



Affective temperament, social support and stressors at work as the predictors of life and job satisfaction among doctors and psychologists

Temperament, socijalna podrška i faktori stresa na poslu u predviđanju zadovoljstva životom i poslom kod lekara i psihologa

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Abstract

Background/Aim. Affective temperament, social support and work-related stressors belong to the group of life and job satisfaction indicators. The aim of this research was to examine predictive roles of the basic affective temperament traits, social support and work-related stressors in the feeling of job and life satisfaction among doctors and psychologists. **Methods.** The sample consisted of 203 individuals out of whom there were 28% male and 72% female doctors (61%) and psychologists (39%), 25–65 years old (39.08 ± 9.29), from the two university towns in Serbia. The set of questionnaires included Serbian version of the Temperament Evaluation of Memphis, Pisa, Paris and San Diego – autoquestionnaire version (TEMPS-A), Satisfaction with Life scale, Job Satisfaction Survey, short Interpersonal Support Evaluation List, and Source of Stress at Work Scale (IRSa) for estimating the frequency of stressors at work. **Results.** According to the existing norms our examinees are satisfied with their life, but considerably less satisfied with their work, specially with pay and benefits, while they are most satisfied with nature of work itself and social relations

with co-workers and supervisors. Our results show that depressive and hyperthymic, and to some extent cyclothymic temperament traits of the affective temperament significantly predict 21% of life satisfaction variance. Situational factors, such as stressors at work and social support, are important in predicting job satisfaction (58% of variance) with no significant contribution of temperament traits. The analysis did not point out any significant relation of sex, occupation, and age with life and job satisfaction. **Conclusions.** Affective temperaments can be regarded as predictors of life satisfaction, but in order to better predict satisfaction the aspects of wider social surrounding and sources of stressors at work must be taken in consideration. Future studies should consider other indicators of life satisfaction such as family or health satisfaction, stressors outside of work situations, and negative aspects of caregiving, for example hyperactivation.

Key words: personality; workplace; occupational exposure; stress, psychological; medical staff; psychology; questionnaires; job satisfaction.

Apstrakt.

Uvod/Cilj. Afektivni temperament, društvena podrška i faktori stresa na poslu spadaju u grupu pokazatelja kojima se može predvideti zadovoljstvo životom i poslom. Osnovni cilj ovog istraživanja bio je da se ispita mogućnost predviđanja zadovoljstva životom i poslom lekara i psihologa, na osnovu afektivnog temperamenta, socijalne podrške i faktora stresa na poslu. **Metode.** Uzorak se sastojao od 203 ispitanika od kojih 28% muškaraca i 72% žena, lekara (61%) i psihologa (39%), 25–65 ($39,08 \pm 9,29$) godina starosti, iz dva univerzitetska grada u Srbiji. Set upitnika uključivao je srpsku verziju *Temperament Evaluation of Memphis, Pisa, Paris*

and San Diego – autoquestionnaire version (TEMPS-A) skale, *Subjective Life Satisfaction* (SLS) skalu zadovoljstva životom, *Job Satisfaction Survey* (JSS) upitnik zadovoljstva poslom, kraću verziju *Interpersonal Social Support* (ISL) skale socijalne podrške, i *Source of stress at work Scale* (IRSa), za procenu učestalosti stresora na radu. **Rezultati.** Prema postojećim normama naši ispitanici su zadovoljni svojim životima, ali značajno manje zadovoljni poslom, naročito platom i beneficijama, dok su najzadovoljniji prirodom posla i odnosima sa kolegama i nadređenima. Rezultati su pokazali da depresivne, hipertimne i donekle ciklotimne crte afektivnog temperamenta mogu značajno predviđati 21% varijanse zadovoljstva životom. Situacioni faktori, kao što su stresori

na poslu i socijalna podrška, važni su za predviđanje zadovoljstva poslom (58% varijanse), bez značajnog doprinosa crta afektivnog temperamenta. Analizom nisu dobijene značajne razlike u nivou zadovoljstva životom i poslom u odnosu na pol, zanimanje i starost ispitanika. **Zaključak.** Crte afektivnog temperamenta mogu se smatrati prediktorima zadovoljstva životom, ali se moraju uzeti u obzir i aspekti šireg socijalnog okruženja i izvora stresa na radu, kako bi ovo predviđanje bilo potpunije. Buduća is-

traživanja trebalo bi da uzmu u obzir i druge pokazatelje zadovoljstva životom, kao što su zadovoljstvo porodicom i zdravljem, stresore van konteksta na radu i negativne aspekte brige o ljudima, na primer hiperaktivaciju.

