

WORK ENVIRONMENT ASSESSMENT IN THE ASPECT OF WORK PSYCHOLOGY PROCESSES

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Abstract. Identifying and minimising/preventing the work environment risk factor means avoiding the emerging of extreme or unpredictable situations, ensuring employees' health or feeling well. The employees in their work environment may be threatened not only by technical and physical, but also by psychological conditions on the basis of which there are problems of psychosocial origin. The fact that the number of stress related illnesses is rising indicates that this is an important problem. The aim of this study was to research in the work environment assessment in the aspect of the work psychology processes in enterprises/organisations. The methodological basis of the research is the studies of publications pertaining to the theme of the research, non-structured observations and the analysis of the reports written by work safety specialists (submitted by e-mail) on the work environment assessment in the aspect of the work psychological processes. The analysis was carried out using the software programme *Weft QDA*. The obtained results show that risk (physical, chemical, psychological) assessment is carried out in enterprises, but the respondents acknowledge that it is usually carried out superficially and it does not reflect the actual situation.

Keywords: psycho-emotional risk factors, stress, work environment assessment.

Introduction

In Latvia the issues of work environment assessment in the aspect of the work psychology processes are especially topical, because the research on "work conditions and risks in Latvia" [1] carried out in 2006 indicates that the psycho-emotional risk factors (lack of time, work with customers, bad relationships with the management/bosses and colleagues, night shifts, working overtime, etc.) as well as organisational and ergonomic risk factors are the most often encountered risk factors in the work environment.

The psycho-emotional harmful factors (the psycho-emotional climate at the workplace) are the factors of work organisation and management, connected with social and environmental conditions. They can cause psychological, social and physical harm to the employees [2]. The research shows that an ergonomically inappropriate workplace [3] and long work hours are the cause of many health problems also among students. American psychologist Robert Karasek [4] and Swedish professor Tores Theorells [5] had conducted research over the period of several years on the psycho-emotional harmful risk factors (stress and its impact on people's health, depression caused by big workload) in the work environment.

Researchers point out that the employees' big work load and inability to influence the working conditions lead to depression, cardiovascular diseases, tiredness (emotional burnout), as a result of which an increase in the rate of mortality is observed. The increasing number of stress-related illnesses indicates the seriousness of the problem. It has been acknowledged that almost a third of the population in the EU countries suffer from stress at work. In the United States three-quarters of employees believe that "now there is more stress than ever before", one employee out of four feels that work is a major source of stress in his/her life, but one out of three has considered the possibility of quitting his/her job. It has been estimated in Australia that stress is "responsible" for an average loss of 3.2 working days for each employee, while a healthy employee is even several times more productive and this employee is less often ill [6]. The number of accidents and occupational diseases in a safe work environment decreases, the organisational culture improves and employees work productively. The decrease of stress and burnout syndrome may be useful in W.Schmid's ideas on the philosophy of the art of life – the art of life is nothing else but a constant life and self creation. The material is life, but art is the creation process, that means consciously directed life. Serenity is attributed to a lasting life style, a concept which is unjustifiably forgotten in modernism. It stems from moderation in pleasure and "life in balance", the right proportion between "too much" and "too little" in all things, the harmony of different components of the body, soul and spirit. In this process a "symmetrical life" is formed where the good state of mind prevails through which it is possible to experience serenity and avoid a bad mood and sullenness, which characterise the psychosocial work environment risk factors.

A bad mood is prevented basing on the idea that nothing happens smoothly, that nothing functions without problems. As an example one can mention both the working tools and the people we have to work and live with – they are the way they are created. As noted by W. Schmidt, that who is used to accepting other people's uniqueness and idiosyncrasies by means of ascetic exercises, gains a good mood instead of a sullen one.

