

PSYCHOSOCIAL WORK ENVIRONMENT RESEARCH ON THE SITUATION IN LITHUANIAN COMPANIES

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Abstract. Work Environment Assessment of psychosocial factors in practice quite a complex operation that requires specialized knowledge and expertise. The difficulty arises because many of the concepts of psychosocial factors and uncertainties of these factors depend on the employee's subjective perception of the environment. Identification of these factors is necessary in order to keep workers mental health and to increase organizations economic efficiency. For psychosocial risk factors assessment are using a variety of questionnaires, for example, evaluation of stress at work questionnaire, the Copenhagen questionnaire, burnout syndrome questionnaire, the questionnaire of motivation at work, and others. Their individual goals are slightly different, but at the same time is the same – to set the stress level in the work environment. Although such research is carried out in the world long enough, Lithuania, this practice is taking its first steps. This work deals with the investigation, which took place in the presence of 25 Lithuanian companies 331 respondents. Subjects were presented four questionnaires, which revealed the existence of workplace psychosocial risk factors. It appears that the most stressful factor is the employee's age and experience. This study revealed, that woman more than men suffer stress at work, as workers without higher education are more exposed to stress. It was also noted that the examination of the different questionnaires revealed the same problems that have the greatest impact on workers' mental well-being - the pace of work, or a rush job, and employee opinion significance or influence at work. Observed and reported the problem, namely the emotional stress resulting from fatigue. The burnout syndrome menace 32.5 % of employees, 3.2 % – already have burnout syndrome. Just the quarter of respondents do not need worry about burnout syndrome, 35.1 % – should pay attention to mental health. It also shows the reasons respondent's most stimulating work with. It was found that most surveyed firms in Lithuania to motivate employees to their work carried out by the content, only then - the financial motivation and success at work. The career perspectives are the weakest motivator in the surveyed companies.

Keywords: psychosocial factors, stress and burnout syndrome, motivation, questionnaire, allostasis, mental health, stress / strain.

1. Introduction

The psychosocial factors in the working environment of Lithuanian companies are relatively new area of research, although the Institute of Hygiene Research Centre of Occupational Medicine carried out since 1994. Occupational risk part of the psychosocial risk factors in 2005 became the only confirmed the study of psychosocial risk factors for procedural instructions, which created a legal framework to assess these factors. For this type of risk, as well as other workplace exposures, the requirement to carry out risk assessments and preventive measures is applied.

According to the European Agency for Safety and Health at Work (EASHW 2010), in the world of work are more important changes that affect worker's health and safety. With the planning, organization and management of working, as well as economic and social context of work related risk factors increase stress and can seriously impair the mental and physical health. In 2005 more than

20% of workers in EU-25 feared that their health is at risk of work-related stress. In 2002 EU-15 annual economic costs of work-related stress were assessed at EUR 20 billion (EASHW 2007).

With regard to psychosocial factors on health, stress concept is inevitable. Stress - that an intermediate constitutional state between the risks factor status and the subsequent health effects. The author of stress theory is Hans Selye, who in 1936 published his first scientific article on this topic and outlined the stress period (Canadian Institute... 2000).

Stress as a phenomenon composed of reflexes of the Stone Age, when human organism is preparing to fight or to scuttle away, i.e., for physical activity. Stress has been required for some of the Stone Age man was confronted with a gang of wolves, but today's workers must adapt to change, monotonous tasks or intimidation and large customers' needs. Stress is understood as the human organism's reaction to the threat, which increases the demand for energy, the liver releases glucose with fats and pro-

teins secreted by the emission of endorphins, a racing heart beat and respiration, blood pressure rises, muscles tense, sweat abundantly (Levi 2002).

