

Investigate the Causes and Factors Affecting Job Stress of the Staff of Pnu in West Province Fars

Mostafa Taheri

Department of Management, Payam Noor University, Tehran, Iran

Abstract: This study aimed to investigate the causes and factors affecting job stress of the staff of PNU in West Province Fars was conducted in 2015. Job Stress Questionnaire of the UK Health and Safety Executive and job stress questionnaire approved by the American Institute of Job Stress were used to evaluate the severity of stress and its related factors and finally, the questionnaire according to the cultural, social, economic conditions was prepared and distributed among the population who were 110 managers and staff of Payam Noor University in West province Fars. To answer questions and check hypotheses Smart-PLS Software throughcheck structural equations and path analysis using Partial Least Squares (PLS) were used. The results show that the dimensions of clarity in the role, authorities' support of staff, partners' support of staff and low control of work processes have a significant negative impact on job stress variable. The results also show that the poor relations in the workplace have a significant positive impact on job stress variable. In the end, the results did not confirm the impact of the aspects of demand for one's job and awareness of changes on the variable job stress.

Key words: Job stress, factors affecting stress, physical and mental health, Payam Noor Universities in West Province Fars, staff

INTRODUCTION

Job stress is an issue that job seekers must have a deep attention to it and consider emotional and psychological issues caused by the intended job in their job search process (Alvani, 1997). Similarly, stress from work makes a lot of physical, psychological, family and social for the person and a lot of stress in daily life can be seen and although this phenomenon are discussed in a negative light but can also have positive value. Industrial and post-industrial world has brought great troubles and worries of people about work, family, mothers' concerns about the status of their children, social problems, organization's expectations of employees, advances in technology and concerns for the obsolescence of knowledge and information and management problems, etc., all cause that the people always have excitement, stress, anxiety and different fear and hopes that sometimes it is not compatible with their mental and physical capacity (Alavi, 2002). Stress usually occurs when a person faces with a challenge, threat or transformation and there is no balance between the person's ability to do work and work asked him. Hans Sally by explaining the differences between Race horse and turtle, said when some people have many needs, a lot of stress is exerted on them, do their job better and these

people are like racehorse that optimum level of stress in them is high but some people also have the best performance when they have less needs and experience less stress and like turtles their optimum level of stress is relatively low. In fact, the optimal level of stress in any person or any organization represents the health of that person or organization and the right amount of their stress.

Job stress can be considered the accumulation of the stressors and conditions related to a job that most people agree it is stressor. Job stress can also be defined interactions between working conditions and individual characteristics so that the demands of the workplace are more than one can afford them. In some cases, the use of individual in a work that does not match with his strengths and information or a change in his work activity can cause stress in him.

Given the high importance of occupational stress and its impact on job performance of individuals in this study the identification of factors affecting job stress of staff of PNU in West province Fars will be discussed. To investigate these hypotheses the conceptual model in Fig. 1 has been used.

Theoretical foundations: In this study, in addition to provide various definitions proposed for occupational

