

ANALYSIS OF CURRENT SITUATION AND PLAN FOR DEVELOPMENT OF E-LEARNING APPLICATION FOR STRESS PREVENTION OF ROAD TRANSPORT DRIVERS AND SME

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Abstract: Prevention of work stress is among the priorities of the European Commission as stated in the Health and Safety policy published in March 2002. The case of the road transport drivers (freights and passengers) is worthy to be considered separately, since their work accidents might affect not only their own health but also other people's - road traffic participants, service personnel, etc. Aim of this paper is to analyze current situation and to propose a methodological dossier of virtual learning environmental (VLE) for stress prevention activities of road transport drivers and SME on the base of achievements in areas such as e-learning and risk prevention. It is proposed the VLE to be composed of 6 learning modules: What is stress? Causes of stress (stress related hazards); Effects of stress; Stress risk assessment; Stress management; Prevention of work stress. The training content will be complemented with examples on Physical and Physiological exercises and techniques. There is short a description of VLE organization, as well.

1 INTRODUCTION

In 2008, major economic changes emerged in all EU countries, which concerned every actor of the economy in a negative sense. Stress is becoming a more and more important work-related risk, as new work organization is applied and as the economical situation is still complicated. Quantative and qualitative investigations of major stressors in the workplace are studied and recommendations for organization of labour in order to avoid them are made (Gaston and Phyllis). Prevention of work stress is among the priorities of the European Commission as stated in the Health and Safety policy published in March 2002.

Workers suffering from stress at work are more likely to be unhealthy, poorly motivated, less productive and more prone to suffer work-related illnesses and accidents at work (EU-OSH). The case of the road transport drivers (freights and passengers) worth to be considered separately, since their work accidents might affect not only their own health but also other people's - road traffic participants, service personnel, etc. The fact of other peoples' life depending on drivers' well-being

increases the necessity of preventing stress among the road transport drivers.

There are good examples for e-learning application for drivers' training, created by specialists in areas of transport science and e-learning pedagogy - CD, DVD or Internet based, web 2.0 included that can be changed and adapted according to needs of trainers and training centres (CT-TRANS and SAFE TRUCK). These examples encourage us to apply the same technology for driver training on stress prevention.

Aim of this paper is to analyze the current situation and to propose a methodological dossier of virtual learning environmental for stress prevention activities of road transport drivers and SME by e-learning.

2 PROBLEM DESCRIPTION

Stress is not necessarily a negative phenomenon. It is believed that certain types of stress are normal and necessary for the satisfactory completion of work. However, if stress is intense, prolonged or continuous, and if one is unable to cope with it, or if it is unbearable, this stress has a negative influence,

which sometimes leads to physical illness and mental disorders. The main sources of workplace stress are work demands, lack of control over one's job, change, conflicting roles, and interpersonal relations, lack of support at work and balance work and life. They exhaust human body, make it susceptible to external factors, cause an increase of the number of wrong decisions, etc. When the term "stress" is used in this code, it usually refers to negative, harmful forms of stress. So define the types of workplace stress are:

Positive stress is that which is normal and necessary for the performance of official duties satisfactorily.

Negative stress is one that is strong, continuous and prolonged and may lead to physical illness and mental disorders.

There are three main strategies for the prevention of workplace stress (European Foundation for the Improvement of Living and Working Conditions):

- Remove or modify the stress factors and reduce their adverse impacts on health and welfare of workers.
- Adapt changes in the work environment to the individual characteristics of workers.
- Increase individual resistance to stress through awareness and improving skills to cope with stress through training.

The first two strategies are aimed at the working environment, and the third - the personality.

The main activities at work are: change tasks and work environment, enter flexible work and rest, promotion of workers, improving social support from colleagues and managers, analysis of work roles and objectives, clear job description, weekly/monthly workshops, discussions on issues in the enterprise, harmonization of responsibilities and authority, monitor of workers, material stimulation etc.

There are several parties involved in road transportation and loading and unloading operations as: principal; the transport company that is contracted/subcontracted by the principal; the driver; the site, where the actual loading or unloading takes place; the operator who is physically carrying out the loading/unloading operations. Each party has its responsibilities.

The management of the site should ensure that operators have competences and have passed successfully all the training necessary to fulfil the legislative requirements and site requirements, in particular regarding the handling of dangerous goods. It must promote and maintain safety

awareness, particularly during product handling and ensure that loading / unloading operations are carried out under supervision, that cargo is secured according to the rules and accepted agreement, that that there is a procedure to report all near misses, incidents, loading/discharge problems and unsafe situations or conditions, including follow-up etc. The management have to gather and operate with a great amount of information to follow and predict the market needs.

Drivers should have competences and training according to Directive 2003/59/CE. Before driving off, they have to be ensuring that all systems, units and aggregates are normally working, secures, take rest breaks according to EU rules, return and complete all paper work etc. Drivers, who are involved in international transport operations, should be able to communicate in the local language of the loading/unloading site or in at least one of the following languages (English, French or German).

Competences, hazards and risks are determined for all parties in road transport: Multi-drop, Occasional, dangerous goods drivers, courier services, warehousemen, workshop staff, lorry loaders and Banksmen, fork-lift operatives. Since stress can not be measured directly with widespread measurement instruments, it is limited by indirect activities, namely, strict compliance with restrictions on drivers' hours, risk assessment and others. Thus, stress is mentioned only short in widespread training materials for drivers and important details are not mentioned. In case the first symptoms of stress are not noticed and health problems in physical and mental status of the worker occur medical care is called. So, the drivers and their managers, load operators should have broad general knowledge on the issues of stress and ways of its prevention.

