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Physical and Psychical Well-Being and Stress: The Perspectives of Leaders and Employees

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Additional information is available at the end of the chapter

<http://dx.doi.org/10.5772/67889>

Abstract

Stress among employees is a significant issue in each organization and society because of its costs on individual, organizational, and society levels. Addressing and reducing stress is thus an important goal, which leads humans to well-being. The main role of managing stress at work belongs to leaders. Their leadership can have effects on the level of stress of employees as well as for themselves. They also decide about their systemic approaches for overcoming stress within organizations. We therefore conducted a stress (qualitative and quantitative) research of employees and leaders within organizations with the main goal to find out the differences between their stresses. The main purpose of this article was to research stress among leaders and employees and to compare their perceived physical and psychical well-being (and stress). For this purpose, we used descriptive statistics and Mann-Whitney *U*-test. We confirmed that (1) leaders report a higher frequency of some kinds of the daily work stress than employees, (2) on average, leaders were more frequently under pressure than employees, (3) on average, leaders had more frequently satisfying sleep than employees, and (4) on average, employees could use their strong points at work less frequently than leaders.

Keywords: employees, leaders, physical and psychical well-being, stress, stress management, work

1. Introduction

As stress becomes more and more one of the biggest problems in our everyday lives, both personal and professional, a very important question arises: how to manage it and how to prevent it. Although the question might seem quite simple, the answer is more complex, especially if we consider that people perceive decisions regarding stress as ethical problems,

which poses a major challenge in organizations, where such stressful environment is practically a part of its culture and is seen as an almost normal, everyday phenomenon.

The main purpose of our research was to identify differences between leaders and employees regarding the physical and psychical well-being and their activities. We also researched the frequency of daily work stress of employees and leaders. We developed four hypotheses, which we verified through descriptive statistics and Mann-Whitney *U*-test for independent samples.

Based on the Dialectical Systems Theory and its Law of requisite holism [1], the following chapter includes the theoretical background about stress and its management. It is followed by the report on the present study including the empirical results of the research. Then, we discuss the results of the hypotheses' verification. In the conclusion, the contributions to theory and practice, along with limitations and future research possibilities are presented.

2. Literature review

2.1. About stress in general

For us, stress is a general term that encompasses a process through which variables in the workplace environment can lead to poor psychological and/or physical health and well-being [2]. Stress not only affects an individuals' well-being but also influences the organizational efficiency. Employees working under the negative stress are less efficient, more dissatisfied, absenteeism, and presentism prone; with such employees, there is a much bigger probability that they will leave the company or work poorly.

Stress can manifest itself in both positive and negative ways. Factors, causing the stress response with the individual, are called stressors. Stress has positive implications, when the situation offers an opportunity for one to gain something. On the other hand, stress can have negative implications, when limits or demands are placed on us. Let us see limits and demands a bit more in detail. Limits are barriers that keep us from doing what we want to do. Purchasing a new car or a house may be your wish, your desire, but if you cannot afford it, you are constrained. We see that limits take control of a situation out of your hands. If you cannot afford the car, you just cannot buy it. Demands, on the other hand, may cause you to give up something you wish. If you wish to go out with friends on Tuesday night, but have an examination on Wednesday, the examination may take precedence. Thus, demands preoccupy your time and force you to change your priorities [3, pp. 328–329].

2.2. Stressors

Stressors can be divided into physical and psychological, but we will look into the organizational and personal stressors. They directly affect both employees and their jobs. There is no shortage of stressors within any organization. Pressures to avoid errors or complete tasks in a limited time, a demanding supervisor, and unpleasant coworkers are a few examples. We can organize stressors into five categories [3, p. 330]:

- Task

Task demands related to an employee's job include the design of the person's job (autonomy, task variety, and degree of automation), working conditions, and the physical work layout. Work goals create pressure on employees when their outcomes are perceived as excessive. Employee's tasks and the tasks of others are interdependent; the greater is this interdependence, the more potential stress surfaces. Autonomy, on the other hand, tends to lessen one's stress.

- Role

Role demands are connected to pressures placed on an employee as a function of the particular role this employee plays in the organization. Role conflicts create expectations that may be hard to adjust to or satisfy. Role overload is experienced when the employee is expected to do more than time or capacity permits. Role ambiguity is created when role expectations are unclear and the employee is unsure what to do.

- Interpersonal demands

Interpersonal demands are pressures created by other employees. Lack of social support from colleagues and poor interpersonal relationships can cause considerable stress, especially among employees with a high social need.

- Organizational structure

Organizational structure can be defined as a stressor, because it can also increase stress. Excessive rules and an employee's lack of opportunity to participate in decisions that affect them directly and personally are examples of variables that might cause stress.

- Organizational leadership

Organizational leadership presents the supervisory style of the organization's company officials. Some leaders create a culture that has the characteristics such as tension, fear, and anxiety. Leaders establish unrealistic pressures to perform in the short run, impose excessively tight controls, and routinely fire employees who do not measure up. The effects of this leadership style flow all the way down through the organizations hierarchy to all employees.

Personal factors that can create stress include family issues, personal economic, health or similar problems, and inherent personality characteristics. Because employees bring their personal problems to work, a leader must first understand these personal factors in order to fully understand employee stress and control it well. Symptoms must be recognized.

2.3. Symptoms of stress

When a person goes through a stress process, he or she passes three phases or stages (GAS—general adaptation syndrome). This model was founded in 1936 by Austrian-Canadian endocrinologist of Hungarian origin Hans Selye. He observed that the body would respond to any external biological source of stress with a predictable biological pattern in an attempt to restore the body's internal homeostasis. With the general adaptation syndrome, a human's adaptive response to stress has three phases: alarm stage, resistance stage, and exhaustion stage. One's

first reaction to stress is the recognition that there is a danger—one prepares to deal with the threat (fight or flight response). During the alarm phase, the main stress hormones cortisol, adrenaline, and noradrenaline are released to provide instant energy. If the produced energy is repeatedly not used by physical activity, it can become harmful. Too much adrenaline results in a surge of blood pressure that can damage blood vessels of the heart and brain—a risk factor for heart attack and stroke. The excess production of the cortisol hormone can cause damage to cells and muscle tissues. Stress-related disorders and disease from cortisol include cardiovascular conditions, stroke, gastric ulcers, and high blood sugar levels. At the first stage, everything is working as it should—you have a stressful event, your body alarms you with sudden hormonal changes, and you are now immediately equipped with enough energy to handle the situation. In the resistance stage, one's body goes into the second phase; the source of stress is possibly resolved. Homeostasis begins returning balance and a period of recovery for repair takes place. Stress hormone levels may return to normal, but you may have a reduced defense and adaptive energy left. If a stressful condition persists, your body adapts by a continued effort in resistance and remains in a state of arousal. Problems begin to manifest themselves when you find yourself repeating this process too often with little or no recovery. Then, the body goes into the last phase. In the exhaustion stage phase, the stress has continued for some time. Your body's ability to resist is lost because its energy supply is gone. It is often referred to as overload, burnout, adrenal fatigue, maladaptation, or dysfunction—here is where stress levels go up and they stay high. The process of adaptation is over and, not surprisingly, this stage of the general adaptation syndrome is the most dangerous one to your health. Chronic stress can damage nerve cells in tissues and organs. Particularly vulnerable is the hippocampus section of the brain. Thinking and memory are likely to become impaired, with tendency toward anxiety and depression [4].

