



# World Scientific News

WSN 55 (2016) 240-251

EISSN 2392-2192

---

---

## Determining and exploring the extent to which stress affects job progress Case study: Staffs at Tehran's PNU (Males and Females)

**Mahdi Ahmadipناه<sup>1,\*</sup>, Anvar Ebrahimi<sup>1</sup>, Shohre Panjsetoni<sup>2</sup>,  
Maryam Ahmadipناه<sup>1</sup>**

<sup>1</sup>Department of Management, Payame Noor University, PO BOX 19395 - 3697, Tehran, Iran

<sup>2</sup>Department of Management, Secretary of Education, District 2, Shahreray, Iran

\*E-mail address: [ma\\_ah\\_pa@yahoo.com](mailto:ma_ah_pa@yahoo.com)

### ABSTRACT

This paper explores the extent to which stress affects work progress. Given the fact that stress affects most human activities, thus it affects people's work progress and it examines variables which are related with each of the stress indices and work progress. Stressful items include marriages, job change, and relocation to a new city, death of relatives, sleeplessness and weak nerves. This paper is taken from a research work done at the PNU and is of a post-facto. Data have been gathered via field surveys and after testing hypotheses, it was found that stress was effective on staffs; work efficiency. Meanwhile, it was found out that there was a need for its management.

**Keywords:** stress; work prepress; behavioral theories; nerve pressure

### 1. INTRODUCTION

Since the modern era is called era of stress, current complicatedness of human societies, speed of changes and inattention to religious and ideological grounds, social and affective system of families, conflicts in human civilizations and social communications have all brought

about new stresses, such that man has to deal with them. On the one hand, we all enjoy immense and undiscovered talents for development and transformation, ability to find deeper meanings, and attaining more success in life. Therefore, it is possible to use abilities and talents for coping with all kinds of stress which arise in daily life. This paper has been conducted in regard to determining and exploring the extent to which stress affects job progress among male and female staffs at PNU and could reveal useful information concerning various decisions making at universities. This issue can be fulfilled through the conduct of regular researches and identification of level of stress among staffs. In fact, we aspire to present useful guidelines which could reduce these stressors. Factors that show the significance of this research indicate the fact that university is a stressful environment and most of the staffs face stress; for instance, when they are busy working, they understand the situation as bad. Hence, stress causes reduced performance among the employees and renders their mental health to decline. For this, we seek to identify these stressful factors and explore the guidelines for coping with them.

Stress (nervous pressure), lexically meaning, is taken from the Latin word “Stringer” meaning contracting and straining. In Persian, some equivalents of nervous impulses, mental pressure, tension and worry have been indicated. Stress has also been translated as nervous strain, where this term is not an accurate equivalence of “stress”, because stress arises from “pressure” and is not the pressure itself. Meanwhile, for two scholars named “Morphed” and “Griffin”, stress can be denoted as “nervous pressure” and consider it a reaction which man exposes against inadaptable stimulants. In this paper, this equivalence has also been applied (Ebrahimi et al, 2009).

Stress is not a new phenomenon and has existed throughout history; it has brought about in numerous ways, including worry of natural blights, wars, manslaughters, oppressions by tyrants. As the Industrial Revolution came into existence and due to deep social, cultural, economic, economic and political developments in all societies and the necessity of continued conformity with the new conditions and meanwhile, because of developments stress found larger scale and became prevalent, such that it has been called the sinister child of the Industrial Revolution or the Silent Killer (Adib Rad, 2007). In modern world, stress is almost prevalent and all people, including the elderly, man and woman, the educated, and the unlettered are all gripped with stress and there are few people who have a sufficient understanding of stress and can cope with its destructive impacts.

Scientific researches reaffirm the fact that stress affect physical and mental health and wastes his/her potential and actual energies. Today, people apply the word stress as a prevalent thematic form or in form of an “epidemic” illness. This world has long opened its way in the conversation literature and as we speak of labor, food, housing and education, we speak of stress too. Despite all negative facets of stress that exist in the public culture, this phenomenon involves positive aspects. Negative facets of stress are called “destructive stress” which yields from hearing bad news and positive facets of stress are called “constructive facets”, which happens when hearing happy and pleasing news (Adib Rad, 2007). Researchers have offered various definitions of stress. These definitions, though have apparent and formative differences, from a thematic point of view, they are almost reflective of a unified idea. Denis Jeff considers "stress" as a state which is exposed because of the interference of "physiologic-mental" variations on two factors of environment and physical health of the individual. Another scholar named Kerry Cooper regards it as a biochemical and behavioral reaction which is carried out by man in the face of dangers. For Suzan Karthrite, stress is referred to a set of individual's general reactions to inadaptable and unexpected factors in the environment which compel him/her to

cope with danger via adopting the method of “fight for flight” or to choose the escape route. Cox states stress is the individual's response to internal and external processes which impose pressure on the capacity of integrating physical and mental pressures (Soltani et al, 2010).

