Psychosocial features at workplace of in the context of some socio-demographic characteristics

Sandra Bušurelo-Erak, mag. psih; Mateja Špehar, mag. psih.;
Croatian Ministry of the Interior Health Centre
Stress

Stressor
(stress reaction stimulus)

Stress
(psychological, physiological and behavioral reaction of the organism)

Life stress
(private life)

Organizational stress
/business life)
Psychosocial risks
(working conditions that are recognized as stressful by most of the workers)

The context of work
(poor work organization and organizational culture):
- inadequate leadership
- unclear objectives and work roles
- inability to develop career
- inadequate work benefits
- lack of influence on decision-making process
- poor working relationships
- imbalance of private and business life

Content of work
(content of assignments)
- assignments that are not diversified, assignments that are meaningless
- too much or too little of the workload and work speed
- work schedule
- dangerous conditions in the workplace
Psychosocial risks research

• 28% of employees are exposed to psychosocial risks at work (EU-OSHA, 2013.)
• 2014th to 2015th the goal is to recognize psychosocial risks at work and to manage them (EU-OSHA, 2013.)
• 2013th to 2015th Strategic Development Plan for Public Health RH: occupational medicine practitioners are executors of the preparation and implementation of anti-stress programs for at risk working group
• Psychologists: Their research and experience contribute to the identification of psychosocial risks
High-risk occupations

• Croatian Ministry of the Interior Health Centre: medical examinations of employees working in high-risk occupations
• High-risk occupations contain: confronting the tragedies caused by natural disasters or human activities, witnessing human suffering or fatalities, the need to respond quickly and simultaneously using a proper assessment of the situation, the possibility of their own injuries or danger, exposure to violent events
• Deminers, firefighters and security guards meet these criteria
• High-risk occupations in the content, but at the same time very different in style and conditions of working
• Deminers: the smallest error means deadly consequences for the individual and the colleagues in the vicinity (30 killed, 120 wounded), the lack of research on this occupation

• Firefighters: organism is in constant readiness, disturbing scenes on interventions, dangerous working conditions

• Security guards: periods of prolonged concentration and monotony, major consequences if they make a mistake in a crisis situation

• High-risk occupations in the content, but at the same time very different in style and conditions of working
Purpose and research problems

1. Check the presence of psychosocial risks in the workplace of deminers, firefighters and security guards.

2. Examine the differences in the severity of psychosocial risks in the workplace of deminers, firefighters and security guards.

3. Examine the differences in the severity of psychosocial risks for the employees with respect to certain socio-demographic variables.
Conduct research

- May to August 2015.
- 164 participants: deminers (75), firefighters (55), security guards (34)
- Preventive examinations for the job (by reference to which it was emphasized that the research is not related to the assessment of work in order to encourage the honest answer)
- A questionnaire to assess psychosocial job characteristics (COPSOQ II)
- 4 categories of questions: psychosocial climate (13 factors), the impact of work on private and family life, work organization (2 factors) and personal health and well-being (7 factors)
- The result obtained in each factor is compared with the average which is determined in advance by the author and concludes if there is a psychosocial risk factor
- The socio-demographic questionnaire (age, sex, level of education, financial status, marital status, type of working sector)
1. Presence of psychosocial risks in the workplace of deminers, firefighters and security guards (arithmetic mean criteria)

