EXPOSURE TO VIOLENCE AND GENERAL STRESSORS IN WORKING ENVIRONMENT AS NEGATIVE PREDICTORS OF THE WORK ABILITY INDEX OF PERSONAL AND PROPERTY SECURITY GUARDS

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The Study of the Psychosocial Aspects in the Working Environment of the Personal and Property Security Guards

Reasons:

- exposure to violence;
- high level of stress in the workplace;
- decrease in self-esteem and motivation;
- risk of developing burnout syndrome;
- consequential illness development;
- loss of earning capacity
Epidemiology

In European Union:

- 9 000 000 workers suffer physical violence;
- 3 000 000 sexual harassment;
- 13 000 000 intimidation and violence
- Security guards and police officers are more exposed to violence during work in relation to other workers.

Anonymous, 2002
Workplace Violence Definition (WHO)

- "The intentional use of physical force or power for the purpose of the threat, or the application thereof, against a person, group of persons or community;

- “It will most likely result in an injury, psychological damage, or deprivation of life“

Krug i sar., 2002.
An Act of Violence

- A traumatic event that goes beyond the usual human experience and causes an anxious response in otherwise healthy individuals.

- Direct or potential life threat, the possibility of being wounded, witnessing a death, injury or harm to other people.
The cause of Workplace Violence

- Occupations exposed to violence;
- Problems in the organization of work;
- Incompetent management and leadership;
- A negative or hostile social climate;
- A culture that allows or rewards harassments within the organization
- Violence may not be expressed in physical, sexual or verbal assault, but it can also be “an uncivilized behavior”

Madu and Poodhun, 2006
The consequences of Violence

**Individual consequences:**

- **Physical**: bruises, injuries, disability and reduced quality of life, death;
- **Psychological**: anxiety and fear, insomnia, alexithymia, posttraumatic stress disorder and conduct disorder, aggression or depression, suicide…

**Consequences at the work unit level:**

- Reduced efficiency, decreased motivation to work and satisfaction with work; sick leave...
- Witnesses of violence also suffer from the consequences.

(Pranjić, 2012; Figley, 2002; Field, 2003.)
Bnei Brak security guard shot; suspect nabbed

Unknown individual shoots at female security guard who sustains light wounds. Police checking circumstances behind incident

Gilad Morag
Man Studying to Be Security Guard Kills Teacher

Feb 24, 2011 1:44 AM CST
Physiological reactions:

- increased levels of cortisol;
- higher cholesterol;
- high blood pressure, palpitations;
- chest pain, insomnia;
- the occurrence of some types of cancer;
- indigestion, headache;
- decreased function of the immune system…
In the first half of 2010 in the Federation of Bosnia and Herzegovina, there were 54 attacks on security guards and police officers during work.

It is believed that a large number of attacks has not been reported as an incident - occupational injury.
To determine the relationship between the exposure to general stressors in the working environment with work ability index in personal and property security guards.

To determine the relationship between the exposure to violence and other specific stressors in the working environment with work ability index in personal and property security guards.
The study includes 250 subjects, personal and property security guards employed in private security agencies in the Tuzla Canton, which are selected by the method of stratified randomization and voluntary sampling.
The questionnaire on the workplace stressors of the Finnish Association of Occupational Health - OSQ;

The questionnaire on the workplace violence (frequency and intensity are designed according to the Likert scale of 1-5)

The questionnaire on the workplace stressor intensity (frequency and intensity are designed according to the Likert scale of 1-4)

The Questionnaire on the Work Ability Index (Work ability index – WAI)

(Geddes and Stickney, 2011)
WAI SCORE

- **7-27**: Poor work ability;
- **28-36**: Good work capacity;
- **37-43**: Very good work ability;
- **44-49**: Excellent work ability;
The Conceptual Model of Work Ability

HEALTH
- Physical capacity
- Mental capacity
- Social capacity

EDUCATION AND COMPETENCE
- Skills
- Professional competence
- Knowledge

WORK
- Mental demands
- Community work
- Working environment
- Physical demands

WORK ABILITY
Distribution of respondents (n = 250) according to age groups

- 19-24: 37
- 25-34: 129
- 35-44: 70
- 45-60: 14
Distribution of respondents by education