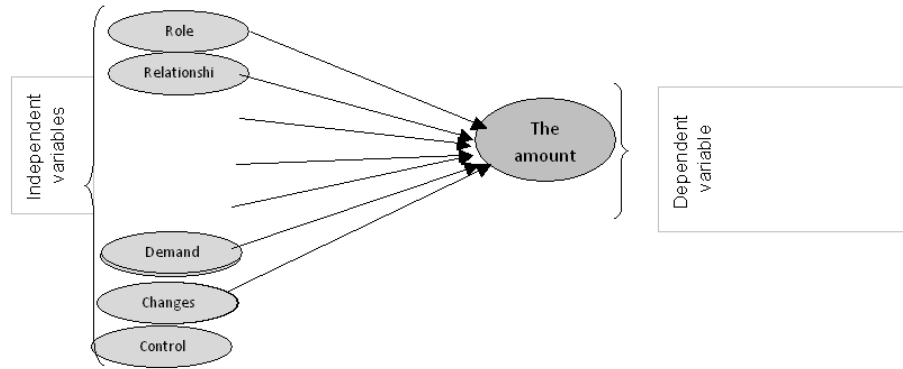


Fig. 1: Conceptual model of research

Table 1: Various definitions provided for stress

Definition	Researcher/year
Stress is a pressure which is caused by the lack of balance between the demands and the resources that an individual has access to them	Chen
Stress is the improper functioning of action and reaction between demands, supports and limitations in doing responsibilities	Michael Campbell
Stress is a pressure which is imposed to a person due to the existence of high demands and low freedom of action and power of decision making (control)	Kamel
Stress is a pressure that is caused by ignorance of person of the work purposes, responsibilities and expectations of partners and leads to confusion, frustration and helplessness	Jayoba
Stress is the set of conflicting demands and expectations which is expected from the person in relation to his responsibility and makes him under stress	Rochman
Stress is a pressure that arises as a result of time limitations for carry out responsibilities, long working hours, frequent and unwanted interruptions and outages in doing responsibilities and lack of time intervals for rest	Jongoy Bradley
Stress is a set of requirements and tasks that are outside of one's ability to perform those cases	John
Stress is the internal and external pressures on individuals that disturb the natural balance of his organisms	
Stress refers to a person's reactions against situations that pose demands, constraints or opportunities	

stress, the signs of job stress, sources of job stress and some studies conducted in this regard are discussed.

In describing stress as a stimulant, it is said, "environmental events that create demands on one are to the extent that they are not stressful for the person". In describing stress as a response, it was explained that in this case, stress is formed because brings great load on individuals. Sally said stress is a non-specific reaction of the body to a demand that exposed to reaction or response to a stimulus, leads to pressure or stress. In other words, this view asserts that different stress responses in different people and situations are different (Giga *et al.*, 2003).

Now, job-related stress in any profession and more than a decade ago is happening and is raised as a serious issue in relation to health (Lu *et al.*, 2003). Therefore, the study has been taken into account. Numerous studies have investigated stress from the social, psychological and medical dimension. From the viewpoint of work environment, researchers consider individual's work environment the main source of job stress. Other studies have focused on

personal differences and investigated the job stress from this view (Ganster and Schaubroeck, 1991).

According to approach of "the National Institute of Occupational Health and Safety", job stress is irritating emotional responses which occurs in case of inappropriateness between the demands and requirements of the job and person's talent or resources and needs of worker. According to the researchers of the Institute, often job stress and challenge are used in one sense and synonymous with each other while these two concepts are separated from each other. The challenge, in terms of physical and mental, gives energy and power to the person and motivates people to learn new skills in their job. The challenge, therefore is an important and constructive factor for the health and productivity (Prochaska and Norcross, 2007). In other definition, job stress is the inability in dealing with job pressures due to the lack of proportionality between personal abilities and work conditions and requirements (Holmlund-Rytkonen and Strandvik, 2005). Some definitions have been proposed by various researchers associated with stress are summarized in Table 1.

Table 2: Signs of stress

Public syndrome	Signs of stress
Extreme fatigue, tremors, headaches and migraines	Somatic symptoms
Nausea and vomiting, frequent colds, regurgitation, severe abdominal pain, palpitations, diarrhea, chest pain, cramps, insomnia, back pain, high blood pressure, inflaming, sweating, loss of appetite, chills, unusual thirst, physical reddening, irritable bowel, skin disorders, hormonal disorders, eye irritation	Psychological symptoms
Depression, anger and panic attacks, lack of concentration, impatience, apprehension and anxiety, uncertainty, nervousness, referral and repeat the memories of the past, colds, feeling of guilt, anxiety, forgetfulness and memory loss, fear, insecurity, irritability, hopelessness and despair, isolation, disbelief and shock	
Crying, loss of sense of humor, throw up or crushing objects, pacing, blaming, irritability, shouting, nervous habits (nail biting, banging feet), resent, caught, obsession (talking about the experience), scratching, sullen, bruxism out, indecision and uncertainty, loss of comfort, loss of confidence	Behavioral symptoms

Stress symptoms: People show responses or reactions to job stress that in various contexts of stress have been discussed as symptoms of job stress; Jax and Bear consider signs of job stress a potential disturbing reaction that staff manifest to the signs of stress. They divide these symptoms into three categories: psychological symptoms, physical symptoms, behavioral symptoms. They believe that job pressures lead to signs which have been shown in Table 2 (Schultz and Schultz, 2003).