Ključne reči:
ličnost; radno mesto; profesionalna izloženost; stres, psihički; lekari; psihologija; upitnici; posao, zadovoljstvo.

Introduction

Life satisfaction is a concept which represents the cognitive component of the subjective evaluation of personal well-being and happiness, as well as the most frequently used indicator of the quality of life¹. One of certainly most important components of life satisfaction among adult population is job satisfaction, *ie* attitude people have toward their job, and aspects of the job².

There are three perspectives in literature which try to explain the relationship between job and life satisfaction³: according to the 'bottom-up' perspective, job satisfaction is an integral part of life satisfaction and together with other life domains it influences total life satisfaction; the 'bottom-down' perspective suggests that life satisfaction influences job satisfaction; regarding the third perspective, much of the relationship between job and life satisfaction is spurious, resulting from common influences, such as environmental variables (*eg*, job income) and personality traits.

In accordance with the last perspective, differences in basic personality traits and 'core self-evaluations' are pointed out as relevant predictors of both life and job satisfaction^{4,5}.

Affective temperaments

Contemporary theory of affective temperaments based on Aristotle, Krecmer and Kraepelin's ideas about basic temperamental types⁶, refers to temperament as a stable behavior trait with strong affective coloring. These different temperaments (depressive, cyclothymic, hyperthymic, irritable and anxious) are described as sub-syndromic conditions of the affective pathology, and they are likely to represent liability factors in the subsequent development of affective disorders⁷.

The majority of earlier studies on temperaments is used for predicting ill-being, or psychological disfunctioning and only a few studies explore where the traits of the affective temperament predict positive characteristics of mental health and concepts of life and job satisfaction. According to Diener et al.⁸, the affective component of the subjective well-being construct is comprised of the frequency and intensity of positive and negative affect experience, which is essentially the description of temperament. Fogle et al.⁹ established that the traits of extraversion and neuroticism, as major temperament dimensions, are important predictors of life satisfaction among adolescents. Moreover, neuroticism trait has been a significant negative predictor of life satisfaction among medical professionals¹⁰.

It was previously established that some aspects of job satisfaction are also moderately correlated with emotionality¹¹. For instance, the correlation of stress at work with affective temperament traits is confirmed⁵. Moreover, the studies showed that choosing occupational orientation can also correlate with temperament traits¹². These data point out that the affective temperament characteristics should be considered for predicting job satisfaction as well as life satisfaction, with obligatory observation of situational factors in that correlation⁹. Job satisfaction results from the characteristics of the job and experience a person has with certain aspects of job such as: pay, chances of promotion, managers, the system of rewarding, work procedures, co-workers and the nature of work¹³.

Helping professions

Helping professions are professions that provide support to people with physical, psychological, and social problems. Doctors and psychologists were the subjects of this research because the area of work in which they are engaged, covers all areas of helping professions such as medicine, nursing, social work, psychotherapy, counseling, education and coaching. These professions are high risk professions for ill-being, low life and job satisfaction¹⁴. Both medical doctors and psychologists are exposed to numerous factors that can have negative influences on mental health such as high intensity of work, constant exposure to pain, psychic and physical suffering of clients, disbalance between made effort and the reward for that effort, personal and family stresses that are reflected through job, etc.

The impact of organizational factors on subjective well-being and life satisfaction among health workers and other helping professions have been confirmed in numerous studies all over the world¹⁵⁻¹⁷. This research examined if and to what extent the affective temperament traits were inserted in the correlation between the situational factors (*eg* work-related stress) and life/job satisfaction among psychologists and doctors. According to the model of Argyle and Lu¹⁸ social competence plays the role of the mediator in the correlation between temperament and happiness, due to which perception of social support, as one of the objective measures of the social competence, was introduced in our model.

The aim of this research was to investigate predictive roles of the basic affective temperament traits, social support and work-related stressors in the feeling of job and life satisfaction among doctors and psychologists.

Methods

Sample

The sample consisted of 203 male and female medical doctors and psychologists, 25–65 years old, from the two university towns in Serbia (Table 1). The doctors were employees in governmental health institutions, while psychologists were employees at schools, kindergartens, centres for social work and health institutions. The total number of administered questionnaires was 320 (reply rate of 63%).

