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# Creating a healthy company by occupational health promotion as a part of social responsibility

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### Abstract

**Purpose** – The purpose of this paper is to provide a new non-technological innovation concerning management processes in organization, focussing on occupational health promotion as a part of social responsibility (SR). Employer's occupational health promotion includes systemic and systematic activities for good employees' social, physical and mental health; synergy is suggested.

**Design/methodology/approach** – A qualitative analysis using SR, dialectical systems theory and human resource management is applied.

**Findings** – A healthy company can be built by occupational health promotion, which must take place socially responsibly and requisitely holistically.

**Research limitations/implications** – Qualitative analysis is applied in desk and field research on Slovenia.

**Practical implications** – The novel socially responsible, requisitely holistic approach to managing employee's health, exposing personal and corporate SR prevents oversights and resulting failures. **Originality/value** – Available literature offers no similar concept.

**Keywords** Employees, Health, Social responsibility, Requisite holism, Work health promotion **Paper type** Research paper

### 1. The selected problem and viewpoint

Social responsibility (SR) reads: responsibility for one's impacts on society, i.e. humans and nature; its basic terms in ISO 26000 Standard are: interdependence and holistic approach (ISO, 2010). Co-workers' health is included. It is not only a medical issue, but also a human resource management issue, which is impossible to resolve with onesidedness of managers. The Mulej and Kajzer (1998) law of requisite holism (RH) must be applied, since a total holism is impossible to attain, and a limitation to a single viewpoint or profession causes a fictitious holism that causes oversights rather than solves the problems. The RH lies between these two extremes; RH includes all essential and only essential viewpoints and their relations and synergies in order to cover all and only essential attributes. What is essential rather than left aside is up to the decision makers (see: Mulej *et al.*, 2013).

Let us quote a practical experience: modern work life in western countries has become more mentally demanding and less physical in nature. This, in combination with other factors, may contribute to impaired mental health and a disturbed energy balance, which in turn may lead to body weight gain. Both are significant threats to the health of workers and because of the associated health care costs and productivity-related loss, also a financial burden for society, including employers. We developed a workplace health promotion intervention consisting of mindfulness training, targeting both these threats (van Berkel *et al.*, 2013).

This contribution is supposed to add a model for a managerial experience to the <sup>©</sup>E quoted one.

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#### 2. The basic framework for co-workers' health management

Absence of health causes also costly co-workers' absence from work. Work health promotion (WHP) is therefore a very important economic and managerial issue. WHP includes the combined efforts of employers, co-workers and society to improve the occupational health and well-being of people. This can be achieved by combining (European Union, 2011):

- improving the work organization and working environment;
- promoting the participation of workers in healthy activities;
- enabling healthy life choices; and
- encouraging personal development.

WHP is backed by processes, by which employers integrate their care for co-workers and their working environment to ensure the co-workers' health by impacting lifestyle, social, economic, environmental and personal determinants of health. WHP covers modern human resources management's components included in the business strategy, reaching beyond reducing the diseases: improving health, welfare and well-being of coworkers. WHP includes four phases: preparation; design; realization; score and followup. Three types of activities contribute to WHP: organizational, environmental and individual activities (Facts 93, 2010). Some of them could be performed with e-support, which is not the central topic in this contribution.

Workplace environment is crucial in humans' life and their well-being. The German Constitution states: "Ownership obliges. The use of property must serve the common good of the entire society (animate and inanimate nature), too." The Bavaria's Constitution mentions: "The entire economic activity serves the common good." Aristotle called the economy that is aimed at attainment of more money "counternatural"; the aim of economic activity must be "the rightful good." "The well-being of people must be the supreme law." were the words of Cicero. The term "the common good was coined by Thomas of Aquinas". Thus, they speak for SR – hence, WHP provides the socially responsible organizational care for humans as constituent parts of society, and as co-workers that are unavoidable for the well running work processes. We focus on some aspects of the latter here.

#### 3. Framework to occupational safety and health (OSH): corporate SR

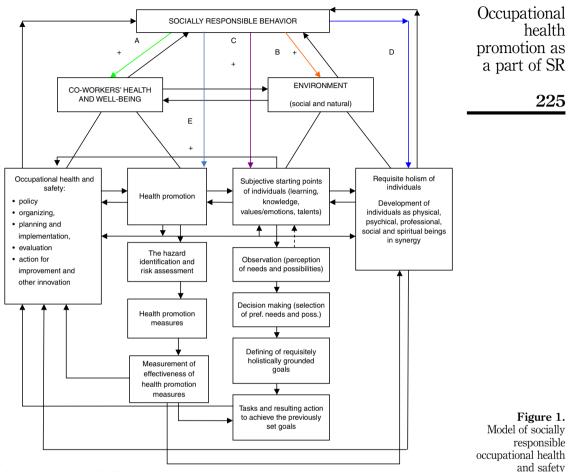
European Union (2011) supports SR, defined as one's responsibility for one's impacts over society in ISO 26000 (ISO, 2010), because SR is leading out from the current socioeconomic crisis. The seven core subjects in ISO 26000 include labor relations that include OSH. The seven principles in ISO 26000 include respect toward human rights that include OSH, too, in our perception and experience. Though, OSH is poorly elaborated and practiced; otherwise international, European, governmental and company documents and policies would not be necessary, but they exist.

Mulej and Dyck (2014b, c) collected the views of several authors on the SR; so the authors also indicated a link between SR and the requisite personal holism and wellbeing of employees which are connected to occupational health and safety.

Our suggested model includes SR to guide the human action aimed to create as-good-as-possible employee's health. Our model in Figure 1 shows: requisitely/RHand SR-behavior positively influences on occupational health and safety. Very important is the direct impact of SR on health promotion. Health promotion affect also four areas: increasing of health through and health promotion, occupational health and

Κ

45.2



Source: Facts 77 (2008)

safety (also vice versa). For health promotion it is important that the subjective starting points of individuals are requisitely holistic. Requisitely holistic approach must be applied also to the occupational health and safety. There is also a mutual effect of occupational health and the organizational environment.