As the stress level rises in our body mechanism, this likelihood that the body creates mental and physical signs or any combination of these signs in response to stress will increase. How does stress or anxieties start? The answer to this question is simple. Anxiety might begin in various ways. Prior to this, it was mentioned that an experience if anxiety signs arise from stress. It may arise from chronic stress or might arise from sudden stress; i.e. when faced with some special fear or problem or an occurrence in life, we might see our stress capacity rise. The special nature of stress varies from one person to the other, as response is their special indicator which is also different (Soltani et al, 2010). In childhood, special kinds of fear are common. Around 92% of the 5-12 aged children are commonly faced with special fears like fear from animals, fear from dangerous situations and fear from sound and fear of darkness.as we grow, these fears are vanished, but they remain in the adulthood years like other fears that might occur by observing unpleasant things which take place for others

Basically, there are a series of general factors which help anxiety last.

1. Lifestyle may keep anxiety going on
2. Avoidance makes anxiety last
3. Lack of self-confidence continues anxiety
4. Our thoughts make anxiety last (Ebrahimi et al, 2009). Anxiety arise for different reasons and in various forms; some anxieties have no special or personal cause and some of which have no clear reasons; yet some others are highly extreme and some are mild (Adib Rad, Nader, 2007).

### ***Freudian Theory***

In his last writings, Freud distinguished between three kinds of anxieties; objective anxiety or actual anxiety which any one has it and is the same response to a real danger which occurs outside. Freud states this kind of anxiety is directed at rational fearful stimulants and is proportionate to them and is a fast and adaptive way for change and personal preparation in the face of risks. Two other kinds of anxiety are those which result in mental complaints and are known as psychic anxiety and mental anxiety. In order to understand the nature of anxiety, we need to at first maintain major fundamental points of the Freudian theory (Adib Rader, 2007). Freud maintains that the human personality may be conceptualized based on the basic part of id, ego and super ego. Id exists since birth and is the source of all mental energy which is called Libra.

This energy is spent for satisfying all initial biological stimulants; including gender stimulants, aggression hunger, and sensual needs like heat and coll. Id has generally an enjoyment seeking nature. Ego derives from Id and serves as a containing force and its performance is organized in accordance with real world needs, deriving from receiving rewards and being punished in childhood as well as parental moral values. Therefore, all humans' behaviors originate from the more complicated reciprocity of these three mental forces which are competing for meeting their own wants.

Freud maintains that the first experience of anxiety happens in the onset of birth; thus, this initial anxiety is a pattern for other anxieties. The second anxiety stated by Freud is the psychic anxiety which is the same fear of punishment by super ego, brought into existence following

non-endurance against natural criteria arising from actual or potential behaviors ordered by the Id. The third kind of anxiety is neuroticism. Watson and Warner were pioneers in research about fear based on behavioral theories; they proven that fear can be conditioned. Maver (1947) has offered recommendations in which he states that there are two factors for developing and continuing fear; fear is created via classic conditioning and the person, via avoidance, reduces this fear alternatively.

This second kind of learning is called instrumental conditioning and the reason is that the person learns the response to avoidance and continues it. Thus, this response reduces anxiety and is considered to be its reinforcement. The Seligman Preparation Theory helps us better understand conditioning fear, because it has shown that the stimulants we show preparation biologically are conditioned by those against which we are not prepared. It is perceived that prevalent anxiety disorders are created in a similar mane with fears. The neutral stimulant is followed by an unpleasant experience and then the person shows some conditioned emotional reaction. Fear can be perceived of as a conditional avoidance experience, while a disorder of anxiety is pervasive (GAQ).

Cognitive theorists believe that occurrences and problems are not the causes of anxiety and stress; rather it is the individual interpretation of these occurrences that might lead to such problems. Cognitive theories are applied in the area of anxiety, because they are effective in treating anxiety. Overall, anxiety continues as a result of wrong situational assessment that would result in the feeling of danger in the person. Beck (1976) argues that morbid anxiety arises from gratuitous and repeated dangers or from one of the following four dimensions:

1. Undue estimate of the size of a fearful occurrence
2. Undue estimate of severity of a fearful occurrence
3. Undercutting personal abilities for coping with problems
4. Underestimating the possibility of help from another person

When people are able to attain major life desires, and are active and happy to follow them, they are happy and cheerful. Rational beliefs are defined as beliefs which prohibit one to reach his goals. These beliefs are absolute and are seen in form of certainly, should and better in man's speech. These things convert into criteria and impossible goals which deter man from future success (Soltani et al, 2010).