Sources of job stress: Among the diverse circumstances of life, working environment is obviously considered a potential and important source of stress. The amount of time a person spends in such an environment is a proof of this claim (Erkutly and Chafra, 2006).

A large number of sources of job stress with different degrees of effectiveness have been identified. According to the “Harold” sources of individual and organizational stress can be divided into 5 categories: organizational functions (rewarding systems, supervisory functions, opportunities for promotion and progression), job characteristics (heavy load, light load, independence), organizational culture and climate (value of employee, personal growth, integrity and perfection), interpersonal relationships (with supervisors, colleagues and clients) and the personal characteristics of employees (personal characteristics, family relations, adaptive skills).

With regard to specific situations that makes a job stressful, sources of stress can be divided into two groups: the exogenous stressors (undesirable job opportunities, heavy load of work, lack of support, etc.), endogenous stressors (like personality features of individuals).

MATERIALS AND METHODS

In terms of methodology, this survey is correlation. This study, based on how to obtain the data needed and in terms of research classification according to their aim, is among the descriptive researches. This study in terms of kind is applied and in terms of method is descriptive survey.

Data collection tools: In this study, to develop principles, definitions and theoretical concepts library resources including documents, books and scientific articles were used also questionnaire was used to collect the data required to test hypotheses. The job stress questionnaire designed and edited by the UK Health and Safety Executive was used to assess factors affecting job stress and also workplace stressors questionnaire offered by the American Institute of Stress has been used for measuring job stress.

Population and statistical sample: The study population consisted of all managers and employees of Payam Noor Universities of West province Fars and the research population is limited and their number is 110. Due to the limited size of the population does not feel the need for sampling and questionnaire was distributed among all members of the population through complete census the reliability and validity of research measurement tools.

The survey questionnaire was judged by several experts and professors of human resource management working in universities to determine the validity of the content and after some modifications and approval from the professors to ensure its higher reliability and acceptable face validity, around 30 questionnaires were distributed in the population. Respondents could not understand several questions at first and after fluent translation of the text and removing a number of questions, the questionnaire was enjoyed sufficient face validity and eventually the agreed questionnaire was used as data collection tool.

PLS software also has the capability to check reliability of internal consistency, composite reliability, reagent reliability, convergent validity, divergent validity. Table 2 shows the values of Cronbach’s alpha coefficients and composite reliability. As can be seen Cronbach’s alpha coefficients for all components is greater than 0/7 which indicates that the model has good internal consistency reliability. As well as all values of Composite Reliability coefficients (CR) for all first and second order variables of study is also larger than 0/7 so the model fitting is approved. In the study of factor

loading as can be seen the factor loadings for all the questions is larger than 0/7, so it was unnecessary to remove any questions from the questionnaires in the model. Reliability and validity of the model is shown in Table 3. The values of Cronbach's alpha coefficient and composite reliability, average variance, factor loading.

Table 3: The values of Cronbach's alpha coefficient and composite reliability, average variance, factor loading

