DETERMINE JOB STRESSORS AND THEIR IMPACT ON THE EFFICACY OF PROFESSORS

Homa Haghighat Padjooh Kargar
Department of Business Management, E-Campus,
Islamic Azad University, Tehran, Iran.

Shabnam vedad Taghavi
Department of Information Technology Management,
Science and Research Branch, Islamic Azad University, Tehran, Iran.

Davoud Rafati Sajedi
Department of Business Management, E-Campus,
Islamic Azad University, Tehran, Iran.

Hamed Dehghani Tafti
Department of Business Management, Science and Research Branch,
Islamic Azad University, Tehran, Iran.

Abstract

The main objective of this study is to determine the effect of stress on performance of professors at the University. Teaching job, stress can affect significantly on quality of training. The performance of professors in teaching and education stems from various factors. In this study, the effects of job stress on academic performance will be discussed. In this regard, 7 important variable job stress was investigated. This is applied and descriptive survey research. Sample population of this research includes 207 people. Structural equation modeling was used to analyze test data. Results of this research indicate impact of stressful job factors on person. The results showed that factors in job stress affect academic performance, and result in increase or decrease the efficacy.
Keywords: stress, stressors, efficacy, University

I. INTRODUCTION

Physical, social and environmental causes of stress are called stressors generally. Some people believe that non-specific response of the body to any situation is stress they stress by need to be consistent, whether the pleasant position (job promotion) or unpleasant (disabling dismissal). The new findings suggest there are differences between desirable and undesirable physiological stress of the situation (Shimomitsu et al, 2000). Job stress, its causes and its impact on the

performance of employees in organizations in recent decades has been the focus of attention. stress and its effects on the organization is one of the main topics of organizational behavior management. Stress in organizations such as aphthous destroys activities and data (Kopp et al, 2007).

Paying attention to the employment of employees and working conditions is an important point increases work quality , keeps healthy of staffs. Considering impact of work stress on life and work of organizations, people involved in these types of systems should find the factors related to satisfaction and improve staff efficiency, whether in the direction of progress (Steptoe et al., 2002). University professors, also including people are associated daily with a large number of students. So they should control their stress to work well (Ohira et al, 2011). But it is accountable for the faculty at the University of different People so we can feel stress in this job just as tangible. Students make future density of society. So, necessity of investigate on stress and factors effective in this regard is very essential. A successful manager can direct stress of staffs in a way they obtain maximum amount of efficiency (Phillips et al, 2005). The main objective of the present study is investigation on the effects of job stress factors on the efficacy of teachers. Main question of this investigation is as follows:

Are stressful work factors impacts significantly on efficacy of staffs of Islamic Azad University in Tehran branch?

II.   LITERATURE OF RESEARCH
STRESS

Stress is known as public reactions to a series of stress factors and unanticipated adverse external and internal reference. Everybody has experienced stress somehow. Contrary to the impression, stress is not always unpleasant events can be result of pleasant and favorable success that demand readjustment in person. In other words, perhaps the main thing in stressful situations is need to adapt and readjustment is necessary for that person. Stress is the result of an interaction between various sources of pressure and person. All people do not imagine a unique stressful situation and demographic differences in terms of personality and life experiences, overshadowed their responses to stress (Kawakami et al, 1999).

Job Stress

Employing a person in a job that is not consistent with his abilities or changes in his work activity, results in stress. In general, job stress is a working environment or stress related factors are associated with an individual working environment. Changes in work activities such as new technology or change objectives, may cause stress. Organizational stress can be measured with a scale absenteeism and quality of work (Carroll et al, 2000). Causes of work stress in the work environment are situations that cause stress. Situations such as lack of jobs, the rule of the regulations, confusion bureaucracy, and lack of control and evaluation mechanisms, shift work, long working hours, new technology, low pay and management style are causing stress in the workplace.

Job stressors

Occupational stressors can be summarized in seven variables. And according to Kayryakv and Sutcliffe (2003), these factors include the nature of work, working time, organizational politics, organization environment, relationships and personal factors (Shimomitsu et al, 2000).

Nature of work

Nature of the work shows how and what is the work . the following indexes are used for its review.

- High volume of quality work
- Highly specialized nature of the work
- Requires a lot of interaction with people
- Few challenges on the job

Time work

Time work is defined as arrival time, exit time, and work volume of person. The following indexes are used to study it:

- High volume
- Difficult time context for works
- Non-fixed working hours
- Working pressures

Organizational policy

Manager's decisions about the organization are known as organizational policy. The following indexes are used to study it:

- Inadequate knowledge of organizational goals
- Conflict between different demands on the job
- Ability to adapt the issues with changing nature of employment
- Insufficient space for innovation
- bureaucracy

Organizational status

Position of the person in the organization is known as organizational status . the following criteria are used to evaluate it.