- Primary school: 13
- High school: 237
Distribution of respondents (n = 250) according to marital status

- Unmarried: 86
- Married: 163
- Informal community: 1
Distribution of respondents according to the length of work experience

length of service of security guard

- Up to one year: 9
- 1 year: 30
- 1.5 years: 13
- 2 years: 42
- 3 years: 50
- 4 years: 34
- 5 years: 31
- 6 years: 19
- 7 years: 9
- 8 years: 3
- 9 years: 1
- 10 years: 4
- Up to 10 years: 5
Distribution of respondents to the experience of exposure to violence

- 32% yes
- 66% no
- 2% without answer

Distribution pie chart showing the percentage of respondents who experienced violence.
Distribution of respondents according to experience mental disorders, which are the consequences of violence in the workplace.
Lein et al. (2011) report a higher percentage of subjects who gave a positive answer to questions about their experience of exposure to all forms of violence, as well as violence-based mental disorders.

A large percentage of our subjects is in fear of losing their job, and therefore they did not report or did not give answers to the provided questions (given the current economic situation).
The distribution of subjects by a factor of probability risk at work with less staff

- Yes: 15%
- No: 85%
The distribution of subjects by a factor of probabilistic risk work at night or early in the morning.
The distribution of subjects by a factor of probabilistic risk work in dangerous conditions

- work at height
- no risk
- the risk of assault
- work with flammable substances

- 68%
- 26%
- 4%
- 2%
Compared to published studies (Appelberg, 1996; Einarsen, 1994; Hoel, 2003), our subjects report a higher percentage of the risk factors in their workplace.

In our opinion, the reason for this is a poorer organization of work, as well as lower equipment of our security agencies in relation to agencies in other countries.
Mark Button (2007, Great Britain) states that the majority of subjects show signs of depressed mood.

Virtanen et al. (2009, Sweden) states that nearly $\frac{1}{2}$ of subjects had sleep disturbances.

Total 19% our subjects suffered from insomnia accompanied by chronic fatigue, while the depressed mood was reported by 15% subjects.

The reason is primarily the failure to report, and the younger age of our subjects.
The risk factors and/or general workplace stressors:

- working alone, no co-workers: 38%
- dissatisfied with the health status: 10%
- dissatisfied with the job: 26%
- feeling stress these days: 20%
- the job is physically demanding: 62%
- job is mentally tiring: 76%
- business has phases that are too heavy: 49%
- must hurry to finish the job: 7%
- you can use the knowledge to work: 40%
- no support from colleagues at work: 30%
- no support in setting superior: 22%
- in the inner circle at work there is actually someone who can talk openly: 22%
- you can not have any effect on things at work that have to do with you: 42%
## Distribution of respondents by category estimated current working capacity

<table>
<thead>
<tr>
<th>Assessment of working capacity</th>
<th>Scor WAI</th>
<th>number of respondents (N=250)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Very good ability to work;</td>
<td>44-49</td>
<td>119</td>
<td>48</td>
</tr>
<tr>
<td>2. Very good ability to work;</td>
<td>37-43</td>
<td>75</td>
<td>30</td>
</tr>
<tr>
<td>3. Good work capacity;</td>
<td>28-36</td>
<td>43</td>
<td>17</td>
</tr>
<tr>
<td>4. Poor work ability;</td>
<td>7-27</td>
<td>13</td>
<td>5</td>
</tr>
</tbody>
</table>
The distribution of respondents by perception of operating efficiency in relation to the tasks and workload:

- Can to work only half time: 3
- Often has to do slowly: 15
- Sometimes has to do slowly: 16
- Some symptoms: 80
- Healthy: 136
Distribution of respondents according to personal prognosis of work ability in the next two years

- I do not believe: 4
- I am not sure: 25
- I am pretty sure: 221
The correlation matrix of the causal relation between individual characteristics and perceptions about the current work ability in relation to the requirements of the position