Lu et al. [5] mentioned several drivers of occupational stress such as physical environment, workload, career advancement, management style, working relationships, organizational support, work itself, rewards, job security, job autonomy, role conflict, and ambiguity. We can add that interpersonal work (one of the most important factors of job satisfaction) relations may cause high stress levels, when employees are subject to team pressure and express opinions not embraced by the work group [6]. Another stressor is also individuals' opportunity to influence decisions or to be involved in decision-making [7].

For leaders, stress can be a sort of dilemma in a way that they actually want their employees to be just under enough stress so they don't feel too relaxed and that such "good" stress would lead them to better results and efficiency. So when humans talk about stress and stress reduction, humans tend to have in mind its harmful and possibly dangerous consequences and its other dysfunctional aspects.

Ingram and Di Pilla [8] expose that early signs of stress caused by work are usually easy to recognize; the effects of (job) stress on chronic diseases, however, are more difficult to see because of a long time and many other influential factors. Stress plays an important role in several types of chronic health problems such as (1) cardiovascular diseases, (2) musculoskeletal disorders, (3) psychological disorders, (4) workplace injury, and (5) suicide, cancer, ulcers, and impaired immune function.

These facts require stress management.

2.4. Stress management

Employers must be aware that they have little or sometimes no control over personal factors. They also face an ethical problem when personal factors cause stress in a way just how far can or may one intrude on an employee's personal life. To help them deal with this issue, many companies started different employee assistance and wellness programs. These programs are designed to assist employees in financial planning, legal matters, health, fitness, stress, and similar areas where employees have difficulties. One of the first ways to reduce stress is to make sure that employees are properly matching their jobs (person-job fit)—and that they understand the extent of their “authority.” Furthermore, letting employees know precisely what is expected from them reduces role conflict and ambiguity.

Redesigning jobs can also help ease work overload-related stressors. Employees need to be directly involved in what affects them: involvement and participation have been found to lessen stress. Contemporary employee assistance programs (EAPs) are extensions of programs that had their start in US companies in the 1940s. Companies like DuPont, Standard Oil, and Kodak recognized that some employees were experiencing problems with alcohol. Formal programs were implemented on the company's site to educate these workers about the dangers of alcohol and help them overcome their addiction. The main purpose of all these programs, which still holds today, is returning a productive employee to the job as soon as possible. Following their early focus on employees having problems with alcohol, EAPs entered into new areas like adoption counseling, legal assistance, death of a loved one, and child-parent relations. US companies spend almost \$1 billion each year on EAP programs. Some studies suggest that most companies save from \$5 to \$16 for every EAP dollar spent. That means, for most organizations, it is a significant return on investment [3, pp. 332–333].

It is very important to develop a stress prevention program. Ingram and Di Pilla [8, p. 13] mention general methods that have successfully reduced worker stress and job dissatisfaction. For reducing workers' stress, one can [8, p. 13] (1) address work-related stressors, (2) establish stress management programs, (3) provide readily available counseling from a non-judgmental source, (4) provide flexibility and innovation by supervisors to create alternative job arrangements, (5) provide an organized and efficient work environment, (6) ensure that the workload is in line with workers' capabilities and resources, (7) clearly define workers' roles and responsibilities, (8) improve communications, (9) recognize and take action on legitimate complaints regarding supervisors, (10) design jobs to provide meaning, stimulation, and opportunities for workers to use their skills, and so on.

Humans encounter stress almost everywhere, in family and working environment. Šarotar Žižek et al. [9] have already explained how people who are, because of their personality, less susceptible to negative effects of stress, as well as those who are more exposed to physiological, psychological, or behavioral consequences of stress can learn to effectively cope with stress. Individual strategies that have, so far, proven successful include regular physical activity, meditation and other relaxation methods, healthy lifestyle, and time management. Here are some suggestions of activities that could be appropriate on individual level: yoga, medical hypnosis, autogenic training, visualization relaxation, cognitive methods, biofeedback relaxation

method, emotional freedom technique (EFT), Bowen therapy, massage and aromatherapy, music therapy, color therapy, humor and laughter, or even something as simple as sleep [9].

2.5. Some facts about stress at work

Stress at work is a ubiquitous and multifaceted phenomenon [10] that is costly for organizations, because it contributes to expensive voluntary turnover [11]. Work stress can be a particular problem in customer-oriented fields because employees often experience conflicting demands of the company, supervisors, and customers, and these conflicts create dissonance for employees [12].

In the case of our study, we took as one of the basis the job strain model proposed by Karasek [13], who stated that psychological strain is due to the combined effects of job demands and other factors. Specifically, a high strain job includes high job demands, or workplace stressors. Job strain can appear as poor mental health, physical health problems, and job dissatisfaction and performance problems [13, 14].

Literature review shows us that the roles of control and autonomy at the workplace are important in relation to job stress [15–17]. Furthermore, higher negative correlation between stress and job performance among leaders compared to non-leaders was found out [18].

Prior research revealed that humans have a diversity of different types of stressors in their daily lives, including interpersonal tensions, overloads at work, and arguments at work and also at home, but that the most common type of stressor is interpersonal tension [19]. There is mixed evidence with regard to the relation between work stress and work outcomes. Several studies nonetheless showed a negative link between stress and job satisfaction (e.g., see [20]) and a positive link between stress and turnover (e.g., see [21, 22]). Similarly, research with a sample of US leaders [23] shows that self-reported work stress was significantly related to both lower job satisfaction and higher turnover.

Management (mostly human resource management), sociology, and psychology (work, and organizational psychology) are among the various disciplines engaged in the investigation of work-related stress [24, 25]. They mainly converge that stress importantly affects productivity and performance of organizations [26].

3. The present study

The main aim of the reported-about study was researching the differences between leaders and employees, regarding the physical and psychical well-being and their activities. Our objective in the theoretical part of the article was therefore to present stress in general, expose stress at work and stress management. In the following chapter presenting the empirical part of the research conducted among the leaders and employees in Slovenia, we explored the different level of physical and psychical well-being—stress, each of both groups is exposed to. Therefore, we developed and verified four research hypotheses.