### 4. Some essential statements about occupational health and safety

OSH covers increasingly important issues, because it impacts co-workers as individuals, their work efficiency and entire society. Having healthy, happy and motivated co-workers, who enjoy OSH, reaches beyond enabling positive economic outcomes, increased competitiveness and profitability; it supports other business factors and well-being, too.

Organizations know they are able to experience less accidents and occupational diseases, if ensuring OSH (Information Bulletin of the European Agency for Safety and Health at Work, 2013). Less accidents and occupational diseases improve the organization's business performance. WHP can increase co-workers' health and

productivity (Goetzel and Ozminkowski, 2008). WHP is important because of its association with job well-being, work ability, absenteeism and early retirement. WHP involving exercise increases work ability (Kuoppala *et al.*, 2008). With implementing the WHP measures companies also (Facts 77, 2008):

help demonstrate their SR;

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- protect and enhance brand image and brand value;
- increase the workers' commitment and competences;
- · reduce business costs and disruption;
- · can better meet their customers' expectations; and
- encourage co-workers to stay longer in active life (All this is shown in Figure 2).

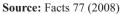
OSH impact the organization's business performance. That is visible internally; in economic terms OSH prevents costs, thus causing opportunity cost and benefits. The level of integration of OSH impacts the business; by including them in their business management, organizations increase their key decision makers' good impacts (see Figure 3).

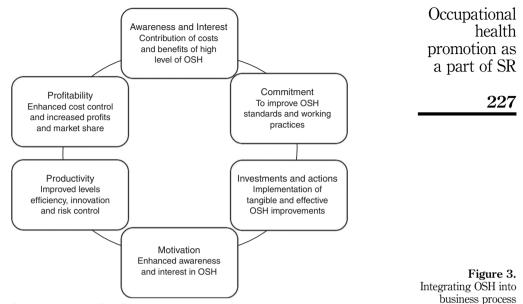
The employer should show strong leadership and commitment to OSH activities in the organization, and make appropriate arrangements for the establishment of an OSH management system and this system should contain (ILO-OSH, 2001):

- the main elements of policy;
- organizing;
- planning and implementation;
- evaluation; and
- action for improvement.



Figure 2. The business benefits of occupational health and safety





Source: Facts 77 (2008)

Protection of workers' life, health, work ability and nowadays also psychological and emotional well-being belongs to fundamental tasks of OSH. Good knowing of all types and levels of burdens and harms as occupational risks, and evaluating the degree of seriousness of co-workers' work and health risks, decisively impacts business performance because it affects co-worker's and managers performance. To ensure the mentioned activities on a RH level and with SR, one must make co-workers' OSH multidisciplinary including (Bilban, 2005, p. 5):

- parts of physiology;
- · psychology of work;
- labor pathology and industrial toxicology;
- · assessment of work ability;
- ecology of work;
- · parts of epidemiology;
- · ergonomics and working environment;
- social medicine;
- hygiene;
- · legal aspect of comprehensive care for employee's; and
- others.

Mulej exposed that activity should be interdisciplinary to include synergies of the listed activities. This is easier to attain with SR's notion of interdependence and related ethics of interdependence (Mulej and Kajzer, 1998) rather than the bosses' ethics of

independence ("We are untouchable power holders") and the co-workers ethics of dependence. ("We must obey only rather than think, hence we are entitled to irresponsibility without creativity.")

#### 5. Some essential statements about occupational safety

The business process potentially leads to accidents that impact co-workers, occurring anywhere, anytime. Safe working in companies should cover all co-workers; they should also know the basics about their occupational safety. Therefore, managers and co-workers must understand the safety concept with RH to attain SR. Safety is everything supporting detailed investigations of possible particularly harmful and hazardous effects to humans in any workplace, and appropriate measures (Kuhar, 1954, p. 18). Thus the occupational dangers threatening co-workers can and must be removed or limited. Security in organizations is not generally defined; it covers at least four types of care: technical, psychosocial, socio-legal and active health care (Bilban, 2005, p. 21).

Occupational risks could arise from multiple areas. They may occur in any process with physical effects, including (Vezjak, 2002, pp. 10-11):

- speed;
- acceleration;
- force, pressure;
- mass, position;
- temperature;
- sound waves;
- vibrations;
- magnetic field;
- voltage, power flow;
- gas, steam, air;
- shearing;
- locations with threatening crushing; and
- locations in grabbing gears, the mounting straps, etc.

Accidents may also result from certain risks and excitation factors, including also external factors, e.g. (Vezjak, 2002, p. 11):

- moisture, snow, ice;
- wind, temperature;
- radiation;
- noise, vibration;
- electric current;
- chemicals;
- dirt;

- · incorrect material; and
- location, etc.

The human factor is often a reason for occupational accidents, including: unprofessional management, superficially designed instruction for the safe use, overloading the humans, equipment, etc., handling under stress, lack of manual dexterity and lack of knowledge on occupational safety (Vezjak, 2002, p. 12).

Requisitely holistic processes help organizations prevent occupational accidents. In large manufacturing companies production departments must have foremen or supervisors, who should evaluate the importance of each function in the following order (Švajger, 1972, p. 150):

- (1) prepare and organize work;
- (2) ensure the workers' safety;
- (3) monitor the work implementation;
- (4) create good human relations;
- (5) prevent accidents by smooth production;
- (6) advise and teach workers;
- (7) ensure discipline;
- (8) participate in technical improvements (and other innovations, N.B. by authors);
- (9) report to their superiors; and
- (10) deal with administrative tasks.

Therefore the foremen should plan workflow in advance to most effectively protect coworkers from the dangers by eliminating unfavorable factors, which could endanger co-workers and work environment. Foremen must permanently care for discipline and control the execution of tasks to be done in the fixed time. With safe work, companies can enable co-workers to work undisturbed and well (Bilban, 2005, p. 18).

The publication "Safety at Work – Your Responsibilities as an Employer" (Australian Government, 2009) instructs how to prevent accidents and in the same time expose that is the best approach is control/supervision. If this is impossible, managers with the assistance of co-workers must implement the hierarchy of controls, thereby reducing occupational risks and hazards. This is done by (Australian Government, 2009):

- elimination of risks;
- replacement of dangers that might cause accidents (if possible) with those causing less risk;
- isolation of the dangers facing co-workers;
- reducing the risks of assets, e.g. by adoption of safe working practices, providing training, guidance or information; and
- use of appropriate personal protective equipment.