- Ambiguity in job requirements
- Insufficient free will to decide
- Insufficient rights
- Lack of guidance and counseling on career path
- Lack of promotion opportunities
- Lack of job stability

Environmental factors

The factors of environment impact on person's stress in organization. The following criterion is used to study it:

- Attitudes of managers
- Contradictions in the role
- Unfair allocation of workload
- Poor working environment.
- Hazardous working conditions

Relations

Relationship between colleagues and other members of organization is known as relations. The following criterion is used to study it:

- Low appreciation for the work done
- There are difficulties and problems with the managerial styles
- Poor communication with colleagues
- Poor communication with the manager / supervisor
- Poor communication with the opposite actors

Personal factors

Internal factors the person who originated the different issues and the following criteria used to evaluate it.

- There is problematic to apply Capabilities
- Lack of opportunities to learn new skills
- Conflict between work and family
- Not enough holidays

Efficacy of Professors

How to deliver lessons and teacher training is known as efficacy of Professors. Criteria used to evaluate it as follows.

- The student grades
- Satisfaction of Students and colleagues
- The preparation level for presenting the courses
- on-time entry and exit of class
- Complete presenting all headings

III.   HYPOTHESES OF RESEARCH

H 1: Stress of work nature impacts on efficacy of teachers of university significantly.

H 2: Stress of work time nature impacts on efficacy of teachers of university significantly.

H 3: Stress of organizational policy impacts on efficacy of teachers of university significantly.

H 4 : Stress of organizational post impacts on efficacy of teachers of university significantly.

H 5 : Stress of environmental factors impacts on efficacy of teachers of university significantly.

H 6 : Stress of relations impacts on efficacy of teachers of university significantly.

H 7 : Stress of personal factors impacts on efficacy of teachers of university significantly

IV.   METHODOLOGY

This is applied research. It is applicable in Azad university of Tehran Central branch. Also, it is descriptive- survey research. Variables are studied by questionnaire in this research. Teachers of Azad Islamic University of Tehran Central branch include society of this research. Sample size includes 450 volume. According to Cochran formula, 207 people were selected as sample size with 5% error level.

$$n = \frac{Nt^2 pq}{Nd^2 + t^2 pq} = \frac{450(1/96)^2(0/5)(0/5)}{450(0/05)^2 + (1/96)^2(0/5)(0/5)} = 207$$

Where:

n= sample volume

N= Statistical population size

t= The standard unit normal variable

p= Proportion of the population has a certain attribute

q= Proportion of the population has a certain attribute (1-p)

d= The allowed wrong amount or percentage of errors

Given the number of people in the population, at least volume of sample is 207 people. Structural Analysis was used for testing data. Lisrel was used too.

V.   RESULTS

Normality test of pattern components

Another common classification statistics is its division into nonparametric statistics and parametric statistics. Parametric statistical requires assumptions about the society in which sampling is conducted. As the default in parametric statistics, it is assumed that distribution of society is normal. Nonparametric statistics, however, do not require any assumptions about the distribution. Parametric statistical techniques are heavily influenced by statistical distribution scale variables in society. For nominal and ordinal variable, nonparametric methods are used. If variable are the relative and distance ones, and if it is assumed statistical distribution is normal, parametric methods used . Otherwise, nonparametric methods are used. Kolmogorov-Smirnov test was used for normality of the factors of .in all tests, statistical hypothesis is as follows.

H0 : data is normal.

H1: data is not normal.

Table 1 :the results of Kolmogorov-Smirnov test for variables of research

variables	Test	Sig	Result
Professors performance	0.766	0.668	normal
Stress of work nature	0.782	0.547	normal
Stress of work time	0.845	0.457	normal
Stress of organizational policy	0.857	0.563	normal
Stress of organizational post	0.798	0.432	normal
Stress of environmental factors	0.678	0.413	normal
Stress of relations	0.843	0.612	normal
Stress of personal factors	0.852	0.639	normal

According to the table 1, as sig > 0.05, H0 is conclude i.e. all factors of research are normal.

2-5-KMO sampling adequacy test

Significant of chi-square test or Bartlett's sphericity is at least a necessary condition for using structural equation. Bartlett test reject the null hypothesis suggests that the correlation matrix has significant information. It is essential condition for doing factor analysis and structural equation.