<table>
<thead>
<tr>
<th>Individual factors and assessment</th>
<th>Age (years)</th>
<th>Marital status</th>
<th>Education</th>
<th>Current work ability</th>
<th>WAI related to psychological demands</th>
<th>WAI related to the physical demands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.000* 0†</td>
<td>1.000* 0†</td>
<td>-0.076 0.115</td>
<td>-0.039 0.270</td>
<td>-0.294 0.000</td>
<td>0.367 0.172</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.535 0.001</td>
<td>1.000* 0†</td>
<td>0.014 0.232</td>
<td>0.007 0.016</td>
<td>-0.140 0.014</td>
<td>-0.020 0.376</td>
</tr>
<tr>
<td>Education</td>
<td>-0.076 0.115</td>
<td>1.000* 0†</td>
<td>0.047 0.232</td>
<td>-0.140 0.014</td>
<td>-0.294 0.000</td>
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</tr>
<tr>
<td>WAI related to the physical demands</td>
<td>-0.039 0.270</td>
<td>0.007 0.016</td>
<td>-0.140 0.014</td>
<td>0.047 0.232</td>
<td>-0.294 0.000</td>
<td>0.367 0.172</td>
</tr>
</tbody>
</table>

- Our subjects can have a decreased in the current work ability in relation to the increasing age due to physical requirements of the work playe;
- Marital status has no share in the working capacity, except for self-assessment of the current work ability;
- The current work ability is associated with mental and physical demands of the workplace;
<table>
<thead>
<tr>
<th>Predictors as independent variables</th>
<th>$\beta$ and 95% confidence interval (95%CI)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor interpersonal relationships</td>
<td>0.877</td>
</tr>
<tr>
<td>Time pressure</td>
<td>-2.283</td>
</tr>
<tr>
<td>Job has phases that are too difficult</td>
<td>-2.254</td>
</tr>
<tr>
<td>Work is physically exhausting</td>
<td>2.128</td>
</tr>
</tbody>
</table>

Workplace stressors as predictors of the decrease in the current work ability
- poor interpersonal relationships;
- job has phases that are too difficult;
- time pressure in carrying out their tasks;
- work is mentally exhausting.
**The correlation matrix of the causal relationship of the violence exposure and the current work ability**

<table>
<thead>
<tr>
<th>Violence</th>
<th>Waving their fists, throwing objects</th>
<th>Insulting movements</th>
<th>Intimidation and terror</th>
<th>Verbal or written threats</th>
<th>Visual sexual abuse</th>
<th>Sexual abuse by words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waving their fists, throwing objects</td>
<td>1.000*</td>
<td>0†</td>
<td>0.606 0.001</td>
<td>0.517 0.001</td>
<td>0.606 0.001</td>
<td>1.000* 0†</td>
</tr>
<tr>
<td>Insulting movements</td>
<td>0.606 0.001</td>
<td>1.000* 0†</td>
<td>0.645 0.001</td>
<td>0.606 0.001</td>
<td>0.606 0.001</td>
<td>1.000* 0†</td>
</tr>
<tr>
<td>Intimidation and terror</td>
<td>0.416 0.001</td>
<td>0.645 0.001</td>
<td>1.000* 0†</td>
<td>0.517 0.001</td>
<td>0.517 0.001</td>
<td>1.000* 0†</td>
</tr>
<tr>
<td>Verbal or written threats</td>
<td>0.367 0.001</td>
<td>0.517 0.001</td>
<td>0.606 0.001</td>
<td>1.000* 0†</td>
<td>1.000* 0†</td>
<td>1.000* 0†</td>
</tr>
<tr>
<td>Visual sexual abuse</td>
<td>0.262 0.001</td>
<td>0.065 0.154</td>
<td>0.348 0.001</td>
<td>0.201 0.001</td>
<td>0.201 0.001</td>
<td>1.000* 0†</td>
</tr>
<tr>
<td>Sexual abuse by words</td>
<td>0.206 0.001</td>
<td>0.244 0.001</td>
<td>0.441 0.001</td>
<td>0.238 0.001</td>
<td>0.774 0.001</td>
<td>1.000* 0†</td>
</tr>
</tbody>
</table>

The work ability is strongly impacted by violence exposure to violence: waiving or throwing various objects, showing offensive movements, intimidation and terror, verbal and written threats and visual or verbal forms of inappropriate sexual violence.
The correlation matrix of the causal relationship of changes in behavior and symptoms and signs of mental health with distress and the current work ability