Variables	Question	Factor loading
Role	1	0/878
	4	0/887
Alpha coefficient (0/91)	11	0/892
Composite reliability (0/9481)	13	0/903
Average variance (0/7851)	17	0/874
Relationship	5	0/892
	14	0/898
Alpha coefficient (0/89)	14	0/898
composite reliability (0/9445)	21	0/897
Average variance (0/8098)	34	0/914
Support of authorities	8	0/844
	23	0/919
Alpha coefficient (0/90)	29	0/924
composite reliability (0/9356)	33	0/923
Average variance: (0/8058)	35	0/876
Support of partners	7	0/830
Alpha coefficient (0/92)	24	0/880
composite reliability (0/9540)	27	0/920
Average variance (0/7843)	31	0/909
Changes	26	0/874
Alpha coefficient (0/87)	28	0/907
composite reliability (0/9205)	32	0/892
Average variance (0/7944)		
Control		
Alpha coefficient (0/89)	2	0/913
composite reliability (0/9492)	10	0/828
Average variance (0/7570)	15	0/877
Demand	19	0/868
	25	0/913
	30	0/814
	3	0/859
	6	0/895
Alpha coefficient (0/91)	9	0/808
composite reliability (0/9571)	12	0/824
Average variance (0/7363)	16	0/869
Job stress	18	0/873
	20	0/854
	22	0/871
Alpha coefficient (0/92)	36	0/909
composite reliability (0/9583)	37	0/897
Average variance (0/7929)	38	0/902
	39	0/872
	41	0/883
	41	0/880

Also in checking the convergent validity, the extracted average variance was studied that since the amount of the extracted average variance for all variables in this study was larger than 0/5 convergent validity of the model was confirmed.

In checking the divergent validity based on the method as can be seen in Table 4, in this stage, the square root of AVE values (average variance) is calculated and then the obtained values are replaced on the diagonal matrix (latent variable correlation). The root-mean-variance for the main variables of the study which are located in the main diagonal of the matrix is larger than the correlation between the variables which are located in the houses lower and left side of the main diagonal. Thus, it can be stated that the study variables in the model have more interaction with their indices than indices of other variables in other words, divergence validity of model is confirmed.

RESULTS AND DISCUSSION

Figure 2 shows the path coefficients of factors affecting job stress. As shown in the figure is the coefficient of determination (R²) for the dependent variable of occupational stress is almost equal to 0/428 that indicates that all aspects can overall explain 0/428 of the variance of job stress. Three values of 0.19, 0.33 and 0.67 as the criterion for weak, medium and strong quantities of R² are taken into account. According to achieve 0/43 as the coefficient of determination and compare to three boundary values for the R² it can be concluded that the model is fairly predictable.

In fact this model tests all the measurement equations (factor loading) and structural equations (path coefficients) by using the t-statistic. According to this model, path coefficient and factor loading are significant at 95% confidence level, if t-value be outside the range of (-1/96 to +1/96) and if the t-value be within this interval, so the factor loading or the path coefficient is not significant.

Table 4: The matrix to assess the divergent validity by fornell and larker (latent variable correlations)

Variables	Control	Relationship	Support of partners	Support of authorities	Role	Job stress	Demand	Changes
Control	0.5730	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Relationship	-0.2023	0.6558	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Support of partners	0.4724	-0.1246	0.6151	0.0000	0.0000	0.0000	0.0000	0.0000
Support of authorities	0.5143	-0.1678	0.5242	0.6493	0.0000	0.0000	0.0000	0.0000
Role	0.4852	-0.1899	0.5209	0.5344	0.6164	0.0000	0.0000	0.0000
Job stress	-0.5265	0.4397	-0.4413	-0.4456	-0.4652	0.6287	0.0000	0.0000
Demand	0.5250	-0.0461	0.6054	0.5716	0.4905	-0.3910	0.5421	0.0000
Changes	0.5121	-0.0996	0.4506	0.5359	0.4671	-0.4093	0.4716	0.6311