In this regard, the origin of general stressors and results of nervous pressures as well as the roles of moderators which are the man's natural and intrinsic mechanism against stressful factors are raised and then, students' stressors classes are stated and in the end, solutions are offered. General stressors are as follows:

1. Environmental stressors: ecobomic, social, political changes, technological developments and labor division in families
2. Organizational stressors organizational structure, organizational culture and space, policies and organizational strategies
3. Social stressors: relation with the custodian, nature of collective work, relation with friends
4. Individual stressors: physical conditions, job schema, high volume of work, role contradiction, role ambiguity (Mousavi Nasab et al, 2006).

These stressors result in the emergence of nervous pressure or stress and cause highly negative results as follows:

### ***Nervous pressure impacts***

1. Physiological impacts: sensitivity to common illnesses, coronary patience, stomach ulcer, cancer, etc.
2. Mental impacts: deprivation and aggression, anxiety, depressions, burn-out, distress
3. Cognitive impacts: reduced focus force, weak memory, thinking disturbance
4. Behavioral impacts: inappropriate work, absence, existing service, consuming alcohol

On the one hand, the human's natural resistance systems as well as the experiences obtained as factors moderating stress serve always in the direction of maintain human's balance quite automatically (Ghasemzadeh, 2007).

### ***Ways to cope with nervous pressure (stress)***

The staff class, though are faced with nervous pressures during conducting work, coping with it will be made easier when staffs are reached some level of balance in relation with nervous pressures and via developing short term plans, they manage to repel nervous reassures in any given time while working. In here, two short term or tactical and a long term and strategic ways are necessary for dealing with periodic nervous pressure for the staffs. The latter refers to the way one reaches comfort, lack of hastiness, concentration and adoption of appropriate behavioral states.

- In 1913, in his book, titled General mental pathology, Jasper laid emphasis on the notion of reaction. From his standpoint, reaction is an effective response to an occurrence and this notion can be changed in an individual's Harmonization framework.
- Almost at the same time, Adolf Meyer formulated the direct relationship between environmental stimulants and the phenomenon of illness as a hypothesis, however, in fact, a fundamental change in the notion of stress and its determining role in illnesses are indebted to researches by Dr. Hans Selie.
- In 1936, Dr. Selie released his first treatise on alarming response. In the mid-1940, Selie started applying the word pressure among his findings. Although the application of this word was novel, his brilliance along with a huge number of his publications led to the fixation of the modern application of this word within then scientific society.

## **2. METHODOLOGY**

The statistical population of this research was comprised of all male and female staffs at PNU. The sample included 50 peoples (males and females) of the PNU staffs who were selected via random sampling. The research tools in this paper which were applied for measuring the extent of stress on job progress included questionnaires. The scales were given out to 50 single and married staffs randomly and the necessity of this research was explained to them; they were also required to accurately respond to the questions raised.

Data were mainly processed by using statistical software. It was attempted to offer the results obtained from the answers along with table and graphs and analyses. While analyzing data, it was striven to use descriptive statistucs by examining individual features of the sample group and later by using indices of frequency, percentage and averages. In inferential statistical

part, research hypotheses were explored by considering the nature of aita and examining data.

### 3. FINDINGS

**Table 1.** Sample people based on age.

Age	Frequency	Per.
Less than 25	38	38.00
25-30	28	28.00
30-35	22	22.00
Over 35	12	12.00
Total	100	100.0

Findings in Table (1) indicates that sample group people's age in thee age interval of less than 25 has the highest frequency and percentage.

**Table 2.** Sample group people based on job records.

Job records	Frequency	Per.
Have	45	45.00
Don't have	55	55.0
Total	100	100

Findings in Table (2) indicates that 45% of the sample people did have some job records.

**Table 3.** Sample group people based on average.

Average	Frequency	Average
Woman	50	16.25
Man Total	50 100	14.81

Table (3) findings reveal that average rates among women are higher than men's.

To make sure of homogeneity of data collected by statistical distributions, Smirnov-Kolmogorov test was used.

**Testing normalcy of variables**

The aim of this test is to find out whether the variables are normal or not.

