WORKPLACE STRESS AMONG PERSONNEL OF PUBLISHING COMPANY, COPING AND WORKING ABILITY

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Abstract. Most of the life of a human is spent at work, creating the economic and material foundation of the society, which, to a large extent, depends on the working ability of these people. The printing and publishing company is experiencing an increase in the numbers of days spent off work due to sickness, overtime hours and on-job casualties. The aim of the research is to study the causes of workplace stress among the personnel, the coping strategies, the working abilities and their mutual relationship. The research questions are: What are the major causes of workplace stress, what coping strategies are used by the personnel, what is the level of the working ability among the personnel, and are there statistically significant correlations between workplace stress, coping strategies and working ability? Based on the results, it was found that the key causes of workplace stress include the high volumes and amount of work. Active coping strategies are used most frequently to handle stress. No respondents were found to have low levels of working ability. A statistically significant correlation was found between the ratings on the scales “organisational culture” and “working ability”, i.e., the lower the evaluation of the organisation among the personnel, the lower the working ability. An explanation for this fact might be the different values of the personnel and the organisation.

Keywords: workplace stress, coping and working ability.

Introduction

A third part of the life of a human is spent at work, creating the economic and material foundation of the society, which, to a large extent, depends on the working ability of these people. Stress is viewed both as a stimulus and as a process between the stimulus and the response, and also as a response to stress (Selye, 1983). A significant concept in association with stress is the stressor, i.e., the factor that causes stress (Le Blanc, De Jonge, & Schaufeli, 2000). In the working environment, stressors include overwork, unclear tasks, inconsistent requirements, inability to influence decision-making, and others. Workplace
stress is a diverse phenomenon that manifests as mental and physical responses in tense job situations (Maslach, 1993). It should also be noted that workplace stress may be caused by conditions such as insufficient load and inability to make use of own professional potencies (Cooper, Dewe, & O’Driscoll, 2001). The research conducted in the world suggests that workplace stress is a daily issue for people working in any sector (Paoli, 2000). Mental, physical and behavioural disorders may occur due to workplace stress (Le Blanc et al., 2000).

There are known basic coping strategies with stress: the problem-oriented and the emotions-oriented strategy for coping with stress (Pearlin & Schooler, 1978; Lazarus & Folkman, 1984). Three types of behaviour appear in research: problem-oriented behaviour, emotions-oriented behaviour and avoidance behaviour (Parker & Norman, 1992). Problem-oriented stress management strives to cope with the environmental requirements and manifests in particular behaviour, i.e., seeking actual help, attempting to handle the threat (Lazarus & Folkman, 1984). Emotions-oriented stress management is used when the person is sure they are not able to change the situation. In this case, as the mechanism for coping with stress, the individual tries to regulate their emotions using anger, seeking emotional support, twisting the situation (Scheier & Carver, 1985; DeLongis & Holtzman, 2005). By investigating these styles of coping, one can foresee the response of the individual in a new situation (Parker & Norman, 1992; Carver, Kus, & Scheier, 1994).

The working ability characterises the ability of the individual to perform the job tasks, the individual has sufficient professional competence, adequate health and a safe working environment (McGonagle, 2015). In a research conducted in an Iran industrial company results showed that employees with higher stress indicators had lower work capacity (Gharibi et al., 2016). Authors in Germany researched perceived stress between employees with different status and it's effects on work capacity. Results showed that perceived work stress was connected with work capacity decrease (Yong, Nasterlack, Pluto, Lang, & Oberlinner, 2012). Scientists in Germany compared occupational disease, depression symptom, work capacity and work environment differences between workers in different medical professions. Significant differences were identified between workers in terms of work capacity, work requirements and work resources. Results showed relation between work stress factors, doctor health and work capacity (Bernburg, Vitzthum, Groneberg, & Mache, 2016).

Nowadays, a serious problem is ageing of the workforce, and more attention needs to be paid to this matter in order to identify any drops in the working ability as early as possible (Ilmarinen & Tuomi, 2004). The factors that determine working ability are health, competences, values, job, family, direct social environment (Grosh, 2004; Ilmarinen, 2009). The study in Iran
demonstrated that employees with the highest stress indicators had decreased working ability (Habibi, Dehghan, Safari, Mahaki, & Hassanzadeh, 2014).

The aim of the authors of the research is to study the causes of workplace stress among the personnel, the stress coping strategies, the working abilities and their mutual relationship. The authors formulated following research questions: What are the major causes of workplace stress? What coping strategies are used by the personnel? What is the level of the working ability among the personnel? Are there statistically significant correlations between workplace stress, coping strategies and working ability?

**Methods**

**Sample:**
There were 102 respondents in the survey (workers from Printing and Publishing Company) 19% females and 81 % males. Most of the respondents in the survey were 40-44 years of age (19%), those of 30-34 years of age were 18%, and respondents aged between 45 and 49 years were 15%.

