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Investigation of the Effect of Stress Arising from Staff on Organizational Productivity-Case Study: Central Bureau of Technical and Vocational Training in Fars Province

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ABSTRACT

This research aimed to explore the relation between the effect of nervous pressures arising from working (job stress) on the reduction of organizational efficiency in technical education and vocational organization the province of Fars. Research methodology in this study is descriptive - survey of the field research branch. The statistical population in this study is include all three categories managers in top and middle and operational, and also staff of technical and vocational organization the province of Fars that is including 334 people. By using the cluster sampling method 236 sample were selected at random level. The research questionnaire is consisted of 30 questions based on research hypotheses that have been adjusted by the researchers. Data statistical processing the environment SPSS and MINITAB software has done. Research findings indicated that employees believe that the working conditions should be prepared for staff to make maximum use of their time. Staff like to work in crowded environments and in interacting with others. Also findings of this study indicated staff are agrees with this subject that conflict in personal relations with colleagues other and managers will not cause stress in staff therefore if the jobs also are non-coordinated have not effects on staff work.

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INTRODUCTION

In present century psychological pressures affect a major part of individual life in the work and organizational environment. Also stress in daily life are observed frequently and all individuals were affected the stress more or less timely and were experienced it.

Appearing this pressure has follow the consequences such as lack of satisfying the needs, frustration feeling, depression and anxiety, absence from work, lack of job satisfaction and a reduction of efficiency and the performance. Thus, in recent decades the issue of mental pressures and its effects, a lot of attention has been located and such as basic topics of organizational behavior has allocated to itself. In fact, it can be called ventured the 21st century the stress century. No doubt movement towards the achieve to organizational goals and its obtaining goals and ultimately society progress depends on enhancing employee performance in organizations is. Mental pressure has the most important affecting on person performance. Thus, when the mental pressures exceeds a certain threshold, will cause the reduction of person performance and since the work environment, managers are considered as the most important element of the organization, they also encounter with various nervous pressures. Therefore the amount of mental pressures in the balance level will have along the best performance and if its amount from a range will more or less, the performance will be low. Also mental pressure continue for a long time will gradually exhausted person and the continuation of this situation will

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cause that physical and emotional energy, reduce and will weaken his ability. Since the person's ability is one of the essential elements in increasing the productivity and productivity also is a function of power and job knowledge and also organizational support, so person performance will decline in the organization. Today, mental pressures is one of the humans problems, particularly in growing and industrial societies and cognition and causative factors of this problem and presenting the results and what is considered in this study is stressful factors of internal organizational (organizational policy, organizational structure, physical condition and mental condition of organizational) and stressful factors of external organizational (individual factor, family and social environment) is.

Managing the stress in workplace:

Nervous pressures namely called and observed in our daily lives frequently. Individuals' worry about work, family, children, away from family members of each other and their separation, social problems, economic status and different needs, expectations organization employees, technological advance and extensive worry of obsolescence knowledge and information, management problems, staff's expectations are all causing that person from the moment of waking in the morning until when sleeping in eventide always is involved the excites - tensions, worries and fears and various hopes that sometimes with his physical capacity, nervous, psychological is proportional and sometimes it is incompatible, set of such states and pressures from it, is called in terms of stress. Awareness of job-related tension is important for managers. Chronic tension lead to physical and psychological horrific side result on the individuals, because the health of staff and its contribution in advancing the organizational goals are to be in jeopardy. Conducted studies show that stress effect, particularly in management personnel is more severe. Stress is the main reason of desertion, absence from work and working low and has undesirable effect on organizational effectiveness. This study pays first to definition of stress or stress pressure and then paid to investigate of stress phases, pressure causes and consequences of nervous pressure and finally, also suggestions have been proposed for reducing nervous pressure in the workplace [1].

The consequences of nervous pressure:

Nervous pressure also has consequences that is explicable are as follows:

Individual consequences: are the results which are mainly effective on individual. However, it is possible the organization also taking effect directly or indirectly of this consequences but these individual will paid that main price. Individual consequences can be classified as follows:

A) Behavioral consequences:

Behavioral consequences of stress are reactions that may cause hurting the person or others. Addiction to alcohol and drug, event creating, violence and disturbing appetite such as behavioral are the consequence of stress.

B) Psychological consequences:

Psychological consequences of stress are dependant on physical - psychological health. When the individuals in the workplace with the severe nervous pressure encounter may be suffering of depression, sleeping too much or insomnia are. Also may be the stress causes the family problem.