<table>
<thead>
<tr>
<th>WORK ENVIRONMENT FACTORS</th>
<th>DEMINERS (n = 75)</th>
<th>FIREFIGHTERS (n = 55)</th>
<th>SECURITY GUARDS (n = 34)</th>
<th>PSYCHOSOCIAL RISK FACTOR CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Sd</td>
<td>X</td>
<td>Sd</td>
<td>X</td>
</tr>
<tr>
<td>Quantitative demands</td>
<td>1.49</td>
<td>1.51</td>
<td>1.07</td>
<td>1.38</td>
</tr>
<tr>
<td>Tempo, work pace</td>
<td>3.49</td>
<td>2.18</td>
<td>4.14</td>
<td>1.78</td>
</tr>
<tr>
<td>Emotional demands</td>
<td>1.88</td>
<td>1.73</td>
<td>3.22</td>
<td>1.88</td>
</tr>
<tr>
<td>Influence at work</td>
<td>5.02</td>
<td>1.89</td>
<td>3.36</td>
<td>1.80</td>
</tr>
<tr>
<td>Possibilities for development</td>
<td><strong>3.60</strong></td>
<td>2.16</td>
<td>5.41</td>
<td>1.45</td>
</tr>
<tr>
<td>Meaning of work</td>
<td>6.81</td>
<td>1.38</td>
<td>6.85</td>
<td>1.18</td>
</tr>
<tr>
<td>Commitment to the workplace</td>
<td>5.59</td>
<td>1.83</td>
<td>7.09</td>
<td>1.13</td>
</tr>
<tr>
<td>Predictability</td>
<td>4.09</td>
<td>2.10</td>
<td>5.50</td>
<td>1.76</td>
</tr>
<tr>
<td>Rewards and recognition</td>
<td>5.24</td>
<td>2.14</td>
<td>6.04</td>
<td>1.70</td>
</tr>
<tr>
<td>Role clarity</td>
<td>6.83</td>
<td>1.45</td>
<td>7.25</td>
<td>.97</td>
</tr>
<tr>
<td>Quality of leadership</td>
<td>5.23</td>
<td>1.94</td>
<td>5.94</td>
<td>1.54</td>
</tr>
<tr>
<td>Social support from supervisors</td>
<td>5.48</td>
<td>1.93</td>
<td>5.94</td>
<td>1.66</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>2.21</td>
<td>.76</td>
<td>2.71</td>
<td>.50</td>
</tr>
<tr>
<td>PRIVATE AND FAMILY LIFE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work family conflict</td>
<td>2.07</td>
<td>1.76</td>
<td>1.27</td>
<td>1.68</td>
</tr>
<tr>
<td>WORK ORGANIZATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical trust</td>
<td>5.40</td>
<td>1.97</td>
<td>6.40</td>
<td>1.34</td>
</tr>
<tr>
<td>Justice and respect</td>
<td>4.90</td>
<td>2.31</td>
<td>5.78</td>
<td>1.99</td>
</tr>
<tr>
<td>PERSONAL HEALTH AND WELFARE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self rated health</td>
<td>3.25</td>
<td>.74</td>
<td>3.05</td>
<td>.73</td>
</tr>
<tr>
<td>Burnout</td>
<td>1.27</td>
<td>1.37</td>
<td>1.36</td>
<td>1.38</td>
</tr>
<tr>
<td>Stress</td>
<td>1.55</td>
<td>1.32</td>
<td>1.45</td>
<td>1.34</td>
</tr>
</tbody>
</table>
1. Presence of psychosocial risks in the workplace of security guards (criteria is the percentage of respondents in psychosocial risk)
Security guards

- Loss of personal significance and importance in business
- Weak impact on business, unpredictability
- Dissatisfaction with superiors and management
- There is no room for professional development
- Overall, high job dissatisfaction
- Poor health
1. Presence of psychosocial risks in the workplace of deminers (criteria is the percentage of respondents in psychosocial risk)
Deminers

- Dissatisfaction with the superiors.
- Their work is not valued and rewarded in the right way.
- They don’t believe information coming from the management.
- No professional development
1. Presence of psychosocial risks in the workplace of firefighters (criteria is the percentage of respondents in psychosocial risk)