Again, synergy of their outputs, outcomes and impacts should be added to WHP.

#### 5.1 Occupational accidents

An accident is defined in Article 3 of the Slovenian "Law on occupational Safety and Health" as an unexpected event in the workplace or in the work space, which happens during a work-process or originates from the work and causes injury to the worker (Kalčič and Lozar, 2011, p. 28).

Occupational accidents usually happen randomly and unexpectedly and are often caused by humans. Eurostat defines an accident during work as a sudden event during the current work, which causes physical or mental harm. An accident causes injury, which causes health impairment and occurs in 24-48 hours after the functioning of the load or damaging; otherwise it is called disease (Bilban, 2005, p. 137).

Work injury shall be considered as a damage caused by the direct and short-term mechanical, physical or chemical effect and damage caused by rapid changes in body position, sudden load on the body or other changes in the physiological state of the organism (*Zakon o pokojninskem in zdravstvenem zavarovanju*, 66th article).

#### 5.2 Causes of accidents during work

There are many causes for accidents during work. Work-related incidents demand 2.6-3.8 percent of gross domestic product throughout the European Union (European Agency for Safety and Health at Work, 2013, p. 12). Accidents are often results of human missed. Bilban (2005, p. 137) mentioned that accidents during work depend on several factors:

- work types and methods;
- · co-workers' qualifications and educations;
- hygienic conditions on workplace;
- socio-economic factors;
- co-workers' culture and motivation; and
- rapid aging of workforce.

Again, synergy of their output, outcomes and impacts should be added to WHP.

The causes of work-related accidents (Heinrich and Švajger, 1973, p. 71) include the company's incorrect or in-holistic management decisions and therefore in-holistic organizational processes and systems. Management of an organization is obliged to provide to each employee safety and health during work. The problem occurs because the organizational management uses wrong methods, approaches and procedures and makes wrong decisions for ensuring the OSH. In addition, co-workers do not carry out the statutory rules about the OSH. This can cause severe consequences that affect the health and safety of co-workers at workplace.

Accidents at work are divided into two groups (Bilban, 2005, p. 138). The first group integrates causes of accidents caused by human; the second group is oriented into causes of accidents arising from the work environment.

Svajger (1972, pp. 75-86) expose that accidents are arising from:

- individual factors gender, age, professional experience and education;
- (2) psychological and physiological factors intelligence, emotional reactions at work, fatigue and tiredness, attention, perception and mobility, leisure time, skills and senses;

- (3) physio-pathological factors the problem of left-wingers at work, the influence of alcohol in the blood and changes in health status; and
- (4) workplace problems regarding work groups, interpersonal relations among co-workers, lack of communication during work, behavior of the working group, job satisfaction, work pace, monotony at work, dissatisfaction with the workplace and breaks during working hours.

Again, synergy of their outputs, outcomes and impacts should be added to WHP.

Accidents are caused by: the loss of control of work equipment and items of work, followed by slips, trips, falls, demolition material agent, lifting, carrying, pushing, installation, drawing, etc. Again, synergy of their output, outcomes and impacts should be added to WHP (Inšpektorat republike Slovenije za delo (Inspectorate of the Republic of Slovenia for Work), 2012, p. 37).

Organizations are aware that any accident at work causes cost to businesses. Any accident must be provided care and limited by organizations with legal rules, which co-workers should fully respect. Accidents may focus the assessment of hazards and risks in the workplace. In doing so, one must first know the potential danger faced by co-workers, to analyze the risk of accidents and to choose the correct safety procedure that will restrict the accident. But these efforts do not guaranty the elimination of every human mistake that can cause irreversible damage to human health or to movable property and real estate of organizations.

#### 6. Some essential statements on occupational health

#### 6.1 Impacts on and by occupational health

Health is fundamental in every human life. The healthy ones can accomplish their goals, focus on their work, career, etc. However, too much enthusiasm for work quickly makes people face reality. The sick ones realize importance of health, and contribution of one's healthy lifestyle to one's well-being. Some general definitions help people understand health better.

The World Health Organization (WHO) defined in 1947 the concept of health as a state of complete physical, mental and social well-being, beyond the absence of disease or infirmity. Health care concerns individuals and the whole society; health is both a private and a social good. Therefore crucial impacts on our health belong to the environment in which we live, too.

Again, synergy of their outputs, outcomes and impacts should be added to WHP.

Individuals' health influences their ability of personal development and economic security in the future, their productivity, learning capacities and intellectual, social, emotional and physical development. Good health of the population supports poverty reduction, economic growth and long-term social development. The four mechanisms include labor productivity, labor market participation, education, savings and investments (Gabrijelčič Blenkuš *et al.*, 2012, pp. 17-18). Again, synergy of their outputs, outcomes and impacts should be added to WHP.

Economic importance of health in rich countries is supported by evidence showing that health impacts several economic outcomes: earnings, number of work hours, labor market participation, early withdrawal from the labor market or (early) retirement. Good health increases the likelihood of participation in the labor market, while poor health negatively impacts earnings and retirement (Gabrijelčič Blenkuš *et al.*, 2012, p. 18). Health also impacts education. Higher education enables better health

and vice versa. General good health of children supports their academic performance and achievements, and vice versa (World Health Organization, 2011, p. 2).

After defining health, one must also define the disease: "Disease is the state or a way of the organism's reaction to the environment, with a disorder of the organism's functions" (Bilban, 2005, p. 10). Disease can develop at any time in various ways and levels, depending on the person's immunity. Some diseases cause the inability to perform regular tasks, such as work; other diseases may become permanent, or cause death.

The work environment hides several causes of diseases. Co-workers perform various differently complex tasks. Work causing mental or physical loads, regardless of their complexity, affects the co-workers' health. One should be aware of how important it is to maintain one's healthy lifestyle, while organizations must provide the appropriate conditions at the workplace.