Serenity is not joyfulness, but the expression of a fulfilled life, which is filled with all the fullness of life and its contrast and controversy which enrich experience, expand identity and form its life's symmetry. "It is not locking oneself into some finality but the openness to the dimension of infinity, mental liberation from the heaviness of earth, so that it could be possible to carry heavy loads again and with ease, not ignoring the presence of these loads" [8].

Materials and methods

The current research is based on long-term unstructured observations, reflected in previous publications [3; 9] as well as the respondents' reports on the assessment of the work environment in the aspect of work psychological processes. These reports were electronically submitted by work safety specialists. The text analysis of the reports was carried out using the software programme Weft QDA. The respondents were 30 LUA European Qualification Framework (EQF) 6th level professional study programme "Work Protection and Safety" students within the reports of the professional practice "Pedagogy and Work Psychology". With the help of the software programme the corresponding passages were found in the submitted reports, and content analysis of the texts was carried out for the assessment of the work environment risk factors. After analysing the respondents' works and studying the sources of theoretical literature, the following categories were formulated.

Codes	Categories
Nov/izv	Assessment of the work environment risks or assessment of psycho-emotional risk factors
neiev	The reasons for non-observance of work safety regulations
slodz	Psychological overload in the work environment

Results and discussion

According to the authors' observations and discussions with the work safety specialists it was established that not always psycho-emotional risk factors are assessed in the work environment in Latvia and the employees do not want to speak about the problems caused by stress. The Cabinet Regulation No 660 "Procedure for internal supervision of work environment" of October 2, 2007 sets the minimum requirements for the assessment of psycho-emotional risk factors:

- Working time (working time organisation – night work, shift work, unplanned overtime work, irregular shifts, duration of work shifts).
- Deficiency of working time (the work to be performed involves extra effort – piecework, working in a group or alone, working pace, rush duration).
- Monotonous work (nature and amount of work that is often repeated; or the work is monotonous and (or) it requires constant attention; the possibilities to influence the work to be performed).
- Inability to influence the work process (small or insufficient possibilities for employees to participate in the planning of their work – the possibilities to organise their work).
- Work in isolation (continuously working alone or in isolation from others – risks of accidents and violence, lack of communication, support from colleagues and lack of information).
- An increased responsibility, making important decisions (responsibility level, how often important decisions are to be made, how large the circle of people is who are influenced by the decision, how serious and extensive the consequences are in case of a mistake).
- Strained psychological atmosphere at work (unfavourable, tense relationships among the employees, unfavourable, tense relationships with the employer – lack of mutual support, psychological isolation, competitiveness, mobbing, bossing).
- Violence (physical attacks and sexual harassment from the employees, customers or other people are possible).

- Other psychological factors [10].

When analysing the content of the reports it is evident in Table 1 that the work safety specialists are informed about the assessment of psychosocial or psycho-emotional risk factors (they are assessed at enterprises), since it was mentioned in most of the reports (55.2 %) sent. The reasons for non-observance of work safety regulations (formally assessed, but not observed psycho-emotional risk factors) were mentioned by almost a third of the respondents (26.9 %). The opinion about the psychological overload was mentioned less often (17.8 %), because, according to the respondents' point of view: "people ignore these risk factors very often because they think that nothing bad will ever happen to them. Most employees are not aware of what it means and what the symptoms of the disease are. One can notice a physical trauma immediately, be it an abrasion, fracture, bleeding, etc. Psychological traumas will not be noticed so easily. They will possibly be noticed when it is too late. The assessment of these factors is complicated and time consuming."

Table 1

Opinion on non-observance of psychological work environment risk factors

Codes	Concepts	Number	%
Assessment	Assessment of work environment psychosocial or psycho-emotional risk factors	158	55.2
Non-observance	Reasons for non-observance of work safety regulations	77	26.9
Overload	Psychological overload in the work environment	51	17.8
Total		286	100

Several researchers point out [11] that psychological (psycho-emotional/psychosocial) risks can be defined as unfavourable social working conditions resulting from poor work planning, organisation or management, thus creating a negative psychological, physical and social influence including job related stress.

