

Social Support and its impact on Job Stress among Cement Industry Workers: (A Comparative Study)

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Abstract: The aim of this paper was to explore the extent to which Social support (i.e. supervisory support and co-workers support) is contributing towards the Job Stress among the public and private sector Cement factory workers in Kashmir Division of Jammu & Kashmir State. The sample size of the study consists of total 300 operational level workers, 150 workers were selected from public and 150 from private sector cement factories in Kashmir Division. The Social support (i.e. supervisory support and coworkers support) was measured by using Job Content Questionnaire. The results indicated the presence of Supervisory support was found to be high among private sector workers with the mean score of 3.83, against their public sector counterparts with the means score of 3.58. Similarly, coworkers support was also found to be quite high among private sector workers reflecting from the mean score of 4.04, as compared to their public sector counterparts with the mean score of 3.91. Whereas, Bivariate correlation indicated that these variables are negatively correlated with the job stress (i.e. supervisory support and coworker's support). And, there is a need of effective training for supervisors, to create awareness about the importance of good relationships among workers and supervisors in public sector organizations. Whereas, multiple regression analysis indicated that both supervisory as well as coworkers support was significantly associated with job stress

Keywords: Job stress, supervisory support, co-workers support.

I. INTRODUCTION

Job stress is increasing across the global in all the countries, organizations, professions, and also among employees, employers, families and society in general. Studies revealed that employees in the United States and other developed countries experienced job stress as a serious issue so that American businesses pay more than \$150 billion annually for occupational stress which leads to the absenteeism of employees, loss of productivity and low performance (P. E. Spector, et al., 2002). Occupational stress has been known as a serious health issue for organizations and employees. Thus, the stressful situations of the workplace due to occupational stress lead to negative consequences like anxiety, headache, stomach distress and cardiovascular disease (P. E. Spector, 2002). Decker and Webb (1994), Felton and Cole (2008), and Albridge (2005) reported that stressful work life were related to receiving psychiatric care, and that in the United Kingdom, the sum of incapacity for men suffering from psychoneurotic and personality disorder, nervousness, migraine headaches, and smoking accounted for 22.8 million work days loss alone. Each individual has a stress threshold, beyond which the mind and body cannot cope effectively with the pressure and anxieties of work. As a result, workers' compensation claims for stress are increasing substantially every year, threatening to bankrupt the system in several states. An estimated one million workers miss work each day because of stress, costing companies an estimated \$602 per employee per year. Absenteeism is also to be blamed for 26 percent of health-related loss of productivity in businesses (info@HealthAdvocate.com. 2007). Among workers with a work-related health problem, 'stress, depression or anxiety' was reported as the most serious health problem by 14 % (European Commission, 2010). Moreover, in the 5th European Working Conditions Survey (Euro-found, 2012), around 45 % of workers reported having experienced, some type of organizational change affecting their work environment, and 62 % reported working to tight deadlines, during the previous few decades.

II. REVIEW OF LITERATURE

The growing importance of cement industry has attracted the attention of the researchers throughout the world which in turn made the cement industry an important subject of the research endeavor. Since the factory workers belong to the lower strata of socio economic groups and are highly prone to stress. But, researchers and media are often interested to take up the problems of middle or high level income groups for publicity and acceptance. In view of this fact, the researcher thought it would be in the fitness of things to conduct a study on this topic of profound significance to bring out the problems of people who are generally unorganized and are often denied of their rights. Factory workers develop a wide variety of occupational illness during their working lives, manifested in physical and psychological stress. Blue collar workers perform their work manually and generally earn low wages. Blue collar work is most often associated with lack of education. Many blue collar jobs require advanced skills, technical training, or years of apprenticeship. For many workers who are considered blue collar, are dealing with work stress as a constant part of their daily life. They are also facing the shrinking job market, possible layoffs and factory closings; blue collar workers are also often worried about their financial future insecurities. Depending on their position, blue collar workers often face a unique set of stressors.