**Measures:**
- **Strategic Approach to Coping Scale** (SACS, Hobfoll et al., 1993). The SACS questionnaire consists of 52 statements and includes nine subscales: assertive action, avoidance, cautious action, indirect action, antisocial action, aggressive action, instinctive action, seeking social support.
- **Work Ability Index** (WAI, Ilmarinen et al., 1980, Finnish Institute of Occupational Health). The WAI is seven items questionnaire. The score is calculated by summation of single item scores. The score can be range from 7 to 49 points. The respondents working ability classified in 4 categories: from 7 – 27 points – poor, from 28 – 36 – moderate, from 37 – 43 points – good, from 44 – 49 – excellent working ability.
- *The workplace stress questionnaire* developed by the authors consisted of 45 statements. All the statements were divided into 9 clusters of items.

**Procedure:**
Questionnaires were uploaded to the online surveys’ program - wobropol. 102 participants had filled up questionnaires. The respondents were to rate each of the statements on a Likert scale in period from 12.03.2018.-30.03.2018.

**Results and discussion**

A summary of the information obtained regarding the *workplace causes* in the working environment (Figure 1) allows to conclude that the personnel is mostly dissatisfied with the salary and bonus payment system as well as the high workloads due to staff insufficiency (for this reason, they are forced to perform
the job duties outside the job description) and the unsatisfactory handling of changes in the company because insufficient information is provided regarding them and not enough support is provided in the process of implementing them. Overall, the personnel has rather negative attitudes towards the company, as evidenced by the number of respondents who do not agree with the statement that they would recommend their friends or acquaintances to work in this company.

![Figure 1](image-url)  
*Figure 1 Most frequent negative responses in the workplace stress survey*

Overall, in their assessment of the positive tendencies in the results of the workplace stress survey, the authors of the research project conclude that the least amounts of stress among the employees are caused by the relationship with the colleagues and the clients, and this is suggestive of a positive atmosphere in the team. The content of the work is also sensible because products necessary for the client are created, and the employees are sure that they are able to manage it with their work.

Based on a summary of the results obtained for coping with stress, it should be noted that the respondents use several coping strategies. Most of the respondents use “fearless and confident action” (Figure 2), which suggests that...
an active stress coping strategy is pursued, i.e., in stress situations, most of the respondents try to do everything possible to resolve the situation.

![Figure 2](image_url)

**Figure 2** *Responses provided by the respondents in the cluster of statements regarding fearless and confident action*

The coping strategy “public contacts” is also pursued by the respondents rather often to deal with their daily stress situations (this is a prosocial stress management strategy), and this suggests that a large part of the respondents are ready to interact with their peers positively and productively to resolve the situation and avoid damage to those around them. Practically no respondents use the “avoidance” coping strategy, and this suggests that, in case there is an actual stress situation, the personnel try to handle the situation actively and positively instead of avoiding. Before taking an avoiding stand, 38% of the respondents still evaluate whether their passive action would not make the situation even worse. Approximately one fifth of the respondents, in their turn, sometimes use “antisocial behaviour”, i.e., in an actual stress situation, they become aggressive and may show their emotions through outbursts of anger.

In the calculations of the **work ability index**, most of the respondents (63%) had a score of 37-43, and this suggests that these respondents have good working ability, but 31% of the respondents had a score of 28 - 36 which corresponds to a moderate level of working ability. Only 6% of the respondents had excellent working ability, which corresponds to a score of 44 - 49 (Figure 3).
It is positive that there are no respondents with poor working ability despite the fact that the age and length of service of some respondents are rather considerable.

With the correlation rates between .6 and .8, there is a strong positive correlation (Table 1) between the workplace stress item clusters “job duties” and “changes” ($r = .67; p < .01$), “relationship with supervisor” and “changes” ($r = .78; p < .01$), “relationship with supervisor” and “organisational culture” ($r = .70; p < .01$), “work volume, load” and “changes” ($r = .68; p < .01$), “work volume, load” and “organisational culture” ($r = .64; p < .01$), “work content” and “working with clients” ($r = .73; p < .01$), “changes” and “organisational culture” ($r = .63; p < .01$).