3.1. Hypotheses development

A few empirical studies have been conducted examining and comparing stress among managers and employees:

- McLean and Andrew [27] found no major discrepancies between employees and managers by researching the nature of job commitment, satisfaction, stress, and control among social services managers and social workers in the UK and found very clear associations.
- Wilkes et al. [28] found that employees had more stress than their supervisors did, while they examined job demands and workers' health in machine-paced poultry inspection.
- Steptoe and Willemsen [29] exposed that different stress tests had detected that high- and intermediate-level supervisors in the British civil service system suffered less stress throughout the workday than their worker bees, both men and women, although the picture is a bit murky for women.
- De Moortel et al. [30] found social class inequalities in mental well-being in the European working population for both men and women. They expose that compared to unskilled workers, managers reported the best mental well-being, while supervisors held an intermediary position.

Results of research provided by Skakon et al. [31] show that managers reported lower levels of stress than employees did. This was partly explained by an active job with high demands at work as well as high control of managers, and that managers had a more positive perception of their working conditions. Skakon et al. [31, p. 103] added that "these results contradict the lay perception of managers being under higher pressure and experiencing more stress than employees. Interventions aiming at reducing employee stress levels, especially regarding behavioral and cognitive stress, could benefit from focusing on psychosocial work environment exposures, such as skill discretion, meaning of work, psychological demands, information flow and management quality."

Therefore, the following hypotheses were verified in the empirical part of this research:

Hypothesis 1: Leaders report a higher frequency of daily work stress than employees.

Hypothesis 2: On average, leaders were more frequently under pressure than employees.

Hypothesis 3: On average, leaders had more frequently a satisfying sleep than employees.

Hypothesis 4: On average, employees could use their strong points at work less frequently than leaders.

3.2. Procedure

Data were collected using a quantitative survey with the final sample. The on-line study started on 9 July and was finished on 19 July 2013. The workers having a job with at least 10 working hours per week and having colleagues at work fulfilled the criteria to participate in the study. The workers categorized themselves with respect to their position in the company as leaders or employees.

3.3. Participants

Out of the 292 respondents included in the sample from Slovenia, 265 answered the questions about stress. Twenty-seven questionnaires, gathered from the respondents who did not answer the questions about stress, were excluded from further analysis. Thus, the data analysis included 265 completed questionnaires. Although there were some missing values in the database, the number of responses to each question was sufficient to apply the data analysis methods listed in the next section. Out of the 265 respondents who answered the questions about stress, 71 (26.8%) were classified as leaders and 194 (73.2%) as employees.

3.4. Data analysis

The collected data were processed with the Statistical Package for Social Sciences (Version 21). As the variables are the ordinal ones, the median was used in this survey as the measure of central tendency. We also displayed the frequency tables. As the collected data were measured on an ordinal scale, the independent samples of the Mann-Whitney *U*-test were used to verify the null hypothesis: The distribution of the physical and psychical well-being or their activity of leaders and employees is the same across categories of positions in the company.

4. Results

Table 1 shows that the highest middle value of the frequency of the workers’ physical and psychical well-being or their activity in the last seven days and nights falls in category 5—more often. Median 5—more often—was achieved for the following workers’ physical and psychical well-being or their activity in the last seven days and nights: “I laughed,” “I was in a good mood,” “I was successful in what I did,” “I was in good spirits,” “I felt as if I could get everything done,” and “My work promoted my abilities and competencies.” This middle value was achieved by leaders also for the following statements: “I had a satisfying sleep,” “I was able to make independent decisions,” “I had the chance to make suggestions at work,” “I was supported by my colleagues,” “I contributed to important decisions,” “I could decide myself how I perform my tasks,” “I could use my strong points at work,” “I was supported by my friends,” and “I had the chance to work on a variety of tasks.” In the independent sample of employees, no additional median 5—more often—was achieved.

The reason that the leaders reached median 5 at the above-written additional nine claims, and the employees did not reach it, is that all these claims are related to leading work (the decision making, more complex works, more accountable, more demands, etc.) what also often offers the leaders the possibility to be able to decide independently, give proposals, and determine work and tasks.

Table 1 also shows that the lowest median of the frequency of the workers’ physical and psychical well-being or their activity in the last seven days and nights falls in category 2—seldom. Median 2—seldom—was achieved for the following workers’ physical and

| Statement | Leaders | | Employees | | All workers | |
|---|---------|--------|-----------|--------|-------------|--------|
| In the last seven days and nights... | N | Median | N | Median | N | Median |
| ... I watched TV. | 71 | 4.00 | 194 | 4.00 | 265 | 4.00 |
| ... I laughed. | 70 | 5.00 | 194 | 5.00 | 264 | 5.00 |
| ... everything bothered me. | 69 | 3.00 | 194 | 3.00 | 263 | 3.00 |
| ... I felt physically fit. | 71 | 4.00 | 192 | 4.00 | 263 | 4.00 |
| ... I was in a good mood. | 71 | 5.00 | 192 | 5.00 | 263 | 5.00 |
| ... I had difficulties in concentrating. | 70 | 3.00 | 191 | 3.00 | 261 | 3.00 |
| ... I worried about unresolved problems. | 70 | 3.00 | 193 | 3.00 | 263 | 3.00 |
| ... I had a good time with my friends. | 71 | 4.00 | 193 | 4.00 | 264 | 4.00 |
| ... I had a headache. | 71 | 2.00 | 193 | 2.00 | 264 | 2.00 |
| ... I was tired from work. | 70 | 3.00 | 194 | 3.00 | 264 | 3.00 |
| ... I was successful in what I did. | 71 | 5.00 | 192 | 5.00 | 263 | 5.00 |
| ... I felt uncomfortable. | 71 | 3.00 | 194 | 3.00 | 265 | 3.00 |
| ... I was annoyed by others. | 71 | 4.00 | 193 | 3.00 | 264 | 3.00 |
| ... I felt down. | 71 | 2.00 | 194 | 2.00 | 265 | 2.00 |
| ... I had a satisfying sleep. | 69 | 5.00 | 194 | 4.00 | 263 | 4.00 |
| ... I was fed up with everything. | 70 | 2.00 | 194 | 3.00 | 264 | 3.00 |
| ... I was in good spirits. | 71 | 5.00 | 194 | 5.00 | 265 | 5.00 |
| ... I was overtired. | 70 | 3.00 | 190 | 3.00 | 260 | 3.00 |
| ... I slept restlessly. | 71 | 2.00 | 194 | 3.00 | 265 | 2.00 |
| ... I was annoyed. | 71 | 3.00 | 194 | 3.00 | 265 | 3.00 |
| ... I felt as if I could get everything done. | 71 | 5.00 | 194 | 4.00 | 265 | 5.00 |
| ... I was upset. | 71 | 3.00 | 193 | 3.00 | 264 | 3.00 |
| ... I put off making decisions. | 71 | 2.00 | 192 | 3.00 | 263 | 3.00 |
| ... I made important decisions. | 69 | 4.00 | 191 | 4.00 | 260 | 4.00 |
| ... I felt under pressure. | 70 | 4.00 | 192 | 3.00 | 262 | 3.00 |
| ... I felt that many of my efforts were in vain. | 70 | 3.00 | 193 | 3.00 | 263 | 3.00 |
| ... I had time for my personal needs. | 68 | 4.00 | 194 | 4.00 | 262 | 4.00 |
| ... I could rely on my friends. | 69 | 4.00 | 193 | 4.00 | 262 | 4.00 |
| ... I was able to get some rest during my breaks. | 70 | 4.00 | 192 | 4.00 | 262 | 4.00 |
| ... I felt burned out through my work. | 69 | 3.00 | 194 | 3.00 | 263 | 3.00 |
| ... I felt frustrated through my work. | 70 | 3.00 | 192 | 3.00 | 262 | 3.00 |