- H0: Population distribution is normal
- H1: Population distribution is not normal

**Table 4.** Normal test of components stress and job progress.

Variables	Kolmogorov-Simonov Z	p-value	Variable distribution	To test the hypothesis
Stress	1.93	0.071	Normal	Independent t test
Job progress	12.1	0.065	Normal	Independent t test

According to results obtained from Table (4), in regard to variables with normal distribution, Independent T tests were used. Since the Kolmogorov- Simonov **Z** value of all variables is greater than the likely variable of 0.05, thus, the null hypothesis is not rejected and with 95% confidence rate, one can state that variables have normal distribution.

**Examination of research hypotheses**

Level of stress and its impacts on average hours of work among married staffs is higher than single staffs.

**Table 5.** Independent T test results for comparing level of stress and its impacts on hours of work among married and single staffs.

Group	No.	Mean	Ratio T	Freedom degree	Sig. P
married	25	4.20	14.21	98	0.02
Single	75	3.25			

0.05 = significance level

Table (5) results indicate that the average stress level and its impacts on the average hours of work among married staffs is higher than singles. As a result, one can state that given averages and the independent t value which is equal to 14.21 is less than 0.05 at the significance level and the research hypothesis is conformed with 95% confidence level.

Level of stress among student staffs is higher than the non-student staffs.

**Table 6.** Independent t test results for comparison level of stress among students staffs is higher than non-student staffs.

Group	No.	Average	Ratio T	Freedom degree	Sig. P
Students staffs	45	3.92	16.30	98	0.01
Non-student staffs	55	3.02			

Significance level -0.05

Table (6) results indicate that the average stress level among student staffs is higher than the non-student staffs. As a result, one can state that independent T test is q=equal to 16.30 at the significance level of less than 0.05. it can be stated that the research hypothesis is confirmed.

**Level of stress is the same between woman and man staffs**

**Table 7.** Independent t tests for comparing level of stress between woman and men staffs.

Group	No.	Average	Ratio T	Freedom degree	Sig. P
woman	50	4.62	20.51	98	0.01
Man	50	3.12			

Significance level -0.05

Table (7) results indicate that the average level of stress between male and female staffs is the same. As a result, given averages and independent t value which is equal to 20.51 at the significance level of less than 0.05, we can state with 95% confidence level that the level of stress is the same between the women and man staffs and thee research hypothesis is supported. Level of job progress among single staffs is higher than that of the married.

**Table 8.** Independent t test results for comparing the extent of job progress among single and married staffs.

Group	No.	Average	Ratio T	Freedom degree	Sig. P
single	50	16.25	8.20	98	0.02
Married	50	14.81			

Significance level -0.05

Table (8) results indicate that the average rate of job progress among single staffs is higher than the married ones. As a result, we can state that given the independent t test, equaling 8.20 at the significance level less than 0.05, the average job progress among single staffs is higher than the married ones. Thus, the hypothesis is confirmed with 95% confidence level.

There is a significance relationship between stress and job progress

No direct relation  $H_0: P = 0$

Direct relation  $H_1: P \neq 0$

**Table 9.** Correlation coefficient between aggressive style and job progress.

		Job progress	Stress
Job progress	Correlation	1	0586
	Sig.		0.002
	No.	100	100
Stress	Correlation	0586	1
	Sig.	0.002	
	No.	100	100

As observed in Table (9), correlation coefficient for this test was 0/586, suggesting a positive and relatively strong relationship between sitters san job progress. Thus, the null hypothesis is rejected. Because the significance level is 0.002 and is smaller than the error level of 0.01, thus the first hypothesis is concluded. There is a significant relation between stress and job progress.

#### **4. CONCLUSIONS**

In this paper which was conducted with the title of Determining and exploring the extent to which stress affects job progress. Case study: Staffs at Tehran's PNU (Males and Females), we arrived at considerable results. According to statistical analyses on the hypotheses we took into account, the accuracy of all hypotheses was approved with 955 confidence rate. Overall, some stresses can irritate and offend all the society, including all people groups. In spite of the existence of general stresses, various peoples existing in the context of the society suffer from kinds of stress, where each of which requires its own special treatment.

Nervous pressures relating to the class of students who serve periodically often arise from educational requirements and preparation for examinations. Though in some cases, as it was mentioned, the pressures have common points with general stress, due to limited special parts of the society and the fact it being periodic, they have their own unique characters. Examples of these nervous pressures (stresses) are: educational obsessions, worry about the future, formation of family, life occurrences, familial conflicts, conflicts with friends, financial problems and the like (Ghasemzade, Farid; Stress and etiology of factors creating it and ways to cope with it; physician publication).

