminator of work- life balance. IT organizations need to understand the value of their employees' personal lives, so they should try to provide technology based solutions in order to facilitate work from home, flexible working hours, etc. It is also suggested that organizations should realize various stress causing factors and try to eradicate or prevent these factors to relieve work - life stress of their employees (Chandel & Kaur, 2015). However, occupational stress is an inevitable factor of hyper competition in every industry, so in order to reduce the negative impact of occupational stress on employees, the organizations may arrange yoga training for the employees at their leisure hours, because yoga is a mind and body practice with a goal of coalescing emotional, psychological, and physical selves (Dwivedi, Kumari, Akhilesh, & Nagendra, 2015).

Conclusion

As stress has become a part of our personal and professional lives ; hence, it is crucial to identify how we handle it. The data analysis section of the study evidents that the employees of the IT industry perceived higher level of occupational stress and it had an impact on the work-life balance of the employees. The male employees perceived higher level of stress while compared to female employees with respect to working hours, interpersonal relationships, lack of career advancement, meeting deadlines, and occupational stress ; whereas, female employees perceived higher level of family-work conflict. The stress in professional life cannot be evaded altogether in the present industry scenario, but proper management of stress may minimize its impact on work-life balance. Therefore, it is concluded that minimizing occupational stress paves the way to healthier work-life balance.

Limitations of the Study and Scope for Further Research

The results of the research are based on occupational stress and work - life balance as perceived by the employees during the study period. The changes in policies of the organizations and work circumstances may change their feelings towards the study parameters. Descriptive research design was used in this research, which has its own merits and demerits.

A similar kind of study can be conducted across the country or various states with a larger sample size, or impact of occupational stress on the physical and mental health of the employees can be studied. Work - life balance may vary based on gender related issues ; hence, a specific study can be conducted exclusively for men and women distinctly.

References

Beehr, T.A., & Newman, J.E. (1978). Job stress, employee health and organizational effectiveness: A facet analysis, model and literature review. *Personnel Psychology, 31*(4), 665-699.

Chandel, K., & Kaur, R. (2015). Exploring various contributors of work-life balance as a panacea for occupational stress. *Prabandhan: Indian Journal of Management, 8*(1), 9-20. doi:10.17010/pijom/2015/v8i1/61247

Chaturvedi, V. (2011). A study on gender differences with relation to occupational stress among faculties in management colleges of private and government institutes –A study with reference to management colleges in NCR. *International Journal of Business Management Economics Research, 2*(2), 168 - 172.

Dwivedi, U., Kumari, S., Akhilesh, K., & Nagendra, H. (2015). Effect of Yoga practices in reducing aggression and counterproductive work behavior: A randomized controlled trial. *Prabandhan: Indian Journal of Management, 8*(10), 21-31. doi:10.17010/pijom/2015/v8i10/79822

Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work -family balance and quality of life. *Journal of Vocational Behavior, 63* (3), 510 - 531.

Kinman, G., & Jones, F. (2003). Running up the down escalator: Stressors and strains in UK academics. *Quality in Higher Education, 9* (1), 22- 37.

Kumari, N., Verma, S., & Verma, Y. S. (2012). A study of selected correlates of organizational stress in higher education institutions. *Prabandhan: Indian Journal of Management, 5*(3), 4 - 12. DOI: 10.17010/pijom/2012/v5i3/60145

Menon, S., & Raithatha, M. (2012). Occupational stress: An analytical study of stress among dabbawalas of Mumbai Tiffin Suppliers Association. *Prabandhan: Indian Journal of Management, 5* (1), 47-54. doi:10.17010/pijom/2012/v5i1/60117

Mukhtar, F. (2012). *Work life balance and job satisfaction among faculty at Iowa State University* (Graduate Theses and Dissertations. Paper 12791). Retrieved from http://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=3798&context=etd

Narang, D. (2016). Impact of occupational stress on work-life balance - A study of select banks in Punjab and Chandigarh. *Zenith International Journal of Multidisciplinary Research, 6* (11), 69 - 83.

Rao, J. V., & Chandraiah, K. (2012). Occupational stress, mental health and coping among information technology professionals. *Indian Journal of Occupational & Environmental Medicine, 16* (1), 22 - 26. doi: 10.4103/0019-5278.99686

Saeed, K., & Farooqi, Y. A. (2014). Examining the relationship between work life balance, job stress and job satisfaction among university teachers (A case of university of Gujarat). *International Journal of Multidisciplinary Sciences and Engineering, 5* (6), 9 -15.

Skakon, J., Nielsen, K., Borg, V., & Guzman, J. (2010). Are leaders' well-being, behaviours and style associated with the affective well-being of their employees? A systematic review of three decades of research. *Work & Stress, 24* (2), 107-139. doi:10.1080/02678373.2010.495262

Veenhoven, R. (1989). National wealth and individual happiness, In K. G. Grunert & T. Olander (eds), *Understanding economic behavior* (pp. 9-32). London : Kluwer Academic Publishers.

Walia, K., & Narang, S. (2015). Job stress and job involvement: A study of IT professionals from North India. *Prabandhan: Indian Journal of Management, 8* (4), 39 - 50. doi:10.17010/pijom/2015/v8i4/63815

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