Occupational stressors in the structure of daily stress of modern people

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Abstract—The article is devoted to the study of the structure of daily stressors and determination of the place of occupational stressors in it, identification of relationships between the number of stressors with the level of stress and satisfaction with various aspects of life. Sample: 334 people aged 20 to 60 (118 men and 216 women) with different occupations and various levels of education. The research methods included: Inventory of Daily Stressors, “Scale of Perceived Stress-10”, Life Satisfaction Questionnaire. The findings of the study revealed a high level of daily stressors in all areas of life examined. It is shown that a significant share in the total number of stressors, both in men and women, belongs to occupational, financial and competition stressors. Correlations were found between the number of perceived stress and the level of stress overexertion, perceived stress and the strength of the stressors according to subjective assessment. The role of job satisfaction and satisfaction with financial situation in reducing the frequency and strength of stress impact is shown.

Keywords—daily stress, perception of stressors, overexertion, occupational stressors

I. INTRODUCTION

Every day a person faces minor troubles and minor events that can be perceived and evaluated as stressful. Researchers refer to these events as everyday stress and show their contribution to the formation of individual stress [1]. The sources of daily stress can be troubles in occupational, family spheres, macro-social problems, blocking of social needs, etc. The strength of the stressful impact of everyday events depends on how the person perceives and evaluates them. The consideration of daily stress in the context of psychological security of the individual leads researchers to the conclusion that the chronic effects of everyday stressors, as well as the impact of severe traumatic stressors, can damage psychological well-being and somatic health [2,3]. It is said that the consequences of the impact of everyday stressors are intelligence and memory disorders [4], lower life satisfaction [5]. The connection between everyday educational stress and emotional maladaptation, social anxiety and increased suicide risk has been proved [6]. However, daily stressors have still not been studied consistently. The main focus is on the study of stress in groups in situations of a greater stress risk. The stressors which have been studied best by foreign scholars are family stressors [7], whereas Russian psychological science is more focused on occupational stressors [8 and others]. The contribution of occupational stressors to the overall situation of stress has not been investigated. In this connection, the goals of the study were the following: to study the prevalence of daily stressors in different spheres of life; to identify the place of occupational stressors in the structure of daily stress; to study the relationship between daily stressors and the level of stress; to identify the relationship between daily stress and life satisfaction.

Methodology of the research. The study is based on the views of Lazarus [1], Dohrenwend [9] and other researchers who regard stress as a condition of the body based on adaptive and non-adaptive reactions. Stressors are understood as social factors, economic or family failures, that disrupt or threaten to disrupt the normal life of the individual. Daily stresses are included in a number of classifications, along with traumatic life events [10, 11, etc.]. Psychological stress occurs when a person has assessed the external and internal requirements as causing excessive stress or exceeding his/her resources.

II. MATERIALS AND METHODS

A. Methods

Inventory of Daily Stressors [12], which presents 55 events related to different spheres of life. Respondents were asked to mark the events that had occurred in their life over the past two weeks and indicate their impact on a 10-point scale. The result on each scale was estimated as a percentage of the maximum possible impact. Scale of Perceived Stress-10 (PSS-10) to assess the level of overexertion, perceived stress and resistance to stress [13]. A questionnaire to assess satisfaction on a 10-point scale in relation to the main spheres of life: occupational, family, financial, relations with others, etc. Mathematical and statistical analysis was performed with the use of SPSS-20 software for Windows.
comparing two independent samples (Student's T-test) and Pearson correlation analysis.

B. Sample

334 people aged 20 to 60 (118 men and 216 women) residing in St. Petersburg and Arkhangelsk. The average age of men was 34.9, and that of women was 39.3 years. Respondents had different levels of education (secondary, secondary vocational, and higher) and different occupations (teachers, medical staff, university teachers, firefighters, pensioners, etc.). The survey was conducted individually at the time convenient for the respondents, which was usually in the evening.

III. FINDINGS AND DISCUSSION

The analysis of the number of stressors revealed a high level of their presence in all areas. The average number of events assessed as stressful over two weeks per person was 91.4 in men and 132 in women. The subjective assessment of the strength of experiencing stressful events ranges from 2 to 10 points and averages 2.54 points in men and 3.71 points in women (p<0.016). The distribution of the number of perceived stressors in the spheres of life is uneven and varies depending on the gender (table 1).