The research was conducted from January till March, 2015 after the approval of the Ethics Committee at the Faculty of Medical Sciences in Kragujevac. All the included examinees signed written consent for participating in this research.

to the personal assessment of well-being and happiness as the most frequent indicators of the quality of life¹. Participants state the level of agreement with five items (eg, “In most ways my life is close to my ideal”) on the seven-point Likert scale ranging from 1 – strongly disagree to 7 – strongly agree. The scores range from 5 to 35, while higher scores indicate greater life satisfaction. Test-retest correlation of the scale is 0.82, and Cronbach’s α ranges from 0.83 to 0.87²¹.

The Job Satisfaction Survey (JSS) is a nine facet scale, comprised of 36 items describing employees’ attitudes about their job and aspects of the job: pay, chances of promotion, supervision, fringe benefits, contingent rewards, operating conditions, co-workers, nature of work, and communication²². The summative score, which points out the general degree of job satisfaction, can also be calculated. Although the JSS was originally developed for use in human service orga-

Table 1

Sample characteristics	
Characteristics	Values
Number of participants	203
Sex, n (%)	
male	56 (27.6)
female	147 (72.4)
Profession, n (%)	
physician	124 (61.1)
psychologist	79 (38.9)
Age (years), $\bar{x} \pm SD$ (range)	39.08 \pm 9.29 (24–61)
Working experience (years), $\bar{x} \pm SD$ (range)	12.19 \pm 8.91 (1–33)
Relationship status, n (%)	
in a relationship	164 (81)
single	39 (19)

Instruments

The short form of Temperament Evaluation of Memphis, Pisa, Paris and San Diego – autoquestionnaire version (TEMPS-A) was used in the research, namely the standardized Serbian version of the scale¹⁹. So far, this self-evaluation questionnaire has been validated in more than twenty languages, representing the most frequently used instrument for assessing basic temperament traits¹⁹. The scale measures emotional reactivity (eg, depressiveness, irritability), cognitive components of the emotional reactions (pessimism or optimism), psychomotor reactions and circadian rhythm (the energy of reactions, sleep schedule, etc.), and social aspects of emotional reactions²⁰. In the Serbian version, 41 yes-or-no items are grouped into six instead of five subscales (the anxious temperament is divided into two subdimensions): depressive, cyclothymic, hyperthymic, irritable, anxious-somatic and anxious-cognitive temperament. The scale showed good internal consistency and the construct validity ($\alpha = 0.83$), as well as moderately high alpha coefficient of subscales (0.73–0.80) among adult non-clinical population. The average test-retest coefficient ($\rho = 0.82$) suggests stable reliability¹⁹.

The scale Satisfaction with Life (SWLS) measures the cognitive component of life satisfaction, namely it is referred

nizations, it is applicable to all types of organizations which are the subject of our research, including medical and mental health centres, schools, social services². It is translated into more than 20 languages, while the official Serbian version was used in this research²³. The reliability of the whole instrument is $\alpha = 0.91$, while the reliability of certain subscales ranges from 0.62 to 0.82².

The Serbian version²⁴ of the short Interpersonal Support Evaluation List (ISEL)^{25,26} was used in this research. The scale comprises 12 items and measures the perceived availability of *Appraisal* (advice or guidance), *Belonging* (empathy, acceptance, concern), and *Tangible* (material or financial aid) social support²⁶. Items are valued on a four-point scale ranging from 1 (definitely false) to 4 (definitely true). Considering general population, the scale reliability ranges from 0.80 to 0.90²⁵. Moreover, there is a positive correlation of this scale with other scales of social support (eg, Inventory of Socially Supportive Behaviors), with the number of close friends, as well as with the level of the quality of marital relationships²⁶.

The IRSa is a multidimensional scale for estimating the frequency of stressors at work²⁷. The scale consists of 38 items, out of which 34 have the form of the five-point Likert scale (from “hardly ever“ to “almost always“) and assesses

the presence of adverse job conditions and events, *eg*, “How often you do not have time to complete all your tasks?” or “Can you decide when to take a break?”. The other four Yes/No items assess job insecurity, *eg*, “Are you worried that you’ll get fired?”. The IRSa comprises seven subscales that assess different sources of stress at work (demands at work, supervision, the support of the manager, the support of colleagues, relations and working environment, position at work, distribution of work assignments). The reliability of subscales ranges from 0.72 to 0.82, with the average reliability of the whole scale $\alpha = 0.74$.