Several factors affect human health: every individual's immunity, the environment in which he/she live, genetics, lifestyle, dietary habits, personality traits, etc. Key determinants that affect human health (Gabrijelčič Blenkuš *et al.*, 2012, p. 29):

- general socio-economic, cultural and environmental conditions;
- living and working conditions: agriculture and food production, education; work
  environment; unemployment, water and sanitation, health care services, housing;
- social and community networks;
- individual lifestyle factors; and
- age, sex and constitutional factors.

Again, synergy of their outputs, outcomes and impacts should be added to WHP.

Work must be varied, dynamic, diverse and creative (Bilban, 2005, p. 23). If co-workers experience all four factors, they work with greater joy and fervor, without using excessive negative energy, which could endanger their health. Diverse, dynamic and creative work can influence on employee's motivation to work. The co-workers can work too much and are workaholics; in these cases they can increase possibilities for accidents at work and occupational diseases to occur.

#### 6.2 Stress and burnout at work in connection with occupational health

The most common diseases that can threaten all co-workers, regardless of their work specifics, are stress and burnout. Stress can be caused by negative characteristics of the work environment, but it can also be a physiological response to harmful environmental factors that directly affect the co-workers' health.

Stress involves a non-specific or negative reaction of one's organism to an experience from the environment, or the pressure that causes physical and mental problems for people (Bilban, 2007, p. 30). Stress is a malaise; one has difficulties, which one cannot influence (Tyrer, 1987, p. 11).

Most often the problem is not only one's potential stressor, but especially one's experience and evaluation of the stressors' threat (Cergol Lipnik *et al.*, 2012, p. 9).

Stress can be divided into six categories (Bilban, 2007, p. 31):

- stress resulting from work: workload, shift work, physical work and long work hours;
- (2) stress resulting from one's official responsibility: role ambiguity, conflict and level of responsibility for others;

- (3) stress resulting from workplace relationships: interpersonal relationships can Significantly impact relationships in work teams and workflow; bealth
- (4) stress resulting from career relationship: it includes the fast pace of life, fatigue and burnout at the workplace;
- (5) stress resulting from the organizational structure, climate and culture; and
- (6) work and family as stressors.

Again, synergy of their outputs, outcomes and impacts should be added to WHP.

According to Eurostat, in 2000, stress is often experienced by people who (Bilban, 2007, p. 30):

- · cannot control their work;
- · cannot influence their choice of work methods;
- · cannot control their required speed of their work;
- · cannot influence time for their break during work;
- · cannot control their schedule of working hours;
- perform monotonous work;
- · experience pressures due to over-time periods;
- · are "victimized" in their workplace; and
- are psychologically tortured and bullied at their workplace.

Again, synergy of their outputs, outcomes and impacts should be added to WHP.

Stress is harmful and dangerous to health when we feel that environmental requirements are beyond our ability. Stress and performance are connected by three essential factors (Powell, 1999, p. 6):

- (1) perpetrators: daily duties and important events in one's life;
- (2) skills: skills and qualities with which one faces stressful situations; and
- (3) signs or symptoms: physical or emotional symptoms, which suggest that environmental requirements are beyond one's ability.

Stress can also affect one's work efficiency. Yorkes-Dodsonov's law says that optimal levels of occupational stress and pressure can have positive attributes, increasing efficiency of co-workers at work. Therefore, managers should maintain an optimal level of stress at work, as this increases productivity (Le Fevre *et al.*, 2003, p. 727).

The second most common occupational disease is burnout. It differs from stress: it covers the final stage, when adjustment processes fail (Bilban, 2007, p. 30). Burnout occurs more easily, when there are big differences between the nature of the work and the nature of the work performer (Maslach and Leiter, 2002, p. 9). Burnout is therefore a cumulative process and develops gradually over time in following four stages (Bilban, 2007, p. 23):

- Phase 1 great working enthusiasm: expressing the need for recognition dominates, causing intensive efforts to achieve the objectives.
- Phase 2 stagnation: frustration is rising because effort does not achieve the expected reward. There are doubts, declining motivation, impaired concentration; one starts moving away from society.

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K 45,2	• Phase 3 – social isolation: one loses contact with the outside world and becomes very impatient, cynical, etc. [].
,	• Phase 4 – apathy or extreme burnout: clear signs of depression and suicidal thoughts.
234	Burnout in the workplace results from several factors, including (Maslach and Leiter, 2002, pp. 39-60):
	• Work overload. Co-workers in the workplace often face the intensive work that requires very much time. Furthermore the job can be very challenging and complex. Therefore congestion with everyday tasks can be very exhausting.
	• Lack of control. Without control over important guidelines of their work people cannot define solution for problems that can be detected during the work. Also, without supervision, there is no connection between individual interests and company interests.
	• Inadequate remuneration. The crisis in the work environment reduces the potential for organizations to reward people. This factor may kill motivation and pleasure to work.
	• Lack of fairness. For fair workplace one needs three key elements: trust, honesty, and respect. The increasingly egoistic world makes maintaining the fairness in the organization almost impossible.
	• Conflicting values. Co-workers are usually irritated, if the organization (often) glorifies the co-workers' ability for outstanding productivity, while managers harm the work quality. People have significantly different values that affect everything concerning their attitude toward work.
	Again, synergy of their output, outcomes and impacts should be added to WHP. Worrying is the opinion of the WHO, which estimates that the stress and burnout and depression by 2020 may become the main reason for humans' failure at workplace. One can forget that psychosocial safety climate is an emerging construct covering shared perceptions about policies, practices and procedures for the protection of worker psychological health and safety (Idris <i>et al.</i> , 2012).
	7. Some essential statements about promotion of occupational health and safety

Health promotion in the workplace complements OSH measures as part of the combined efforts of employers, co-workers and national authorities to improve the health and well-being of co-workers. Health promotion and well-being at work programs is based on the promotion of health among all workers and their families through preventive and assistance programs in the field of workplace stress, violence at work, drug and alcohol abuse and the promotion of tobacco-free work places (ILO, 2014).

Promotion of health and safety includes a planned combination of educational, political, environmental, organizational mechanisms that support measures and conditions of lives of individuals, groups and communities. Implementation of health promotion programs in the workplace requires a systematic/systemic (i.e. RH) approach improving the business and work environment, and promotion of co-workers' healthy lifestyles and personal development (Henning *et al.*, 2009, p. 27).

