

Marika Bubuteishvili

Master of Warsaw Management University

## **Anxiety as Determining Indicator for Work-Related Stress**

### **Abstract**

Researches prove that people, who have a permanent job, feel much better than the unemployed. It means that employment means a lot for almost every person. However, in many cases, the inappropriate environment at work is a source of stress as well.

When we discuss stress, we should not forget that one and the same situation could have a stronger impact (stress) on one person and less – on the other. Individual factors such as how one sees and copes with stress are extremely important here. Besides, qualification and socio-demographic conditions are essential, too.

The aim of the survey was to assess the quality of the staff anxiety and to carry out correlation and comparative analysis between the level of job satisfaction and the survey results of anxiety.

Employees' diagnosis was made with reactive and personal anxiety test – questionnaires, developed by Charles Spielberger.

*Key Words: Employee, Stress, Anxiety*

### **The essence and Consequences of Work-related Stress**

People live in stressful environments and spend plenty of internal resource to cope with it. Our daily life is filled with stressful situations, unseen circumstances, everyday problems that seriously harm our mind and body.

Technological progress, constant growth of pace in modern life, ongoing reforms and changes, permanent rapid flow of personal, family and social events, requires appropriate responses from people. These could be overcoming obstacles and mobilizing physical and mental forces.

Why is the atmosphere in organisations stressful and tensed? We have to analyse the working environment to find an answer. Despite the fact that the definition for stress prompts us to connect stress to a personal or individual factor, the detailed research shows that there are additional factors that create such atmosphere. Some of them are vague organizational culture and low self-actualization of the personnel.

The reason is simple - there is no organization that prioritizes and analyses how employees' professional and emotional conditions matches the job they are doing. Therefore, there are quite a number of cases where there are inconsistencies between the work that one is performing and their character. This is exactly the cause of stress (Robbins S.P., Judge T.A. 2018).

We performed the desk-research and studied the analysis in several organizations where the focus is on job-related stress. We have seen that the results were alarming. More concretely, none of the parameters such as salaries, quality of engagement, work-life balance discussed work-related stress factors. The contradictory nature of these results and the reality were the reason of our hypothesis and research in general (Paul J. Rosch, M.D. 1998).

Despite high satisfaction rates described in internal organizational research reports, job-related stress is very high in both big commercial/private companies as well as public institutions. This can also be proved by the fact that employees do not state their positions on this issue. (Management project (2008).

Therefore, in order to analyse and examine the real situation and prove our hypothesis, we have studied different literature, working environment and terms as well as internal research. On the other hand, to analyse personnel stress related factors, we have selected the Spielberg Method invented by Professor Charles Donald Spielberger. The method uses differentiated approach to measure stress as a personal and as a situational factor. For that, we use The State-Trait Anxiety Inventory (STAI) where the first part looks at situational stress and the other – personal.

### **Correlation of Anxiety and Stress**

Current century is called as the century for anxiety. The term itself was used by Sigmund Freud and currently is considered by many researchers as the precondition for stress, fear and depression. In the last years, the interest towards the relationship of stress with anxiety has increased. This is because of the fact that in many cases stress is considered in different aspects such as temporary condition caused by stress (Beridze R. 2011).

According to psychologists, it is an important emotional condition created by predicted and unexpected threat and is revealed when the situation is anticipated to develop undesirably. In contrast with fear, anxiety is related to unconscious, diffuse, subjective threat whereas fear – with real one. Freud believed that anxiety has a signalling function and with the help of intensive impulses warns ego about the upcoming threat. In response, “ego” is using defensive mechanisms such as relocation/expulsion, projection, substitution, rationalization and so forth. At the same time, defensive mechanisms act at unconscious level and cause unreal perfection of the reality by an individual (Shubladze G., Mgebrishvili B., Wowkolauri F., 2008).

Because of threat uncertainty, people assess situations subjectively and are anxious because of personal as well as weakness towards external factors. Anxiety at the psychological level is considered as tension, nervousness and uncertainty, not being able to cope with approaching defeat, which causes inadequate behaviour and is the reason for unjustified failure (Selye H.1974).

In many cases anxiety is revealed as a destructing factor which interferes with constructional and consistent realization of set objectives. The factor that produces development of different psychopathologic complexes and formation of phobias.