<table>
<thead>
<tr>
<th>Psychosocial Risk</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative demands</td>
<td>0</td>
</tr>
<tr>
<td>Tempo, work place</td>
<td>18.18</td>
</tr>
<tr>
<td>Emotional demands</td>
<td>30.9</td>
</tr>
<tr>
<td>Influence at work</td>
<td>34.55</td>
</tr>
<tr>
<td>Possibilities for development</td>
<td>49.1</td>
</tr>
<tr>
<td>Meaning of work</td>
<td>12.73</td>
</tr>
<tr>
<td>Commitment to the workplace</td>
<td>10.91</td>
</tr>
<tr>
<td>Predictability</td>
<td>23.67</td>
</tr>
<tr>
<td>Rewards and recognition</td>
<td>7.27</td>
</tr>
<tr>
<td>Role clarity</td>
<td>23.64</td>
</tr>
<tr>
<td>Quality of leadership</td>
<td>30.91</td>
</tr>
<tr>
<td>Social support from supervisors</td>
<td>7.27</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>7.27</td>
</tr>
<tr>
<td>Work family conflict</td>
<td>9.09</td>
</tr>
<tr>
<td>Vertical trust</td>
<td>23.64</td>
</tr>
<tr>
<td>Justice and respect</td>
<td>10.91</td>
</tr>
<tr>
<td>Self related health</td>
<td>9.1</td>
</tr>
<tr>
<td>Burnout</td>
<td>18.18</td>
</tr>
<tr>
<td>Stress</td>
<td>30.9</td>
</tr>
<tr>
<td>WORK ENVIRONMENT FACTORS</td>
<td>12.73</td>
</tr>
<tr>
<td>WORK FAMILY CONFLICT</td>
<td>7.27</td>
</tr>
<tr>
<td>WORK ORGANIZATION</td>
<td>23.64</td>
</tr>
<tr>
<td>PERSONAL HEALTH AND WELFARE</td>
<td>9.1</td>
</tr>
</tbody>
</table>
Firefighters

• Dissatisfaction with the possibility of development

• A feeling that they have no impact on business

• Emotionally demanding work
• Unwanted sexual advances: 3.6% (colleagues-1.2%; superiors-0.6%; clients-1.2%)

• Threats of violence: 7.1% (colleagues-0.6%; superiors-3%, clients-4.3%)

• Physical violence: 1.8% (superiors-0.6%; clients-1.2%)

• Harassment: 11.6% (colleagues-1.8%; superiors-7.3%; clients-1.2%)
2. Differences in the severity of psychosocial risks in the workplace of deminers, firefighters and security guards (ANOVA)

<table>
<thead>
<tr>
<th></th>
<th>DEMINERS (n = 75)</th>
<th>FIREFIGHTERS (n = 55)</th>
<th>SECURITY GUARDS (n = 34)</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Work environment factors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>68,02</td>
<td>14,12</td>
<td>71,72</td>
<td>9,06</td>
<td>56,96</td>
<td>12,81</td>
<td>15,02</td>
<td><strong>000</strong>*</td>
<td></td>
</tr>
<tr>
<td><strong>Private and family life</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,06</td>
<td>1,75</td>
<td>1,27</td>
<td>1,68</td>
<td>2,41</td>
<td>1,87</td>
<td>5,25</td>
<td><strong>006</strong>*</td>
<td></td>
</tr>
<tr>
<td><strong>Work organization</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10,28</td>
<td>4,06</td>
<td>12,18</td>
<td>2,95</td>
<td>9,44</td>
<td>4,63</td>
<td>6,27</td>
<td><strong>002</strong>*</td>
<td></td>
</tr>
<tr>
<td><strong>Personal health and welfare</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3,56</td>
<td>2,85</td>
<td>3,76</td>
<td>2,77</td>
<td>4,85</td>
<td>2,36</td>
<td>2,71</td>
<td>069</td>
<td></td>
</tr>
</tbody>
</table>

- Work environment factors: security guards estimate work environment factors less favorable than deminers and firefighters.

- Private and family life: firefighters estimate a greater impact of business on their private life than deminers and security guards.

- Work organization: deminers and security guards estimate work organization less favorable than firefighters.