Management of health and safety significantly impacts business. Hence, management should be aware that the safe and healthy working environment reduces injuries and illnesses. This may increase productivity. Work of healthy and motivated co-workers is more efficient and attains a better quality (Cergol Lipnik *et al.*, 2012, p. 42).

Promotion of health and safety at work affects several areas (Nöhammer *et al.*, 2013, p. 41):

- Psychological areas: impact on co-workers aims, on one hand, to improve the current and future physical well-being and, on the other hand, to develop better eating and recreation habits, to reduce the existing health problems and prevent the future health problems.
- Mental area: co-workers, who increasingly value company, have greater motivation and job satisfaction. We can also see improvements in dealing with work: more responsible stress management.
- Social sphere: the impact on co-workers has primarily the form of better interpersonal relations: co-workers have intensive contacts with colleagues. The consequence includes the increased group cohesion and less internal conflicts among co-workers.
- Facilitating prevention activities: in this phase, one can use the appropriate promotion of health and safety to save time, because work cannot be organized individually. This improves the health care and support from the psychosocial perspective.
- General cognitive and affective outcomes: they result from the positive changes in behavior that is associated with health, a better understanding of health, a sense of increasing productivity, etc.

Again, synergy of their outputs, outcomes and impacts should be added to WHP.

Comprehensive WHP programs commonly include health-related educational services (e.g. nutrition education); individual health risk identification (e.g. confidential health risk assessments [HRAs]); health risk reduction services (e.g. health counseling and support groups); preventive health services (e.g. immunizations); treatment health services (e.g. care at worksite medical clinic); and health-related regulation (e.g. worksite nonsmoking policy) (Berry and Mirabito, 2011).

The area of promotion of occupational health and safety is also legally defined. In 2011, in Slovenia, the amendments to the "Act on occupational safety and health" added the area of health promotion and management of psychosocial risks in the workplace. ZVZD-1 to the square of 6 and Article 32 stipulates employers to plan and implement health promotion in the workplace. Employers should provide the necessary means and method of monitoring its implementation (Kalčič and Lozar, 2011, p. 32 and 53).

Another open issue tackles accidents at work we have already discussed.

#### 7.1 The hazard identification and risk assessment in the workplace

Preconditions to reduce the rate of occupational accidents and diseases in organizations include identifying hazards and risks faced by co-workers at their workplaces and the adoption of certain organizational actions. Organizations must build the entire process of risk assessment and hazard in the workplace. Danger in the organization is defined as "a situation or condition which may endanger or cause damage to the employee or failure

of his/her health" (Pravilnik o načinu izdelave izjave o varnosti z oceno tveganja (Rules on the preparation of safety statement including risk assessment), 2000, Article 3).

Hazards in the workplace may include: mechanical hazards, distribution of jobs, electricity, hazardous substances, physical hazards, biological, ecological conditions, the ratio of employee to the workplace, psychological factors and the organization of work and other factors (Primer vsebine izjave o varnosti z ocenjevanjem tveganja/ The case of the content of the security risk assessment, 2014, p. 9). Responsible/ accountable persons, e.g. managers must therefore obtain information and identify the danger that could threaten the co-workers at workplace. Again, synergy of their outputs, outcomes and impacts should be added to WHP.

Information about dangers in organizations can be obtained in various ways. So one can (Facts 81, 2008):

- visit workplaces in the organization and search for potential causes for accidents and occupational diseases;
- converse with co-workers, with whose help one can discover what presents dangers for them;
- study long-term dangers to health;
- look at the work accident records and records of absence due to occupational diseases; and
- obtain information from other sources: websites, state authorities, legal regulations and technical standards.

Again, synergy of their outputs, outcomes and impacts should be added to WHP.

When one accurately detects potential dangers, one can start addressing risks at workplace. Risk is "a probability of a danger, which could cause an injury or a health defect" (Pravilnik o načinu izdelave izjave o varnosti z oceno tveganja (Rules on the preparation of safety statement including risk assessment), 2000, 3rd article).

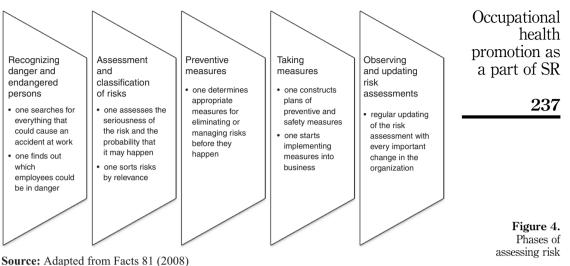
Each organization must construct its own assessment of risk at the workplace, as preparing a risks assessment can provide a basic advantage at business, support improving safety and health at work (Facts 85, 2009).

Risk assessment is therefore an important procedure, which helps organizations evaluate potential risks, caused by dangers at the workplace. First, companies and their managers must think about the probability of dangers causing damage, how serious will these damages be and how often are co-workers exposed to dangers. On this basis, all crucial risks and endangered persons are determined and assessed. All assessed risks are then prioritized; decisions about appropriate measures are made. Then, an appropriate plan of preventive and safety measures can eliminate and manage risks at workplace. The last step in the process of making an assessment in companies is observing and updating the assessment and supervising the implementation of measures (Facts 81, 2008). For easier comprehension, phases of assessing risks are illustrated Figure 4.

Risk assessment can be constructed by multiple persons, namely the employer or co-workers, who are appointed by employers. Companies can also hire external professional services for preparing all the documentation needed (EU Directive 89/391/EGS, 1988).

Nahrgang *et al.* (2010) developed and meta-analytically tested the relationship between job demands and resources and burnout, engagement and safety outcomes in the workplace. They found:

 support for a health impairment process and for a motivational process as mechanisms through which job demands and resources relate to safety outcomes;



- that job demands such as risks and hazards and complexity impair co-workers' health and positively relate to burnout;
- support for job resources such as knowledge, autonomy, and a supportive environment motivating co-workers and positively relating to engagement;
- that job demands were to hinder an employee with a negative relationship to engagement, whereas job resources were found to negatively relate to burnout; and
- that burnout was negatively related to working safely but that engagement motivated co-workers and was positively related to working safely.