Anxiety as an emotional discomfort and exposure of anticipated threat is an important revelation of unfulfilled requirements. This is a personal sign, readiness for fear.

Anxiety is an emotional condition of worry and concern that is characteristically for many whenever they feel danger; whenever they feel that it would be difficult to adapt to a critical situation (e.g. resolving professional or civic duties and achieving important objective). Anxiety is

caused by unexpected changes in the adapted reality (moving to new situation from a good collective)

Anxiety is felt when doing something important and some dosage of it helps us in thinking and effective working. However, intensive anxiety brings negative results. More than the normal amount and uncontrolled type has a stressful effect on a person (Karasek R. 2007).

Specialists differentiate between two criteria and concept: Anxiety and anxiousness. The latter is also considered by two criteria – personal and situational. They believe that the level of anxiousness diagnosis is very important because that determines behaviour of the object. Some level of anxiousness is absolutely normal for the human being in order to be active. Each person has his/her own level the so-called necessary anxiousness. In that sense, specialists believe that self-assessment is an important component of self-control and self-regulation. It is believed that people express different psychological adaptive skills according to their lifestyle and the level of anxiousness in it.

To be precise, in contrast with people of high-level anxiousness characteristics, low-level ones have more clear socio-psychological adaptive skills.

### **Spielberger Anxiety Scale – State-Trait Anxiety Inventory**

Current methods of assessment give only general levels of anxiety or the possibility to evaluate specific reactions. The only method that gives us possibility to differently evaluate personal and psychological conditions of anxiety in a person is the Spielberger's method. It encompasses evaluating personal and situational anxiety. Considering the fact that this method is translated in 52 languages and dialects, we could say that it is an international standard/method for evaluating the level of anxiety in a human being.

According to his concept, anxiety is a condition and anxiousness – personal trait: anxiety is the reaction to an anticipated threat whether real or not; Anxiousness – individual sustainable psychological characteristic that is expressed in inclining towards anxiety. For instance, during ordinary situations when they do not give any basis for anxiety.

Personal anxiety – it is a characteristic that is activated when a person evaluates the situation as dangerous that is connected with his/her prestige, self-assessment, and respect. Situational or reactive anxiety is characterized with subjective feelings of emotions and nervousness. (Correlation of Anxiety and Stress <http://www.youngscientistusa.com/archive/6/397/>)

Spielberger gives us 40 questions to think of. In the test, 20 questions are about assessing situational anxiety level and 20 – personal. According to this method there are four answers to each question and each answer demonstrates the choice of the respondent.

High level anxiety is a negative characteristic and has unnecessary impact on a person and his behaviour. It reduces mind efficiency and could lead to aggressive behaviour and the negative status of the person. According to specialists, anxiety could serve as stimulating increase in activity as well as foretelling risks. However, in most cases it creates the feeling of helplessness and lack of self-confidence.

Anxiety as situational phenomena is a relatively easy subject to correction. That could be done by different psychotherapy methods and defensive mechanisms. As for anxiousness, it is more of a

personal trait and harder one to change. For that one needs good observation, right assessment and identifying the root causes.

### **Types of Assessment Methods**

At the selective stage of the survey by us were reviewed three directions of personality assessment:

#### **1. Interview as a method of assessment**

Interview is the old one and widely used method of getting information about people. During the interview, the personologist gets information from the respondent by asking questions and receiving answers. Directly between the interviewer and the respondent is held a dialogue to achieve a certain goal.

The form of interviewing itself depends on the specific topic and purpose of the study. Despite its diversity, interview can be divided into two main categories: structured and unstructured. Questions in the first type of interview are precisely formulated and sorted by a certain sequence. The structured interview scheme is illustrated in the order of pre-established questions where it is easy to notice that the most personal and endangered questions are asked at the end. The essence of the strategy is to build confidence toward the interviewer at the beginning of the interview by asking general and innocent questions to get more intimate information.

In the unstructured interviews, on the contrary, the questions are built so that the respondents have some freedom in answers. The respondent chooses himself what he / she wants to answer the questions. On the other hand, the interviewer may refuse the pre-planned practice of the survey, if he/she thinks it does not provide useful information and chooses another direction of the conversation. In comparison with the structured interview, unstructured gives an opportunity to the personologist to make respondent's thoughts and fillings sensing more flexible in the context of received answers.

