Diagnosing occupational stress in Romanian organisations

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Abstract

The study investigates the complex topic of occupational stress, based on a comprehensive model of stress diagnosis and management for romanian employees (N=1026 participants), at individual and organizational level. The following multidimensional components of the dynamic stress process are measured with the romanian adapted version of Pressure Management Indicator (PMI, Williams & Cooper, 1998; PMI-RO, Brate, 2004, 2006, 2008): stressors, effects, individual differences and coping strategies. Specific significant influences and associations between stressors, individual differences, coping strategies and perceived effects of occupational stress are presented. Further implications and applications of the study are offered.

Keywords: occupational stress, stressors, effects, individual differences, coping strategies

1. Introduction

Occupational stress in different work settings (Brate, 2003; Pitariu, 2004) is still one of the major topics investigated in the last years from different perspectives (Brate, 2011), because of the impact of his effects at individual and organizational level. This increasingly common feature of modern alert life proves to influence and to be linked to job performance and satisfaction, organizational behavior, acute and chronic health problems, burnout, aggression in all forms, anxiety, personnel fluctuation, producing high costs for different types of organizations and socioprofessional categories.

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In the dynamic and complex process of stress, in different occupational and organizational settings, the impact of specific stressors (of different intensity, frequency or type) and the perception of the these effects is moderated or mediated by individual differences (personality dimensions, emotions and coping strategies: Brate, 2007b, 2009). These variables (moderators/ predictors) could be also crucial in developing, applying or improving stress management and intervention strategies, at individual and organizational level (Brate, 2007a).

2. **The Objective**

The main purpose of this study is to use a comprehensive model of diagnosis and management of the main variables of the occupational/organizational stress process: stressors, personality factors and coping mechanisms (individual differences) and effects (Brate, 2008, 2009a, 2011). This paper presents only a part (synthesis) of the results of the larger study on diagnosing and intervention in occupational stress for Romanian employees, from different socioprofessional categories (Brate, 2003, 2004, 2006, 2009b etc.).

3. **Method / Procedure**

The Romanian version (PMI-RO, Brate, 2004, 2006, 2008) of the **Pressure Management Indicator** (PMI, developed by Williams & Cooper, 1998) was distributed to employed participants from different Romanian organizations in the public and private sector, after it was translated and adapted. The data collecting, cleaning and verification of the questionnaires left for now a sample of 1026 individuals with no missing data and each participant having only completed one administration of the PMI-RO. For statistical processing data and measuring the variables, the statistical program SPSS was used.

3.1. **Participants**

The participants who had completed the PMI-RO, were N=1026 employees, from public and private sectors with different levels of educational and professional background. The age mean for the participants is 36.34 years, 524 (51.1%) were male participants and 502 (48.9%) female participants. 23.8% reported a major event and 9.8% reported a major illness in the last 3 months.

3.2. **Instrument**

The **Pressure Management Indicator** (PMI, Williams & Cooper, 1998, translated and adapted for Romanian participants by the autor: PMI-RO) is a 120 item self-report questionnaire developed from the Occupational Stress Indicator (OSI). The instrument contains a biographic questionnaire and provides an integrated multidimensional diagnosis of the major dimensions of occupational stress, investigated with Likert subscales from 1 to 6, which measure:

1. Socio-professional sources of pressure: Workload (PW), Relationships (PR), Recognition (PC), Organizational climate (PO), Personal responsibility (PP), Managerial role (PM), Home/work balance (PH), Daily hassles (PD) - as independent variables;
2. Personality (individual differences): Drive (TD), Control (LC), Impatience (TI), Personal influence (LI) - as moderator variables;
3. Coping mechanisms: Problem focus (CO), Life/work balance (CD), Social support (SS) - as moderator variables;
4. Effects: Job satisfaction (JI), Organizational satisfaction (JO), Organizational security (OS), Organizational commitment (OC), State of mind (MA), Resilience (MR), Confidence level (MW), Physical symptoms (PA), Energy levels (PE) - as dependent variables.

This multidimensional and comprehensive diagnostic tool permits to extract a stress profile for the individual, groups, socio-professional categories, departments, institutions, firms or corporations, organized by different criteria. Also on its base, specific multidimensional stress diagnosis models and intervention (management) strategies can be initiated and developed.
3.3. Premise/ hypothesis

Occupational stressors, specific individual differences and coping strategies play a significant role in the perception of the sources of stress (pressures) and for the awareness and recognition of the effects of occupational stress.

4. Results

Analysing the mean differences between English (Williams & Cooper, 1998) and Romanian participants, observations show that Romanian participants have higher scores for satisfaction and organization scales (positive effects), but lower scores for perceived health in general (negative effects). On the other hand the perceived socioprofessional pressures are significantly higher for the romanian population. For the individual differences, the Romanian participants ranked lower only at the type A drive subscale and the personal influence subscale.

Gender differences:
- female participants tend to feel more anxious than men (state of mind);
- female participants tend to feel more worried, have less energy and feels more tired than men, have more feelings of physical discomfort (confidence level, energy levels, physical symptoms);
- female participants feel less able to influence and control events than male participants (influence and control);
- female participants make much more use of social support than male participants.

