Abstract. The main objective of this study was to show that the work of civil servants is not trivial, as is often thought, but that they are employees like everyone else, with their rights and obligations, and who also suffer from cuts in salaries, as well as all the other misfortunes that can befall other workers with different professions, as well. The specific objective is to give a description of this job, which would contribute to breaking down the prejudices about what civil servants actually do. The research was conducted on a sample of 140 civil servants in Belgrade, employees in state administration bodies, of both sexes, who varied in age and in years of service. The study was conducted as an exploratory-descriptive study, the correlation type. The data were collected through a rating scale of assessment of stress at work, constructed according to the Cooper model, which has already been applied in research “Stress at work and job satisfaction among teachers in primary and secondary schools”, and with the scale of assessment of job satisfaction, by Milica Guzina. Once again it was confirmed that stress at work and job satisfaction are in relation, so that job satisfaction reduces the impact of stress at work, for example, the respondents with higher satisfaction at work will perceive a lower level of stress at work. The impact of some demographic variables on the self-assessment of stress at work and job satisfaction has also been confirmed. So there are differences depending on gender, length of service, age, presence / absence of chronic illness, satisfaction with family life, satisfaction with their financial status.

Key words: civil servants; stress; job satisfaction.
Introduction

The work that a person performs is a source of satisfaction but also of a source stress for them. These two phenomena are generally connected, in the sense that occupational stress reduces job satisfaction, but also that job satisfaction reduces the impact of stress on a person's well being. The later is called positive stress, which increases the resistance of the organism and personality, and also occurs in the work situation.

For the research of occupational stress and job satisfaction we chose the job of public officials, in order to demonstrate that the work of public officials is not trivial, as is often thought, but that they are employees like everyone else, with their rights and obligations, and who also suffer from cuts in salaries, as well as all the other misfortunes that can befall other workers with different professions, as well. The specific objective is to give a description of the job, which would contribute to breaking down the prejudices about what civil servants are actually doing.

Job Description and importance of interest for public officials

A public officer is a person whose job consists of tasks within the range of the state administration, or legal tasks, information technology, material and financial, accounting and administrative tasks.

Public officer is obliged to act in accordance with the Constitution, Law and other regulations, and according to the rules of specific workplace. They are responsible for the legality, competence and effectiveness of their work. Public officials perform the duties assumed, except when they consider that the present order is contrary to regulations, industry standards, or that its execution can cause damage. They shall do tasks that are not part of their job description, unless they fulfill the conditions, due to the temporary increase in workload or to replace absent public officer. In case of natural disasters, acts of God or other unforeseen circumstances, the public officials shall, upon the written order of their superior, take the workplace lower than theirs, as long as such circumstances last.

Every day they are in contact with citizens, with their superiors, with other government officials, as well as with the administration. This requires great responsibility, flexibility and patience. Numerous tasks of public officials are potential sources of satisfaction and dissatisfaction at work, of well-being and stress.

Reforms through which society and the state are going in the last few years is bringing extra effort in carrying out different tasks and roles that public officials have, so they require constant adjustment, learning new methods, and changing or even outright rejection of several old established modes of working. Due to the dissatisfaction of public officials, their creativity, analytical role, patience in communication with citizens, superiors and colleagues, as well as other important tasks that a public officials can be done on a daily basis are being compromised.

According to one definition, by Richard S. Lazarus [8], stress is a condition or feeling we experience when 'demands go beyond the personal and social resources that the individual holds.'

Stress at Work

According to one definition [1; 8], stress is a consequence of any external or internal factors that distort the natural balance of the body, so when the reaction occurs, the adjustment can be is accompanied by physical and psychological disorders that can lead to outbreaks of disease.

Stress does not necessarily have harmful effects on the body, but can also have positive effects – a person can be mobilized to invest extraordinary effort and to overcome difficult situations. For normal persons, positive stimulanses – stressors are needed because they force them into action, into overcoming effort, they are having stimulating effect on the ambition, encouraged by the success of the fight and also stir up new activities.

Hans Seli, founder of the theoretical concepts of stress, defines stress as general adaptive reaction of the organism caused by adverse and harmful effects of external and internal environment [2].

Today there are several theoretical and methodological models of stress.

Physical or mechanical model. In this model the stress is seen as an external pressure or excessive workload that comes from the environment and affects the body. In psychology, this model is used to describe and classify the stress over the workload model.

Physiological or medical model. Stress includes general internal body reaction that occurs in response...
to external pressures, similar to what Seli’s definition of "General Adaptation Syndrome". Within the medical understanding of stress, it means any effect of external or internal origin, which impairs the natural balance of the body, so that the reaction which occurs is adjustment, and it may be accompanied by physical and psychological disorders.