Statistical analyses

The data were analyzed using SPSS Statistics v.20. Pearson's correlation coefficients were used to examine associations between continuous variables, while *t*-test was used to determine the significance of differences among arithmetic means. Kolmogorov-Smirnov test was used for analyzing normality of the distribution of scores on the scales of life and job satisfaction. Furthermore, the hierarchical and logistic regression analyses were used for establishing the degree where predicting variables indicate criterion variables.

Results

All the scales showed relatively high reliability, for the subscales TEMPS-A ranging from 0.70 to 0.80, ISEL 0.78, IRSa 0.91, SWLS 0.84 and JSS 0.92.

Kolmogorov-Smirnov test showed normal distribution of scores on the scales of life and job satisfaction. Considering life satisfaction, the values are to some extent higher than theoretical frameworks, therefore the curve is slightly curved toward higher values, but it is still within the bounds of significance. Concerning job satisfaction, the values are in the range of normal distribution (Table 2).

The analysis of sociodemographic characteristics did not point out any significant difference considering sex and occupation (doctors and psychologists) in regard to life and job satisfaction. The relationship status of the examinees (in a relationship/single) showed that those who are in a relationship are more satisfied with life than those who are single (Table 3).

Life satisfaction is positively correlated with the number of children and the years of education, while job satisfaction is negatively correlated with the years of working experience (Table 4).

According to the already existing norms in the world²⁸, our examinees are satisfied with their life, but considerably less satisfied with their work [$t(2) = 11.20$; $p < 0.01$]²⁹. Namely, our workers are the least satisfied with pay (9.03 ± 4.61) and benefits (9.37 ± 4.45), while they are most satisfied with nature of work itself (18.72 ± 3.52), social relations with co-workers (15.56 ± 4.15) and supervisors (15.57 ± 5.33).

The correlation among affective temperaments, life and job satisfaction, social support, and stress at work is shown in Table 5. The effects of sex and age variables were controlled in

Table 2

Descriptive indicators of life and job satisfaction						
Parameters	Min-Max	AS	SD	Skewness	Kurtosis	K-S
Life satisfaction	9–35	26.42	5.42	-0.72	0.36	0.058
Job satisfaction	38–185	113.36	28.31	0.08	-0.06	0.200

K-S – Kolmogorov-Smirnov test; AS – average score; SD – standard deviation.

Table 3

Differences in life/job satisfaction according to demographic characteristics							
Parameters	AS		SD		<i>t</i>	<i>df</i>	<i>p</i>
	male	female	male	female			
Life satisfaction	26.77	26.10	4.83	5.54	0.792	201	0.429
Job satisfaction	109.88	111.59	26.86	27.82	-0.397	201	0.692
	Psych	Doctors	Psych	Doctors			
Life satisfaction	25.73	26.87	5.79	4.99	-1.966	201	0.058
Job satisfaction	110.34	111.61	26.89	27.98	-0.320	201	0.749
	In a relation-ship	Single	In a relation-ship	Single			
Life satisfaction	26.70	24.54	4.82	6.97	2.293	201	0.023*
Job satisfaction	111.72	108.59	26.64	31.14	0.638	201	0.524

* $p < 0.05$; AS – average score; SD – standard deviation.

Table 4

Correlation of life and job satisfaction with demographic characteristics				
Parameters	Age	Number of children	Years of education	Working experience
Life satisfaction	0.044	0.246**	0.138*	0.042
Job satisfaction	-0.114	0.047	-0.004	-0.159*

** $p < 0.01$; * $p < 0.05$; Kolmogorov-Smirnov test.

Table 5

Correlation between examined psychological constructs									
Temperament and job and life satisfaction	Cyclo	Hyper	Irrit	AnxC	AnxS	Life Sat.	Job Sat.	Soc.Sup.	Work Stress
Depressive	0.427**	-0.103	0.332**	0.409**	0.304**	-0.340**	-0.212**	-0.216**	0.273**
Cyclothymic (Cyclo)	-	-0.089	0.300**	0.397**	0.402**	-0.324**	-0.213**	-0.215**	0.240**
Hyperthymic (Hyper)		-	0.063	-0.093	-0.056	0.280**	0.080	0.209**	-0.094
Irritable (Irrit)			-	0.176*	0.200**	-0.164*	-0.180**	-0.084	0.220**
Anxious-Cognitive (AnxC)				-	0.481**	-0.216**	-0.210**	-0.241**	0.216**
Anxious-Somatic (AnxS)					-	-0.209**	-0.168*	-0.077	0.168*
Life Satisfaction (Life Sat.)						-	0.384**	0.250**	-0.349**
Job Satisfaction (Job Sat.)							-	0.392**	-0.744**
Social Support (Soc.Sup.)								-	-0.353**

** $p < 0.01$; * $p < 0.05$.

this analysis owing to the fact that there are certain differences of dominant temperament traits in regard to these variables^{19,30}.