<table>
<thead>
<tr>
<th>Symptoms and signs</th>
<th>It is easy to get angry</th>
<th>insomnia</th>
<th>Depression</th>
<th>Violent toward family</th>
<th>Harsh and insensitive</th>
<th>Suicidal</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is easy to get angry</td>
<td>1.000* 0†</td>
<td>0.400 0.001</td>
<td>0.510 0.001</td>
<td>0.207 0.001</td>
<td>0.409 0.001</td>
<td>0.016 0.400</td>
</tr>
<tr>
<td>insomnia</td>
<td>1.000* 0†</td>
<td>0.380 0.001</td>
<td>0.534 0.001</td>
<td>-0.134 0.017</td>
<td>0.400 0.001</td>
<td>0.115 0.035</td>
</tr>
<tr>
<td>Depression</td>
<td>1.000* 0†</td>
<td>0.534 0.001</td>
<td>0.795 0.001</td>
<td>0.001</td>
<td>0.795 0.001</td>
<td>0.147 0.010</td>
</tr>
<tr>
<td>Violent toward family</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>Harsh and insensitive</td>
<td>0.400 0.001</td>
<td>0.400 0.001</td>
<td>0.558 0.001</td>
<td>0.558 0.001</td>
<td>0.558 0.001</td>
<td>0.384 0.001</td>
</tr>
<tr>
<td>Suicidal</td>
<td>0.016 0.400</td>
<td>0.115 0.035</td>
<td>0.147 0.010</td>
<td>0.384 0.001</td>
<td>0.239 0.001</td>
<td>1.000* 0†</td>
</tr>
</tbody>
</table>

Our subjects can have a decrease in the current work ability with the occurrence of anxiety, insomnia, depressed mood and alexithymia (they are violent against family members and they become rude and insensitive).
**ANOVA - Linear Regression Analysis**

**Dependent variable: Work Ability Index (WAI)**

<table>
<thead>
<tr>
<th>Predictors as independent variables</th>
<th>β and 95% confidence interval (95%CI)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
</tr>
<tr>
<td>The effects on mental health</td>
<td>-0.221</td>
</tr>
<tr>
<td>The fear of making a mistake at work</td>
<td>0.714</td>
</tr>
<tr>
<td>Exposure to harsh, rude behavior</td>
<td>-0.207</td>
</tr>
<tr>
<td>Exposure to threats and terror</td>
<td>0.128</td>
</tr>
</tbody>
</table>

Predictors of decrease in work ability in relation to the consequences of violence are mental health disorders and fear of making a mistake at work.
The dangers of exposure to act of violence in the workplace (injuries and accidents at work):

- witnessing a murder or attempted murder of another person;
- work without the assistance of colleague;
- work in night shifts;
- frequent contacts with third parties
Stressors as predictors of a decrease in work ability:
- poor interpersonal relationships and too difficult phases of work;
- time pressure in carrying out their tasks;
- mentally demanding job.

Work performance is strongly impacted by exposure to violence:
- intimidation and terror, verbal and written threats;
- aspects of visual or verbal inappropriate sexual violence.
A decrease in the current work ability of subjects is related with:

- occurrence of anxiety and insomnia;
- depressed mood and alexithymia;
- fear to make a mistake at work.

Predictors of decrease in work ability in relation to the consequences of violence:

- mental health;
- fear to make a mistake at work.
To remember

**Primary prevention:** the responsibility of employer is to train and inform employees about ethical obligations, mutual tolerance and proper communication.

**Secondary prevention:** in cases where the employee has already been exposed to distress predictors, and it refers to the establishment of employees’ ability to identify the stressor and abusers, and to seek appropriate help.

**Tertiary prevention:** includes establishment of measures that will lead to early detection of the symptoms of distress, which will eliminate the damage already caused to the employee, their family and society.
The legislature must prevent violence with appropriate punitive measures for a perpetrator.

Prevention measures on an individual level: regular medical examinations, the adjustment of working hours and shift work, a healthy lifestyle, physical activity, rehabilitation, career planning, education.

Organizational measures: optimal number of employees, adequate financial resources for work, training, clear instructions on how to complete certain phases of work.
VIOLENCE PREVENTION PROGRAMS IN WORK ORGANIZATIONS

thank you!