#### **Self-report method**

Not a single work, which is devoted to assessing individual differences, will be complete without reviewing the results obtained through the self-report questionnaires. In fact, the questionnaires are used more widely than any other form of personality assessment. In these types of studies test is offered in the written form to answer questions relating to their character peculiarities, values, attitudes, motives, feelings, interests and skills.

The term "self-report" in this case is used with the meaning of any information that a person directly informs us by answering the particular question about himself / herself or by selecting one of the provisions, in the conditions of a limited number of options (e.g. yes, no, I do not know, sometimes).

The self-report questionnaires characteristic feature is that the answers are pre-given. The respondent should choose the answers "correct", "is not correct", "agree", "disagree" or make a choice from other similar alternatives.

Standardization of the evaluation procedures minimizes the personal impact of the assessors. The self-report questionnaires differ from each other by the number of personal characteristics which

are measured at the same time. Tests, that are created to evaluate one of the individual signs (single-dimensional tests), are usually created and used to evaluate any specific aspect of the person. After the test, the researchers are checking whether they are distinguished with low and high scores. Who have low and high scores on the parameter, as well as with the behavioural characteristics and even with other parameters which are also proven by self-assessment methods. This methodology implies that the measurable personality sign is equally in every person. That means that any individual participating in the research can get high, medium or low grades, and the test assessment will be equally important because it reflects the individual peculiarities of each of them.

Examples of single-dimensional tests are the personal and situational anxiety questionnaire of Spielberger, which was used by us as a research tool. There are also many questionnaires based on the self-report which measure several personal characteristics together. The advantage of multidimensional tests is that they allow us to get more complete idea about the personality.

Assessment of individual differences is an important aspect of personology. Methods based on self-report, which are mainly represented as questionnaires, take a special place in accomplishing this task. The main reason for this is that through self-report tests it is possible to get a more complete and systematic information about a person than it can be achieved with irregular reports. In this case the experimenter's personal predisposition or theoretical bias is compensated by the objectivity of counting the results. In addition, with these tests relatively less prepared person will be able to work. Self-report methods are more credible than other methods (e.g. projective and similar tests) and this we can consider as a big advantage of them. Finally, through the multidimensional questionnaires, it is possible to measure several personal signs / characteristics at the same time.

Thus, on the basis of the analysis of the methods reviewed by us, by examining work stress-related orientation research results and in order to verify the hypothesis put forward by us in the research, we have selected so called self-report method. In particular, Ch.D. Spielberger's anxiety methodology of differentiated research which fully complies with the above-mentioned criteria.

The aim of the survey was to assess the quality of the staff anxiety and to carry out correlation and comparative analysis between the level of job satisfaction and the survey results of anxiety.

The survey was conducted in the specific organization where a high rate of staff satisfaction was observed according to the internal survey conducted in 2018.

Employees' diagnosis was done with reactive and personal anxiety test – questionnaires. Their filling was carried out by the employees of the above-mentioned organization with the highest level of credibility and confidentiality.

At the initial stage of the research self-assessment test-questionnaire, which consists of two parts from the reactive anxiety test (RT, № 1-20) and personal anxiety test (PT, 21-40), was distributed to 250 employees.

Table # 17. RT – Reactive Anxiety Questionnaire

**State trait anxiety inventory Form Y-1**

Self-evaluation questionnaire	STAI Form Y-1			
	1	2	3	4
1. I feel calm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I feel secure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I am tense	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I feel strained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I feel at ease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I feel upset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I am presently worrying over possible misfortunes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I feel satisfied	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I feel frightened	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I feel comfortable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I feel self-confident	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I feel nervous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I am jittery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I feel indecisive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I am relaxed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I feel content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I am worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I feel confused	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I feel steady	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I feel pleasant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1: Not at all, 2: Somewhat, 3: Moderately so, 4: Very much so

Table # 18. PT Personal Anxiety Questionnaire:

State trait anxiety inventory Form Y-2				
Self-evaluation questionnaire	STAI Form Y-2			
	1	2	3	4
21. I feel pleasant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I feel nervous and restless	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I feel satisfied with myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I wish I could be as happy as others seem to be	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. I feel like a failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. I feel rested	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. I am "calm, cool, and collected"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. I feel that difficulties are piling up so that I cannot overcome them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. I worry too much over something that really doesn't matter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. I am happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. I have disturbing thoughts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. I lack self-confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. I feel secure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. I make decisions easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. I feel inadequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. I am content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. Some unimportant thought runs through my mind and bothers me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. I take disappointments so keenly that I can't put them out of my mind	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. I am a steady person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. I get in a state of tension or turmoil as I think over my recent concerns and interests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1: Almost never, 2: Sometimes, 3: Often, 4: Almost always				

At the next stage each finished test was individually processed and the final data of reactive anxiety (RT) as well as personal anxiety (T) was determined

Reactive anxiety was processed with the data of the first questionnaire with the formula:  $RT = \Sigma 1 - \Sigma 2 + 50$

where

$\Sigma 1$  - is 3, 4, 6, 7, 9, 13, 14, 17, 18 total sum of the concept indicators;

$\Sigma 2$  - is 1, 2, 5, 8, 10, 11, 15, 19, 20 total sum of the concept indicators;

Personal anxiety level/indicator was processed with the data of the first questionnaire with the following formula  $PT = \Sigma 1 - \Sigma 2 + 35$ ,

where

$\Sigma 1$  - is 22, 23, 24, 25, 28, 29, 31, 32, 34, 35, 37, 38, 40 total sum of the concept indicators;

$\Sigma 2$  - is 21, 26, 27, 30, 33, 36, 39 total sum of the concept indicators;

The research showed that

Interpretation of the results would be according to the following system:

- Low anxiety below 30
- 31-45 medium anxiety
- 46 or more – high anxiety

Diagram #1. Reactive Treating (Anxiety)