TABLE I. DESCRIPTIVE STATISTIC OF STUDY VARIABLES ON THE DAILY STRESSORS IN THE GROUPS

<table>
<thead>
<tr>
<th>Daily Stressors (Life spheres)</th>
<th>Men</th>
<th>Women</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>M (%)</td>
<td>M (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Work - business</td>
<td>24.3 (24.0)</td>
<td>29.9 (22.6)</td>
<td>0.001***</td>
</tr>
<tr>
<td>2. Relations with others</td>
<td>9.9 (11.0)</td>
<td>14.8 (16.0)</td>
<td>0.006**</td>
</tr>
<tr>
<td>3. Plans interruption</td>
<td>7.5 (15.0)</td>
<td>7.7 (15.0)</td>
<td>0.238</td>
</tr>
<tr>
<td>4. Finance</td>
<td>12.3 (20.0)</td>
<td>15.3 (25.0)</td>
<td>0.030*</td>
</tr>
<tr>
<td>5. Planning</td>
<td>7.3 (12.2)</td>
<td>12.2 (20.3)</td>
<td>0.00***</td>
</tr>
<tr>
<td>6. Family problems</td>
<td>11.4 (18.9)</td>
<td>17.7 (29.4)</td>
<td>0.000***</td>
</tr>
<tr>
<td>7. Environment</td>
<td>5.5 (10.9)</td>
<td>7.8 (15.0)</td>
<td>0.141</td>
</tr>
<tr>
<td>8. Feelings – loneliness</td>
<td>7.1 (14.1)</td>
<td>13.35 (26.7)</td>
<td>0.00***</td>
</tr>
<tr>
<td>9. State of health</td>
<td>10.3 (20.0)</td>
<td>16.1 (32.0)</td>
<td>0.000***</td>
</tr>
<tr>
<td>10. Competition</td>
<td>8.7 (17.4)</td>
<td>13.9 (27.5)</td>
<td>0.000***</td>
</tr>
<tr>
<td>11. Total</td>
<td>91.4 (16.7)</td>
<td>132.0 (24.0)</td>
<td>0.000***</td>
</tr>
</tbody>
</table>

As can be seen from the table, the sphere that includes the most stressors for both men and women is occupational. It includes such stressors as a large number of tasks that have to be done, disturbance during work, the need to meet deadlines, the need to work overtime, unwillingness or inability to perform the assigned work, the fear of not having time to complete the work on time, the lack of time for rest, etc. Moreover, more than 30% of the subjects also marked, among the significant events that happened to them over the year, the events of the occupational sphere, including schedule and official duties changes, dismissal and being hired to a new job.

The comparison of occupational stressors with stressors of other areas revealed that the most prevalent stressors in work are stressors associated with the family (29.4%), competition (27.5%) and work (22.6%), and high-impact stressors of feelings loneliness (26.7%). The leading stressors for men were the following: most stressors are found in occupational sphere (24%), finance (20%), the family sector (18.9%) and competition (17.4%).

Competition stressors include situations of forced competition, the need to publicly defend one's point of view, work in public, and physical discomfort. They can also be recognized as occupational stressors. Financial stressors turned out to be important (20% for men; 25% for women). It should be noted that 28% of respondents have loan liabilities, and more than 30% named among the significant events of the year their loan and changes to their financial position. Attention is drawn to the high representation of stressors associated with general health (20% for men and 32% for women). This stressor also includes such experiences as adverse effects of weather conditions, lack of time for rest, being worried about another person, concerns about one's appearance, feeling that there is not enough time to take care of one's health. The presence of this group of stressors indicates the difficulties associated with the restoration of psychophysiological potential. A significant role is played by family-related stressors: challenging situations with relatives, children, grandchildren, concerns for the health of family members, quarrels between spouses. For women, they rate the second (29.4%), and for men, the fourth (18.9%).

The study of the relation between the number of perceived stressors and the subjective assessment of the strength of the experience, the level of overexertion and perceived stress, conducted by correlation analysis, revealed direct relationships between the number of stressors and the perceived intensity of the experiences (27 relations, p<0.001) and the severity of overexertion (15 relations, p<0.001). The nature of the relationships indicates that an increase in the number of stressors leads to increased overexertion and perceived stress. The relations between stressors of different spheres show that stressors of one sphere are able to involve other spheres in the stress process, i.e., stress generalization take place.

The comparison of the number of stressors with the satisfaction with life spheres showed that the areas most correlated with the number of stressors are job satisfaction and financial situation, which formed 15 negative relationships with all types of stressors (p<0.05; 0.01). Overexertion and the magnitude of perceived stress also formed negative connections with satisfaction with different spheres of life (16 connections at p<0.001). The direction of the relationship indicates that job satisfaction and satisfaction with one's financial situation contribute to a reduction of the number of stressors, and the factors of stress reduction are job satisfaction, satisfaction with financial situation and family status, interaction with the family, warm emotional climate in the family.

The study found daily stressors in all spheres of life. This is consistent with the findings of American researchers [14], which revealed the presence of a large number of daily stressors, with communication stressors being the most prevalent in the American sample. Our study found that the spheres which have the greatest level of stressors are work, finance, and competition. This may be due to the instability of the professional and economic spheres, the growing demands imposed on employees, the high level of competition and financial difficulties faced by adult Russians. The revealed interrelations between the number of perceived stressors with the level of overstrain indicate their role in the development of stress and confirm the data on...
their contribution to the formation of individual stress and the threat they pose to the psychological security of the individual [1,15]. The leading role of job satisfaction in reducing stress and the number of perceived stressors can be explained by the importance of the occupational sphere as the main form of personal fulfillment of an adult, and as a source of material well-being. Dissatisfaction with the material situation adds tension and increases the number of stressors in different spheres of life, which is consistent with the data [16].

IV. CONCLUSION

Stressors are present in all spheres of everyday life. Occupational, financial and competition-related spheres have the highest levels of stressors. It is found that the increase in the number of daily stressors increases the level of overexertion and perceived stress.

It was revealed that the positive role of job satisfaction and satisfaction with one's financial situation is in reduction of the number of daily stressors in different spheres of life and reduction of stress tension.

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