Tables 1-3 show the correlation matrixes for each of the subscales within the 3 dimensions measured by the PMI-RO: sources of pressure, individual differences, effects.

For this article we will focus on specific significant relationships/ associations between the stressors and effects variables, individual differences (personality and coping strategies) and the effects variables.

The results show that:
• the coping strategies positively correlate with each other, also the other personality subscales (individual differences, for ex. personal influence with control), with four exceptions where they correlate negatively: type A with impatience and personal influence, impatience with control and control with social support (table 1);
• the majority of stressors are significantly negatively correlated with the effects (table 2);
• high levels of organizational satisfaction, security, and mental and physical well-being were negatively correlated with high pressure (stressors): table 2;
• the outcome variables were positively (significantly) correlated with increased control and influence, the drive dimension of Type A (with the exception of organisational satisfaction), and greater use of problem focus and life-work balance, as coping strategies: table 3;
• the following individual differences: control ($\beta = .410, p < .001$), influence ($\beta = .401, p < .001$) and general coping ($\beta = .310, p < .001$) are significant predictors for the stress effects in general (cumulative effects).
• drive A type is a significant predictor for state of mind ($\beta = .111, p < .001$).

Table 3. The Relationship Between the Moderator Variables and the Outcome Variables Scales (PMI-RO)

<table>
<thead>
<tr>
<th>Moderator Variables</th>
<th>Subscales</th>
<th>Outcome Variables</th>
<th>Subscales</th>
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<tbody>
<tr>
<td></td>
<td>Type A Drive (TD)</td>
<td>Impatience (TI)</td>
<td>Control (LC)</td>
</tr>
<tr>
<td>Job satisfaction (JI)</td>
<td>ns</td>
<td>ns</td>
<td>174</td>
</tr>
<tr>
<td>Organisational satisfaction (JO)</td>
<td>-.063</td>
<td>-.061</td>
<td>252</td>
</tr>
<tr>
<td>Organisational security (OS)</td>
<td>.067</td>
<td>-.084</td>
<td>360</td>
</tr>
<tr>
<td>Organisational commitment (OC)</td>
<td>ns</td>
<td>.113</td>
<td>121</td>
</tr>
<tr>
<td>State of mind (MA)</td>
<td>.111</td>
<td>-.143</td>
<td>363</td>
</tr>
<tr>
<td>Resilience (MR)</td>
<td>ns</td>
<td>127</td>
<td>.130</td>
</tr>
<tr>
<td>Confidence level (MW)</td>
<td>.069</td>
<td>-.175</td>
<td>235</td>
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<tr>
<td>Physical symptoms (PA)</td>
<td>ns</td>
<td>-.096</td>
<td>239</td>
</tr>
<tr>
<td>Energy levels (PE)</td>
<td>ns</td>
<td>.168</td>
<td>309</td>
</tr>
</tbody>
</table>

Note. N=1026. Unless otherwise marked, all correlations are significant at p < .05; ns=Not significant.

5. Discussion

The results led us to the conclusion that the stressors variables have generally a negative impact on the outcome variables (effects) and that specific individual differences and coping strategies are significantly associated with outcomes variables of occupational stress, for the romanian participants: for instance, higher levels of control (how much someone feel able to influence and control events) and personal influence (the extent to which someone is able to exercise discretion in their job) and efficiently using coping strategies (problem focus, life-work balance and social support) reduce the negative impact of stressors and influence the perception of socioprofessional stress effects (in terms of satisfaction, physical and mental state).

This study, conducted on Romanian employees led us to results, that are similar mostly and in accordance with findings and research tendencies on the predicting/ moderating/ mediating role of individual differences in the stress process (Baron & Kenny, 1986; Bliese & Jex, 2002; Day & Jreige, 2002; Edwards & Lambert, 2007; Grant & Langan-Fox, 2007; Mauno, Kinnunen & Ruokolainen, 2006; Probst, 2000; Schmidt, 2007; Williams & Cooper, 1998).

6. Implications and applications of the study

This instrument and stress model offers a good base for diagnosing the stress process, in different work settings and developing specific intervention/ management strategies at individual and/or organizational level. Efficient
management stress strategies (including profilaxy, control and intervention) can be applied at individual and organizational level. In the dynamic stress process, the following three sequences are important:

- Prevention (monitoring);
- Diagnosis (with specific validated and standardised instruments);
- Intervention strategies and programs at individual and organizational level;

Relying on his diagnosis at individual and organizational level, as an important stress audit tool, several stress intervention strategies can be initiated (Brate, 2007a, 2008, 2009b). By analysing the results of this study, after diagnosing (these or other) interactions between the measured variables for the participants, specialists could initiate an intervention programme at different levels: individual, organisational or for specific socioprofessional categories, with goal-specific management strategies.

Future research should take into consideration the multidimensional structure and form of expression of occupational stress. Managing stress in organisations is in many contexts triggered by a crisis or a conflict at individual or organisational level. Organisations should consider stress prevention, not only in terms of reducing costs, but also in terms of maintaining (preserving) and improving organisational health (proactive approach), by stimulating organisational culture and rethinking the health paradigm.

References


