

The Positive Effects of Stress Management in Organizations with Stress's Symptoms

¹Recep Yücel, ¹İsmail Gökdeniz and ²Halil Elibol

¹Department of Management, Faculty of Economics and Administrative Sciences,
Kırıkkale University, 71450 Kırıkkale, Turkey

²Kırıkkale Higher School of Vocational Education,
Kırıkkale University, 71450 Kırıkkale, Turkey

Abstract: Within the changing and newly characteristics of 21th century, the most important role is taken on by people in organizations. Individual, who is in the center of the work, has to comprehend his own deficiencies and remove their negative sides before relating others. Rather than being beneficial to the organization, the people in stress damage both their organization and themselves. In this study, the aim is to determine the kinds of stress, its symptoms and the effects of stress management on organizations.

Key words: Symptoms, stress, method, organization, management

INTRODUCTION

Stress, being the most important concept in recent times, can be defined as the imbalance of body with internal and external effects. The competitive atmosphere of the 21th century, has made stress more obvious in organizations and has shown that it is a jeopardy for the future of organizations. Becoming more intensive and harder, working life gives us different responsibilities. Within the frames of these responsibilities, individuals not having proper time management, face off stress. Illness, early retirement, death on duty, job accidents, improper attendance to work, health insurance expenses, insufficient performance, ineffective management, decision mistakes, increase in accident levels, tension in mutual relations, concentration problems, inability in making decisions and decrease in creativity are all can be accepted as economic, social and physiological effects of stress on working life.

Today, it is a must to know how stress affects people and where it comes. Stress causes insufficiency in performances, perceptual defaults, interpersonal problems in working life. Stress influences both workers and organizations. In order to manage stress, it is necessary to understand stress and divert its negative effects into positive. In this study, the aim is to define the stress concept, its kinds, symptoms, causes and the effects of stress management on organizations.

The concept of stress and its kinds: Stress, originally came from the Latin word *estrica* can be defined as physiological or psychological vague reactions against

events threatening the human health and peace a signal of danger, a perceived stimulus and namely shown inefficiently dealt problems (Akgemici, 2001). Stress is a reaction against physiological or psychological problems of human because of an event or situation (Hellrgiegel *et al.*, 1983). According to Beehr and Newman (1978) stress is a situation occurring in people, compelling them to divert their normal activities. In a different definition, stress is defined as an individual's reaction against threatening environmental features characteristics (Richard, 1981). Stress illustrates the weak harmony between society and individual. The society's extensive wishes from an individual or wishes over the capacity of the individual can be the causes of stress this situation (Balci, 2000). According to Selye (1956), first of all, stress causes energy loss in individual's physiology. With the feature of damaging alive cells, stress causes body abrasion and aging.

It is not possible to say that stress has a completely negative effect on human life. While extensive stress damage individuals unavoidably, medium-level stress usually has positive effects. It is possible to say that such a level of stress is necessary obligatory/mandatory for physiological extension, success and acquiring new abilities (Balci, 2000). However, intensive stress causes neurological problems, illnesses, performance loss and withdrawal from organization both physiologically and psychologically (Richard, 1981). Stress when it is seen in one of the workers influences others negatively, thus diminishes efficiently, low stress increases the contribution staff of the organization and the work satisfaction (Balci, 2000).

In science world, the belief that workers under optimum stress work efficiently takes attention. While, applying new methods, an amount of stress is required for psychological development/evolment Richard, 1994). Stress is defined as positive stress if it affects the staff's functions and performances positively, if it affects negatively and makes the staff ill, it is defined as negative stress (Quick and Quick, 1984). Hans (1956) defines positive stress as disstress. A small amount of stress provides alertness effort and energy needed in daily life. However, intensive, continious and long term stress causes fatigue and performance loss and jeopandizes physiologic and psychologic health. It is rational to say that optimum level stress creates the enthusiasm for working performances.