Life and job satisfaction are in low to moderate negative correlation with almost all temperament traits, moderate positive correlation with social support, and moderate to high negative correlation with sources of stress at work (Table 5). Life satisfaction has moderate correlation with all the three types of social support (Appraisal $r = 0.254$ **, Belonging $r = 0.259$ **, and Tangible $r = 0.239$ **), and the situation is similar regarding job satisfaction (Appraisal $r = 0.351$ **, Belonging $r = 0.298$ **, and Tangible $r = 0.346$ **). In regard to the sources of stressors at work, the lack of the manager's support ($r = 0.712$ **), distribution of work assignments ($r = 0.650$ **) and bad work environment ($r = 0.640$ **) are highly correlated with job satisfaction, as well as the support of colleagues ($r = 0.528$ **).

In order to examine the relation between explanatory and criterion variables, analyses of hierarchical and linear regression were conducted. According to the theoretical model and the fact that temperament is a basic personality trait,

in the first part of these analyses, life satisfaction was the dependent variable, while the independent ones were those temperament traits that moderately correlated with life satisfaction. In the second step, social support and sources of stress at work were introduced in the model (Table 6).

When life satisfaction is predicted by temperament traits, the model is significant and presents 21% of the variance in life satisfaction. Introducing additional variables, work-related stress and social support, the additional 6% of the variance in life satisfaction is explained and this change is also significant.

Linear regression analysis of job satisfaction considered only variables 'social support' and 'stress at work', because the other ones did not show moderate correlation with the dependent variable. Approximately 58% of the life satisfaction variance was explained by this model (Table 7).

Discussion

The aim of this paper was to examine the predictive role of affective temperaments in the feeling for life satisfacti-

Table 6

Hierarchical regression for life satisfaction as criterion variable						
Life satisfaction	B	SE b	β	R	R^2	ER^2
Step 1				0.45	0.21	0.19
constant	24.81	1.01				
depressive	-1.21	0.34	-0.25**			
cyclothymic	-0.49	0.21	-0.17*			
hyperthymic	0.63	0.18	0.22**			
Step 2				0.52	0.27	0.25
constant	25.36	3.37				
depressive	-0.87	0.33	-0.19*			
cyclothymic	-0.36	0.21	-0.12			
hyperthymic	0.54	0.18	0.19*			
work stress	-0.06	0.02	-0.21**			
social support	0.11	0.06	0.12*			

Hierarchical and linear regression analysis; $n = 210$; * $p < 0.05$; ** $p < 0.01$.

Table 7

Linear regression for job satisfaction as criterion variable						
Job satisfaction	B	SE b	β	R	R^2	ER^2
Step 1				0.76	0.58	0.57
constant	167.20	13.09				
work stress	-0.95	0.07	-0.69**			
social support	0.76	0.23	0.17*			

Linear regression analysis; $n = 210$; * $p < 0.05$; ** $p < 0.01$.

on among doctors and psychologists, as to well as examine their intermediary roles in predicting job satisfaction.

Regarding the life satisfaction variance, depressive and hyperthymic and to some extent cyclothymic temperament traits, make the greatest contribution. These results are expected since hyperthymic temperament refers to cheerful, optimistic, energetic (active) and self-confident persons³¹, and optimism and self-esteem are actually the traits that are positively correlated with life satisfaction³²⁻³⁴. Moreover, it is also expected that depressive temperament has negative influence on life satisfaction, because it can be described as the contrast to hyperthymic temperament. Cyclothymic temperament showed the weakest predictive power, particularly when situational variables are included in the model. Nevertheless, it is obvious that persons with rapid mood and energy swings, which are characteristics of the cyclothymic temperament³¹, are less satisfied with their life. This is proved by numerous studies that present great power of this type of temperament for predicting early depressivity and suicidal tendencies³⁵, higher rates of relapse of depression, higher rates of irritability and mixed feelings, as well as addictions³⁶. Introducing stressors at work and social support in the model, the significance of predicting is to some extent increased which points out their potential intermediary role in this model. Other authors also came to similar conclusions^{37,38}, emphasizing that approximately 50% of individual differences referred to experiencing happiness can be explained by the inborn predisposition for a certain level of positive affect, 10% can be explained by life experience, while the other 40% can be under our own control.