## 8. Some essential statements about OSH at work in the European Union up to 2020

Good strategies, which will guide managers to organizational goal – better safety and general well-being at workplace, are needed for stimulating OSH. For the European Union to help at raising the quality of safety and health at workplace, the following goals for the period between 2007 and 2012 have been set (European Agency for Safety and Health at Work, 2013, p. 4):

- changed and supplemented laws on OSH;
- improved general approach to the well-being at workplace by taking changes into account, which apply to the working environment and consequent new risks at workplace;
- improving quality and productivity at work;
- gradual raising of actual average retirement age;
- improving employment of men and women;
- improving the quality of working environment;
- progress in the area of sex inequality;

- establishing working environments and work safety services; and
- reducing the incidence of work-related accidents.

Again, synergy of their output, outcomes and impacts should be added to WHP.

The above goals also apply beyond 2012, but will be changed if needed. In 2007-2012, European Union strategically achieved one of the goals – lowering the number of accidents and occupational diseases. Incidence of work-related accidents was lowered by 25 percent in the EU members' area (European Agency for Safety and Health at Work, 2013, p. 4).

The first proof of noticeable change concerning OSH is legislation. As we mentioned, on the 3rd of December of 2011, Slovenia adopted a new Law on OSH, which is noticeably improved, if compared to the old law (Zakon o varnosti in zdravju pri delu (The Law on Safety and Health at Work (ZVZD-1)), 2011). Legislation should help toward reducing the instance of accidents at workplace and occupational diseases, although some organizations ignore the rules. Non-compliance or partial compliance with the rules causes many offenses in certain industries; this was evident from the Labor inspectorate's reports. Because the world is changing and with it the people's values, it is very important for the legislation to follow and lead. Therefore the first strategy of the EU members is to regularly update the legislation because of all new risks and occupational diseases of the present world.

In the area of safety and health, the European Union wants to implement the following till 2020 (Commission of the European Communities, 2007, pp. 7-11):

- promote well-being and health of the older co-workers;
- protect people from health hazards;
- · raise the efficiency of preventive medical supervision;
- support dynamic health systems and new technologies;
- implement health-related strategies;
- perform Europe-wide campaigns for raising awareness about health at workplace;
- improving and updating legislation on safety;
- from 2014 to 2020, EU intends to allocate at least 25 percent of cohesion resources for the area of safety and health at workplace;
- preventing the occurrence of accidents at workplace; and
- other.

Again, synergy of their outputs, outcomes and impacts should be added to WHP.

Companies can contribute the most to improving the quality of safety and health at workplace with their own activities in this area. If companies adopt and further promote the legislation on OSH at work, they will surely contribute to a safer work.

In recent years, one emphasized more the ensuring OSH in the so called green workplaces. European Union is trying to coordinate economic growth with the need to protect the environment. To reach this, EU wants to lower the emissions of greenhouse gasses, raise energetic efficiency, stimulate renewable sources of energy and lower the amount of waste produced. This was the basis for creating green workplaces, which push humans toward preserving the environment and restoring it to its original state.

If EU really wants to implement those goals, EU must ensure safety and well-being of co-workers as well. In the area of green workplaces, new risks show up, connected to the raising of industrial biotechnology, different energetic risks, harmful gas emissions, explosions, etc. (Bradbrook *et al.*, 2013, p. 5).

European Union wants to protect the workers of all its member states against threatening dangers at workplace. With similar strategies, which will influence the area of safety and health at workplace, EU wants to improve the quality of safety and well-being in every workplace.

### 9. Two further aspects

For our contribution two further aspects of WHP are also important that were covered in our recent e-books and we only mention them here for a link:

- Chroust *et al.* (2014) wrote about "First responders to regional disasters a case of social responsibility"; and
- (2) Ivanuša *et al.* (2014) wrote about "Requisite holism of behavior when facing complexity of pandemic diseases – new trends in Healthcare information systems (HIS)."

They are in the book, edited by M. Mulej and R. Dyck "Volume 4: Social Responsibility – Range of Perspectives Per Topics and Countries", as one of four books on "Social Responsibility Beyond Neo-liberalism and Charity" (2014).

### 10. Conclusion

WHP which complements OSH measures is a crucial tool of managers. It improves the whole organizations and is important for reductions of costs. It can improve physical and mental health or well-being of co-workers. It helps to raise awareness of co-workers about healthy lifestyle and benefits of that. As we stated again and again in this contribution, there are many crucial elements of WHP, but they should be considered in synergy for their shared additional impacts to be detected and controlled rather than overseen. Therefore, SR should be applied: ethics of interdependence supports synergy, which then supports attainment of RH.

In the near future WHP should be oriented into leadership that should be "healthy leadership." Therefore WHP will integrate also interventions for managers such as:

- time management;
- leadership coaching;
- course on work life balance;
- course on leadership's styles;
- · measurement of organizational climate;
- mentoring;
- education to strengthen communication's skills;
- · skills to work with troubled co-workers and situations;
- education for conflict management;
- course on diversity management;

- course on creative problem solving;
  - giving feedback to co-workers;
  - development of active listening;
  - · development of socially responsible values, business ethics and morals;
  - strengthening the holism of manager; and
  - talent management.

Further research should be oriented into testing a model WHP, which integrates on organizational level:

- individual intervention (knowledge and skills) monitoring and management of sickness absence and return to work;
- social groups and work units explanatory (knowledge and skills), social support, relationships at work;
- co-workers working in organizations, as social environments linking environmental factors and health, WHP focus, linking work context and health;
- group level social support and organizational climate influence on health and well-being of humans; and
- leaders, influencing other stressors which in turn will reduce co-workers' strain, enhancing their well-being.

It is necessary to develop WHP from a global perspective – and WHP to incorporate in SR. Benefit of requisitely holist approach will have OSH. Therefore we develop model of socially responsible occupational health and safety which must be integrated into policies at the organizational, national and European level.