The factors causing stress and the effects of stress on organization: In today's working life, there area alot of sources of stress related to social and personal life (Stora, 1984). Factors creating stress result from general environmental features and the quality of working life (Bingol and Naktiyok, 2001).

Organizational factors causing stress are job differences, role conflicts and ambiguity,extensive work burden and working less (Simpek *et al.*, 1998).

Factors causing stress in working life is either because of way of or because of individual's own characteristics, environmental conditions or structure of the organization. Especially, the features related to the nature of organization one continually causing stress for the staff. It is not possible to control stress when the sources of it is not realised effectively. As a result of this, these sources turn into chronic stress sources (Sahin, 1994).

Macro level stress factors for organizations (Aktas and Aktas, 1992):

- Politics (Attitudes) (unfair success evaluation, unequality in prices).
- Organizational structure and characteristics (centralism, less opportunity for promotion).
- Physical Conditions(crowd, noise, hot and cold weather conditions).
- Organizational Periods (weak communication among staff/workers, unbalanced and unfair control and supervising system).
- Factors related organizations,outside and group stress (conflicts, clash, hostile feelings and behaviours).

Stress causes decrease in efficiently, late coming and inattendance to work,leaving the job, concentrating

problems and hesitating on logical decisions. It causes tension with family members and friends and results in depression, death or suicide. According to Hans (1974), it is impossible for people to live without stress. In other words, it is exactly true to mention about death without a stressful life. Stress-free life cannot be thought. The most beatiful events of life bring stress to our life, since we are required to adopt all events.

Stress with its low affect can cause an aparent loss in individuals performance. In further levels, individual may not react, be insensitive and lose working motivation. In the end, individual lacks of emotional feelings. Individual loses his enthusiasm for work, extensively tense and does not want to go working. The important points are; boredom, hard or less working, stress, time sensitivity, concentration problems, loss of confidence, introvertness and exhaustion (Efeoglu, 200).

In a study in Carneige-Mellon University, the subjects were evaluated in terms of their stress leves in all their lives, then an influenza virus was given to them systematically. However, not all the subjects were affected from the influenza virus at the same rate. A sound immunity system resists against influenza virus. The subjects with more stress and hectic life were liable to get the virus. While, the ones with less stress had a rate or 27%, the ones with more stress had a rate of 47%. This is an obvious prof that only stress can worsen the immunity system (http://www.ansiad.org.tr/v2/52/files/petekcan_stres.htm).

In other example, from the 1054 people 55% of them is seen to have sleeping problems related to job stres. It is astonishing to see that 21% of the subjects has depression because of growing job intense and stress. Professor Ken Pelletier from California University Medicine Faculty states the importance of stress emphasizing that 80% of all illnesses are related to stress (<http://www.yenibir.com/StaticFiles/yenibir/kbulten/kbnisan/ymc.htm>).

The positive effects of stress management in organizations with stress symptoms: In today's hard working conditions and city life, it can be easily estimated that stress can influence social life negatively both individually and organizationally. From this aspect,it can be seen that having the knowledge of effective stress management increases performance from many directions. It is necessary that the main duty of the management be to cope with educational programmes.

Stress Management Training (SMT) is the education training individuals how to cope with stress. In these programmes, especially the main training subjects are the causes and effects of stress and how to decrease

physiological and psychosocial effects of stress (Muchinsky, 1997). It can be a strategic trick for employers to decrease the level of stress or push it down to optimum levels with such kinds of trainings in institutions.

Stress Management Applications (SMA) provide individuals and institutions with the opportunity to separate controlled and uncontrolled factors of stress and focus on the matters/problems disregarding details. Additionally, SMA teach individuals evaluate the different aspects of events and relax, cause the individuals have different aspects, causes individuals to lead themselves, cause to think regulating a calm and different working life and finally cause to have a desire for a more relaxed working atmosphere (<http://www.insankaynaklari.com>).