| Statement | Leaders | | Employees | | All workers | |
|---|---------|------|-----------|------|-------------|------|
| ... I experienced consistence among my colleagues. | 70 | 4.00 | 192 | 4.00 | 262 | 4.00 |
| ... I could pass my breaks in stillness. | 68 | 4.00 | 190 | 4.00 | 258 | 4.00 |
| ... I had a lot of work at home. | 70 | 4.00 | 194 | 4.00 | 264 | 4.00 |
| ... I could not stop thinking about problems of work at home. | 70 | 3.00 | 193 | 3.00 | 263 | 3.00 |
| ... there were some disputes between colleagues at work. | 70 | 2.00 | 192 | 2.00 | 262 | 2.00 |
| ... I was able to make independent decisions. | 70 | 5.00 | 191 | 4.00 | 261 | 4.00 |
| ... my work promoted my abilities and competences. | 71 | 5.00 | 193 | 5.00 | 264 | 5.00 |
| ... I had the chance to make suggestions at work. | 71 | 5.00 | 194 | 4.00 | 265 | 4.00 |
| ... I did not get my work out of my head. | 68 | 4.00 | 189 | 3.00 | 257 | 3.00 |
| ... I could pass my breaks as scheduled. | 71 | 4.00 | 191 | 4.00 | 262 | 4.00 |
| ... there were misunderstandings between colleagues at work. | 70 | 2.50 | 194 | 2.00 | 264 | 2.00 |
| ... I was supported by my colleagues. | 71 | 5.00 | 190 | 4.00 | 261 | 4.00 |
| ... I felt very exhausted. | 70 | 3.00 | 194 | 3.00 | 264 | 3.00 |
| ... I was able to relax during my breaks. | 70 | 4.00 | 193 | 3.00 | 263 | 3.00 |
| ... I contributed to important decisions. | 71 | 5.00 | 193 | 3.00 | 264 | 4.00 |
| ... I could not be enthusiastic about my work anymore. | 70 | 2.00 | 193 | 3.00 | 263 | 3.00 |
| ... I had the possibility to recover and relax. | 71 | 4.00 | 193 | 4.00 | 264 | 4.00 |
| ... I could decide myself how I perform my tasks. | 71 | 5.00 | 194 | 4.00 | 265 | 4.00 |
| ... I felt that my work is not acknowledged very much. | 71 | 3.00 | 194 | 3.00 | 265 | 3.00 |
| ... I could use my strong points at work. | 71 | 5.00 | 194 | 4.00 | 265 | 4.00 |
| ... I was supported by my friends. | 69 | 5.00 | 192 | 4.00 | 261 | 4.00 |
| ... I had responsibilities in my leisure time. | 70 | 4.00 | 194 | 4.00 | 264 | 4.00 |
| ... I experienced that I cannot achieve much in several things. | 70 | 2.00 | 194 | 3.00 | 264 | 3.00 |
| ... I had the chance to work on a variety of tasks. | 71 | 5.00 | 191 | 4.00 | 262 | 4.00 |
| ... I doubted the importance of my work. | 70 | 2.00 | 192 | 3.00 | 262 | 3.00 |

N, Number of respondents. Measured on a seven-step ordinal scale: 1—never; 2—seldom; 3—sometimes; 4—often; 5—more often; 6—very often; 7—always.
Source: own research.

Table 1. The medians of the frequency of the workers’ physical and psychical well-being or their activity in the last seven days and nights.

psychical well-being or their activity in the last seven days and nights: “I had a headache,” “I felt down,” “I slept restlessly,” “There were some disputes between colleagues at work,” and “There were misunderstandings between colleagues at work.” This middle value was achieved by leaders also for the following statements: “I was fed up with everything,” “I put off making decisions,” “I could not be enthusiastic about my work anymore,” “I experienced that I cannot achieve much in several things,” and “I doubted the importance of my work.” In the independent sample of employees, no additional median 2—seldom—was achieved.

Employees, who do not work as leaders, often perform routine tasks that are physically and mentally exhausting. This may be the reason that employees working on these workplaces, on average, sometimes do not feel the enthusiasm, have seldom conflicts with coworkers, sometimes doubt the importance of their work, and so on. This is also negatively reflected on the abilities to rest and perform activities in private life.

We were verifying statistical differences, regarding the workers’ physical and psychical well-being or their activity, between the two independent samples of workers: leaders and employees. **Table 2** shows the results of two independent samples of the Mann-Whitney *U*-test.

Between leaders and employees, there are no significant differences regarding the following physical and psychical well-being or activities: “I watched TV,” “I laughed,” “Everything bothered me,” “I felt physically fit,” “I was in a good mood,” “I had difficulties in concentrating,” “I worried about unresolved problems,” “I had a good time with my friends,” “I had a headache,” “I was tired from work,” “I felt uncomfortable,” “I felt down,” “I was in good spirits,” “I was overtired,” “I slept restlessly,” “I was annoyed,” “I was upset,” “I felt that many of my efforts were in vain,” “I had time for my personal needs,” “I could rely on my friends,” “I was able to get some rest during my breaks,” “I felt burned out through my

| Statement In the last seven days and nights... | Asymptotic significance | Decision on the null hypothesis |
|---|----------------------------|------------------------------------|
| ... I watched TV. | 0.651 | Retain |
| ... I laughed. | 0.514 | Retain |
| ... everything bothered me. | 0.209 | Retain |
| ... I felt physically fit. | 0.088 | Retain |
| ... I was in a good mood. | 0.213 | Retain |
| ... I had difficulties in concentrating. | 0.638 | Retain |
| ... I worried about unresolved problems. | 0.968 | Retain |
| ... I had a good time with my friends. | 0.309 | Retain |
| ... I had a headache. | 0.472 | Retain |
| ... I was tired from work. | 0.518 | Retain |
| ... I was successful in what I did. | 0.044 | Reject |
| ... I felt uncomfortable. | 0.711 | Retain |