#### References

- Australia Government (2009), "Promoting health and safety", available at: www.comcare.gov. au/\_data/assets/pdf\_file/0010/40978/Safety\_at\_work\_OSH\_60\_Feb\_09.pdf (accessed May 4, 2012).
- Berry, L.L. and Mirabito, A.M. (2011), "Partnering for prevention with workplace health promotion programs", *Mayo Clinic Proceedings*, Vol. 86 No. 4, pp. 335-337.
- Bilban, M. (2005), Medicina dela za študente tehnične varnosti (Medicine of Work for Students of Technical Safety), Zavod za varstvo pri delu, Ljubljana.
- Bilban, M. (2007), "Izgorelost/Burnout", Delo in varnost, Revija za varstvo pri delu in varstvo pred poźarom, Vol. 52 No. 1, pp. 23-29.
- Bradbrook, S., Duckworth, M., Ellwood, P., Miedyinski, M. and Reznolds, J. (2013), Green Jobs and Occupational Safety and Health: Foresight on New and Emerging Risk Associated with New Technologies by 2020, Publications Office of the European Union, Luxembourg.
- Cergol Lipnik, M., Vatovec, M., Medarić, Z. and Mežnar Steklasa, D. (2012), SOS in the Workplace: A Guide to Improving Employee Health and Wellbeing in the Workplace, University of Primorska, Science and Research Centre, Annales University Press, Koper.
- Chroust, G., Ossimitz, G., Roth, M., Sturm, N. and Ziehesberger, P. (2014), "First responders to regional disasters – a case of social responsibility", in Mulej, M. and Dyck, R. (Eds), *Volume 2: Social Responsibility – Range of Perspectives Per Topics and Countries*, Bentham Science, Sharjah.

Downloaded by TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES At 22:08 14 November 2016 (PT)

Commission of the European Communities (2007), "Together for health: a strategic approach for the EU 2008-2013", available at: www.google.si/url?sa=t&rct=j&q=&esrc=s&source= web&cd=1&ved=0CBwQFjAA&url=http%3A%2F%2Fec.europa.eu%2Fhealth%2Fph\_ overview%2FDocuments%2Fstrategy\_wp\_en.pdf&ei=\_1GoU-GkI6bOygP\_yICYCA&usg= AFQjCNGXFItJ5DxeP5cFQid5IADWS8KfkQ&sig2=v\_xxXr\_1HX6dtaJ0IJuKhA&bvm= bv. 69411363,d.bGQ (accessed June 13, 2014).

- European Agency for Safety and Health at Work (2013), "Work accident explained", available at: http://osha.europa.eu/en/fag//fag1/what-is-an-accident-at-work (accessed May 28, 2014).
- EU Directive 89/391/EGS (1988), available at: https://osha.europa.eu/sl/legislation/directives/theosh-framework-directive/1 (accessed June 6, 2014).
- European Union (2011), "Occupational health and safety risks in the healthcare sector", Directorate-General for Employment, Social Affairs and Inclusion Unit B.3., European Commission.
- Facts 77 (2008), "The business benefits of good occupational safety and health. European Agency for Safety and Health at Work", available at: www.google.si/?gws\_rd=ssl#q=The +Business+Benefits+of+good+occupational+Safety+and+Health (accessed June 5, 2014).
- Facts 81 (2008), *Risk Assessment The Key to Healthy Workplaces*, European Agency for Safety and Health at Work, Bilbao.
- Facts 85 (2009), Assessment, Elimination and Substantial Reduction of Occupational Risks, European Agency for Safety and Health at Work, Bilbao.
- Facts 93 (2010), *Promocija zdravja na delovnem mestu za delodajalce (Health Promotion in the Workplace for Employers)*, European Agency for Safety and Health at Work, Bilbao.
- Gabrijelčič Blenkuš, M., Koprivnikar, H., Drev, A., Vračko, P., Pirnat, N., Hočevar, T., Vrdelja, M., Jeriček Klašček, H., Pucelj, V., Kofol-Birc, T., Martinovič, B., Krajnc, I. and Martinovič, A. (2012), Vsevladni pristop za zdravje in blaginjo prebivalcev in zmanjševanje neenakosti v zdravju, Inštitut za varovanje zdravja Republike Slovenije, Ljubljana.
- Goetzel, R.Z. and Ozminkowski, R.J. (2008), "The health and cost benefits of work site healthpromotion programs", *Annual Review of Public Health*, Vol. 29, pp. 303-323. doi: 10.1146/ annurev.publhealth.29.020907.090930.
- Heinrich, J. and Švajger, J. (1973), Varnost pri delu: teorija in praksa praksa (Safety at Work: Theory and Practice), Zavod RS Slovenije za varstvo pri delu, Ljubljana.
- Henning, R., Warren, N., Robertson, M., Faghri, P. and Cherniack, M. (2009), "Workplace health protection and promotion trough participatory ergonomics: an integrated approach", *Public Health Rep.*, Vol. 124 No. 1, pp. 26-35.
- Idris, M.A., Dollard, M.F., Coward, J. and Dormann, C. (2012), "Psychosocial safety climate: conceptual distinctiveness and effect on job demands and worker psychological health", *Safety Science*, Vol. 50 No. 1, pp. 19-28.
- ILO (2014), "Workplace health promotion and well-being", available at: www.ilo.org/safework/ areasofwork/workplace-health-promotion-and-well-being/lang-en/index.htm (accessed June 4, 2014).
- ILO-OSH (2001), Guidelines on Occupational Safety and Health Management Systems, 2nd ed., International Labour Office, Geneva.
- Inšpektorat republike Slovenije za delo (Inspectorate of the Republic of Slovenia for Work) (2012), "Poročilo o delu Inšpektorata RS za delo za leto 2012 (Report on the work of the Inspectorate of Labour, Republic of Slovenia, in 2012", available at: www.id.gov.si/si/o\_ inspektoratu/javne\_objave/letna\_porocila/ (accessed June 4, 2014).
- ISO (2010), ISO 26000, available at: www.iso.org/iso/ discovering\_iso\_26000.pdf (accessed May 6, 2012).

Ivanuša, T., Mulej, M., Podbregar, I. and Rosi, B. (2014), "Requisite holism of behavior whe	n
facing complexity of pandemic diseases - new trends in healthcare information system	IS
(HIS)", in Mulej, M. and Dyck, R. (Eds), Social Responsibility Beyond Neoliberalism an	d
Charity, Social Responsibility – Range of Perspectives Per Topics and Countries', Vol.	2
(out of 4), Bentham Science, Sharjah.	