The signals of stress seen in individuals can be listed as the followings (Köknel, 1996; Richard, 1994; Simpek *et al.*, 1998):

- Increase in heart beat and breath.
- Increase in blood sugar.
- Tension in muscles, pains in joints.
- Dry mouth and throat.
- Fatigue.

- Loss in weight and appetite.
- Obesity and gluttony.
- Headache, dizziness.
- Loss in balance of the main physical activities of body and swinging.
- Perspiration in hands and feet.
- Insomnia, oversleeping and unbalanced sleeping.
- Grinding the teeth and speaking while sleeping.
- Sleep-walking, seeing nightmare.
- Problems in digestive system, stomach and intestines
- Nausea, diarrhoea, vomiting.
- Difficulty in speaking, more or less speaking.
- Sensitivity against noise and voice.

Studies done before, the individual and institutional signals of stress are grouped as shown in Table 1.

MATERIALS AND METHODS

In this study, it is focused on stress signals in institutions of production sector and distributional shapes of stress signals. This study's main aim is group the stress signals in institutions of production sector and determine which one is the best effective. To do this study furniture managements from production sector are chosen.

Table 1: Stress signals in working life

Stress signals	Stress Signals	Stress Signals	Stress Signals
Individual stress signals	Subjective signals	Objective signals	Physical signals
Physical Stress signals	Depression	Anxiety	Increase in tension
1-Increase in tension	Boredom	Depression	Digestive problems
2-Perspiration	Dissatisfaction	Cognitive signals	Perspiration
3-Digestive problems	Behavioural signals	Indecisiveness	Asthma
4-Asthma	Gluttony	Inconcentration	Headache
5-Headache	Taking alcohol and smoking	Behavioural signals	Fatigue
6-Fatigue	Increase in mistakes	Smoking	Nausea
Behavioural Stress Signals	Addiction to drugs	Taking alcohol	Allergy
1-Smoking	Aggressive behaviours	Institutional stress signals	Behavioural signals
2-Insomnia	Emotional signals	Inattentance to work	Insomnia
3-Alcohol taking	Concentration problems	Decrease in performance	Wanting to Sleep
4-Loss of appetite	Forgetfulness		Smoking
Emotional Stress Signals	Indecisiveness		Loss in appetite
1-Anxiety	Sensitivity against criticism		Increase in eating habits
2-Worry	Physiological signals		Taking alcohol
3-Depression	Increase in blood sugar, blood pressure and heart beat		Physiological signals
Mental Stress Signals	Dry mouth		Tension
1-Indecisiveness	Ulcer		Incompatibility
2-Inconcentration	Headache		Avoiding in cooperation
Institutional effects	Enlargement in the pupils of eye		Continuous anxiety
Latecoming and Inattentance to work	Chronic heart diseases		Feeling of insufficiency
Change in staff	Institutional signals		Irrelevant nervousness
Low performance	Not attending to job properly		Institutional signals
	Insufficiency		Low performance
	High work force and cycling speed		The increase in health insurance repayment
	Bad working atmosphere		Staff changes
	Work displeasure		Staff compensation demands
	High accident rate		Theft and sabotage

Sources: Pehlivan (1995), Artan (1986), Baltas and Baltas (1999) and Baspinar *et al.* (2001)

In this study, first and second datas were used. Second datas were used in the view of foreign and local academic studies done before. First datas were collected from Ankara. Within the results of studies, a survey form was prepared. Additionally, an evaluation survey (prestudy) was applied to 20 people, some questions were excluded, necessary questions were added and a survey form was developed. Especially, the workers of two furniture production firms were spoken face to face to fill in the surveys equally. Survey questions were collected in four headlines. The first one was an information form about the participants of the survey. In the second part, There were 21 questions about sources of stress and 15 questions about the ways of keeping up with stress. The questions were prepared in accordance with the 5 question Likert scale (never, rarely, sometimes, usually, always). In this study, stress signals were dealt with. The results of the study evaluated with SPSS (11.0). Two different statistical analysis were done. One of them is the technique of frequency distribution analysis technique.