Table 1 Spearman’s rank correlation for workplace stress survey item clusters

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<th>Measure</th>
<th>1.</th>
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<td>3. Work volume, load</td>
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<td>.59**</td>
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<td>4. Work content</td>
<td>.42**</td>
<td>.33**</td>
<td>.20</td>
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<td>5. Changes</td>
<td>.67**</td>
<td>.78**</td>
<td>.68**</td>
<td>.24</td>
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<td>6. Organisational culture</td>
<td>.56**</td>
<td>.70**</td>
<td>.64**</td>
<td>.15</td>
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<td>7. Working with clients</td>
<td>.48**</td>
<td>.41**</td>
<td>.18</td>
<td>.73**</td>
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Note. $N= 102$, ** $p< .01$
Based on the evaluation of the obtained strong positive correlations between the workplace stress item clusters, the authors of the research project establish that the job duties and work volumes strongly correlate with changes in the company possibly because the personnel, when receiving information about some changes expected in the work processes or future implementation of any new systems, expect increases in the volumes of work and duties. Regarding changes in the company, there has not been a sufficient explanatory process from the direct supervisor of the employee, and, therefore, the relationship with the supervisor correlates with changes in the company. The personnel is not always satisfied with the manner of communication of the direct supervisor, and this might explain the overall attitude of the employees towards the company because, infrequently, personnel also relate their attitude towards the organisation as the overall attitude towards the company. The work content closely correlates with working with clients, and this could be explained by the fact that the personnel feel the input into their job and the importance of the work they do to satisfy their clients.

The results obtained from the calculation of the Spearman’s rank correlation between the coping strategies questionnaire item clusters (Table 2) suggest a strong positive correlation between “indirect action” and “antisocial action” \( (r = .73; p < .01) \) as well as “antisocial action” and “aggressive action” \( (r = .64; p < .01) \). Conversely, there is a statistically significant negative mutual correlation between the item clusters “assertive action” and “avoidance” \( (r = -.68; p < .01) \) because they are diametrically opposite coping strategies which, due to their very nature, cannot be used concurrently.

Table 2 Spearman’s rank correlation for stress management survey item clusters

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<td>1. Assertive action</td>
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<td>2. Avoidance</td>
<td>-.68**</td>
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<td>3. Indirect action</td>
<td>-.03</td>
<td>.02</td>
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<tr>
<td>4. Antisocial action</td>
<td>-.07</td>
<td>.10</td>
<td>.73**</td>
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<td></td>
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<tr>
<td>5. Aggressive action</td>
<td>.31**</td>
<td>-.15</td>
<td>.49**</td>
<td>.64**</td>
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Note. \( N = 102, ** p < .01 \)

The results obtained from the calculation of the Spearman’s rank correlation for all of the respondents between the workplace stress item clusters and the coping strategies item clusters suggest a strong positive correlation between “working with clients” and “assertive action” \( (r = .60; p < .01) \), which can be explained by the fact that the employees, who communicate with the
clients, know the work process well and act fearlessly in various stress situations.

The results obtained from the calculation of the Spearman’s rank correlation for all of the respondents between the workplace stress item clusters and the working ability index suggest a statistically significant medium strong correlation between organisational culture and working ability ($r = .34; p < .05$), which suggests that, in cases there are differences between the values of the organisation and the personnel, this has significant impacts on the working ability of the personnel because, based on the theory, one of the factors affecting working ability is the values of the employee. The results obtained from the calculation of the correlation between workplace stress coping strategy item clusters and the working ability index suggest no statistically significant correlations between any of the above-mentioned factors.

Conclusions

Based on the research, it was determined that the key workplace stress causes are dissatisfaction with the salary and bonus payment system, the high work volumes and workloads as well as with the organisational culture and the handling of changes in the company, and this suggests that the management of the organisation should make adjustments to the personnel salary and bonus payment system by establishing common and clear criteria for the salary and bonus calculations. The respondents use several coping strategies. Most of the respondents use “fearless and confident action”, which suggests that an active stress coping strategy is pursued, i.e., in stress situations, most of the respondents try to do everything possible to resolve the situation. The coping strategy “public contacts” is also pursued by the respondents rather often to deal with their daily stress situations, and this suggests that a large part of the respondents are ready to interact with their peers positively and productively to resolve the situation and avoid damage to those around them. No respondents were found to have poor levels of working ability, but a third of the respondents have moderate working ability. A statistically significant correlation was found between the relationship between the direct manager and the handling of changes in the company, and this suggests that the managers do not explain the necessity for the changes sufficiently and do not provide sufficient information about them. To large extent research results are matching with other author research findings – work stress reduces work capacity (Yong et al., 2012, Gharibi et al., 2016, Bernburg et al., 2016). Research results didn’t show statistically significant relation between stress coping strategy application and work capacity. The authors suggest that the human resources department liaise with the respective specialists to provide regular training to the direct
supervisors on working with the personnel – stress coping, communication skills, motivation and giving and getting feedback. The authors suggest that the human resources department should develop a system for monitoring the health of the personnel by not only providing the mandatory health checks, but also doing work ability index calculations annually in conjunction with an occupational illness doctor. Insofar as permitted by the requirements applicable to the protection of the data of natural persons, the specialists of the human resources department should analyse the reasons for the occupational invalidity of the personnel, by dividing them into categories.

References