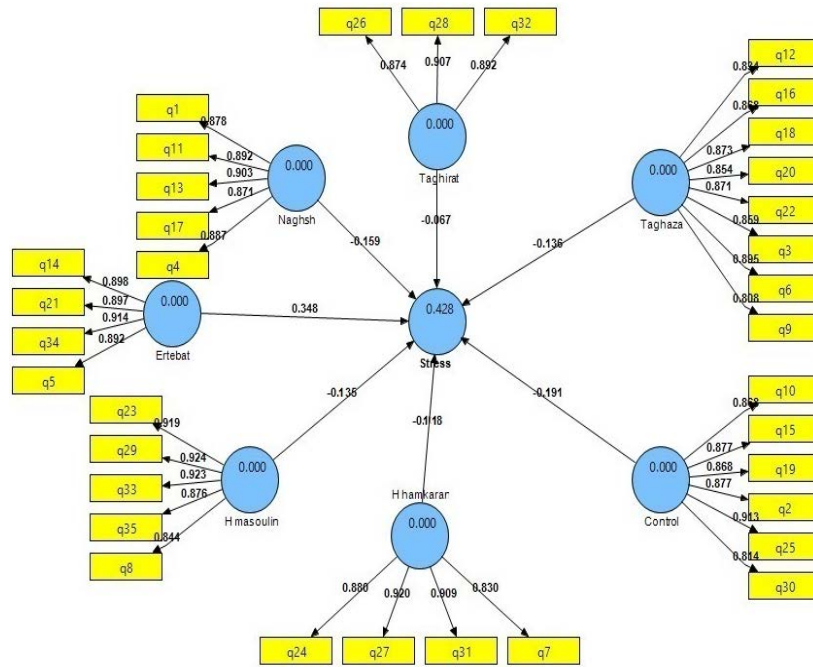


Fig. 2: Research models in a state of significant coefficients (t-value)

Table 5: Direct effects, t-statistic and research hypotheses result

Assumptions	Standardized path coefficient	t-statistic	Sig.	Accept or reject the hypothesis
Clearly in role-job stress	-0/159	169/2	<0.05	Accept
Unfavorable relations-job stress	0/348	867/2	>0.05	Accept
Support of authorities-job stress	-0/135	195/3	<0.05	Accept
Support of partners-job stress	-0/118	242/2	>0.05	Accept
Low control of work processes-job stress	-0/191	203/2	>0.05	Accept
Demand-job stress	-0/136	023/1	>0.05	Reject
Awareness of changes-job stress	-0/067	472/0	<0.05	Reject

The path coefficient and factor loading are significant at the 99% confidence level if the t-value be outside the range of (-2/58 to +2/58) is. According to the results of the t-test all factor loadings are significant at the 95% confidence level and have played a significant role in measuring their structures. Figure 2 shows research models in a state of significant coefficients (t-value). In fact this model tests all the measurement equations (factor loading) and structural equations (path coefficients) by using the t-statistic.

Response to the research hypotheses

First hypothesis: clarity in the role has a significant negative impact on job stress: According to the results of path coefficient and t-statistic which are specified in Table 5 as well as in Fig. 2 and 3, clarity in the role has a significant impact on job stress (t-statistic is outside of the range -1/96 to +1/96). According to the path coefficient we can say that the impact of clarity in the role on job stress is significant and negative because the obtained pathcoefficient is negative. So by improving the

clarity in the role, job stress reduces and with its reduction in the organization, job stress increases.

The second hypothesis (unfavorable relationships in workplace have a significant positive impact on job stress): According to the results of path coefficient and t-statistic which are specified in Table 5 as well as in Fig. 2 and 3, unfavorable relationships have a significant impact on job stress (t-statistic is outside of the range -1/96 to +1/96). According to the path coefficient we can say that the impact of unfavorable relationships on job stress is significant and positive because the obtained pathcoefficient is positive. So by improving unfavorable relationships, job stress increases and with its reduction in the organization, job stress reduces.

The third hypothesis (support of authorities from employees has a significant negative impact on job stress): According to the results of path coefficient and t-statistic which are specified in Table 5 as well as in Fig. 2 and Fig. 3, support of authorities has a significant