The other is factor analysis. With the analysis of percentage, the datas in the information forms of participants and the distribution of stress sources are searched. With the technique of analysis, it is studied which kinds of stress sources affect working life and how they affect working life independently. The factor analysis technique used is a method of ceasing the dependency between the variants and decreasing dimensions. Factor analysis provides us to comment and clarify the variant covariant structure of variance sets, with less factor (Pamuk, 2005). Consequently, the first step of factor analysis is to get correlation matrix. In the use factor analysis as interrogative, it is generally appropriate to choose correlation matrix (Tatlidil, 2002).

RESULTS AND DISCUSSION

The first technique used in the search is frequency analysis technique and the results will be evaluated according to percentage analysis. First, the information about information forms will be given, then information about stress sources will be given. Eleven percent of the participants of the survey is women and 89% of them are men. It is seen that the number of woman and man workers are different. The reason is that the companies are in production sector. The age levels of the workers are: 4% of the workers are under 20, 9% of them are between 21 and 25, 28% of them is between 26 and 30, 22% of them is 31 and 35, 23% of them is between 36 and 40, 10% of them is 41 and 45, 4% of them is between 46 and over. It is seen that 59% of the survey participants are between 30 and

over. The education level is: 15% of the participants graduated from primary school, 34% of them graduated from secondary school, 4% of them graduated from lycee and 7% of them graduated from a university. Additionally, 64% of the participants are married, 28% of them are single, 6% of them are divorced and 2% of them widow/widower. Ten percent of the workers are working between 1 and 5 years, 31% of them are working between 1 and 5 years, 31% of them are working 6 and 10 years, 26% of them are working 16 and 20 years, 19% of them are working over 20 years. Fifty percent of the workers state that they have been in working life for 11 years. Eighteen percent of the survey participants have their job as their first job. Twenty five percent of them have changed their jobs 1 or 2 times, 36% of them have changed 3 or 4 times, 13% of them have changed 5 or 6 times, 5% of them have changed 7 or 8 times, 4% of them have changed 9 or 10 times. As a result, 61% of the survey participants have changed their job 4 times maximum. Twelve percent of the survey participants are working at their present job less than 1 year. A 44% of them are working between 1 and 5 years, 30% of them are working between 6 and 10 years, 13% of the one working between 11 and 15 years, 10% of them are working between 16 and 20 years. The results show that 44% of the workers are working at their present jobs between one and 5 years and the other 44% of them are working at least 6 years, at most 20 years.

The results of stress signals with the method of frequency analysis: It is asked to the workers whether they slow down working when they are in stress. The results stated are: 39% of the workers never slow down working, 30% of them rarely slow down working, 17% sometimes, 12% generally, 1% of them always slow down working when they are in stress. Six percent of the workers are always, 14% of them are generally, 41% of them are sometimes, 24% of them are rarely, 15% of them are never thinking about leaving their jobs when they are in stress.

When asked about the aims of companies, it is seen that 7% of the workers always, 11% of them generally, 24% of them sometimes, 21% of them rarely, 35% of them never concern about the aims of companies when they are in stress.

When asked about inattentancy to work, when they are in stress, it is found that 6% of the workers always, 12% of the workers usually, 24% of the workers sometimes, 30% of the workers rarely and 28% of the workers never have attentancy problems when they are in stress.

About the possibility of making mistakes while working, 5% of the workers always, 18% of them

generally, 24% of them never make mistakes while working when they are in stress.

About relationships with their friend. 3% of the workers always, 18% of the workers generally, 19% of the workers sometimes, 36% of the workers rarely and 23% of the workers never have problems with their friends when they are in stress.

Seven percent of the workers have no cooperation with their colleagues when they are in stress. While, 19% of them have generally, 26% of them have sometimes, 28% of them rarely and 18% of them never have such cooperation problems when they are in stress.