C) Physical consequences:

Stress pressure may cause the incidence of physical irregularities. For example, there is a relation between discomfort and heart attack with stress. Other consequences resulting from intense nervous pressure include: headache, lumbago, stomach ulcer, stomach pains, and duodenum, skin problems and ...

2. Organizational consequences:

Nervous pressure has other consequences that have more direct impact on the organization

A) Performance:

One of the obvious consequences of intense nervous pressure is correct and proper of performance reduction. This reduction about executive workers is manifested as low quality of work and productivity decline and about managers it could possibly mean the wrong making decision or disturb the working relations with others because of anger and incompatible is.

B) Isolation:

Isolation may also be the result of stress. The most important types of isolation include: the absence or resignation. Persons who cope with nervous pressure, spend the hard time in workplace in order to find a better organization think to leave their organization. Nervous pressure can have other consequences for example, person may attempt to psychological isolation and is lack of attention to the job and his organization.

C) Attitudes:

Issues such as job satisfaction, morality, organizational commitment, damaged under nervous pressure and reduced work incentives. Lowering the each of them will cause reducing or lowering the performance or produced.

3-Fatigue:

Consequences of nervous pressure is fatigue that affect both individuals and organizations. Fatigue is a general feeling of burnout and when occurs that person feels a lot of pressures has endure and sources of satisfaction are very low the first victims of state fatigue are people that have high enthusiasm and a strong motivation to perform the work. In particular, they will damage when the organization has ignored their innovation and or has limited and constantly are thinking about their interests. In such a case, the person practically analyse their enthusiasm and motivation like candle that burns and annihilation, undermine and and finally spoiled the results of work .in this stage, may be the individual little by little, is feeling fear to work and may spend more time on doing work but success to do the less work and may show his physical and mental inadequacies.

Factors affecting in creating stress:

There are several factors have interferenced in the stress creation that these factors have been proposed as potential sources of stress:

- (a): environmental factors
- (b): organizational factors
- (c): individual factors

In the below figure, model of stress that show clearly each effect of these factors is presented. As has been shown in the figure, individual differences are acts as a moderating factor. On the other hand, stress can be followed the signs of physiological, psychological, behavioral of them are.

*Research objectives:**The main objective:*

Discovering the relation between the nervous tension of work (stress) on reducing organizational productivity.

Sub- objectives:

1. Finding the relation between the amount of stress individual signs with record of staff' service
2. Finding the relation between the amount of stress with individuals gender
3. Finding the relation between the amount of stress individual signs with staff job security
4. Finding the relation between the amount of overwork volume and its relation with nervous pressures of work(stress)
5. Finding the relation between ambiguity in role and the amount of nervous pressures of work(stress)
6. finding the relation between conflict in staff' interpersonal and the amount of nervous pressures of work(stress)stress
7. Finding the relation between the stress and age of individual

Methodology:

Research method is a set of rules, tools, reliable ways and systematic for a reality check, discover the unknown and access to the problems solution [17].

Survey research, has selected small and large populations and with selected samples study from that community to explore the extent of distribution relative and interrelationships of psychological variables and sociological will examines [13].

Society is a set of real or imaginary members, that research results can be transferred to it [18].

Society is set of elements that having common characteristics common characteristics one or more are [14].

Given the research objectives, the study method in this research is descriptive- survey of field investigations. Statistical population of this study are constitute of managers in three levels (top, middle, operational) and staff of education organization of technical and vocational the province of fars. Our sample volume in this study is including 334 people that in organizations were studied, which includes education general administration of technical and vocational cities of shiraz, lar, jahrom, marvdasht, kazeroon, neyriz, estahban, fasa, darab, abadeh. The total number of managers in the three levels top, middle and operational in statistical population are included 79 people and also 255 people of staff.

Sampling method and determination of sample volume:

In order to determining the sample volume of this research due to the definiteness of trait variance study case first by using preliminary questionnaires 25 the variance estimate then by using the following formula the sample volume was determined:

$$n = \frac{Nt^2s^2}{Nd^2 + t^2s^2} = \frac{550 \times 1.96^2 \times .22^2}{550 \times .05^2 + 1.96^2 \times .22^2} = 236$$

236 sample were selected at random level that from the 236 sample 236 questionnaire were returned by the researcher.

Sampling method in this research is cluster sampling method and for this purpose among all the cities of fars province the randomly selected, and then the questionnaires were distributed randomly among them, and then were collected. Studied sample the cities of lar, jahrom, marvdasht, kazeroon, neyriz, estahban, fasa, darab, no. 1 covers the center of shiraz, no. 2 center of shiraz, shiraz sisters center, center of measurement and evaluation, and information technology center of abadeh.

Measurement tool and information collection:

Questionnaires are known one of the most common methods of information collection [18].