Table 2: The KMO and Bartlett's test result for the correlation matrix of variables

Adequacy sample test	.880
Bartlett's sphericity index	3737.092
Freedom degree	595
Sig	.000

Table 2 shows the amount of KMO is 0.880 due to the significance level (0.000) Bartlett's test is significant. Therefore, according to sampling adequacy and Bartlett's test significance, data correlation matrix structure it is possible to enter the equation.

Reliability and validity of the questionnaire and model fitness

In order to assess the validity and reliability of the questionnaire Cronbach's alpha values obtained were used for structures that are of variable reliability.

Factor loading values of each of the items was above 0.50 and significant values in 0.05 were more than 1.96. The mean variance extracted (AVE) higher than 0.40 and all structures with composite reliability (CR) were higher than 0.50.

The hypotheses test using structural equation modeling

To confirm or refute the hypothesis , a significant coefficient (test t) is used. If t-value is more than 1.96 or less than – 1.96 (in 5% error level) , the hypothesis is confirmed , and significant change between these two variables is obtained. Additionally, in measurement model it is seen that factor coefficient for each variable is more than 0.50%.
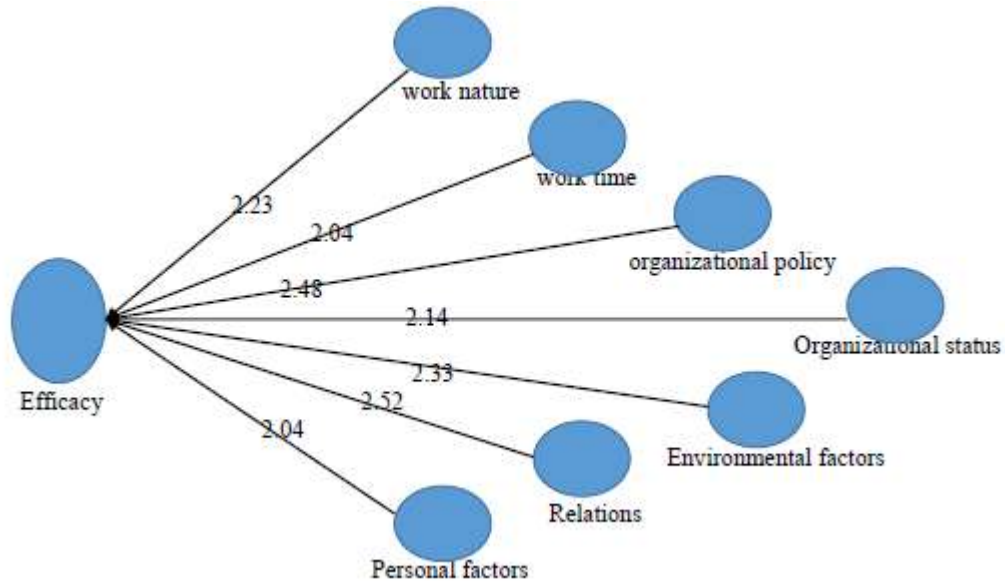

Chart 1: Model Output of PLS Software

Table 3) summarizes the results of test of hypotheses 1-7

Hypothesis	Sig	Result
Stress of work nature impacts on efficacy of teachers of university significantly.	2.238	Confirmed
Stress of work time nature impacts on efficacy of teachers of university significantly.	2.044	Confirmed
Stress of organizational policy impacts on efficacy of teachers of university significantly.	2.480	Confirmed
Stress of organizational post impacts on efficacy of teachers of university significantly.	2.146	Confirmed
Stress of environmental factors impacts on efficacy of teachers of university significantly.	2.338	Confirmed
Stress of relations impacts on efficacy of teachers of university significantly.	2.502	Confirmed
Stress of personal factors impacts on efficacy of teachers of university significantly.	2.004	Confirmed

The findings of the first hypothesis

In hypothesis 1, it was claimed that Stress of work nature impacts on efficacy of teachers of university significantly. According to statistics analysis of chart 1, sig is 2.238 that is more than 1.96. this amount is more than 1.96. hence, this hypothesis is not rejected by 95% insurance. It is concluded that stress of work nature impacts on efficacy of teachers of university significantly.

The findings of the second hypothesis

In hypothesis 2, it was claimed that stress of work time nature impacts on efficacy of teachers of university significantly. According to statistics analysis of chart 1, sig is 2.044 that is more than 1.96. hence, this hypothesis is not rejected by 95% insurance. It is concluded that sress of work time nature impacts on efficacy of teachers of university significantly.

The findings of the third hypothesis

In hypothesis 3, it was claimed that stress of organizational policy impacts on efficacy of teachers of university significantly. According to statistics analysis of chart 1, sig is 2.480 that is more than 1.96. hence, this hypothesis is not rejected by 95% insurance. It is concluded that stress of organizational policy impacts on efficacy of teachers of university significantly.