**Emotional or functional model.** Under this model, stress is regarded as one of the general functional statuses, which is the essence of emotional response to stress. General emotional tension arises as the main response to the existence of threatening stressors from the environment. According to this model, stress is the type of primitive (basic) emotional response which once had a purpose in human survival in dangerous situations, while for the modern man it has become unnecessary and harmful.

**Psychological or psycho-social model** includes a broader approach to stress which means that it considers the discrepancy between the demands of the environment and the possibility that people adequately respond to these requirements. Within this model, the most important are cognitive factors and subjective assessment that determines the level and severity of the stressors and reactions to stress, so that the essence of stress depends not only on stressors, but also on the characteristics of personality. The advantage of this model over previous models is that it not only describes the origins, manifestations and consequences of stress, but explains the process of stress and interaction of subjective and objective factors in this process, as well as possible ways and mechanisms for coping with stress.

**Systematic or integrative model** is a model that tries to take into account all the components of stress, including stress, reaction and the ability for managing stress. Within this model, stress is seen as a general, systematic functional condition which manifests itself as a biologically-psychologically-behavioral response of an individual to stressors of internal or external origin, aimed at achieving the goal, adaptation or survival in a stressful situation, where they can exhibit different subjective and objective effects.

**Job satisfaction**

In psychology, there are different definitions of the general feeling of job satisfaction: as affective attitude towards work, and the general feeling about the job, taking into account the favorable and unfavorable aspects of the business [6]. Job satisfaction can also be viewed through the satisfaction of workers with certain aspects of work and working conditions.

In accordance with this definition, there are several ways of measuring job satisfaction. We can distinguish a holistic approach and indirect, additive approach.

**Holistic approach** is establishing affective relationships of people for work and determining their attitude towards work. On the basis of certain indicators such as exciting workplace, the importance of a job for that person, their attachment to work, we get a score that reveals the general job satisfaction.

**Indirect or additive approach** is based on measuring the satisfaction of certain aspects of the job, but over the data obtained indirectly. It determines the score on the the general job satisfaction. On the basis of this type of measurement is the assumption that what a worker feels for work as a whole, depends on the satisfaction of certain aspects of his job. In this study we will use indirect or additive approach to measuring job satisfaction.

Davies & Shackleton [5] provide data that indicate that job satisfaction increases over time, that the allegations of Hopokov’s longitudinal research survey confirm, as he shows that 27 years after the first test job satisfaction on a sample of 23 respondents, job satisfaction increased in 17 cases while it decreased only in two cases. The authors believe that it is necessary to separate the impact of length of service and the impact of age on job satisfaction, although the two terms are often equated in practice.

Peterson, Kepvel, Herzberg and Mausner [5, p. 9] based on their research claim that the relationship between age and job satisfaction has a U-shaped function. At the beginning of employment satisfaction is high, then it is declining over the years – in the late twenties and early thirties reaches a minimum, to be later increased in a period prior to retirement.

Guzina [7] determined on the basis of her research that older workers are generally more satisfied than younger ones.

To describe the connection between job satisfaction and length of service Herzberg, Mausner, Peterson and Kepvel [5] also proposed in function to describe the relationship between age and job satisfaction.

Taylor’s basic assumption was that, if one accepts the basic principles of scientific management as well as their own, with the least possible investment effort of achieving the best results and get the highest possible salary, it will keep job satisfaction on a high level for an individual. Thus, according to this theory, the money is the most important motivator for work. Salary is the cause of the development of job satisfaction among individuals.
Job satisfaction of workers may greatly influence the satisfaction of their own lives. A prolonged and intense job dissatisfaction can undermine mental health of the individual. Unhappy with the work, as considered by Herzberg and Mausner [5] manifested more neurotic symptoms and had worse interpersonal relationships, were harder to adapt and less extravasial. It is important to discover the factors of job dissatisfaction and work towards reducing their impact, or achieve complete elimination, where feasible.

Research goals

Our aim was to determine the level of professional stress and the level of job satisfaction among public officials.

We also tested the assumption that job satisfaction increases resistance to stressors at work, and that the level of stress at work reduces job satisfaction.

We also assumed that some socio-demographic variables will have the impact on the level of perceived stress at work and job satisfaction, and that there will be difference in relation to gender, length of service, age, presence/absence of chronic diseases, satisfaction with family life, satisfaction with financial status of workers included in this research.