| Statement In the last seven days and nights... | Asymptotic significance | Decision on the null hypothesis |
|---|----------------------------|------------------------------------|
| ... I was annoyed by others. | 0.043 | Reject |
| ... I felt down. | 0.629 | Retain |
| ... I had a satisfying sleep. | 0.015 | Reject |
| ... I was fed up with everything. | 0.407 | Retain |
| ... I was in good spirits. | 0.513 | Retain |
| ... I was overtired. | 0.616 | Retain |
| ... I slept restlessly. | 0.257 | Retain |
| ... I was annoyed. | 0.461 | Retain |
| ... I felt as if I could get everything done. | 0.028 | Reject |
| ... I was upset. | 0.934 | Retain |
| ... I put off making decisions. | 0.630 | Retain |
| ... I made important decisions. | 0.003 | Reject |
| ... I felt under pressure. | 0.042 | Reject |
| ... I felt that many of my efforts were in vain. | 0.334 | Retain |
| ... I had time for my personal needs. | 0.265 | Retain |
| ... I could rely on my friends. | 0.594 | Retain |
| ... I was able to get some rest during my breaks. | 0.544 | Retain |
| ... I felt burned out through my work. | 0.783 | Retain |
| ... I felt frustrated through my work. | 0.918 | Retain |
| ... I experienced consistence among my colleagues. | 0.015 | Reject |
| ... I could pass my breaks in stillness. | 0.483 | Retain |
| ... I had a lot of work at home. | 0.763 | Retain |
| ... I could not stop thinking about problems of work at home. | 0.228 | Retain |
| ... there were some disputes between colleagues at work. | 0.917 | Retain |
| ... I was able to make independent decisions. | 0.011 | Reject |
| ... my work promoted my abilities and competences. | 0.018 | Reject |
| ... I had the chance to make suggestions at work. | 0.001 | Reject |
| ... I did not get my work out of my head. | 0.122 | Retain |
| ... I could pass my breaks as scheduled. | 0.797 | Retain |
| ... there were misunderstandings between colleagues at work. | 0.155 | Retain |
| ... I was supported by my colleagues. | 0.013 | Reject |
| ... I felt very exhausted. | 0.827 | Retain |
| ... I was able to relax during my breaks. | 0.717 | Retain |
| ... I contributed to important decisions. | 0.000 | Reject |

| Statement In the last seven days and nights... | Asymptotic significance | Decision on the null hypothesis |
|---|----------------------------|------------------------------------|
| ... I could not be enthusiastic about my work anymore. | 0.064 | Retain |
| ... I had the possibility to recover and relax. | 0.532 | Retain |
| ... I could decide myself how I perform my tasks. | 0.017 | Reject |
| ... I felt that my work is not acknowledged very much. | 0.205 | Retain |
| ... I could use my strong points at work. | 0.003 | Reject |
| ... I was supported by my friends. | 0.082 | Retain |
| ... I had responsibilities in my leisure time. | 0.925 | Retain |
| ... I experienced that I cannot achieve much in several things. | 0.219 | Retain |
| ... I had the chance to work on a variety of tasks. | 0.001 | Reject |
| ... I doubted the importance of my work. | 0.484 | Retain |

Null hypothesis: The distribution of the workers' physical and psychical well-being or their activity is the same across categories of position in the company. The significance level is 0.05.

Source: own research.

Table 2. The results of the Mann-Whitney *U*-test for the distribution of the workers' physical and psychical well-being/their activity for two independent samples: leaders and employees.

work," "I felt frustrated through my work," "I could pass my breaks in stillness," "I had a lot of work at home," "I could not stop thinking about problems of work at home," "There were some disputes between colleagues at work," "I could pass my breaks as scheduled," "I felt very exhausted," "I had the possibility to recover and relax," "I felt that my work is not acknowledged very much," and "I had responsibilities in my leisure time."

Furthermore, **Table 1** shows that the middle value of the leaders' responses for the statement "I was fed up with everything" falls in category 2—seldom, and of the employees' responses for this statement in category 3—sometimes. Despite this fact, the distribution of "I was fed up with everything" is not significantly different between leaders and employees (**Tables 2** and **3**). The same conclusion can be drawn for "I put off making decisions," "I could not be enthusiastic about my work anymore," "I experienced that I cannot achieve much in several things," and "I doubted the importance of my work."

Table 1 shows that the middle value of the leaders' responses for the statement "I did not get my work out of my head" falls in category 4—often, and of the employees' responses for this statement in category 3—sometimes. Despite this fact, the distribution of "I did not get my work out of my head" is not significantly different between leaders and employees (**Tables 2** and **3**). The same conclusion can be drawn for "I was able to relax during my breaks."

Moreover, **Table 1** shows that the middle value of the leaders' responses on the statement "I was supported by my friends" falls in category 5—more often, and the middle value of the employees' responses on this statement in category 4—often. Despite this fact, the distribution of "I was supported by my friends" is not significantly different between leaders and employees (**Tables 2** and **3**).

Table 2 shows that between leaders and employees, there are significant differences regarding the following physical and psychical well-being or activities: “I was annoyed by others,” “I had a satisfying sleep,” “I felt as if I could get everything done,” “I felt under pressure,” “I was able to make independent decisions,” “I had the chance to make suggestions at work,” “I was supported by my colleagues,” “I contributed to important decisions,” “I could decide myself how I perform my tasks,” “I could use my strong points at work,” and “I had the chance to work on a variety of tasks.”