Privatization is also a gradual process which affects employees over the time. While some employees perceive the changes positively, others are not satisfied. Today, in view of the complexity and ever-increasing changes of the society as well as the improvement of technology; job stress has become a serious threat to humans and has severely affected the health and performance of the employees in both the sectors, whether private or public. Mahdad, (2002) and Saatchi (2008) declared that mental health problem of employees was the main hazard for organizational productivity in cement industry of Iran. Various studies conducted by, for example Ahola ,(2009) ; Shields ,(2006); Haslam et al.(2005); Boya et al. (2008);Takada et al. (2009); Stoetzer et al.(2009); Date et al. (2009); Wieelaw et al. (2008) revealed that depression and anxiety of employees have a direct relationship with job stress, impaired work performance, safety, lifestyle factors, working environment, problematic interpersonal relationship at work, long working hours per day and finally psychological work exposures.

Social-Support: A Source of Stress

Social-support is related to the support from superiors, subordinates and colleagues who play a very part in an individual's stress levels; low levels of trust and support are likely to increase stress (Ricardo et.al. 2006). "Support" is the last stressor classified under Job Contents and in this context, refers to the amount of adequate encouragement, feedback and resources provided to the worker by their organization, management and colleagues (Cousins et al., 2004). In a subsequent study, Frese (1999) found that high social support lessens the negative impact of stress on psychological functioning. Edimansyah et al. (2008) found that social support at the workplace predicted higher perceptions of quality of life among 698 male automotive workers in Malaysia. Similarly, Chen, Siu, Lu, Cooper and Phillips (2009) in their research involving 843 employees in eight types of domestic and foreign invested enterprises in China, found that informal social support decreased depression. Social-Support is the combination of two other sub- dimensions which are supervisory-support and coworkers-support as explained below;

Supervisory Support:

Buck (1972) focused its study on the relationship of workers and managers, and found that lack of considerate behaviors of supervisor appears to have contributed significantly to feelings of job pressure. He also observed that both manager and workers who felt that they were under pressure reported that their superior always ruled with an iron hand and rarely tried out or allowed participation in decision making. Beehr et al. (1990) operationalized the social support in terms of communications between supervisors and subordinates and the study suggested that a supportive workplace environment reduces stressors and their negative effects by improving attitudes and behaviours. Similarly, Galvin and Dileepan (2002) reported that poor relationship with supervisors is among the most stressful factor within the organizations. Raeda, (2003) found that working alone on one's job without social support from one's peers and supervisors would lead to job stress.

Coworkers Support:

The number of research works points out the need of good relationship and support from the colleagues at work for the elimination of work related stress hazards. It is found that the real source of problems connected with work stress are not located in the work environment, but is person-based, and the most effective way to reduce stress is to change the person based factors Kumar & Madhu (2011). Jungwee Park (2007) found that, for men, high workplace social co-worker support was associated with a lower likelihood of reduced work activities. The study also found that, female blue-collar

workers with the experience of work injury had job strains, and low coworker support as compared to those without such an experience. In addition, high job strains and low coworker support was significantly associated with work injury in the female blue-collar workers. High level of stress was due to lack of sensitivity towards colleagues, which may lead to aggression (Spector et al. 2000). Earlier studies showed that negative relationships with colleagues and bullying and harassment have a huge impact on the work-related stress level (Einarsen, 1999; Adams 1992). Shaukat et.al (2014) found that, there is a low level of stress against relationships with colleagues in Pakistani cell phone industry.

III. OBJECTIVES OF THE STUDY

In the light of above discussed literature review, the present study has been designed to find out the impact of social support over the job stress of operational level workers, working in the Cement Manufacturing organizations in Kashmir Division of J&K State with the following set of objectives.

1. To critically review the extant literature available on the topic of research undertaken.
2. To ascertain the relationship between social support and job stress among the operational level cement factory workers.
3. To make a comparative assessment of the presence of supervisory support and coworkers support among the respondents of the organizations under study.
4. To provide suggestions on the basis of the results of the present study and the coping strategies in order to minimize the levels of stress among the respondents of the sample study organizations.