- Personal health and welfare: there is no difference in the assessment.
3. Differences in the severity of psychosocial risks for the employees with respect to certain socio-demographic variables

Age

younger age (22-35)
mean age (36-50)
older age (51-63)

- Work environment factors:
younger age participants (x=60,54) estimate significantly less favorable (F=5,48, p<0,05) than mean age participants (x=68,69) and older age participants (x=69,06)

- Work organization:
younger age participants (x=9,2) estimate less favorable (F=4,30. p<0,05) than older age participants (x=11,93)

There is no significant difference in the assessment between groups:
- Private and family life (F=1,70, p>0,05)
- Personal health and welfare (F= .04, p>0,05)
Self-assessment of the financial status

bad financial status
average financial status
very good financial status

- Work environment factors:
  bad financial status participants (x=54,16) estimate significantly less favorable (F=19,09, p<0,05) than average (x=68,24) and very good (x=76,29) financial status

- Private and family life:
  bad financial status participants (x=3,29) estimate significantly greater impact of business on their private life (F=11,72, p<0,05) than average (x=1,73) and very good (x=,88) financial status

- Work organization:
  bad financial status participants (x=8,70) estimate significantly less favorable (F=5,94, p<0,05) than average (x=10,84) and very good (x=12,88) financial status

- Personal health and welfare:
  there is a significant difference between groups (F=15,51, p<0,05), bad financial status participants (x=6,20) estimate less favorable, average financial status (x=3,72) estimate slightly better and very good financial status participant (x=1,88)
Marital status

married
not married

There is no significant difference in the assessment between groups:

- Work environment factors: (t=1,10, p>0,05)
- Private and family life: (t=.03, p>0,05)
- Work organization: (t=.81, p>0,05)
- Personal health and welfare: (t=.08, p>0,05)

Type of working sector

private sector
state sector

Private sector participants (x=65.64) estimate work environment factors significantly less favorable (t=12.87, p<0.05) than state sector participants (x=68.14)

There is no significant difference in the assessment between groups:

- Private and family life: (t=.22, p>0.05)
- Work organization: (t=.73, p>0.05)
- Personal health and welfare: (t=.75, p>0.05)
Conclusions

1. Check the presence of psychosocial risks in the workplace of deminers, firefighters and security guards.

Security guards point out the greatest presence of psychosocial risks (dissatisfaction with overall work environment factors, work organization functioning and assess their health as bad).

Deminers are dissatisfied with some aspects of work environment factors: possibility for development, superiors, rewards for their work and functioning of the management of the company.

Firefighters are unhappy with some aspects of work environment: emotional demands at work, possibility for development and lack of impact on work.

1. Examine the differences in the severity of psychosocial risks in the workplace of deminers, firefighters and security guards.

Security guards estimate work environment factors less favorable than other occupations.

Firefighters estimate a greater impact of business on their private life than other occupations.

Deminers and security guards estimate work organization less favorable than firefighters.

There is no difference in the assessment of the personal health and welfare.
3. Examine the differences in the severity of psychosocial risks for the employees with respect to certain socio-demographic variables.

Younger age participants distinguish from other by unfavorable assessment of the work environment factors and work organization, while there is no difference between age groups in private and family life and personal health and welfare.

Bad financial status participants distinguish from other by unfavorable assessment of all factor that are examined.

Married and not-married participants don’t differ in the assessment of factors.

Private sector participants distinguish from state sector participants by unfavorable assessment of work environment factors. There is no difference between groups in other factors assessment.
## Suggestions for improvements

### Security guards
- Program for education of the supervisors (leadership skills, communication skills).
- Flow of information at all levels.
- Involvement in decision-making process (creating work schedules with employees according to their preferences).
- Education in recognizing burnout syndrome.

### Deminers
- Benefits through tangible and intangible rewards (accommodation, meal, activities on the field, participation in congresses, free working days, additional insurance, physical therapy and massage, award for the best worker of the year, accelerated retirement).
- Investment in working equipment.
- Flow of information at all levels.
- Anti-stress relaxing programs.

### Firefighters
- Implementing crisis interventions.
Thank you for your attention!