| Statement In the last seven days and nights... | Category | Frequency—valid percent | | | | | | |
|--|-----------|-------------------------|--------|-----------|-------|---------------|---------------|--------|
| | | Never | Seldom | Sometimes | Often | More often | Very often | Always |
| ... I was successful in what I did. | Leaders | 0.0 | 1.4 | 5.6 | 25.4 | 35.2 | 25.4 | 7.0 |
| | Employees | 1.0 | 2.1 | 16.1 | 25.5 | 28.6 | 21.9 | 4.7 |
| ... I was annoyed by others. | Leaders | 4.2 | 19.7 | 25.4 | 19.7 | 12.7 | 15.5 | 2.8 |
| | Employees | 11.4 | 26.4 | 21.2 | 17.6 | 9.3 | 10.4 | 3.6 |
| ... I had a satisfying sleep. | Leaders | 4.3 | 4.3 | 17.4 | 18.8 | 21.7 | 24.6 | 8.7 |
| | Employees | 4.6 | 10.8 | 26.3 | 17.0 | 20.6 | 13.9 | 6.7 |
| ... I was fed up with everything. | Leaders | 25.7 | 27.1 | 11.4 | 10.0 | 12.9 | 10.0 | 2.9 |
| | Employees | 18.6 | 27.8 | 18.0 | 10.3 | 11.9 | 8.2 | 5.2 |
| ... I felt as if I could get everything done. | Leaders | 2.8 | 1.4 | 11.3 | 21.1 | 25.4 | 33.8 | 4.2 |
| | Employees | 2.6 | 4.6 | 16.0 | 28.9 | 23.2 | 18.6 | 6.2 |
| ... I put off making decisions. | Leaders | 12.7 | 40.8 | 14.1 | 23.9 | 7.0 | 1.4 | 0.0 |
| | Employees | 14.6 | 29.2 | 28.1 | 17.2 | 6.8 | 2.1 | 2.1 |
| ... I made important decisions. | Leaders | 2.9 | 4.3 | 23.2 | 27.5 | 24.6 | 13.0 | 4.3 |
| | Employees | 2.1 | 17.8 | 29.3 | 25.7 | 12.6 | 7.9 | 4.7 |
| ... I felt under pressure. | Leaders | 4.3 | 22.9 | 15.7 | 20.0 | 20.0 | 11.4 | 5.7 |
| | Employees | 6.8 | 24.0 | 27.6 | 20.3 | 10.9 | 5.2 | 5.2 |
| ... I experienced consistence among my colleagues. | Leaders | 1.4 | 2.9 | 21.4 | 25.7 | 22.9 | 17.1 | 8.6 |
| | Employees | 2.6 | 16.7 | 21.9 | 22.9 | 15.6 | 12.0 | 8.3 |
| ... I was able to make independent decisions. | Leaders | 1.4 | 4.3 | 5.7 | 27.1 | 27.1 | 27.1 | 7.1 |
| | Employees | 3.1 | 12.6 | 17.3 | 23.6 | 14.7 | 19.4 | 9.4 |
| ... my work promoted my abilities and competences. | Leaders | 1.4 | 1.4 | 8.5 | 11.3 | 28.2 | 32.4 | 16.9 |
| | Employees | 1.0 | 5.2 | 13.0 | 21.8 | 24.4 | 19.2 | 15.5 |
| ... I had the chance to make suggestions at work. | Leaders | 1.4 | 4.2 | 12.7 | 19.7 | 28.2 | 21.1 | 12.7 |
| | Employees | 1.0 | 17.0 | 20.1 | 20.1 | 20.1 | 12.4 | 9.3 |
| ... I did not get my work out of my head. | Leaders | 2.9 | 13.2 | 30.9 | 19.1 | 17.6 | 10.3 | 5.9 |
| | Employees | 8.5 | 16.9 | 30.2 | 14.8 | 18.0 | 7.9 | 3.7 |

| Statement In the last seven days and nights... | Category | Frequency—valid percent | | | | | | |
|---|-----------|-------------------------|--------|-----------|-------|---------------|---------------|--------|
| | | Never | Seldom | Sometimes | Often | More often | Very often | Always |
| ... there were misunderstandings between colleagues at work. | Leaders | 12.9 | 37.1 | 22.9 | 11.4 | 10.0 | 5.7 | 0.0 |
| | Employees | 21.6 | 34.5 | 22.7 | 9.8 | 5.7 | 5.2 | 0.5 |
| ... I was supported by my colleagues. | Leaders | 1.4 | 4.2 | 14.1 | 23.9 | 35.2 | 14.1 | 7.0 |
| | Employees | 1.6 | 14.2 | 20.5 | 27.4 | 14.2 | 15.8 | 6.3 |
| ... I was able to relax during my breaks. | Leaders | 8.6 | 17.1 | 21.4 | 18.6 | 12.9 | 14.3 | 7.1 |
| | Employees | 6.2 | 20.2 | 24.9 | 17.1 | 14.5 | 7.8 | 9.3 |
| ... I contributed to important decisions. | Leaders | 4.2 | 8.5 | 9.9 | 25.4 | 23.9 | 21.1 | 7.0 |
| | Employees | 7.8 | 19.7 | 24.9 | 22.3 | 9.8 | 11.4 | 4.1 |
| ... I could not be enthusiastic about my work anymore. | Leaders | 22.9 | 32.9 | 14.3 | 12.9 | 10.0 | 5.7 | 1.4 |
| | Employees | 17.6 | 22.3 | 21.2 | 17.1 | 10.4 | 7.8 | 3.6 |
| ... I could decide myself how I perform my tasks. | Leaders | 2.8 | 7.0 | 12.7 | 19.7 | 21.1 | 23.9 | 12.7 |
| | Employees | 2.6 | 12.9 | 20.1 | 21.6 | 18.0 | 17.5 | 7.2 |
| ... I could use my strong points at work. | Leaders | 2.8 | 4.2 | 9.9 | 19.7 | 23.9 | 29.6 | 9.9 |
| | Employees | 1.5 | 10.8 | 21.6 | 24.2 | 18.0 | 12.9 | 10.8 |
| ... I was supported by my friends. | Leaders | 4.3 | 8.7 | 5.8 | 26.1 | 23.2 | 23.2 | 8.7 |
| | Employees | 1.6 | 9.9 | 22.9 | 24.5 | 16.1 | 14.6 | 10.4 |
| ... I experienced that I cannot achieve much in several things. | Leaders | 21.4 | 32.9 | 15.7 | 18.6 | 4.3 | 5.7 | 1.4 |
| | Employees | 18.0 | 24.2 | 26.8 | 13.4 | 8.8 | 5.2 | 3.6 |
| ... I had the chance to work on a variety of tasks. | Leaders | 1.4 | 4.2 | 8.5 | 26.8 | 31.0 | 19.7 | 8.5 |
| | Employees | 0.5 | 11.0 | 23.6 | 27.2 | 18.3 | 12.6 | 6.8 |
| ... I doubted the importance of my work. | Leaders | 28.6 | 27.1 | 12.9 | 11.4 | 12.9 | 4.3 | 2.9 |
| | Employees | 22.4 | 23.4 | 25.0 | 14.1 | 8.3 | 4.7 | 2.1 |

Source: own research.

Table 3. Frequency table for selected statements about the workers' physical and psychical well-being or their activity.

Moreover, although the middle value of responses on the statement "I was successful in what I did" falls in category 5—more often—in both independent samples: leaders and employees (**Table 1**), **Table 2** shows that the null hypotheses: "The distribution of 'I was successful in what I did' is the same across categories of position in the company," is rejected. This result is confirmed by the distribution displayed in **Table 3**. For example, only 7% leaders, but even 19.2% employees were never, seldom, or sometimes successful in what they did; on the other hand, 67.6% leaders, but only 55.2% employees were more often, very often, or always successful in

what they did. Similar conclusions about the same middle values and different distributions can be drawn for the statement “My work promoted my abilities and competences.”