##### ***Short term measures in dealing with nervous pressure (stress)***

These measures include periodic treatment of issues and pressures arising from conditions of doing job as follows:

- Job planning: this instance is among the most significant factors that mitigate nervous pressures. If long term planning is done discretely, short-term and middle-term measures will, in no doubt, move in the favorable path. To the contrary, if the long term planning is not carried out properly, all short term and middle term planning will get disturbed and its true results will be the emergence of extreme stress in the employee.
- Time management: In this connection, it has to be said that man has generally time limitations. Undoubtedly, if there is a proper time planning and things are put in their own place, there will be no disruption in life and job related affairs, and thereby chaos in work will not happen. Upon execution of time management, not only "hasty planning" will be removed, but also things will be done properly (Moosavi Nasab et al, 2006).
- Proper feeding and sports activities: that which is emphasized at the time of doing work for the working class is proper feeding and sports activities. People who do sports are successful in raising "endurance of nervous pressure" and this task has to be done carefully so that ailments are cured and degrees of comfort are reached.
- Nerves rest and care: training muscular reflexivity and care and concentration are useful techniques for replacing nervous and distressful emotions with comfortable states that have to be done by experts quite systematically so that the impacts are manifested.
- Gradual change of cognitive and behavioral reactions against nervous pressures: this method states when we cannot change our surrounding world, we can at least change our own reactions and reform them and thus to increase dealing with nervous pressures. At the time of doing work, it is important to create a silent and comfortable environment (Moosavi Nasab et al, 2006).

***Long term measures for coping with nervous pressures (stress)***

Although observance of short term measures is necessary, but they do not suffice; because their impacts are temporary and are just sedative. The one affected with stress attacks does everything to save himself. He consumes various drugs, does sports and recreation, studies various books in this regard, and refers to Yoga and Meditation classes. He is absorbed by all this and after a while, he notices that he is just at the starting point and the stress is still remaining and he is not yet out of the woods. To deal with the crises of stress, the following ways are recommended:

- Strengthening religious basics: man is a “religious” creature and a religious man has a history more than the "intelligence seeking" man. Researches have proven that having convictions and religious creed have the highest impacts in preserving man against distresses and evil obsessions. Today, doctors believe that individual's religious pillars take priority while curing neurotic and distressful patients and state that taking drugs are a supplementary method which helps patients temporary. Carrying out divine orders and prophet's Traditions assume significance repelling nervous pressure's, such that man can stand against the most extreme nervous stresses like a string trunk of a tree. God-centeredness instead of self-centeredness and inculcating this subject that "Man makes mistakes, unless for those who have faith and do good deeds" could protect man (Hashemi, 2010).
- Moderation: for Fredrick Pearls, a moderate man is this place and that time. For him, man lives with an immune and safe feeling at the time of being and finds out that the only reality is this same moment and there is no need for looking at back and front. A moderate man is not a prisoner of occurrences and illusions; rather he knows his own weak and strong points and accept them (Siarouchi & Meyer, 2007).
- Out of deprivation: it is impossible to constantly negate stress, unless the individual comes out of stress by himself. These limitations could include limited insights, self-conceits, material competitions, constant conflicts with self and others. Upon coming out of limitations and restrictions, man is placed in another circle and pays attention to mystical issues. Mixing with Islamic Mysticism and that which has brought about in Islam, including life orders and behavioral ways are among the most appealing factors of stress in life.

**References**

- [1] Ebrahimi, H., Nikraves, N., Oskoe, S. F., & Vahedi, F. (2009). Stress major reaction of nurses to the ethical decision-making, Iran University of Medical Sciences.
- [2] Adib Rad, N. (2007). The effect of stress inoculation training of emotional intelligence in stress reduction and coping with stress (thesis) Teacher Training University.
- [3] Soltani, M., Aminoroaia, M., Attari, A. (2010). Enhanced human stress management on educational achievement. Iran University of Medical Sciences.
- [4] Siarouchi, F., & Mayer, J. (2007). Stress in everyday life, translation by Asghar Nouri and Habibullah Nasiri. Tehran: Shahryar Publication.
- [5] Ghasemzadeh, F. (2007). Stress and root causes and how to deal with it. Tehran: Medical publications.

- [6] Mousavi Nasab, S. M., Taghavi, M., & Mohamad, N. (2006). Stress Assessment: Evaluation of Two theoretical models predict psychological adjustment. *Shahid Beheshti University of Medical Sciences Journal* 13(2), 111-120.
- [7] Hashemi, H. (2010). Relationship between time and stress management behaviors in students Shahid Beheshti University of Medical Sciences and Health Services. *Shahid Beheshti University of Medical Sciences Journal* 29(5), 51-59.

( Received 02 September 2016; accepted 20 September 2016 )