In this study measuring tool is researcher made questionnaire. This questionnaire is consisted of 30 questions, which was designed based on the likert scale that research questions are placed evaluated and measured, at first responder person should have answered to general questions such as gender, age, recent educational degree and occupation.

The validity of measuring tool:

The validity concept answered to this question that the measuring tool measures the extent to the desired feature. Without knowing the validity of measurement tools it is not possible to be sure to the accuracy of the data obtained from it. The measurement tool may be valid for measuring a specific feature, however, for measuring same feature on the another population that does not have any credit [15].

Confidence reliability of measuring tool (validity):

This concept means that tool measurement in the same conditions the extent to which gives the same results. Usually "validity reliability coefficients range" is from zero (no correlation) until +1 (perfect correlation).

To calculate validity reliability coefficient of measuring tool has been used in this study, of cronbach's alpha method. This method are used for calculating the internal coordinate of measuring tool such as questionnaires or tests that measures different features. In these tool, to answer any questions can available different numerical values. For calculating cronbach's alpha coefficients, first the scores variance of each subset_questionnaire questions (under test) and the total variance are calculated then by using the following formula the amount of coefficient alpha has been calculated.

*Research findings:**Investigation the questions related to main research hypothesis:**Main research hypothesis: Work-related stress (stress) reduces the efficiency of the organization:*

Based on findings of above table, average score of first question is 2/92, the second question 3/05, the third question 2/20, the fourth question 3/39 and the fifth is question 2/31. The highest cumulative percentage of positive choice of agree and totally agree with 2/31 is related to the fifth question (I do not think it is probable to be injured in workplace) and the lowest cumulative percentage of agree and totally agree choice is related to the fourth question (id not like my job but not take a risk and change may job path).

The mean scores of responses varied between 2/20 and 3/39. That indicates the respondents' agreement with the effects of work-related stress on reduction of organizational productivity.

$$H_0 : \mu \geq 3$$

$$H_1 : \mu < 3$$

The mean score of respondents with standard deviation of 0/967 is 2/82. regarding the fact that the observed t is significant at $p < 0/01$, so the null hypothesis will be rejected. In another word, work-related stress causes the reduction of organizational reduction. In another words, the staff believe that stress has been considered as the factor for reduction of productivity.

Investigation the questions related with the first research sub-hypothesis:

The first research hypothesis: it seems that if the job is more important, the stress will be reduced. Based on the findings of above table, the mean score of the sixth question is 2/44, the seventh question is 2/38, the eighth question 1/73, the ninth question 2/19 and the tenth question is 2/51. The highest cumulative percentage of agree and totally agree is about the eighth question with 83/7 (if I play role in a career that am interested in, I can

perform a task better). The lowest cumulative percentage of agree and totally agree choice is related with tenth question with 61 percents (I pulled away from recreation because it takes up all my time).

The mean score of responses varied between 1/73 to 2/51. That indicates the level of respondents' agreement with effect of job importance on stress reduction.

$$H_0 : \mu \geq 3$$

$$H_1 : \mu < 3$$

The mean score of respondents with standard deviation of 0/677 is 2/24. Regarding the fact that the observed t was significant at $p < 0/01$, so the null hypothesis was rejected. In another words if the job is more important, the staff's stress will be reduced.

Investigation the questions related to the second research sub-hypothesis:

Second research sub-hypothesis:

It seems that high load of work will make stress among the staff.

Based on the findings of above table, the mean score of eleventh question 2/55, twelfth question 2/57, the thirteenth question 2/65, the fourteenth question 2/28, the fifteenth question 2/58 and the sixteenth question was 2/34. The highest cumulative percentage of agree and totally agree choices is about the eleventh question with 70/8 (if the load of work is high, I do not feel relax and calm). And the lowest cumulative percentages about agree and totally agree choices with 55/9 were about the thirteenth question (I always feel a little time to get things done).

The mean score of respondents varied from 2/28 and 2/65. That indicates the level of respondents' agreement with effect of high load of work on increasing stress.

$$H_0 : \mu \geq 3$$

$$H_1 : \mu < 3$$

The mean score of respondents with standard deviation of 0/780 was 2/46. Regarding the fact that the observed t was significant at $p < 0/01$, so the null hypothesis will be rejected. In another words, high load of work will cause the stress be increased among the staff.

Investigation the questions related with the third research sub-hypothesis:

The third research sub-hypothesis: it seems that conflicts in roles will lead into having stress among the staff. $H_0 : \mu \geq 3$

$$H_1 : \mu < 3$$

The mean score of respondents with standard deviation of 0/615 was 2/55. Regarding the fact that the observed t was significant at $p < 0/01$, so the null hypothesis would be rejected. In another words, the conflicts in roles will make the stress among the staff.