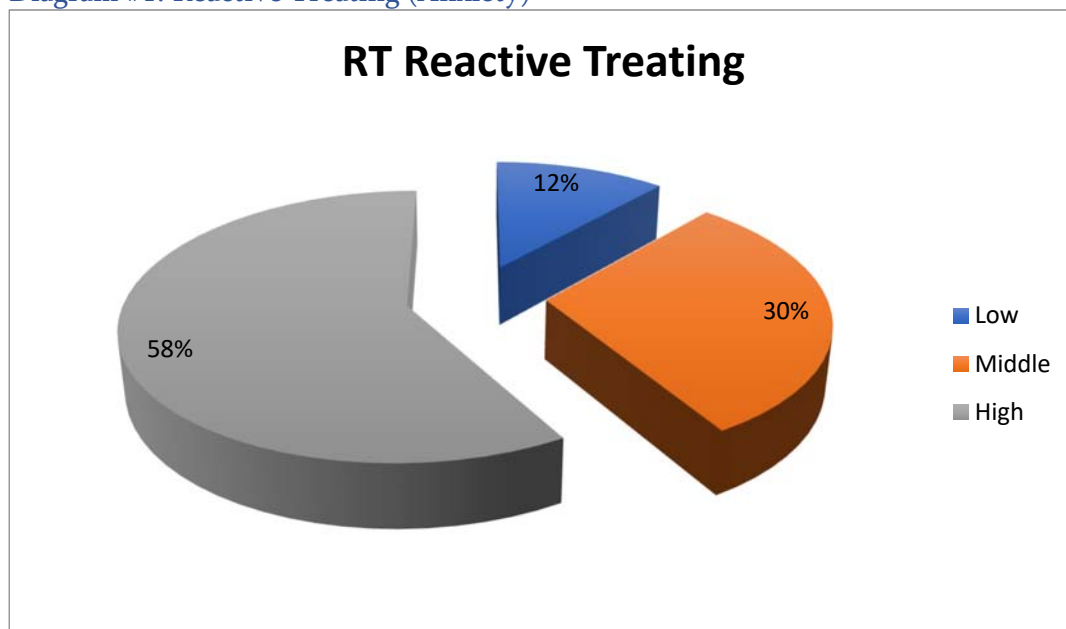
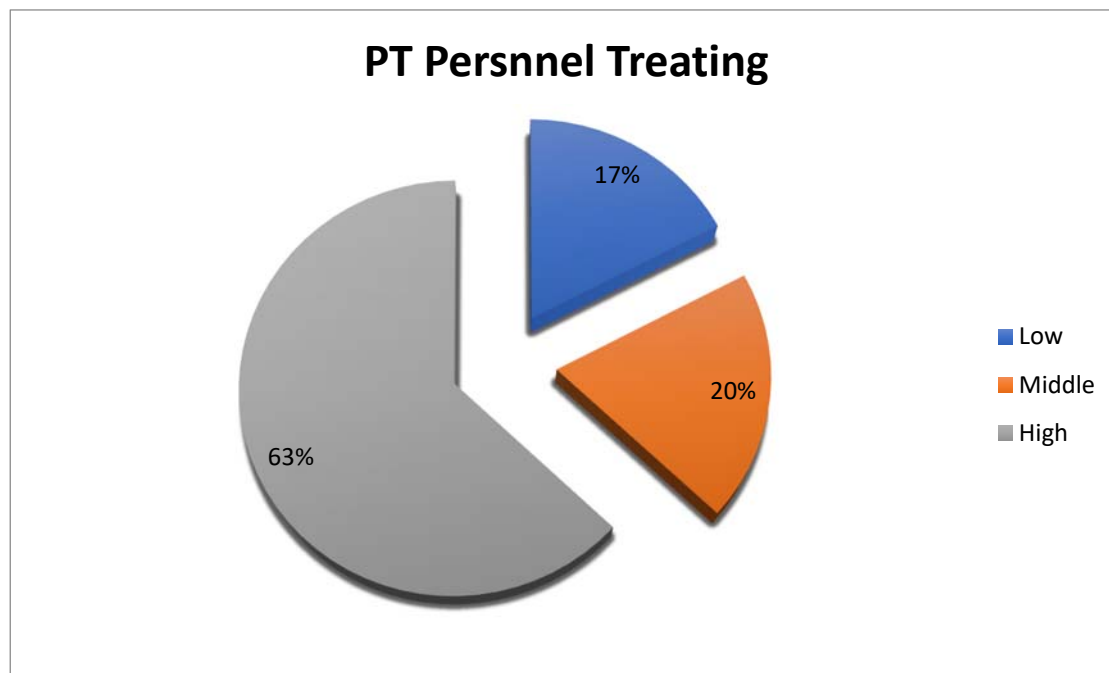




Diagram #2. Personal Treating (Anxiety)



### Results and implications

Our research once again underlined that in big companies reactive and personal anxiety of the employees is not suitable to work satisfaction level that on the one hand could be because of the careful attitude of employees towards organizational research and on the other – sense of insecurity and because of that avoiding real evaluation.

Organizations which perform these sorts of researches actually depend on the readiness of respondents to give exact information about themselves. The problem is that in many cases questionnaires include questions that give the possibility to respondents to misleading the researchers. Intended lies are most anticipated when respondent believes that he/she would gain something from the answer. E.g. respondent might lie about the question on a vacant position and answer positively to the questions that in his mind might generate the position and opinion about himself/herself.

In contrast with these researches, formal evaluation of an employee not only gives important and accurate information on personal differences, but also clearly and visibly provides that to employees.

### References:

Beridze R. (2011). Management of Human resurses, Georgia, Tbilisi, <http://www.bpa.ge/book/book33.pdf> (Last seen 25.04.2019)

Karasek R. (2007). Job Demand Control Model <https://www.toolshero.com/stress-management/job-demand-control-model/> (26.04.2019)

Management project (2008). The impact of the job stress of employees satisfactions and motivation. Tbilisi, Georgia

Paul J. Rosch, M.D., (1998). Reminiscences of Hans Selye, and the Birth of “Stress”, *Stress Medicine*, Vol.14 (1-6)

Robbins S.P., Judge T.A. (2018). Essentials of Organisational Behaviour, 14 nd edition, New York, Pearson

Selye H.(1974). Stress Without Distress, Publisher Philadelphia; New York,J.B. Lippincott

Shubladze G., Mgebrishvili B., Wowkauri F., (2008). Fundamentals of Management, Georgia, Tbilisi