However, Oakley Ray (2004) from the University of Vanderbilt argues that new facts are known about the associated health homeostatic scheme was proposed several new terms. McEwen (2002) introduced the new concepts, allostasis and allostatic load. The Lithuanian language translation appeared in the only journal of Cardiology Practice, which Bagdzevičiūtė (2007) explains that the essence of allostatic exercise is the gradual accumulation of long-term adverse effects, and allostasis the body's ability to activate or suppress vital functions. Allostatic load is characterized by principle "Use or get rid of", which takes place in the human organism to maintain balance.

Animal models showed that the low stress leads to prolonged survival. Perhaps, in order to prevent morbidity and should have a low stress or stress and to strengthen the adaptive processes. You can cite F. Nietzsche: "What does not kill me, makes me stronger".

According to Ray (2004) the historical and well-known concept of stress is replaced by a modern and better defining the term "allostatic load". However, this does not alter the fundamental question - what causes it? There are two main components.

First, the environmental requirements of the individual (real or intuit only), which may be only a few or many, like - simple and complex. The second component is the pressure integrity of the individual skills (resources), which also may be few or numerous.

Stress/allostatic load occurs when an individual capacity and environmental requirements are asymmetric, and the individual believes that its ability can to meet those requirements. It must be stressed that the key is not available to individuals or do not have the skills and the abilities that they believe should or should not. Despite some obvious physical environmental situations such as natural disasters, an important determinant of living conditions is a factor in understanding the situation. By Hans Selye, the man who drew global attention to the stress, said: "It's not what happens to you and how you accept it" (Justine 1994).

Ability to maintain a balance between individual integrity and environmental capacity creates a psychological harmony or psychological instability. There are many components that make up the integrity of capacity problems, but Ray (2004) identifies only four. It is very important is the fact that these skills are learned, not innate. These processes can not carry out reflexively, automatically, but requires conscious effort.

Tabanelli (2008) and other scientists from the University of Bologna in Italy has carried out a systematic literature / online sources, analysis and synthesis, to find ways to make work-related psychosocial factors for the establishment and structuring them.

Overall, they found in the ways of the 33 (26 questionnaires, 7 monitoring techniques), with the majority (11 questionnaires, 5 observation techniques) have been associated with public institutions. Access to information

depends on the individual approach is very different. However, the filing of such data is likely to facilitate investigators trying to assess the multiple stressors of work for the individual, group and / or the entire organization at the level of work.

The aim of this - to introduce the research methodology used and discuss the research carried out in Lithuanian companies, the results of the identification of psychosocial risk factors that would cause the greatest concern about the safety and health at work.

2. Research Methods

For psychosocial factors assessment in industrial companies were used four different questionnaires.

The first is a work-related stress assessment questionnaire developed by the Occupational Health Centre of Hygiene Institute (Pajarskienė and Jankauskas 1998), and by Kaminskas (2010) was supplemented by questions, EU named as the new and emerging risks. This questionnaire consists of 25 questions, which are grouped according to research aspects of regulated factors (exposure potential and social relations), the perceived environment (job characteristics and strain factors, mental demands of work) as well as stress and satisfaction (stress and health, job satisfaction and life, stressful reactions). This questionnaire has added seven questions designed to identify new emerging psychosocial factors.

Second was used the burnout syndrome questionnaire. The burnout syndrome is a complex phenomenon in the last decade, quite a lot of attention of researchers was paid from different countries.

In 1974 for the first time this concept was presented by the German psychoanalyst Herbert J. Freudenberger, in order to describe the employees providing support to persons with mental and physical exhaustion. Subsequently, these matters were dealt with social psychology. C Maslach (1978) from the University of Berkeley (California), a number of studies conducted in Europe (Vollmer 1998). Subjects were distributed to 15 questions burnout syndrome in a questionnaire containing possible answers given five-point Likert scale.

Third was used Copenhagen Questionnaire (COPSOQ II 2007). This questionnaire has developed and perfected in Copenhagen (Denmark) the National Environmental Centre. The first questionnaire was based on the 1997 research. The most recent questionnaire was very different from the first, because these days the questionnaire includes a significant number of areas.