Hypothesis:

H1: "The level of stress among the sample respondents will be high in both the sample study organizations"

H2: "Supervisory support is a significant source of stress for the operational level factory workers"

H3: "Coworkers support is a significant source of stress for the operational level factory workers"

IV. RESEARCH METHODOLOGY

For the present study researcher adopted the Job Content Questionnaire which was developed by Robert Karasek, 1979 for measuring Job Demand and Control only, but later this was revised by Johnson & Hall, 1988 by adding the dimension for measuring the social support (i.e. supervisory support and coworkers support) and the Job Stress Questionnaire developed by Lambert, Hogan, Camp & Ventura (2006) was adopted to measure the levels of stress and both of them were clubbed to form a comprehensive questionnaire which measured all the factors together. Job stress was measured by 4 items, supervisory support was measured by 8 items and coworkers support was measured by 5. For each item, the responses were recorded on a 5-point Likert-type scale, ranging from 1 (strongly disagree), 2 (disagree), 3 (partially agree), 4 (agree) to 5 (strongly agree). In the state of J&K two leading cement manufacturing organisations were selected for the present study namely JK Cements Ltd. {falling under the category of Public Sector} and the other one namely Khyber cements Pvt. Ltd. {which belongs to the category of Private Sector}. Apart from convenience based sampling method the above mentioned two organizations have also been selected on the basis of their dominance in the state of J&K.

Sample Design:

The sample size for the present study was selected from the operational level workers and not from the employees engaged at top or middle level in both the organizations in order to ensure that the data collected doesn't mislead the results. The sample size from each organization was chosen on the basis of proportionate sample method (*i.e. Total population of workers in each organization/Total population of both the organizations*Sample size calculated by using sample size calculator*). So a total sample of 300 workers were selected from both organizations (i.e.150 workers from public and 150 from the private sector factories).

Reliability and Validity of the Scales:

In order to check the reliability and validity of the Job Content and Job Stress Questionnaire in our settings, the responses were received from the (50) operational level factory workers, in order to check the reliability of the questionnaire the correlation between the items of the various dimensions was calculated by using SPSS version 20. The Cronbach's alpha coefficient for all the dimensions are revealed in table (1) shown as under;

TABLE: 1 CRONBACH'S ALPHA COEFFICIENTS (α) OF THE *JCQ SUBSCALE (N=50)

Scale (No. of items)	Cronbach's (α) coefficient
Stress (4)	0.863
Supervisory support (8)	0.673
Co-workers support (5)	0.676

*JCQ=JOB CONTENT QUESTIONNAIRE

Note: This indicates a good internal reliability, based on average inter-item correlation.

V. RESULTS AND DISCUSSIONS

The study revealed that, there was a significant difference of opinions among the respondents regarding the presence of job stress and social support (i.e. supervisory support and co-workers support) as reflected in Table (2). The mean score of stress in public sector workers was 2.86 against private counterparts where mean scores was 2.31, which indicated that the public sector workers experience relatively more stress than their private counterparts. And the difference in such mean scores was statistically tested using t-test and was found to be significant ($\alpha > p$) at 95% confidence level. Which supports the findings of Lewig and Dollard (2001) that public sector employees are subject to greater work-related stress than private sector employees & also the report prepared by Ricardo et.al (2007), revealing that public sector workers are significantly more i.e. 64% likely to report stress to be the leading hazard of concern at work than workers in the private sector only 46%. The mean score of supervisory support in public sector was 3.58, and the mean score of private sector was 3.83, which indicated that the private sector workers were getting relatively higher levels of support from their supervisors at work compared to their public sector counterparts. And the difference in such mean score was statistically tested using t-test and was found to be significant ($\alpha > p$) at 95% confidence level, which supports the findings of Hoque, Davis and Humphries (2004), Hardie and Critchley (2008) that private sector delivers a higher quality of care, suggesting a better managed context. It is therefore expected that public sector will experience a lower level of satisfaction with their supervisor-subordinate relationship. Similarly, the mean score of co-workers support in public sector was 3.91, and the mean score of private sector was 4.04, which again indicated that private sector workers were receiving good amount of support from their co-workers at work than their public sector counterparts, which does not support the findings of (Motta,1996 & Renata Borges,2013) who revealed in their studies that, public sector employees are receiving more supportive environment than private sector employees as public sector employees frequently develop friendships in the workplace by mixing personal and professional relationships at work.