Eight percent of the workers always, 13% of the workers generally, 25% of the workers sometimes, 28% of the workers rarely decrease the quality of services when they are in stress. On the other hand, 23% of the workers never decrease the quality of service.

Four percent of the workers always, 12% of the workers general, 32% of the workers sometimes, 32% of the workers rarely change their routine behaviours when they are in stress. Eighteen percent of the workers never change their routine behaviours when they are in stress.

Nine percent of the workers always, 16% of the workers generally 36% of the workers sometimes, 25% of the workers rarely are anxious when they are in stress. Thirteen percent of the workers have told that they never anxious when they are in stress.

Five percent of the workers always, 21% of the workers generally, 29% of the workers sometimes, 32% of the workers rarely are nervous when they are in stress.

Four percent of the workers always, 13% of the workers generally, 25% of the workers sometimes, 28% of the workers rarely have less self-confidence when they are in stress. Ten percent of the workers have said that they have never had self-confidence when they are in stress.

Fourteen percent of the workers always, 32% of the workers generally, 20% of the workers sometimes, 26%

of the workers rarely have fatigue when they are in stress. Eight percent of the workers have stated that they have never fatigue when they are in stress.

Ten percent of the workers always, 25% of the workers generally, 36% of the workers sometimes, 21% of the workers rarely have sleeping problems and insomnia when they are in stress. Eighteen percent of the workers have told that they never have sleeping problems and insomnia when they are in stress.

Twelve percent of the workers always, 26% of the workers generally, 31% of the workers sometimes, 17% of the workers rarely have loss of appetite. Fourteen percent of the workers are told have no loss of appetite when they are in stress.

The results of stress signals with factor analysis

method: To determine which of the stress Signals affect working life independently, the factor analysis technique was applied and the datas are shown in Table 2 and 3.

Information about Analysis are given in total variance shown in Table 2. A started in Table 3, the number of factors whose real values are more than 1 is 5. The whole of this factor is the 63.851% of the total variance. Varimax method was applied to the first solution which is found with the method of basic constituents. Results related to this are given in Table 3. These 5 factors clarifies 17.855, 15.356, 12.066, 9.479 and 9.095% of the total variant, respectively.

Among the stated 15 factor, a rate of 63.851% shows the five factors that are clarifies in Table 2. The distribution of these 5 factors are seen in Table 3.

Among the 5 important factors, the variant have a contribution of 17.855% to the first one according to the level loading. This contribution of 17.855 is shown in Table 4 changing from the biggest to the smallest stress sources, respectively.

Table 2: Declared total variance
Starting real values

Constituent	Total	Variance (%)	Cumulative	Total	Variance (%)	Cumulative
1	4.455	29.703	29.703	2.678	17.855	17.855
2	1.758	11.723	41.426	2.303	15.356	33.211
3	1.246	8.307	49.733	1.810	12.066	45.277
4	1.088	7.255	56.988	1.422	9.479	54.756
5	1.029	6.862	63.851	1.364	9.095	63.851
6	0.894	5.960	69.810			
7	0.785	5.234	75.045			
8	0.696	4.643	79.687			
9	0.658	4.390	84.077			
10	0.593	3.951	88.028			
11	0.500	3.330	91.358			
12	0.406	2.708	94.066			
13	0.386	2.573	96.639			
14	0.292	1.945	98.584			
15	0.212	1.416	100.000			

Table 3: Spinned factors matrix (Varimax method)