Fourth work motivation questionnaire. This questionnaire is based on the F. I. Herzberg two-factor theory of motivation, which was first published in 1968 article "One More Time: How do you motivate Employees?" and to this day is one of the most desirable of publications at Harvard Business Review It was the pair in order to see what most motivates employees in their work. Distinguish eight reasons: financial, recognition and responsibility, responsibility, relationship with the supervisor, career, achievements, job content, and cooperation.

3. Material and methods of statistical analysis

The study of employees of various companies was the four anonymous questionnaires and only one of them, which are work-related stress assessment questionnaire, was heading for the stratification of data collected. 14 company employees completed all four questionnaires, 11 company employees - three questionnaires (kept no motivation at work here). Questionnaires vary the number of questions and problems, as well as the number of respondents to the survey (Table 1).

Table 1. The amount of questions and the respondents of different questionnaires

Name of the questionnaire	Question number	The number of respondents (number of enterprises surveyed)
Work-related stress assessment questionnaire	32	309 (23)
Copenhagen Questionnaire (COPSOQ II, 2007)	23	331 (25)
The burnout syndrome questionnaire	15	316 (24)
Work Motivation Questionnaire	56 (28 pair)	201 (14)

As already mentioned, only in one questionnaire was the stratification of data collection issues. According to the author performed stratification analysis of the data, the age distribution of respondents presented in Figure 1.

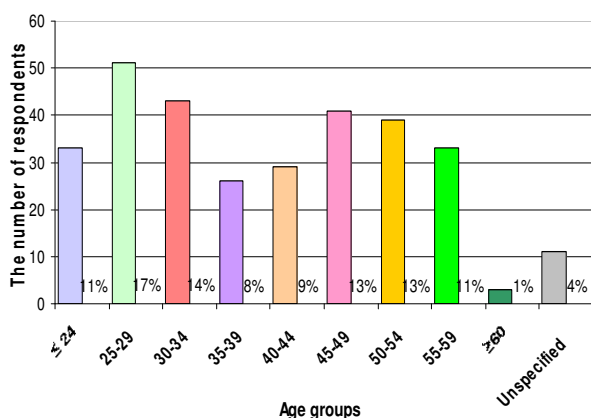


Fig 1. Distribution of subjects by age groups

Table 2 presents the distribution of respondents by sex, marital status and education. The number of respondents by sex with about an equal (50% women and 45%

for men (5% did not sex)), according to marital status - were mostly married (married) people (53%) by education level - mostly workers who have acquired secondary education (43%). A similar number (40%) graduated from college. University education is 24% of the participating employees. Each of these groups was people who did not provide the data.

Table 2. Stratified data of respondents by the questionnaire „Assessment of stress at work“

Personal Data	Number of respondents
Sex	
Man	138 (45 %)
Woman	156 (50 %)
Unspecified	15 (5 %)
Marital Status	
Single (unmarried)	83 (27 %)
Married (married)	164 (53 %)
Separated	38 (12 %)
Widower	16 (5 %)
Unspecified	8 (3 %)
Education	
Incomplete secondary	4 (1 %)
Secondary	133 (43 %)
Superior School	56 (18 %)
Higher non-university	36 (12 %)
Higher university	74 (24 %)
Unspecified	6 (2 %)

After collecting the data stratification, the significance of averages was carried out comparison of the various sections that describe the mean score was significantly different in age, sex, marital status and education. Statistical analysis was performed using the collection and analysis program for MS Excel and Minitab 15th. Quantitative comparison of the rates was made by the two independent sample Student's (t) criteria of 95% confidence interval. Checking the statistical assumptions used to rate the significance of $p < 0.05$ (significant).