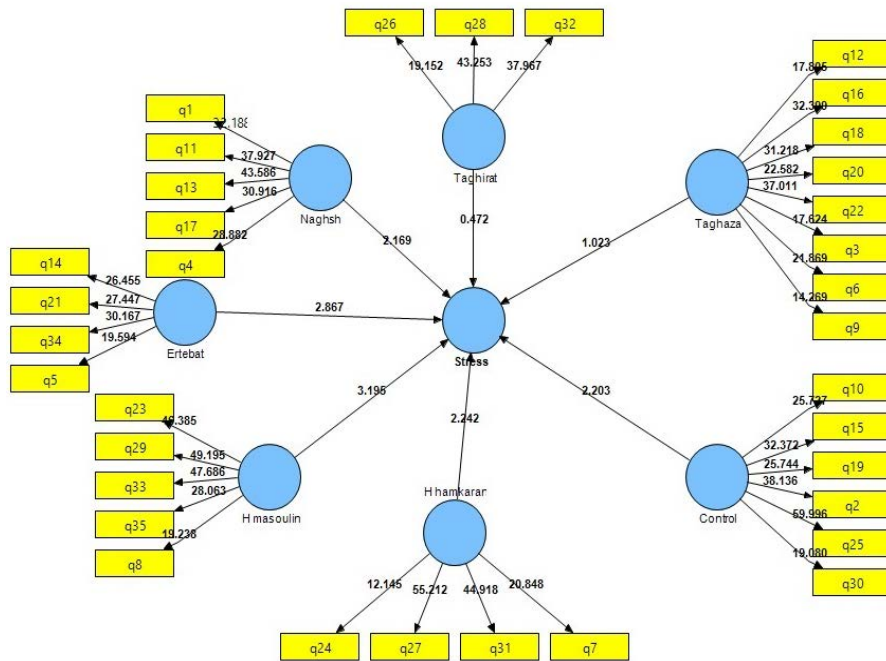


Fig. 3: Model of significant coefficients of assumptions in the research model

impact on job stress (t-statistic is outside of the range -1/96 to +1/96). According to the path coefficient we can say that the impact of support of authorities on job stress is significant and negative because the obtained path coefficient is negative. So by improving the support of authorities, job stress reduces and with its reduction in the organization, job stress increases.

The fourth hypothesis (support of colleagues from employees has a significant negative impact on job stress): According to the results of path coefficient and t-statistic which are specified in Table 5 as well as in Fig. 2 and 3, support of colleagues has a significant impact on job stress (t-statistic is outside of the range -1/96 to +1/96). According to the path coefficient we can say that the impact of support of colleagues on job stress is significant and negative because the obtained path coefficient is negative. So by improving the support of colleagues, job stress reduces and with its reduction in the organization, job stress increases.

Fifth hypothesis (the low control of work processes has a significant negative impact on job stress): According to the results of path coefficient and t-statistic which are specified in Table 5 as well as in Fig. 2 and 3 the low control of work processes has a significant impact on job stress (t-statistic is outside of the range -1/96 to +1/96). According to the path coefficient we can say that the impact of the low control of work processes on job stress

is significant and negative because the obtained path coefficient is negative. So by improving the low control of work processes, job stress reduces and with its reduction in the organization, job stress increases.

The sixth hypothesis (the demand for a job has a significant positive impact on job stress): According to the results of path coefficient and t-statistic which are specified in Table 5 as well as in Fig. 2 and 3, the demand has no significant impact on job stress (t-statistic is within the range -1/96 to +1/96) and the hypothesis is rejected.

The seventh hypothesis (awareness of changes has a significant negative impact on job stress): According to the results of path coefficient and t-statistic which are specified in Table 5 as well as in Fig. 2 and 3, the awareness of changes has no significant impact on job stress (t-statistic is within the range -1/96 to +1/96) and the hypothesis is rejected.

CONCLUSION

Given the importance of occupational stress in the workplace, this study was done aimed to investigate the factors affecting job stress in employees of PNU in West province Fars, the results showed that clearly in role has a significant negative impact on occupational stress, namely whatever staff work be clear and unambiguous their job stress is reduced. As well as support of

authorities and partners from employees and low control of work processes have a significant negative impact on job stress and by increasing them the amount of stress reduces. The results also confirmed the significant and positive impact of unfavorable relations on job stress. Managers should strive to improve working relationships within the organization. There are different ways of coping with stress that using any of the methods depends on each person's perceptions of position and his type of evaluation that two main ways to deal with stress in the working environment are discussed below.