The questions related with the fourth research sub-hypothesis:

Fourth research sub-hypothesis: It seems that a contradiction in personal relationships with colleagues and managers will lead to stress among staff(my colleagues do not have a friendly behavior with me).

$$H_0 : \mu \geq 3$$

$$H_1 : \mu < 3$$

The mean score of respondents with standard deviation of 0/675 is 2/80. Regarding the fact that the observed t is significant at $p < 0/01$, so the null hypothesis will be rejected. In another words, employees agree with the impact of conflict on employees' personal relationships with colleagues and manager on the incidence of stress.

Analysis of variance (ANOVA):

Their job experience regarding the indicators of stress impact on reduction of productivity, the effect of conflicts on the role of stress, job importance, high load of work, and the impact of conflict of labor relation staff on causing staff are different. In another words, people with different experience believe that the effect of stress on productivity, impact of job importance on stress reduction, effect of high load on causing stress, effect of role conflict on causing stress and the impact of conflicts on working relation of staff are the same.

Employees with working experience of 0 to 5 years know the highest effect on conflict effects in staff working relationship on causing stress and then afterwards, respectively there are the impact of stress on reduction of productivity, effect of role conflicts on having stress, impact of high work load on stress and the last the effect of job importance on stress reduction.

Staffs with job experience of 5 to 10 years know the highest impact on conflicts in working relationship among staff in stress incidence. And after them respectively has the impact of stress in productivity reduction, impact of conflict in roles in stress incidence, the effect of high load in stress incidence and effect of job importance on stress reduction. Staffs with job experience of 10 to 15 years know the highest impact of stress pressure on reduction of productivity and then respectively, in effect of role conflict in stress incidence, effect of

conflict among staff working relationship in stress incidence, impact of job importance on stress reduction and effect of high work load on stress incidence. Staff with job experience of 20 years and more has the highest effect of high working load on stress incidence and then respectively the effect of stress on productivity reduction and impact of role conflict on stress incidence, impact of job importance on stress reduction and effect of conflicts of staff working relation on stress incidence.

Analysis of variance (ANOVA):

Regarding the fact that the observed t has not been significant at $p < 0/05$ level, so differences can be found between the respondents' opinion with different management experience. In another words, based on people's opinion with different management experience the effect of stress on productivity, effect of job importance on stress reduction, impact of high load of work on stress incidence, effect of role conflict on stress incidence and the impact of conflict in labor relation staff on making stress are the same. Staff with management experience of 0 to 5 year knows the highest effect in impact of stress on productivity reduction and then afterwards respectively, regards the effect of conflict in labor relation staff on stress incidence, impact of role conflicts on stress incidence, the effect of high load of work on stress incidence and the effect of job importance on stress reduction.

Staff with management experience of 5 to 10 years considers the highest impact in conflict in labor relation staff on stress incidence, and then respectively the effect of stress on productivity reduction, effect of role conflict on stress incidence, impact of high load of work on stress incidence and effect of job importance on stress reduction. Staff with management experience of 10 to 15 years knows the highest effect in stree on reduction of productivity, and then respectively the effect of conflict in labor relation staff on stress incidence, impact of role conflict on stress incidence, effect of high load of working on stress incidence and effect of job importance on reduction of stress. Staff with management experience of 15 to 20 years considers the highest effect of stress on reduction of productivity, and then respectively in effect of role conflict on stress incidence, impact of job importance on reduction of stress, the effect of conflict in labor relation staff on stress incidence and the impact of high load of working on making stress.

Dependent t-test:

Regarding the fact that the observed t was not significant at $p < 0/05$ level in all indicators except high load of work, so differences can be found among the male and female respondents' opinions about these indicators. In another words, male and female know all the effects of stress on reduction of productivity, effect of job performance on stress reduction, impact of role conflict in stress incidence and effect of conflicts in labor relation staff on stress incidence are the same. Regarding the fact that the observed t has been significant for indicator of the effect of high load of work on stress incidence. so differences can be found among the male and female respondents' opinions about the mentioned indicator.

In another words, male and females' opinions regarding the effect of high load of work on stress incidence are not the same. Men knows the highest effect as the impact of stress on reduction of productivity and then respectively the impact of conflicts in labor relation staff on stress incidence, effect of role conflicts on stress incidence, effect of high load of working on stress incidence and the impact of job importance on stress reduction. Women considers the highest effect as the impact of stress on reduction of productivity and then respectively the effect of conflicts in labor relation staff on stress incidence, effect of role conflicts on stress incidence, effect of high load of working on stress incidence and effect of job importance on stress reduction.