Nowadays, e-learning provides flexible and cheap opportunities for providing information and specialized knowledge to the large groups of specialists. It provides opportunities for easy updating of training content, providing information by text, images, short and longer videos to large number of users at a time convenient for them, control of access to training and of knowledge etc. It is good by e-learning authorities and employers, in cooperation with the workers representatives to supply all employees, supervisors and managers with information on stress at work. This information should include:

- Nature and causes of stress in the workplace and activities to prevent the occurrence of such problems and the best methods for their reduction and elimination;

- Information on laws and regulations, including stress, which are general and specific to transport;
- Information about services available to help workers exposed to workplace stress, including assessment to rehabilitation, discussions, and experience exchange.

So, training in transport should be based on a series of policies and to ensure continuous knowledge according to specific needs. It should be ensured by the employer or together with workers, or by supervisors and managers.

There are needs organization of work to be improved for stress prevention. Working hours must be respected according to European directives. The timetable of work should be done efficiently, so employees to have time for family and other commitments. It should be avoided extremely long hours of work in discouraging recourse in emergency work, and providing enough time for rest. Minimum consecutive night shifts and split shifts to be assigned in accordance with healthy and together with other activities to ensure welfare of workers. From that point of view the work plan is important for stress reduction. An effective plan should ensure that: tasks are clearly defined, significant, different, and allow an appropriate degree of autonomy in their implementation; identification of the tasks is according to the skill and experience of staff, taking into account the characteristics and difficulties of the different operations of work; rotation of staff is planned, especially if specific and dangerous activities and new employees are provided; appropriate verification of completed tasks and providing opportunities for skills development of staff is available; planning of work is continuously improved in order to better meet the needs.

Another option for stress reduction is the good communication skills. Communication with customers and stakeholders can be improved by: providing customers timely and relevant information; customers are given the opportunity to comment the quality of work; the comments are not ignored and they are taken into account; reduce the conflicts, creating service desks and acceptance of complaints. Communication between management and workers and among workers can be improved when: communication channels are established on the basis sharing information and facilitating solutions to problems related to work; special communication channels are set when organization is changed or there are reforms; Put in operation checking procedures; the employees are stimulated

and they have opportunity to work in formal or informal, temporary or permanent groups; there are opportunities for staff to submit ideas, and particularly in planning and organization of their own work; there is time for dialogue, sharing information and concerns.

Use the good practices in work is another inexpensive way to reduce stress at work and in the same time to improve the quality of work. The improved work practices should aim to ensure: sufficient staff in terms of number and qualifications according to the needs of work and consumers; employees are given flexible deadlines so that the rules and policies shall not be construed as unacceptable by the society and customers; those who work alone and especially at dangerous areas should be equipped with devices for communication and should be supported by emergency procedures in case of need.

Stress caused by the new technology can be prevented by their little by little implementation. It is good to start by their advantages and critical point in application. In this case speed of work, terms and interruptions should be focused on people rather than technology.

Working conditions are another key factor to increase stress. It is recommended low noise, good lighting, temperature, humidity and ventilation at the workplace, risk assessment for stress prevention. According to European Agency for Safety and Health at Work sufficient working space must be available to facilitate the work carried out and there is enough space between the workers and with customers to reduce personal intervention and creation of stress and tension.

All employees must have access to proper medical and psychological treatment, and it should be known the hazard risks at workplace. When the transport companies do not have the medical center or case exceed their jurisdiction, the employer must send the employee an appropriate treatment outside the enterprise. Consultation should be organized by the employer with all who are affected by stress and the workplace. It should include: initial consultation to help the individual to know the risks of stress and change their behavior and attitudes; advice when stress affects employees to help them cope with these problems.

Specific training should be provided for all parties in road transport sector.

Specific training for drivers and operators should include: Obligations and rights according to National and EU legislation; How to improve ability to identify potential situations causing stress; How to

improve capacity to assess and to solve problems; How to be prepared to manage activities at work; What to do if there are some extra cases; Auto-suggestion and communication skills; How to make positive attitude at work.

Training for supervisors, managers and employee representatives should include: How to organize the work to decrease the stress; How to register change in behavior of staff and which may indicate as stress; How to put good conditions for operations and which methods to use; How to support drivers, operators and help them by administrative procedures; How to keep confidence for any information obtained about personal healthy of staff; How to reduce stress in office; How to manage staff and create a work environment based on mutual respect, etc.

3 METHODOLOGY DOSSIER FOR VLE

The VLE will be composed of learning modules, each based on chapters. The modules are: What is stress?; Causes of stress (stress related hazards); Effects of stress (individual and organisational); Stress risk assessment; Stress management; Prevention of work stress; Each module will content information about Learning objectives; Theory; Control questions; Additional materials; Glossary; Bibliography and Case Study. The training content will be complemented with examples on Physical and physiological exercises and techniques.

4 CONCLUSIONS AND FURTHER DEVELOPMENT

The VLE will present general information about stress, stress related hazards in transport and how to assess, manage and prevent them, to be composed of 6 learning modules: What is stress? Causes of stress (); Effects of stress; Stress risk assessment; Stress management; Prevention of work stress. The chapters are planned to content: Learning objectives; Theory; Control questions; Additional materials; Glossary; Bibliography; Case Study. The training content is planned to be complemented with examples on Physical and Physiological exercises and techniques and they will be presented by text, pictures and videos. There is short a description of VLE organization, as well.

VLE is in process of creation now, following the described plan here.

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