TABLE: 2 INDEPENDENT SAMPLE T-TEST FOR COMPARISONS OF LEVELS SOCIAL SUPPORT

DIMENSIONS	NOORG*	**N	Mean	t-value	Sig.
Stress	Public	150	2.8600	5.931	.000
	Private	150	2.3117		
Supervisory support	Public	150	3.5800	-5.604	.000
	Private	150	3.8300		
Coworker support	Public	150	3.9120	-3.683	.000
	Private	150	4.0493		

*NOORG= Nature of Organizations

**N= Number of respondents

Bivariate Correlation Analysis of various Dimensions contained in Table (3) revealed that Supervisory support ($r = -0.295^{**}$) and Coworkers support ($r = -0.129^{*}$) was found to be negatively correlated with the job stress which means that any decrease in social support will increase the levels of stress among the workers or vice versa in proportion of their correlation. This supports the findings of Raeda, (2003) that stress is negatively associated with social support from coworkers and supervisors. And, (Daniels & Guppy 1994; Wong & Cheuk, 2005) that high social support acts as a buffer to decrease stress in the workplaces and increases the well-being. The social support may be from supervisor or organization and coworkers.

TABLE: 3 CORRELATIONS MATRIX AMONG VARIOUS DIMENSIONS

DIMENSIONS		STRESS	SUPERVISORY SUPPORT	COWORKERS SUPPORT
STRESS	Pearson Correlation	1		
	Sig. (2-tailed)			
SUPERVISORY SUPPORT	Pearson Correlation	-.295**	1	
	Sig. (2-tailed)	.000		
COWORKERS SUPPORT	Pearson Correlation	-.129*	.004	1
	Sig. (2-tailed)	.026	.940	

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Since the social support (i.e. supervisory support and coworkers' supports) both were found to be associated with the Job Stress it becomes imperative to understand which variable is having a deeper and significant impact over the job stress? For this purpose it becomes necessary to perform the regression analysis of the data which will also help us to test our hypothesis. So, Table (4) revealed that, the significance of model in terms of overall fit is expressed by F = **17.115**. The Beta value of **-0.295 and -0.127** of Table (5) revealed, that supervisory support and coworkers support reflected a significant (p<0.05) but negative impact over the job stress. In other words, social support i.e. coworker support and supervisory support were much useful to predict the job stress of cement factory workers of Kashmir Division.

TABLE: 4 REGRESSION ANALYSIS MODEL SUMMARY

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	22.074	2	11.037	17.115	.000^b
	Residual	191.528	297	.645		
	Total	213.602	299			
a. Dependent Variable: STRESS						
b. Predictors: (Constant), SUPERVISORY-SUPPORT, COWORKERS SUPPORT						

TABLE: 5

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.821	.795		8.579	.000
	SUPERVISORY_SUPPORT	-.961	.179	-.295	-5.363	.000
	COWORKERS_SUPPORT	-.403	.174	-.127	-2.316	.021
a. Dependent Variable: STRESS						

Hypothesis Testing:

The Independent sample t-test revealed that, there was the presence of high level of stress in both the organizations with mean of (public=2.86 & private = 2.31) and their t- value was statistically significant at 95% confidence level, which supports to our first hypothesis as,

H1: "The level of stress among the sample respondents will be high in both the sample study organizations" which supports the findings of Bano and Jha (2012)

Results from the regression analysis demonstrated that both the sub dimensions of social support showed their impact over the job stress as their t-value were statistically significant at 95% confidence level, which supports our following hypothesis.

H2: *“Supervisory support is a significant source of stress for the operational level factory workers” Which supports the findings of Raeda, (2003) working alone on one’s job without social support from one’s peers and supervisors would lead to job stress (Mirovisky& Ross,1986;Eugene, 1999).*

H3: *“Coworkers support is a significant source of stress for the operational level factory workers” again supporting the findings of Raeda, (2003) and Wong & Cheuk, (2005).*

VI. FINDINGS AND SUGGESTIONS

The in-depth analysis of job stress and the variable of Social Support (i.e. supervisory support & coworker support) revealed the following findings:-

Supervisory Support:

- Supervisory support was found to be high among private sector workers with the mean score of **3.83**, which means they receive good supervisory support in the form of supportive feedback, welfare or concern from supervisors and coordination etc against their public sector counterparts with the means score of **3.58** and the difference was statistically significant.
- Job stress was negatively correlated with the supervisory support which means that there would be increase in job stress if supervisory support would be reduced, See Table (3).
- Regression analysis revealed that job stress was found to be significantly associated with supervisory support and confirms our hypothesis H2, See Table (5).