Similarly, although the middle value of responses for the statement “I made important decisions” falls in category 4—often—in both independent samples: leaders and employees (**Table 1**), **Table 2** shows that the null hypotheses: “The distribution of ‘I made important decisions’ is the same across categories of position in the company,” is rejected. This result is confirmed by the distribution displayed in **Table 3**. For example, 30.4% leaders, but even 49.2% employees had never, seldom, or sometimes made important decisions; on the other hand, 41.9% leaders, but only 25.2% employees had made important decisions more often, very often, or always. Similar conclusions can be drawn from the results in **Table 1–3** for the statement “I experienced consistence among my colleagues.”

4.1. Discussion

We developed four main hypotheses presented in the third chapter. The first hypothesis was: “Leaders report a higher frequency of daily work stress than employees.” This hypothesis can be partially confirmed with results in **Table 1**. We can confirm that leaders report a higher frequency of the following daily work stressful feelings than employees:

- I was annoyed by others.
- I felt under pressure.
- I did not get my work out of my head.
- There were misunderstandings between colleagues at work.
- I contributed to important decisions.
- I had the chance to work on a variety of tasks.

Considering the above-written daily work stressful feelings, **Table 2** shows that there are significant differences between leaders and employees regarding the following physical and psychical well-being or activities: “I was annoyed by others,” “I felt under pressure,” “I contributed to important decisions,” and “I had the chance to work on a variety of tasks.”

Employees report a higher frequency of the following daily work stressful feelings than leaders (**Table 1**):

- I was fed up with everything.
- I slept restlessly.
- I put off making decisions.
- I could not be enthusiastic about my work anymore.
- I experienced that I cannot achieve much in several things.
- I doubted the importance of my work.

However, the differences between leaders and employees regarding the daily work stressful feelings are not statistically significant (**Table 2**).

Research results show us that managers are under greater stress than employees are. The fact that Slovenian organizations have been faced with the consequences of the 2008 crisis, with effects still being felt in 2013, can contribute to the understanding of these results. This leads us to the conclusion that managers must prepare special anti-stress programs when organizations are faced with the crisis. It is also associated with manager's empathy because we start from a specific working environment where managers very difficultly terminate an employee employment contract because of social awareness. Thus, managers feel more personally responsible, in order to retain employees and are therefore under increasing pressure to an organization to function effectively.

Based on the research results, presented in **Tables 1** and **2**, we can confirm the second hypothesis: "On average, leaders were more frequently under pressure than employees." Leaders reached median 4—often—at the item, "I felt under pressure," and median 3—sometimes—was achieved by employees at this item (**Table 1**). **Table 2** shows that between leaders and employees, there are significant differences regarding the frequency of this feeling.

The consequences of the crisis in 2008 may threaten the existence and development of organizations. In order to avoid the negative effects of such crisis, managers work quantitatively and qualitatively more as in conjuncture. They are therefore also under increasing pressure, which can be reduced through various activities integrated in stress management.

Based on the research results, presented in **Tables 1** and **2**, we can confirm Hypothesis 3: "On average, leaders had more frequently satisfying sleep than employees." **Table 1** shows that for the frequency of the statement "I had a satisfying sleep," median 5—more often—was achieved by leaders, and median 4—often—was achieved by employees. **Table 2** shows that the differences between leaders and employees regarding the above-written statement are statistically significant.

Despite the fact that managers in Slovenia are under stress and feel the pressure, they sleep well. We may assume that they are aware of their physical and mental well-being, and they improve it with a variety of activities, which result in a satisfying sleep. We conclude that employees fear for their existence, because they could lose their job and this presents long-term uncertainty, resulting in a poor sleep—and are under constant pressure (which has a deeper and more long-term consequences). Managers are under the major short-term pressures, but do not fear for their own existence, and despite all they sleep better.

Similarly, we can also confirm Hypothesis 4: "On average, employees could use their strong points at work less frequently than leaders." **Table 1** shows that for the frequency of the item "I could use my strong points at work," median 4—often—was achieved by employees, and median 5—more often—was achieved by leaders. **Table 2** informs us that the above-written difference is statistically significant.

The workplace of managers and related powers and responsibilities of managers are complex. Therefore, managers must apply all their abilities, knowledge, skills, and personal attributes

including their motivation, will, values, and other feelings. The workplaces of other employees are not so complex and so they cannot use their strong points at work as frequently as managers can.

The issue of workers' physical and psychical well-being or their activities in Slovenia gain importance in 2012, since a new Law on Safety and Health at Work [32] was passed. Since 2012, it is obligatory to implement the precautions about safety and health at work. According to this law, one must assess the risk of every working place in company/organization, which can negatively impact the employee. To minimize these risks, it is necessary to implement systematic activities, which have a positive impact on reducing stress and stressors. All activities are performed in the frame of workplace health promotion (WHP).

5. Conclusion

5.1. Contributions to theory

In the present study, we investigated the differences in physical and psychical well-being of employees and leaders. These operated in a crisis, because in 2013 the consequences of crisis were very intensive in Slovenia. This exploration of stress of leaders and employees focuses on differences, because leaders could manage their employees on the basis of health-caring leadership. Therefore, it is important to develop such a leadership style.

5.2. Contributions to practice

Leaders can see differences in physical and psychical well-being of employees compared to themselves. They can manage employee's stress through work health promotion. It is a process, which is structured in the following phases: preparation, design, realization, score, and follow-up. It affects several areas [33, p. 41]:

- Psychological areas: impact on employees aims on one hand to improve the current and future physical well-being and on the other hand to develop better eating habits and recreation, and to reduce the existing health problems and prevent the future health problems.
- Mental area: employees, who increasingly value company, have greater motivation and job satisfaction. We can also see improvements in dealing with work more responsibly and stress management, which is present in the workplace.
- Social sphere: the impact on employees is primarily in the form of better interpersonal relations, which means that employees have intensive contact with colleagues. The consequence of that includes the increased group cohesion and less internal conflicts among employees.
- Facilitating prevention activities: in this phase, you can use the appropriate promotion of health and safety to save time, because work cannot be organized individually. We can see improvement in the health care and increased support from the psychosocial perspective.

- General cognitive and affective outcomes: this area affects the positive changes in behavior that is associated with health, a better understanding of health, a sense of increasing productivity, and so on.

5.3. Limitations and further research

Limitations are related to economic conditions; namely, we studied employees and leaders in various organizations that operate in crisis. Further research should be directed to the study of employees and leaders in favorable economic conditions. Stress of unemployed persons remains completely open to further researches.

Employees, who do not work as leaders, often perform routine tasks that are physically and mentally exhausting. This is also negatively reflected in the abilities to rest and perform activities in private life. This is also a relevant area for further research.