Stress management: Almost half of large companies in America teach stress management to their employees. Stress management programs teach issues about the nature of stress sources and cases such as relaxation exercises and time management and so on to the employees. Stress management training can quickly reduce stress symptoms such as anxiety, sleep disorders and has the advantages of being free and easy to do. But it has two major drawbacks: the beneficial effects on stress symptoms are often short-lived. In this program some of the root causes of stress are ignored because the focus is on the individual, not the environment.

Organizational change: against the technique of stress management, organizational change is the most important direct method to reduce stress at work and by identifying stressful aspects of work, like additional workload and by designing stress reduction strategies, like the use of the principles of ergonomics, this goal is achieved. The advantage of this method is that it is directly involved with the root causes of stress at work but sometimes managers do not agree with this view because it creates changes in the ways of doing work or planning of production or organizational structure. As a general rule to reduce job stress the first priority should be given to organizational change to improve working conditions. But even the most serious efforts in this field cannot eliminate stress completely for all employees, so a combination of organizational change and stress management is a better method for the prevention of stress in the workplace.

Organizations' managers can also in processes of hiring, recruitment and appointment with job interviews and through interview strategies such as stress strategy, put job seekers in situations of mental or nervous stress and register his reaction about the amount of his stress taking to be a criterion for deciding on his recruitment and appointment. They can also increase the tolerance of other employees with the implementation of various projects to be able to neutralize various factors and face

less stress. Increase the employees' tolerance against job stress leads to saving time and increasing personal and organizational productivity.

Another thing which is the duty of the managers in the improvement and reconstruction of mental health factors is to pay attention to "quality of working life". Quality of working life means the individuals' attitude towards their jobs. This means that to what extent the mutual trust, attention, gratitude, interesting work and proper opportunities for investment (material and spiritual) in the workplace is provided by managers for employees. The degree of quality of working life within the organization is estimated by measuring satisfaction, low absenteeism and high motivation in employees.

RECOMMENDATION

Managers using the capabilities of sciences such as ergonomics can help to relieve stressors from the workplace. Because ergonomics science by studying capabilities and condition of human, workplace stress, complete familiarity with static and dynamic forces of the human body, prudence, fatigue, training and designing tools, supports the human during the job and by observing its principles work pressure and unnecessary offense is reduced as a result the efficiency is increased and ultimately it can be said with implementation of these principles both the interests of workers and the interests of employers are provided.

In addition, organizations to deal with the negative effects of stress can consider the following actions: proportionality of workload with talents and abilities of employee, design job so that motivate the individual and allow to use one's skills in the work, duties and responsibilities of persons be clearly specified the employees are allowed to participate in decision-making in their work the possibility to improve communications, career advancement and encourage be equally facilitated, the possibility of social exchange between employees be provided.

REFERENCES

- Alavi, A.A., 2002. Psychology of Management and Organization. Publications State Management Training Center, Iran.
- Alvani, M., 1997. General Management. 10th Edn., Ney Publishing, Tehran.
- Erkutly, H.V. and J. Chafra, 2006. Relationship between leadership power base and job stress of suburbanites: Example from boutique hotels. *Manage. Res. News*, 29: 285-297.

- Ganster, D.C. and J. Schaubroeck, 1991. Work stress and employee health. *J. Manage.*, 17: 235-271.
- Giga, S.I., C.L. Cooper and B. Faragher, 2003. The development of a framework for a comprehensive approach to stress management interventions at work. *Int. J. Stress Manage.*, 10: 280-296.
- Holmlund-Rytönen, M. and T. Strandvik, 2005. Stress in business relationships. *J. Bus. Ind. Market.*, 20: 12-22.
- Lu, L., C.L. Cooper, S.F. Kao and Y. Zhou, 2003. Work stress, control beliefs and well-being in Greater China: An exploration of sub-cultural differences between the PRC and Taiwan. *J. Manager. Psychol.*, 18: 479-510.
- Prochaska J.O. and J.C. Norcross, 2007. *Systems of Psychology: A Transtheoretical Analysis*. 3rd Edn., John Wiley and Sons Inc., New York.
- Schultz, D.P. and S.E. Schultz, 2003. *A History of Modern Psychology*. 8th Edn., Thomson/Wadsworth, Belmont, CA.