4. Results

For psychosocial factors in the working environment as a key assessment tool has been selected advanced questionnaire, which, like the original version was known as work-related stress assessment questionnaire (Urnikytė and Kaminskas 2010). The respondents participated in the survey were divided by age into two groups - employees aged to 40 years and employees who are 40 years and older. It was found that employees to 40 years of age suffer more stress due to lack of job clarity, low self-assessment of competence of the work (score 2.1), less job satisfaction (score 2.4). They are also more than a group of senior staff psychologically negative impact on

overtime (score 2.7) and other people (score 2.6). For those who are 40 years and older suffer from stress on relations with colleagues (score 2.4), the general state of health (score 2.6), employment contracts (score 2.4), there is uncertainty (score 2.8) and the elderly (score 2.2), or reduced access to training (score 2.6).

Also was investigated which issues are statistically significant by sex. Women more than men feel the stress on relations with colleagues (score 2.5), for rush (score 3.6). They are also more likely than men have trouble accumulating (score 2.6), in preference concern for the elderly (score 1.9) and have difficulty maintaining a private and work life balance (score 3.1).

The obtained data were also grouped the respondents into two groups according to marital status in order to find out whether it affects their suffer stress. The study showed that there is only one issue on which more employees experiencing loneliness, feeling of loneliness that is felt (living alone score is 2.2, and married – 1.9), which may affect the employee’s overall mental state.

Education is also affected by employees’ stress at work. It appeared that employees without higher education is concerned, their views on the taking account of your opinion (score 3.2), experiencing physical stress (score 2.8) and experiencing for the senior age (score 2.0). However, employees with higher education feel less job satisfaction (score 2.5) (Figure 2).

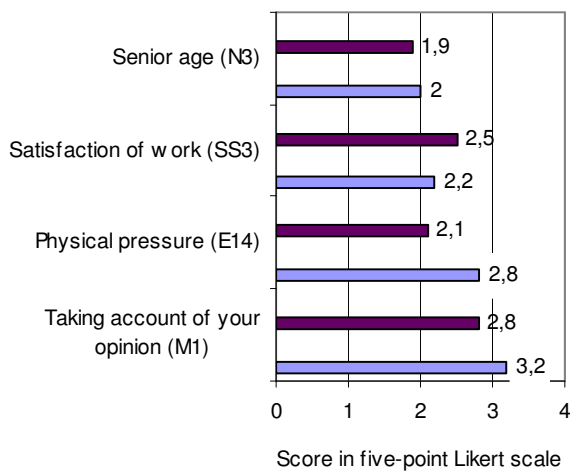


Fig 2. Statistically significant questions (with higher education and without higher education)

After detailed analysis of the responses to work-related stress assessment questionnaire of all respondents (Figure 6) showed that the most intense rush of work and the significance of the opinion factors (score 3.35), on the second place are variety of tasks (score 3.0) on the third place mental pressure, physical pressure and fatigue scores are the same and equal to 2.8. How much less negative effect on employees feel the intense work factors, but they exceed the value of 2.5 points, such as stress, satisfaction of life and hard periods score was 2.65, irritation and anxiety score 2.55.

The research carried out by assistance of work-related stress assessment questionnaire has revealed important business activity for which the employer should focus on the effect that the company could increase efficiency and improve working conditions for health and safety. First, the employer should be the organization for addressing issues related to the unjustified rush and to provide employees to express their views of working life issues. Second, the employer should be more interested in the needs of workers, i.e., what causes stress for them, what annoys them and try to create a working environment that promotes satisfaction with working life.