Further suggestions based on research findings:

1-regarding the fact that job importance causes the stress reduction among the staff. They recognize the importance and important indicators of job and by emphasizing on this issue has taken these jobs important ones that can be possible through emphasizing on top managers' emphasis on subordinate jobs through encouraging.

2-regarding the fact that high load of work will cause stress among the staff, it has been suggested the work be classified and specific load of work be determined for specific hour in order to have a reduced stress among the staff. Or by appointing more employees, the staff's load of work can be determined based on their required hours and in this way their stress will be decreased.

3-regarding the fact that conflicts among the staff roles causes stress among them, it has been suggested that by proper planning tasks that will be assigned to each person, to be coordinated and aligned and in this way their stress can be reduced. Because conflicts in responsibilities that each person has makes them confused and decrease individual performance.

4-it has been suggested that relation and interaction between employees and managers should be more and be aware of each person's roles and in this way the employees will be more sensitive to their responsibilities and managers will be able be informed of their staff performance. Through this, some ways will be used to overcome the defects.

5-it has been suggested that by establishing the culture among the staff, their responsibilities can be presented not only as responsibility but also as spiritual responsibilities, and in this way, they will perform their tasks more meticulously and regard their jobs as important ones.

6-it has been suggested that in different organizations sometimes the staff and managers' comments will be asked and in this way the effective factors which results in stress incidence will be recognized. And if possible detect it and in this way increase the staff efficiency.

REFERENCES

- [1] Moorhed, Griffen, 1384. Organizational behavior management, translated by Alvani, Seyyed Mahdi, Memarzadeh, Gholamreza, Morvarid publication, Tehran.
- [2] Moghimi, Mohammad, 1377. Management and research approach, broadcasting footage cashmere, pp. 433 and 434 and 424.
- [3] Jaafari, Moghadam, Saeed, 1380. Tadbir Monthly management, No. 132, Industrial Management Organization, Tehran.
- [4] Montazeri, Ahmad, 1383. Stress management, Sargol publication, page 14.
- [5] Khaki, Gholamreza, 1382. Research methods in management, publication center of Islamic Azad University, Tehran.
- [6] Kall, 1363. Introduction to research methods in Islamic science translated by Hafeznia Mohammadreza, Samt publication, Tehran.
- [7] Fazl Niya, Mohammadreza, 1383. Introduction to research in the humanities Page 41.
- [8] Alvani, Seyyed Mehdi, Azar, Adel, Danai Fard, Hossein, 1383. Quantitative research methodology in management approach, publisher Saffar, illumination, Tehran.
- [9] Mohebb, Ali, 1382. Productivity in management, Publications Public Administration Training Center, Tehran.
- [10] Rezaiyan Ali, 1383. Stress management, Mehr publication, Qom.
- [11] Sarfarazi, Mehrzad, 1382. << "Effectiveness of a new style of management decision making order compared to the consistent management theory Kirton Adaptation Innovation (KIA)» M.A thesis, azad islamic university in Dehaghan, management department, page 123.
- [12] Sarookhani, Bagher, 1377. << Research methods in social science >>, Publisher Institute for Humanities and Cultural Studies, Fourth Edition, Tehran, p. 157.
- [13] Krelajer, Fred, Ann, 1374. << Foundation of research in behavioral science >>, translated : Hassan Pahae Sharifi, Jaafar Najafi Zand, Avaye Noor publication, first printing, volume 1, Tehran, page 213,
- [14] Hooman, Heidar Ali, 1373. << Knowing the scientific methods in technology science >>, Parsa publication, first printing, page 167.
- [15] Sarmad, Zohreh, Bazargan, Abbass, Hejazi, Elahe, 1378. << Research methods in technology science>>, Agah publication, second publication, Tehran, page 169.
- [16] Sarmad, Zohreh, Bazargan, Abbass, Hejazi, Elaheh, 1379. <<Research methods in behavioral science>>, Agah publication, third publication, Tehran, page 170.
- [17] Ezzati, Morteza, 1376. << Research methodology in social science>> published Political Economy Research Institute, University of Tarbiat Modarres, printing, Tehran, p. 20.
- [18] Delavar, Morteza, 1376. <<Research methodology in social science>> Published Political Economy Research Institute, University of Tarbiat Modarres, printing, Tehran, p. 20.
- [19] Mehdizadeh Rostam Mehdi, Memarzadeh Tehran Gholamreza, 1390. << organization and reforming the establishment and methods>> valuable thought publication.