	1	2	3	4	5
Slowing down working	0.247	0.192	0.657	0.134	0.313
Thinking to leave the job	0.269	0.147	0.179	0.149	0.817
Ignoring the aims of company	0.579	1.686E-02	0.269	-1.130E-02	0.292
Increase in attendancy to work	0.700	1.844E-03	7.244E-02	2.897E-02	0.108
Possibility to make mistakes	0.645	7.256E-02	-0.103	0.458	0.114
Having unhealthy relations with collagues	0.692	0.187	0.382	8.551E-02	-7.256E-02
Incooperation with collagues	0.573	0.184	0.389	0.333	-0.375
Decrease in service quality	0.165	1.539E-03	0.164	0.878	9.876E-02
Behavioural changes in habits	0.117	2.835E-02	0.830	-6.387E-03	-1.659E-02
Continious anxiety	4.647-02 E	0.545	0.188	0.105	0.329
Nervousness	0.228	0.634	0.178	-0.352	-5.749E-02
Loss of self confidence	0.621	0.265	-0.104	-2.180E-02	0.439
Fatigue	7.686E-02	0.745	-1.499E-03	-0.141	6.781E-03
Insomnia	9.040E-02	0.795	-8.972E-03	0.313	6.432E-02
Loss of appetite	-3.244E-02	0.462	0.403	0.169	0.154

As seen in Table 4 among the 6 variants 4 of them are institutional stress signals. Eventhough they are free variants these variants as in the group of institution prove that the first negative reflection of stress signals take place. It is obvious that after affecting institutions, stress has an effect on individuals' psychology. Thirdly mental stress signals are seen. This item shows that when they are in stress, workers has problems of self-confidence and un decisiveness.

The 2nd free variants affecting the factor 15.356% changing from the biggest to smallest are shown in Table 5.

In Table 5, the first item is behavioural stress signals, the second one is physical stress and the 3rd and 4th signals are psychological stress signals.

The 3rd free variants affecting the factor 12.066% changing from the biggest to the smallest are shown in Table 6 and the free variants of 3rd factor.

In Table 6, the first source is seen as behavioural stress signals and the second one is institutional stress signals. Different from Table 5, it is seen that there is a change from personal stress signals to institutional stress signals. Here, the distribution between personal stress signals and institutional stress is 70%

The 4th free variants affecting the factor 9.479% changing from the biggest to the smallest are shown in Table 7.

Institutional stress signals are in the first place in Table 7. The factor of decrease in service quality affects the variants sufficiently. It is seen that the less the rate of factors are, the less the number of items are.

The 5th free variants affecting the factor 9.095% changing from the biggest to the smallest are shown in Table 8.

Institutional stress signals are in the first place in Table 8. Individuals think of leaving the job as the last choice.

As one of the most important problems that companies face up, stress becomes a concept both

Table 4: he comparison between stress signals and the free variant of first factor

The free variant of the first factor	Grouping stress sources
Increase in inattendancy to work	Institutional stress signals
Having un health relations with collagues	Psychological stress signals
Possibility to make mistakes	Institutional stress signals
Loss of self confidence	Mental and cognitive stress signals
Ignoring the aim of company	Institutional stress signals
Incooperation with collagues	Institutional stress signals

Table 5: The comparison between stress signals and the free variant of second factor

Free variant of the second factor	Grouping stress sources
Insomnia	Behavioural stress signals
Fatigue	Physical stress signals
Nervousness	Psychological stress signals
*Continious anxiety	Psychological stress signals

Table 6: The comparison between stress signals and the free variants of third factor

Free variants of the third factor	Grouping stress sources
Behavioural changes in habits	Behavioural stress signals
Slowing down working	Institutional stress signals

Table 7: The comparation stress signals and the free variants of fourth factor

Free variants of the fourth factor	Grouping stress sources
Decrease in service quality	Institutional stress signals

Table 8: The comparison between stress signals and the free variants of fifth factor

Free variants of the fifth factor	Grouping stress sources
Thinking to leave job	Institutional stress signals

threatening all individuals and the people around. In addition to giving harms to individual's personal life, stress is a factor affecting both fertility and production of organizations. When people are in stress, it is suggested them to apply the advices given to them in the study. It can be a rational effort for the organization managers to apply different surveys to measure stress levels of their staff and to give them education when they are in need. It is thought that defining stress signals consciously in advance and managing these signals affect individuals, institutions and organizational and environment namely the whole life positively.

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