The findings of the fourth hypothesis

In hypothesis 4, it was claimed that Stress of organizational post impacts on efficacy of teachers of university significantly. According to statistics analysis of chart 1, sig is 2.146 that is more than 1.96. hence, this hypothesis is not rejected by 95% insurance. It is concluded that Stress of organizational post impacts on efficacy of teachers of university significantly.

The findings of the fifth hypothesis

In hypothesis 5, it was claimed that Stress of environmental factors impacts on efficacy of teachers of university significantly. . According to statistics analysis of chart 1, sig is 2.338 that is more than 1.96. hence, this hypothesis is not rejected by 95% insurance. It is concluded that stress of environmental factors impacts on efficacy of teachers of university significantly.

The findings of the sixth hypothesis

In hypothesis 6, it was claimed that Stress of relations impacts on efficacy of teachers of university significantly. According to statistics analysis of chart 1, sig is 2.502 that is more than 1.96. hence, this hypothesis is not rejected by 95% insurance. It is concluded that Stress of relations impacts on efficacy of teachers of university significantly.

The findings of the seventh hypothesis

In hypothesis 7, it was claimed that Stress of personal factors impacts on efficacy of teachers of university significantly. According to statistics analysis of chart 1, sig is 2.004 that is more than 1.96. Hence, this hypothesis is not rejected by 95% insurance. It is concluded that Stress of personal factors impacts on efficacy of teachers of university significantly.

VI.   CONCLUSION

Results of research confirm hypotheses of the research, because seven variables of job stress impact on efficacy of teachers. It means that efficacy of teachers change if is affected by job stress factors including work nature, work time, organizational policy, organizational status, environmental factors, relationship, cognitive factors. Therefore, it is stated that Azad University should plan in a way that provide education and welfare of teachers with minimum stress. It results in increasing efficacy of teachers finally. This efficacy results in obtaining advantage for the Azad University.

REFERENCES

[1] Carroll, D., Harrison, L.K., Johnston, D.W., et al., 2000. Cardiovascular reactions to psychological stress: the influence of demographic variables. J. Epidemiol. Community Health 54 (11), 876–877.

[2] Carroll, D., Lovallo, W.R., Phillips, A.C., 2009. Are large physiological reactions to acute psychological stress always bad for health? Soc. Personal. Psychol. Compass 3, 725–743.

[3] Gianaros, P.J., Salomon, K., Zhou, F., et al., 2005. A greater reduction in high-frequency heart rate variability to a psychological stressor is associated with subclinical coronary and aortic calcification in postmenopausal women. Psychosom. Med. 67, 553–560. http://dx.doi.org/10.1097/01.psy.0000170335.92770.7a.

[4] Kawachi, I., Knodo, N., 2007. Social inequalities, stress, and health. What can we learn from Japan/USA comparisons? Stress Kagaku 23, 141–147.

[5] Kawakami, N., Haratani, T., 1999. Epidemiology of job stress and health in Japan: review of current evidence and future direction. Ind. Health 37, 174–186.

[6] Kopp, M.S., Skrabski, A., Székely, A., et al., 2007. Chronic stress and social changes: socioeconomic determination of chronic stress. Ann. N. Y. Acad. Sci. 1113, 325–338. http://dx.doi.org/10.1196/annals.1391.006.

[7] Ohira, H., Matsunaga, M., Kimura, K., et al., 2011. Chronic stress modulates neural and cardiovascular responses during reversal learning. Neuroscience 193, 193–204. http://dx.doi.org/10.1016/j.neuroscience.2011.07.014 (13).

[8] Phillips, A.C., Carroll, D., Ring, C., et al., 2005. Life events and acute cardiovascular reactions to mental stress: a cohort study. Psychosom. Med. 67 (3), 384–392. http://dx.doi.org/ 10.1097/01.psy.0000160464.63264.5d.

[9] Shimomitsu, T., Haratani, T., Ohno, Y., 2000. The final development of the brief job stress questionnaire mainly used for assessment of the individuals (in Japanese). In: Kato, M. (Ed.), Ministry of Labour Sponsored Grant for the Prevention of Work-Related Illness: the 1999 Report. Tokyo Medical College, Tokyo, pp. 126–164.

[10]   Steptoe, A., Feldman, P.J., Kunz, S., et al., 2002. Stress responsivity and socioeconomic status: a mechanism for increased cardiovascular disease risk? Eur. Heart J. 23 (22), 1757–1763.