Arguments / Evidence / Facts / Preconditions:
- Job satisfaction will increase the overall satisfaction that a person feels, and thus will reduce the effects of stressors on the job.
- If stress at work is intense or prolonged, it will be very hard for to potential job satisfaction to neutralize it, but it will rather be overridden by stress and the pleasure that the job could have put the individual will be reduced.
- It is determined that the subjective interpretation of stressful events depends on a range of socio-demographic variables such as age, marital status, financial status, gender, experience, etc. [2; 3].
- When it comes to examining the impact of chronic diseases on stress, we already know that the general state of health of the individual can have an important role in the stress response, i.e. The disease of the individual, which increases vulnerability to stressful situations [2; 3].

Variables

The main variables are the level of occupational stress and the level of job satisfaction.

Control variables:
- Gender: male and female.
- Age groups: young (under 40 years of age), middle aged (40 to 55 years of age) and older (55+ years old).

- Experience: expressed through length of service.
- Health condition: suffering from chronic diseases and does not suffering from chronic diseases.
- The perception of family relations: content with family life and dissatisfied with family life.
- Perception of material situation: satisfied and dissatisfied with their financial status.

Research is of non-experimental, exploratory type. The method applied is survey.

Techniques for data collection

- A modified version of the instrument based on the model of Cooper's, scale which was constructed by Sladjana Ćirović [4], in her thesis „Experience of stress at work among teachers in secondary schools“:
  Scale consists of 22 statements given in the form of a five-point Likert's scale. By collecting responses to each claim, with a note that some questions must be scored in the opposite direction (questions under numbers 8 and 22) to give the final score, which is a measure of evaluation of stress at work. Claims in the questionnaire relate to the different dimensions of work situations, which could be potential sources of stress. We have already applied this questionnaire in determining stress at work among teachers, and it proved to be valid and reliable.

- Questionnaire for job satisfaction by Milica Guzina. The scale consists of 18 statements that were given in the form of a five-point Likert's scale. By collecting responses to this questionnaire, with a note that some questions must be scored in the opposite direction (questions under number 3, 4, 6, 8, 10, 11, 14, 16 and 18) it gives the final score, which is a measure of job satisfaction, estimated by workers themselves. Claims in the questionnaire are relating to various aspects of the work that may cause satisfaction or dissatisfaction in the workplace.

Sample

The sample is appropriate and made of 140 state officials in Belgrade, of employees in state administration bodies (Ministry of Construction, Transport and Infrastructure, the Ministry of Finance). Age of respondents ranged from 28 to 62 years.

By its structure, the sample was heterogeneous. Respondents are public officials of both sexes, different ages, which vary in health, satisfaction with family life and financial status, as well as in length of service.
Results

To process the data in this study we used t-test and analysis of variance to determine significant differences, a general components analysis to determine the structure of the investigated phenomenon, while the link between stress and job satisfaction was verified by the Pearson correlation coefficient.

The level of stress: Mean for the questionnaire is 3.59 (the average answer lies between „I'm not sure“ and „generally dissatisfied“). It should be noted that the average is closer to 4 rather than 3, so we could say that the public officials themselves estimate that they are under moderate level of stress.

The level of job satisfaction: Mean for the questionnaire is 3.54 (the average answer is between „I'm not sure“ and „mostly satisfied“). This data points to a moderate satisfaction with the work among public officials.

Relation between stress and job satisfaction determined in this test proved to be statistically significant (Pearson's correlation coefficient r = 308; sig = 014). Once again we confirmed the assumption of the mutual influence of stress at work and job satisfaction, and that job satisfaction increases resistance of organism to stressors at work, and that stress work reduces job satisfaction.

General components analysis

Components whose inherent value exceeds 1 (one) were retained. These five extracted components explained 88.2 % of the total variance in the questionnaire.

Table 1

Extraction of main components

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Total</th>
<th>% of Variance</th>
<th>Cumulative %</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>8,886</td>
<td>40,392</td>
<td>40,392</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>4,011</td>
<td>18,233</td>
<td>58,625</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2,791</td>
<td>12,688</td>
<td>71,313</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1,984</td>
<td>9,018</td>
<td>80,330</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1,737</td>
<td>7,894</td>
<td>88,224</td>
<td></td>
</tr>
</tbody>
</table>

Statistical analysis and logical analysis of the content of items, based on experience and relevant literature, derived the following factors, or components: Organization of work, Scope of work, Job requirements, Degree of decision-making, Further education, Income, Job security, Interpersonal relationships, Conflicts, Working conditions.

Demographic variables and stress at work

Gender

Between men and women there are differences in the experience of stress at work, which were statistically significant, although these differences are not prominent. This means that some aspects of the job are stressful for members of the male or female population.

We can conclude that the male respondents named working overtime and colleagues' doubt in their expertise as stressors.

We assume that men are additionally burdened with this aspect of the job, when it comes to the length of working overtime, because they are rarely invited to family obligations, so they can't ask for special treatment - to return home on time.