Coworker Support:

- Coworkers support was found to be quite high among private sector workers reflecting from the mean score of **4.04**, which means that they respect each other at work helps each other in getting the tasks done smoothly etc as compared to their public sector counterparts with the mean score of **3.91**, and the difference was found to be statistically significant.
- Job stress was found to be negatively correlated with the coworkers’ support which means that there would be increase in job stress if coworkers support would be reduced, See Table (3).
- Regression analysis revealed that job stress was found to be significantly associated with coworkers support and confirmed our hypothesis H3, See Table (5).

Suggestions of the Study:

It is evident from the findings of the study that there is a moderate level of job stress present among the workers of both sectors. So, it is very important for the management to make the proper use of Stress Management Programs available for the factory level workers in order to control the levels of stress on time.

Reason of Job stress among the workers was low social support (i.e. low supervisory support & low coworkers support) which means that lack of supportive or well organized feedback system of the organizations and relationship gaps between the coworkers as well as with the supervisors. This is a very sensitive issue to handle because time and again researchers have reported that —Low social support from the colleagues and serious checks by the superiors or co-workers, have marked effects of depression and result in negative relationships with the employees (Stoetzer et.al, 2009). So, it is very important for the management to bridge this gap between the coworkers and the supervisors, by organizing the counseling sessions for the both in order to understand the importance of coordination and cooperation at work.

Based on the findings of the study, the following recommendations are made. The working environment and conditions of service of workers needs to be improved upon in order to afford the workers coping and adjusting to the pressure that tends to emanate from the job.

- Organization support system that tend to combat the physical, social and psychological effects of work-induced stress on workers and their attitude to work should be organized at workplace in order to foster job commitment satisfaction and compliance mode of operation on the part of workers.
- Workers should be given the opportunities to participate in the design of their own work situations and in the processes of change and development affecting their work.
- Closely controlled or restricted work monitoring should be avoided or should be made on limited basis.
- Work should provide opportunities for developing the variety of skills, social contacts, and cooperation between the different working operational units within the organizations.
- Providing organizational support / social support to the workers which include the support from coworkers as well as from the immediate supervisors at the workplace.

VII. LIMITATIONS OF THE STUDY

As the other studies are not flawless similarly the present study also has certain limitations, which are as under:

1. The sample was confined to two organizations only namely, JK Cements Ltd. & Khyber Cements Pvt. Ltd. Of Kashmir Division.
2. This research was undertaken at one period of time and therefore, the results reflect the findings of that particular period of time only. Related to this is the fact that the researcher can only take account of the respondent's physical or emotional state at that time only while taking or measuring their responses.
3. Also, the data was collected from the operational or plant level workers of the cement factories only, while excluding the other levels of the organization.
4. Finally, this research has taken only supervisory support and co-workers support to measure the impact of social support at work. So, there is lot of scope to make further additions in the dimensions and their impact on job-stress.

VIII. FUTURE RESEARCH

1. The researchers can extend the present study by measuring the responses from more related organizations.
2. The present author recommends to carry out a longitudinal study on this concerning topic.
3. The researchers can carry furthermore studies on large geographical areas.
4. It is also suggested to carry out the study concerning this topic and industry with some more dimensions.

REFERENCES

- [1] Adams, A (1992), "holding out against workplace harassment and bullying", Personnel Management, October, pp. 48 – 50.
- [2] Ahola, K. et al. (2009), "Occupational burnout and chronic work disability: An eight-year cohort study on pensioning among Finnish forest industry workers". Journal of Effective Disorders. Vol.115,pp.150-159.
- [3] Albridge, C. O. (2005), "Psychological effects of stress and job performance". Journal of Behavioural Science, vol.26 (2), pp.110-122.
- [4] Beehr, T. A., King, L. A., & King, D. W. (1990), "Social support and occupational stress: Talking to supervisors". Journal of Vocational Behavior, vol. 36, pp.61-81.
- [5] Boya, F.O., Demiral, Y., Ergor, A., Akvardar, Y., & De Witte, H. (2008), "Effects of perceived job insecurity on perceived anxiety and depression in nurses". Industrial Health vol. 46, pp. 613-619.
- [6] Buck, V. (1972), "Working under pressure". London: Staples Press.
- [7] Bushara Bano and Rajiv Kumar Jha (2012), "Organizational Role Stress Among Public and Private Sector Employees: A Comparative Study", The Lahore Journal of Business 1:1 (Summer 2012): pp. 23–36.