The main conclusions obtained from the respondents' reports are that "the employees think they are incapable to influence the decisions related to their work. Most often accidents happen not because of ignorance but because of deliberate ignorance of regulatory enactments." Summarising several respondents' viewpoints it can be concluded that there is documentation regarding the influence of psychological work environment risk factors on the employee's health, however the real situation shows that it is not fully taken into consideration in the work environment at the enterprises. The risk assessment is carried out very superficially and does not reflect the real situation.

The employers and employees are insufficiently educated and are not completely aware of the influence level of the psycho-emotional risk factors on health (it is difficult to measure the result). The respondents have noted – "If there are strained relationships among employees at a work place, the focus is removed from the work to be carried out, thus resulting in a fertile ground for accidents. The fact that there is a small number of employees, which is constant, is a beneficial factor for controlling psychological factors, therefore the work safety specialist can get acquainted with the employees over a longer period of time and identify the problem in due time." The respondents point out that there are professions where the employees face psychological work environment factors – the employees who work with customers and therefore they have to deal with strained situations, as well as teachers whose emotional condition to a great extent can be influenced, which could lead to a burnout syndrome. The basic causes are careless attitude towards health, rush, stress, unpredicted conditions and situations which cause traumas at workplaces (e.g., a slippery floor at a workplace after washing it, icy steps when freezing, etc.). According to respondents, psychosomatic disturbances were observed in the employees, but the managers consider this information confidential.

In the report of SLI (State Labour Inspectorate) over the year 2013 it was pointed out that the number of violations regarding the labour law had increased by 3.2 % compared to the year 2012. The employers had most often not observed the Labour Law provisions relating to employment contracts, i.e. incomplete formulation of the employment contract and employment without an employment contract, as well as requirements relating to work remuneration. The number of cases regarding

violation of work and rest time was 610 (18 % of the total violation number – a total of 13,658 violations detected) [12]. When analysing the psycho-emotional risk factors, the respondents pointed out the accidents which were caused by overload, inability to concentrate on definite things, sleep disorder, or just the opposite – too much of sleep as a result of psycho-emotional risk factors: “The company demands the employees to complete the tasks which cannot be performed at the required period of time due to different circumstances which are beyond their control, so the only thing the employer provides is a mandatory health examination every three years. Consequently, the employees’ health disorders are observed because of overload (inability to use holiday time due to redundancy). Due to the reduction of the staff the remaining employees feel uncertainty about staying in their positions, which creates additional stress.” The respondents pointed out that they do not observe the working time and the time for rest not because they do not know that it should be done, but because they do not want to. For instance, when the employee works at the computer he/she does not want to interrupt it and take breaks. Or even worse, the employee believes that the break from work means doing other things at the computer which is not really related to work performance, e.g., reading news on the Internet or visiting social network.”

The expert on external relations from the State Labour Inspectorate Uģis Kozlovskis emphasizes that “the society’s attitude to the observance of work safety regulations plays an important role in reducing accidents. It is the employee himself/herself who has to take care of his/her safety pursuant to the employer’s labour safety and protection requirements concerning the use of personal protective equipment. The employees have to avoid causing accidents and they have to evaluate their working conditions. The signature in the work safety register should not be a formality; it should be the acknowledgement of knowledge, skills and competence about the possible risks.” [13] The respondents express a similar view:

- “Accidents happen to those employees who have short length of service and who do not fully understand the seriousness of requirements and also those employees who have had long years of service and have experienced different situations in which due to lucky coincidences the non-observance of regulations has not resulted in an accident.”
- “Most employees know the regulatory enactments which have to be observed, but they do not want to do it, since there always is a reason which could be used as an excuse of non-observance. For instance, when working at the computer the employees know that they have to rest and do some exercises, but nobody does, using the excuse that in this case they will not manage to do the work on time and no overload related accident has been previously registered in the company (it could be explained by the fact that people do not understand such type of accidents and therefore do not support such registration).”
- “Very often the cause of the violation of these requirements is the employees’ attitude. Senior employees consider that they have done their work exactly that way, no other way and therefore they do not have to comply with the requirements and what for? The work should be done without hesitation, but not papers and instructions to be followed. This attitude may lead to accidents, since the use of personal protective equipment is also a waste of time, not providing any comfort, and other reasons/etc. One of the causes is that in society overall the economic and human resource losses caused by accidents and occupational diseases are not fully understood.”
- “As all the employees work at the computer, in most cases the violation of work safety regulations is caused by non-observance of the requirements related to taking work breaks, doing exercises during these breaks and using arm rests.”
- “The employees sign something, not knowing exactly what, because they are not given either introductory instructions or fire safety rules. Many employees are calculating individuals who calculate both time and money, thinking that nothing bad will ever happen to them. In the enterprises no rest breaks when working at the computer are observed (they are not observed because the requirements stipulated in the regulatory enactments are not known, since the work is strained enough – the main task being to perform the current work). There are employees who stay at work after working hours and also work from home. Overload related health disorders have been observed. I know that a doctor informed an employee about an overload at work. Even though the employer was also informed about it, the fact was

perceived with a certain amount of disbelief – it cannot be the case, since the work load is not so big to cause an overload affecting health. It is mainly explained by the fact that employees do not take time off for holidays, they just take some days off. Then there are also employees who choose 1 or 2 week holidays at once. No health problems were observed in these cases.”

- “In the enterprise or company the violation of work safety regulations takes place not because of ignorance, but simply because of non-observance, and also because of formal attitude. The main reason is - to save time and manage to do more work related tasks and thinking that nothing bad will happen. If the employees spend the whole day in the office, they observe the rest and lunch breaks. Unfortunately, half of the employees spend their rest and lunch breaks at the computer. There is the possibility to use a stationary exercise bicycle at the workplace, but it is not used.”

Some respondents pointed out work experience as one of the factors influencing the attitude: “Unfortunately the new employees watching the senior employees working take over the negative experience and as much as it is possible the PPE (personal protection equipment) is not used and wrong work methods are used which create additional possibilities for traumatism. Psycho-emotional risks are assessed with no follow up. Psychological overload is more typical of administration – over the period of 2 years three production managers were changed. The shift leaders acknowledged in private talks that they had sleep disorders. Many of them wake up at night thinking about work. The employees do not take threats to their health seriously, they do their work just to be paid, and health issues are secondary to them. There have been some accidents at the company and most often the causes being not knowing the requirements of regulatory enactments or ignoring them, but not the hazardous or harmful risk factors at workplace. The employees have chosen unsafe work methods that have resulted in an accident. There have not been any accidents related to overload but some health disorders have been observed, however they were temporary, repeating periodically, when the pace of work had to be increased.

Studies show that recovery from stress related diseases cost more than accidents at work [14]. Although the role of psychological risk factors has been underemphasized, scientists recognize that there is sufficient evidence of the adverse effects of various psychosocial stressors in the pathogenesis of cardiovascular diseases and recovery from them (the obtained research data from heart rehabilitation and exercise training programs prove that physical activities play an important role in the improvement of psychological risk factors, including depression, anxiety, hostility and total psychological stress, as well as stress-related mortality) [15].

Conclusions

1. The attitude of society to the observation of work safety and protection regulations plays a significant role in the decreasing of the influence of the psycho-emotional work environment risk factors.
2. In the conditions of Latvia it is very difficult for the work safety specialists to assess in practice the psycho-emotional work environment risk factors, since the employees are not accustomed to share psycho-emotional problems.
3. There is insufficient recognition of working time and adequate rest break planning observance within the context of psycho-emotional work environment risk factors.
4. It is necessary to update the research on the psycho-emotional work environment risk factors and training of the work safety specialists and personnel regarding this issue to state those factors in due time and minimise their impact.

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