Female respondents named the clarity of what is their specific task, income level, and doubts about the competence of superiors as the most stressful.

These results do not surprise us much, since it is known that women in Serbia are not only performing their basic job, but also doing other jobs that are not in their job description, and hence this additional burden. Also, for the same work, women are still paid less than men.

Length of service and stress at work

When comparing the results on the scale of assessment of stress among the respondents in different categories according to length of service, it shows that there are significant differences among them in the stress response when we include organization or work, scope and requirements of the job, interpersonal relationships and the level of decision-making at work.

The organization, scope and requirements of work and interpersonal relationships, are the most stressful for public officials with the shortest length of service. When it comes to the level of decision making, public officials with many years of service react with the lowest levels of stress. We can assume that respondents with more years of service already
gained respect in the workplace, and thus their impact on decision-making increased.

Age
Differences in the general perception of the stress in relation to age, are similar to the differences in relation to length of service, in favor of the elderly subjects, so it turned out to be the youngest group of respondents which stated that they are feeling stressful influence of almost all aspects of work. Young people declare that they feel increased stress towards job requirements and job security, compared to middle-aged people and older people. This information is also logical, because young people are still at the stage of professional development and at the beginning of their professional careers in general, while older people experience less stressors in the scence of job security, since they have less chance to get fired, and there is also severance pay that guarantees security in case of losing their job due to early retirement.

The presence of chronic diseases
People who suffer from chronic diseases are significantly different from those who do not have these diseases and are more likely to have a stressful response when it comes to the demands of work and level of decision-making.

On the other hand, people who do not suffer from chronic diseases react intensely on conflicts, job insecurity, and work organization. A person who is not feeling well physically certainly has a difficulty with each additional task, overtime or special job requirements.

The questionnaire that was used in the research deals only with chronic diseases, because they are the most durable, but we can assume that even having a cold reduces resistance to stress among workers.

Satisfaction with family life
People who are dissatisfied with family life differ significantly from those who have a family life satisfaction in the areas of scope of work, working conditions, additional training, job security, income level, interpersonal relationships, job requirements and the level of decision-making.

Since the family is the basic unit of society, the place from which we start and to which we always come back, it would be logical to expect that the person who is in feeling accepted, secure, loved, or in a word, happy in the family, to be strengthened as a person and ready to cope with stress in a working situation.

Satisfaction with the financial status
People dissatisfied with their financial status show a significantly higher level of stressful experiences from people who are satisfied with their financial status and that applies in almost all areas, especially in the fields of organization, scope and requirements of work, and working conditions.

When someone is lousy paid, in their own estimation, certainly we can expect that they will not look favorably on additional tasks or difficult working conditions, while a person who believes that they are paid by the merits will find it easier to bear at least some additional efforts.

Conclusion
The aim of this study was to determine the level of professional stress among public officials and the level of job satisfaction among public officials. We also tested the assumption that job satisfaction increases resistance to stressors at work, and that the level of stress at work reduces job satisfaction.

When it comes to stress, mean for the questionnaire is 3.59 (the average answer lies between I'm not sure / and generally dissatisfied).

It should be noted that the average is closer to 4 rather than 3, so we could say that the public officials themselves estimate that they are under moderate level of stress.

When it comes to the level of job satisfaction, mean for the questionnaire is 3.54 (the average answer is between I'm not sure / and mostly satisfied). This data points to a moderate satisfaction with the work among public officials.

Relation between stress and job satisfaction determined in this test proved to be statistically significant (Pearson's correlation coefficient $r = 308; \text{sig} = 014$).

We can accept the assumption of mutual influence of stress at work and job satisfaction, and that job satisfaction increases resistance to the stressors at work, and that stress at work reduces job satisfaction. Job satisfaction increases resistance to the effects of stressors on the work.

The level of stress at work reduces job satisfaction.

It was also confirmed that some demographic variables have impact on the experience of stress at work and job satisfaction. So there are differences depending on gender, length of service, age, presence/bsence of chronic illness, satisfaction in the family life, satisfaction with financial status, in the experience of stress at work and job satisfaction.

In the research we have conducted stress factors at work are defined as organization of work, scope of work, job requirements, degree of decision-making, further education, income, job security,
interpersonal relationships, conflicts, working conditions.

From the above it can be easily seen that the factors obtained in this study, are formed on the basis of experience and relevant literature, but also in accordance with the statistical analysis of the obtained data, because its contents practically coincide with the factors that are isolated within the model oriented on management (Cooper's model).

Each of the defined factors had an important part in the formation of the overall experiences of stress among the respondents, and the strength of this influence varied in relation to certain demographic variables. Therefore, this research can be considered as a certain confirmation of management oriented model.

References

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