- [8] Chen, W.-Q., Siu, O.-L., Lu, J.-F., Cooper, C. L., & Phillips, D. R. (2009), "Work stress and depression: the direct and moderating effects of informal social support and coping". *Stress and Health*, vol. 25, pp.431-443.
- [9] Daniels, K., & Guppy, A. (1994), "Occupational stress, social support, job control, and psychological well-being" *Human Relations*, Vol.47, No.12, pp.1523.
- [10] Date, Y., Abe, Y., Aoyagi, K., YE, Z., Takamura, N., Tomita, M., Osaki, M., & Honda, S. (2009), "Depressive symptoms in Chinese factory workers in Nagasaki, Japan", *Industrial Health*. Vol. 47, pp.376-382.
- [11] Decker, B. S. and Webb C. O. (1994), "Occupational stress and psychological effects on workers", *Journal of Applied Psychology*, vol.6(1), pp.41-56.
- [12] Edimansyah, B. A., Rusli, B. N., Naing, L., Rusli, B. A. M., Winn, T., & Ariff, B. R. H. T. M. (2008), "Self - perceived Depression, Anxiety, Stress and Their Relationships with Psychosocial Job Factors in Male Automotive Assembly Workers", *Industrial Health*, vol.46, pp. 90-100.
- [13] Einarsen, S (1999), "The nature and causes of bullying at work", *International Journal of Manpower*, vol. 20 no.1/2, pp.16-27.
- [14] Eugene, J.W. (1999), "The Impact of Work Resources on Job Stress Among Correctional Treatment Staff", *Journal of Addictions and Offender Counseling*, vol.20(1), pp.26-34.
- [15] Eurofound — "European Foundation for the Improvement of Living and Working Conditions, Fifth European working conditions survey", Publications Office of the European Union, Luxembourg, (2012). Available at: <http://www.eurofound.europa.eu/surveys/ewcs/2010/>.
- [16] Eurofound — "European Foundation for the Improvement of Living and Working Conditions", Work-related stress, (2007). Available at: <http://www.eurofound.europa.eu/ewco/reports/TN0502TR01/TN0502TR01.pdf>
- [17] European Commission, Health and safety at work in Europe (1999– 2007): "A statistical portrait", Luxembourg, Publications Office of the European Union, 2010. Available at: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-31-09-290/EN/KS-31-09-290- EN.PDF.
- [18] Felton, S. M. and Cole.K. (2008), "Strategic management and workplace stress. New York": Macmillan press Ltd
- [19] Frese, M. (1999), "Social support as a moderator of the relationship between work stressors and psychological dysfunctioning: A longitudinal study with objective measures", *Journal of occupational Health Psychology*, vol.4(3), pp.179-192.
- [20] Gavin, T. A. & P. Dileepan. (2002), —"Stress!! Analyzing the culprits and prescribing a cure", *Strategic Finance*" (November), pp. 50 – 55.
- [21] Hardie, E and Critchley, C (2008), "Public perceptions of Australian doctors, hospitals and healthcare systems", *Medical Journal of Australia* 1899:4, pp.210-214.
- [22] Haslam, C., Atkinson, S., Brown, SS., & Haslam, R.A. (2005), "Anxiety and depression in the workplace: Effects on the individual and organization", *Journal of Affective Disorders*.vol. 88, pp.209-245.
- [23] Hoque, K., Davis, S. and Humphries, M. (2004), "Freedom to do what you are told: Senior management's autonomy in an NHS Acute Trust", *Public Administration*, vol.82: 2, pp.355-376.
- [24] Johnson, J. V., & Hall, E. M. (1988), "Job strain, work place social support, and cardiovascular disease: a cross sectional study of a random sample of the Swedish working population", *American Journal of Public Health*, vol.78(10), pp.1336-1342.
- [25] Jungwee Park (2007), "Work stress and job performance December 2007 Perspectives Statistics Canada" — Catalogue no. 75-001-XIE
- [26] K. Satheesh Kumar, Dr.G.Madhu (2011), "Analysis and modelling of work stress in manufacturing industries in Kerala ,India", *International Journal of Modern Engineering Research (IJMER)* Vol.1, Issue2, pp-552-558 ISSN: 2249-6645 www.ijmer.com