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References

- [1] Mulej M, Božičnik S, Čančer V, Hrast A, Jurše K, Kajzer Š, Knez-Riedl J, Jere Lazanski T, Mlakar T, Mulej N, Potočan V, Risopoulos F, Rosi B, Steiner G, Štrukelj T, Uršič D, Ženko Z. *Dialectical Systems Thinking and the Law of Requisite Holism Concerning Innovation*. Litchfield Park, AZ: Emergent Publications; 2013.
- [2] Webster JR, Beehr TA, Christiansen ND. Toward a better understanding of the effects of hindrance and challenge stressors on work behavior. *Journal of Vocational Behaviour*. 2010; **76**(1): 68-77.
- [3] DeCenzo DA, Robbins SP, Verhulst SL. *Fundamentals of Human Resource Management*. 10th ed. Hoboken, New Jersey: John Wiley & Sons; 2010.
- [4] Essence of Stress Relief. Hans Selye's general adaptation syndrome [Internet]. 2014. Available from: <http://www.essenceofstressrelief.com/general-adaptation-syndrome.html> [Accessed: 2014-07-10]
- [5] Lu H, Barriball L, Zhang X, While A. Job satisfaction among hospital nurses revisited: A systematic review. *International Journal of Nursing Studies*. 2012; **49**: 1017-1038.

- [6] MacDonald LA, Karasek RA, Punnett L, Scharf T. Covariation between workplace physical and psychosocial stressors: evidence and implications for occupational health research and prevention. *Ergonomics*. 2001; **44**: 696-718.
- [7] Troup C, Dewe P. Exploring the nature of control and its role in the appraisal of workplace stress. *Work & Stress*. 2002; **16**: 335-355.
- [8] Ingram JS, Di Pilla S. Stress in the Workplace. Global Risk Control Service Occupational Health and Safety. Research White Paper, ESIS, Inc. 2007; 1-24.
- [9] Šarotar Žižek S, Treven S, Treven U, Milfelner B, Pisnik Korda S, Potočnik A, Mulej M, Ivanovič B. Premagovanje stresa kot sredstvo za zagotavljanje dobrega počutja: znanstvena monografija projekta Chance 4 change. Maribor: University of Maribor, Faculty for Economics and Business; 2013.
- [10] Lazarus RS. From psychological stress to the emotions: A history of changing outlook. *Annual Review of Psychology*. 1993; **44**: 1-21.
- [11] Villanueva D, Djurkovic N. Occupational stress and intention to leave among employees in small and medium enterprises. *International Journal of Stress Management*. 2009; **16**: 124-137.
- [12] Ruyter K, Wetzels M, Feinberg R. Role stress in call centers: Its effects on employee performance and satisfaction. *Journal of Interactive Marketing*. 2001; **15**(2): 23-35.
- [13] Karasek R. Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*. 1979; **24**: 285-308.
- [14] Karasek R, Theorell T. *Healthy Work: Stress, Productivity, and the Reconstruction of Working Life*. New York: Basic Books; 1990.
- [15] Cekmeceliolu HG, Günsel A. Promoting creativity among employees of mature industries: the effects of autonomy and role stress on creative behaviors and job performance. *Procedia Social and Behavioral Sciences*. 2011; **24**: 889-895.
- [16] Konstantopoulos N, Sakas D, Triantafyllopoulos Y. The strategy of stakeholder briefing during merger negotiation in the bank market. *Journal of Management Development*. 2009; **28**: 622-632.
- [17] Konstantopoulos N, Sakas D, Triantafyllopoulos Y. Lessons from a case study for Greek banking M&A negotiations. *Management Decision*. 2009; **47**: 1300-1312.
- [18] Gilboa S, Shirom A, Fried Y, Cooper C. A meta-analysis of work demand stressors and job performance: Examining main and moderating effects. *Personnel Psychology*. 2008; **61**: 227-272.
- [19] Almeida DM, Horn MC. Is daily life more stressful during middle adulthood? In: Brim OG, Ryff CD, Kessler RC, editors. *How Healthy Are We? A National Study of Well-being at Midlife*. Chicago, IL: The University of Chicago Press; 2004. pp. 425-451.

- [20] Richardson AM, Burke RJ. Occupational stress and job satisfaction among physicians: Sex differences. *Social Science & Medicine*. 1991; **33**: 1179-1187.
- [21] Hemingway M, Smith C. Organizational climate and occupational stressors as predictors of withdrawal behaviors and injuries. *Journal of Occupational and Organizational Psychology*. 1999; **3**: 285-299.
- [22] Keller RT. The role of performance and absenteeism in the prediction of turnover. *Academy of Management Journal*. 1984; **27**: 176-183.
- [23] Cavanaugh MA, Boswell WR, Roehling MV, Boudreau JW. An empirical examination of self-reported work stress among U.S. managers. *Journal of Applied Psychology*. 2000; **85**: 65-74.
- [24] Tsarenko Y, Tojib DR. A transactional model of forgiveness in the service failure context: a customer-driven approach. *Journal of Services Marketing*. 2011; **25**: 381-392.
- [25] Blackhart GC, Nelson BC, Knowles ML, Baumeister RF. Rejection elicits emotional reactions but neither causes immediate distress nor lowers self-esteem: A meta-analytic review of 192 studies on social exclusion. *Personality & Social Psychology Review*. 2009; **13**: 269-309.
- [26] Trivellas P, Reklitis P, Platis C. The effect of job related stress on employees' satisfaction: A survey in health care. *Procedia – Social and Behavioral Sciences*. 2013; **73**: 718-726.
- [27] McLean J, Andrew T. Commitment, satisfaction, stress and control among social services managers and social workers in the UK. *Administration in Social Work*. 2000; **23**: 93-117.
- [28] Wilkes B, Stammerjohn L, Lalach N. Job demands and worker health in machine-paced poultry inspection. *Scandinavian Journal of Work, Environment & Health*. 1981; **4**: 12-19.
- [29] Steptoe A, Willemsen G. The influence of low job control on ambulatory blood pressure and perceived stress over the working day in men and women from the Whitehall II cohort. *Journal Hypertens*. 2004; **22**: 915-920.
- [30] De Moortel D, Vandenheede H, Muntaner C, Vanroelen C. Structural and intermediary determinants of social inequalities in the mental well-being of European workers: a relational approach. *BMC Public Health*. 2014; **14**: 938.
- [31] Skakon J, Kristensen TS, Christensen KB, Lund T, Labriola M. Do managers experience more stress than employees? Results from the Intervention Project on Absence and Well-being (IPAW) study among Danish managers and their employees. *Work: A Journal of Prevention, Assessment and Rehabilitation*. 2011; **38**(2): 103-109.
- [32] Law on Safety & Health at Work in Slovenia ZVZD-1. Zakon o varnosti in zdravju pri delu (ZVZD-1). 2011. Available from: <http://www.uradni-list.si/1/content?id=103969> [Accessed: 2014-02-02].
- [33] Nöhammer E, Schuster C, Stummer H. Employee perceived effects of workplace health promotion. *International Journal of Workplace Health Management*. 2013; **6**: 38-53.