- Kalčič, M. and Lozar, A. (2011), Zakon o varnosti in zdravju pri delu (ZVZD-1), GV založba; ZVD Zavod za varstvo pri delu, Ljubljana.
- Kuhar, A. (1954), Delovna varnost: bistvo, dolžnosti in organizacija borbe proti obratnim nesrečam v industriji in obrti: Primeri iz železarn (Work Safety: The Essence, the Duties and Organization of Struggle Against Factory Disasters in Industry and Crafts: Examples from the Ironworks), Državni zavarovalni zavod Direkcija za Slovenijo, Zaščitna služba, Ljubljana.
- Kuoppala, J., Lamminpaa, A. and Husman, P. (2008), "Work health promotion, job well-being, and sickness absences – a systematic review and meta-analysis", *Journal Occupational Environent Medicine*, Vol. 50 No. 11, pp. 1216-1227.
- Le Fevre, M., Matheny, J. and Kolt, G.S. (2003), "Eustress, distress, and interpretation in occupational stress", *Journal of Managerial Psychology*, Vol. 18 No. 7, pp. 726-744.
- Maslach, C. and Leiter, M.P. (2002), Resnica o izogrevanju na delovnem mestu: kako organizacije povzročajo osebni stres in kako ga preprečiti (The Truth about Burnout at the Workplace: How Organizations Cause Personal Stress and How to Prevent it, Educy, Ljubljana.
- Mulej, M. and Dyck, R.G. (Eds) (2014b), Social Responsibility Beyond Neoliberalism and Charity. Social Responsibility – Methods, Dilemmas and Hopes, Vol. 3, S. I, Bentham Science, Sharjah, available at: www.eurekaselect.com/123215/volume/3
- Mulej, M. and Dyck, R.G. (Eds) (2014c), Social Responsibility Beyond Neoliberalism and Charity. Social Responsibility – Sustainability, Education and Management, Vol. 2, S. 1, Bentham eBooks, available at: www.eurekaselect.com/123197/volume/2
- Mulej, M. and Kajzer, S. (1998), "Ethic of interdependence and the law of RH", STIQE '98, ISRUM, Maribor, pp. 56-67.
- Mulej, M., Božičnik, S., Čančer, V., Hrast, A., Jere Lazanski, T., Jurše, K., Kajzer, S., Knez-Riedl, J., Mlakar, T., Mulej, N., Potočan, V., Risopoulos, F., Rosi, B., Steiner, G., Štrukelj, T., Uršič, D. and Ženko, Z. (2013), *Dialectical Systems Thinking and the Law of Requisite Holism Concerning Innovation*, Emergent Publications, Litchfield Park, AZ.
- Nahrgang, J.D., Morgeson, F.P. and Hofmann, D.A. (2010), "Safety at work: a meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes", *Journal of Applied Psychology*, Vol. 96 No. 1, pp. 71-94.
- Nöhammer, E., Schuster, C. and Stummer., H. (2013), "Employee perceived effects of workplace health promotion", *International Journal of Workplace Health Management*, Vol. 6 No. 1, pp. 38-53.
- Powell, T. (1999), Kako premagamo stress? (How to Overcome Stress?), Mladinska knjiga, Ljubljana.
- Pravilnik o načinu izdelave izjave o varnosti z oceno tveganja (Rules on the preparation of safety statement including risk assessment) (2000), Uradni list št. 30/2000 from 6. 4. 2000., available at: www.uradni-list.si/1/content?id = 24734 (accessed June 1, 2014).
- Primer vsebine izjave o varnosti z ocenjevanjem tveganja/ The case of the content of the security risk assessment (2014), Ministrstvo za delo, družino, socialne zadeve in enake možnostim, Ljubljana, available at: www.mddsz.gov.si/fileadmin/mddsz.gov.si/pageuploads/vzd/ primer.pdf (accessed May 28, 2014).
- Švajger, J. (1972), Varnost pri delu: teorija in praksa (Safety at Work: Theory and Practice), Zavod RS Slovenije za varstvo pri delu, Ljubljana.

Tyrer, P.J. (1987), Kako živeti s stresom (How to Live with Stress), Mladinska knjiga, Ljubljana.

- van Berkel, J., Boot, C.R.L., Proper, K.I., Bongers, P.M. and van der Beek, A.J. (2013), "Process evaluation of a workplace health promotion intervention aimed at improving work engagement and energy balance", *Journal Occup. Environ. Med.*, Vol. 55 No. 1, pp. 19-26.
- Vezjak, M. (2002), Skrb za zdravje in varno delo (Concern for Health and Safety at Work), Inštitut Prevent, Ljubljana.
- World Health Organization (2011), Bloom A.D. Education, Health and Development, American Academy of Art and Science, available at: www.amacad.org/publications/ubase\_edu\_ health\_dev.pdf (accessed May 17, 2013).
- Zakon o varnosti in zdravju pri delu (The Law on Safety and Health at Work (ZVZD-1)) (2011), available at: www.uradni-list.si/1/content?id=103969 (accessed June 2, 2012).

#### Further reading

- EU Directive 89/106/EEC (1988), available at: http://eur-lex.europa.eu/legal-content/en/ ALL/;ELX\_SESSIONID=BKzLTnPTXWDnZ7hGRMJQ15hnxZJlQG5HH1QBF1QbnjJF6r8w GJLd!-87709489?uri=CELEX:31989L0106 (accessed May 4, 2012).
- EU (2011), "Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and The Committee of the Regions. A renewed EU strategy 2011-14 for Corporate Social Responsibility", COM(2011) 681 final. Brussels, October 25.
- Mulej, M. and Dyck, R.G. (Eds) (2014a), Social Responsibility Beyond Neoliberalism and Charity. Social Responsibility – A Non-Technological Innovation Process, Vol. 1, S. I, Bentham e-Books, available at: www.eurekaselect.com/121105/volume/1
- Zakon o varstvu pred požarom (Law on Fire Protection) (ZVPoz-UPB1) (2007), available at: www. uradni-list.si/1/objava.jsp?urlid=20073&stevilka=102 (accessed May 4, 2012).

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