- [27] Karasek R (1979), "Job demand, job decision latitude, and mental strain: implications for job redesign", *Adm Sci Q* vol.24:pp.285–308
- [28] Lambert, E.C., Hogan, N.L., Camp, S.D., & Ventura, L.A. (2006), "The impact of work-family conflict on correctional staff: preliminary study". *Criminology & Criminal Justice: An International Journal*, vol.6(4), pp.371-387.
- [29] Lewig, K. A., & Dollard, M. F. (2001), "Social construction of work stress", *Australian newsprint media portrayal of stress at work, 1997–98*.
- [30] Mackay CJ, Cousins R, Kelly PJ, Lee S, Mccaig RH. (2004), "Management standards and work-related stress in the UK", *Policy Background and Science.Work & Stress*. Vol.18 (2):pp. 91-112. Available: <http://www.tandf.co.uk/journals/DOI:10.1080/02678370410001727474>.
- [31] Mahdad, A. (2002), "Industrial and Organizational Psychology", Tehran, Jungle Publications.
- [32] Mirovisky, J., and Ross, E. (1986), "Social Patterns of Distress", *Annual Review of Sociology*,12, pp. 23-45.
- [33] Motta,Fernando C.P.(1996), "Cultura e organizations no Brazil", Sao Paulo: EAESP-FGV,1996.
- [34] Paul Spector, (2002), "Cross national differences in relationships of work demands, job satisfaction, and turnover intentions with work family conflict", *Personnel Psychology*.
- [35] Rael, E. G. S., Standsfeld, S. A., Shipley, M., Head, J., Feeney, A., & Marmot, M. (1995), "Sickness absence in the Whitehall II study, London: The role of social support and material problems", *Journal of Epidemiology and Community Health*, vol.49, pp.474-481.
- [36] Renata Borges, (2013), "Are public officials really less satisfied than private sector workers? A comparative study in Brazil", *Rev.Adm. Public* vol.47 no.6 Rio de Janeiro Nov./ Dec. 2013.
- [37] Ricardo Blaug Amy Kenyon Rohit Lekhi (2007), "Stress at Work :A report prepared for The Work Foundation's Principal Partners".
- [38] Saatchi, M. (2008), "Industrial and Organizational Psychology", Tehran, Virayesh Publications.
- [39] Shaukat Ali Raza, Aliha Yousaf, Aamir Sajjad and Abir Hassan Naqvi (2014), "Investigation of Employees' Stress Level in Pakistani Cell Phone Industry", *British Journal of Economics, Management & Trade* vol. 4(6): pp. 992-1004, 2014. www.sciencedomain.org.
- [40] Shields, M. (2006), "Stress and depression in the employed population", *Health Reports*, Vol. 17(4): pp. 11-29.
- [41] Spector, P., Zapf, D., Chen, P. & Frese, M. (2000), "Why negative affectivity should not be controlled for in job stress research: don't throw the baby out with the bathwater", *Journal of Organizational Behaviour*, vol. 21, pp. 79-95.
- [42] Stoetzer U, Ahlberg G, Johanson G, Bergman P, Hallsten L, Forsell Y, Lundberg I. (2009), "Problematic relationships at work and depression: A swedish prospective cohort study", *Journal of occupational Health*, vol.51: pp.144-151.
- [43] Takada, M., Suzuki, A., Shima,S., Inoue, K., Kazukawa, S., & Hojoh, M. (2009), "Association between lifestyle factors, working environment, depressive symptoms and suicidal ideation: A large-scale study in Japan", *Industrial Health*. Vol. 47, pp. 649-655.
- [44] Wieclaw, J., Agerbo, E., Mortenson, P.B., Burr, H., Tuchsén, F., & Bonde, J.P. (2008), "Psychological working conditions and the risk of depression and anxiety disorders in the Danish workforce", *Biomed Central Public Health*,8.
- [45] Wong, K. S., & Cheuk, W. H. (2005), "Job related stress and social support in kindergarten principals: the case of Macau", *International Journal of Educational Management*, Vol.19, NO.3,pp.183-196.