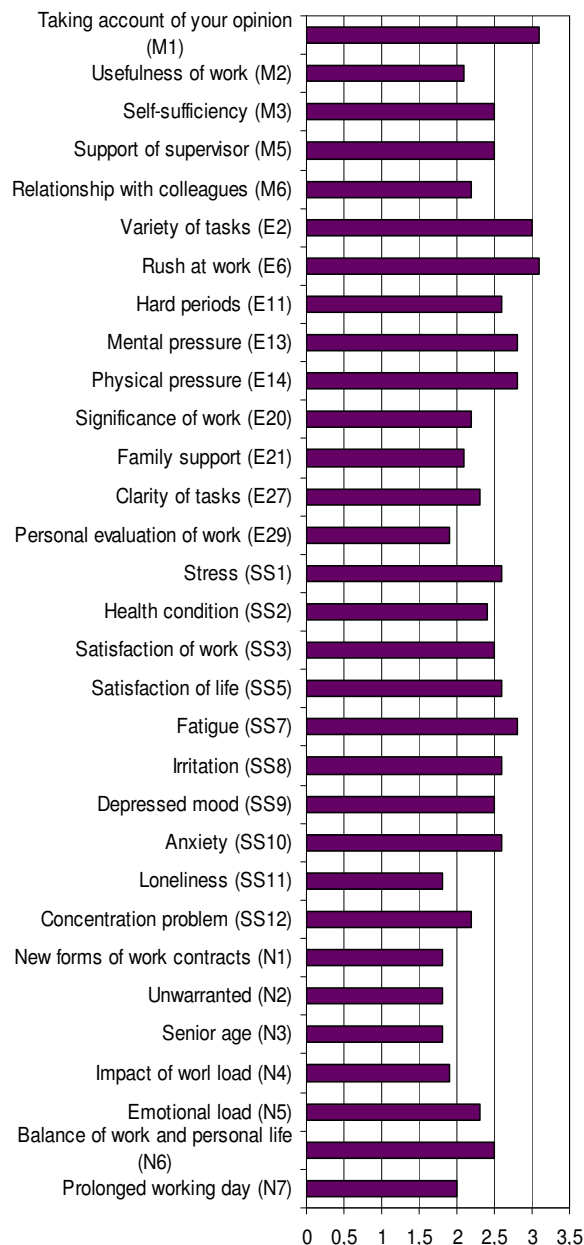


Fig 3. Stress at work intensity according to the questionnaire „Work-related stress assessment“

Alternatively, firms in terms of psychosocial factors were applied to study in Copenhagen Questionnaire (COPSOQ II, 2007). In Figure 4 are presented the ques-

tions and their responses averages in the 8-point scale. Research shows that most of the scores of answers assessed the pace of work and possession of personal influence at work (in averages 4.6). Questions about the pace of work and personal impact on employment when were applied work-related stress assessment questionnaire and the Copenhagen questionnaire is to obtain maximum intensity points. According the Copenhagen questionnaire the pace of work the average score was 4.5 and personal impact on employment score was 4.7.

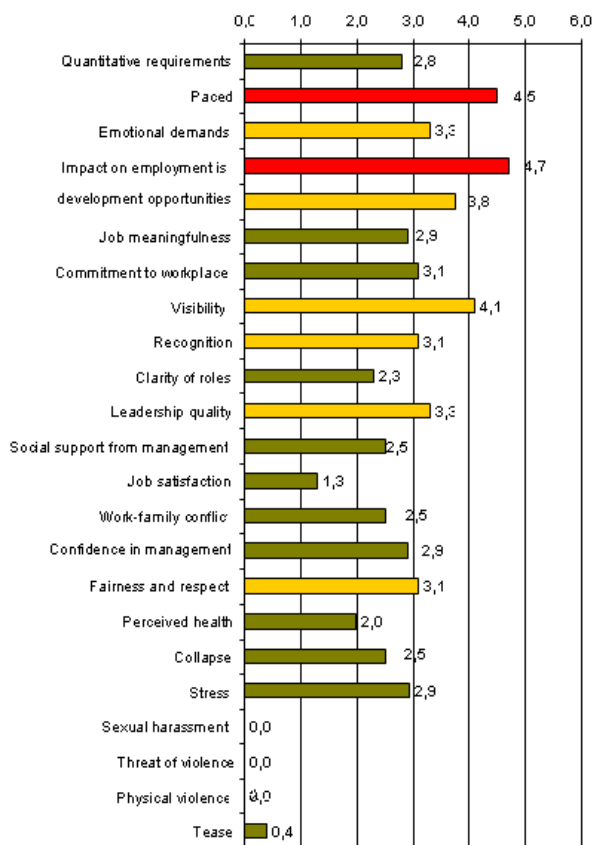


Fig 4. Copenhagen questionnaire responses averages

In addition to the above questions, as well as show a high level of stress at work raising from visibility questions about the (score 4,1), development opportunities (score 3,8), the emotional requirements, the quality of leadership (score 3,3), fairness and respect and recognition (score 3, 1).

The burnout syndrome questionnaire was used in 24 enterprises for 316 respondents (see Table 1). The study applying this questionnaire aims - to estimate employee stress levels and warn him about impending danger. The surveys revealed that only a quarter of employees were not worth worrying about impending burnout at work. Every third employee should pay attention to his or her well-being and stress level at work. Also, every third employee already has a high-risk area, which calls for action to reduce stress levels. One in twenty workers have "blown"; and he needed immediate help.

By analysis of anonymous burnout syndrome questionnaire was discovered, that 25 % of respondents do not

need to worry about this syndrome, 38 % – need to pay attention, 34 % – at high risk of burnout and 3 % – already have burnout. In a situation where over 37% of workers suffering serious burnout risk, companies have to seek the leadership of psychology experts to develop and implement preventive measures.

In a study under the motivation at work questionnaire data were collected from 201 employees of 14 companies. Work motivation questionnaire helped to identify the reasons for employees is mainly driven by work (Figure 5). As it turned out the investigation, most work in promoting the job content (21.3), second place - financial reasons (19.2) and the employee's achievement (18.6). Employees are less motivated by cooperation (17.9), responsibility/liability (17.9), recognition (16.1) and the relationship with manager (16.3). They are the least motivated career (14.4).

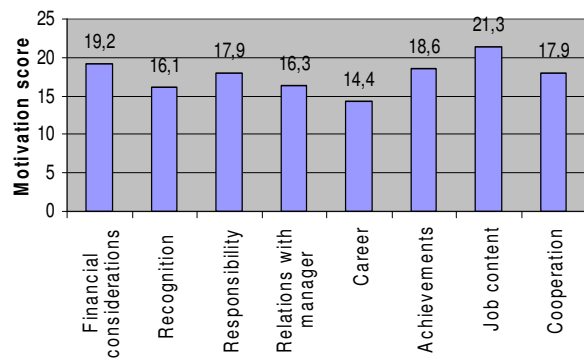


Fig 5. The factors, influencing workers' motivation

5. Conclusions

1. The investigation by Work-Related Stress Assessment Questionnaire for 309 respondents from 23 enterprises revealed, that stress at work affects women more than men, as workers without higher education than with high education. For employees under 40 years of age stress is caused by one group of factors, in older age - 40 years or more - another group of factors.
2. Comparing Work-Related Stress Assessment Questionnaire and Copenhagen Questionnaire results showed that the main factors that cause stress are the same – pace, rush at work, impact on employment, and the significance of the opinion factors.
3. Only a quarter of employees are eligible for a quiet impending burnout at work. Third employees should pay attention to their well-being of the stress levels at work. Third employee already has a high-risk area. 1 / 11 part of the workforce is already "blown" and they need to take steps to improve their mental health.
4. According Work Motivation Questionnaire data from 201 respondents (14 companies), and performed this data analysis was determined, that the factors most motivating employees to perform their duties are as follows: in the first place was the work content, in the second place - the employee's achievements and finan-

cial considerations. It was also found that respondents at least motivated by career opportunities.

5. In a situation when over 37 % of workers suffering serious burnout risk, companies have to seek the leadership of psychology experts to develop and implement preventive measures.

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