In respect to demographic variables, the relationship status, the number of children and years of education showed a correlation with life satisfaction. It is expected that people in relationships have the possibility to satisfy psychological, reproductive and social needs, but first of all, the need for belonging as one of basic psychological needs. Being married/cohabiting and social support explained a half of the total variance of life satisfaction among physicians¹⁰. However, until now most papers either did not confirm the correlation, or showed a negative correlation between the number of children and life satisfaction. According to Angeles³⁹, previous researches did not manage to identify these effects, because the key role of marital status was not taken into consideration. The experience of individuals who are married and share duties and problems, differs from the experience of the ones who are separated, or have never been married and who have to take care of children themselves. Furthermore, financial status has not been considered in the earlier researches. Regarding the fact that our research includes highly educated people who are employed and have stable incomes, the number of children does not imply worrying for family existence.

National studies in Sweden and Spain confirms our results considering the correlation between years of education and life satisfaction^{40,41}. Incomes and level of education have a direct and indirect impact on most aspects of life satisfaction in these studies. More educated people can better or-

ganize their free time, take various activities, make numerous social contacts in their life, and all these issues indirectly influence life satisfaction.

The second model confirms that situational factors such as stressors at work and social support are significant predictors of job satisfaction, while it does not confirm our hypothesis that temperament traits also play a role in such a model. Stressors at work as the most significant predictors for job satisfaction together with social support predict 58% of the variance in job satisfaction. As we have already mentioned, researches in different countries show a high prevalence of work stress among helping professions¹⁵⁻¹⁷. Exposing oneself to numerous kinds of stressors, among healthcare professionals, can cause increased anxiety, depressivity, irritability, sleep disorder, lack of concentration and aggressive behavior, and it can also contribute to the development of burnout syndrome, mental problems, absence from work, earlier retirement⁴². The sources of stressors at work have a tendency to make its effect complex and multiplied because they are combined together with the sources of stressors from other domains of life (family life, relationship with friends), which all together contribute to not only lower job satisfaction but to low life satisfaction in general.

Family and social relationships, as segments of social and emotional support a person perceives, are also important for maintaining the quality of life⁴³, though this variable made only a small contribution in our models. Researches emphasize the relevance of social relationships for mental health, therefore the individuals with weak social relationships are liable to numerous health and social problems⁴⁴. Social support is correlated with many positive indices of mental health, such as optimism, happiness, and life satisfaction, but also negatively correlated with perceived stress⁴⁵.

Regarding sociodemographic variables our study points out that only working experience is (negatively) correlated with job satisfaction. Some researches show that age is positively correlated with job satisfaction, but more and more authors suggest that the relationship between age (or working experience) and job satisfaction is U-shaped, declining until around the mid-30s and gradually increasing until the late 60s^{46,47}. On the other hand, our research considers specific professions, so we have to regard only the studies with similar population. The correlation between working experience and depression, anxiety and chronic diseases among doctors can be seen in Caplan's⁴⁸ research, where he found that older doctors are more exposed to the significant amount of stress. Working experience results in chronic diseases, general exhaustion, impossibility to adapt to new technologies, which all cause harder fulfilling work obligations and less job satisfaction.

Finally, the aspects of job satisfaction that we examined in this paper should also be mentioned. Our examinees are least satisfied with those aspects of job referred to extrinsic motivation, namely external rewarding, such as pay and benefits. These results are expected considering the fact that Serbia belongs to developing countries with budget activities of limited financial possibilities, and organizations mostly relied on other motivation factors for achieving employees' efficiency at work⁴⁹. On the other hand, they are most satis-

fied with aspects of intrinsic motivation, characteristics of job, but with social relationships at work as well, which probably contributed to better total job satisfaction, because support from superiors and co-workers are significant components of high job satisfaction⁴⁹⁻⁵¹.

The studies show that caring for others is associated with improvement in health indicators of caregivers, which supports the hypothesis that providing support to others can sometimes be more advantageous than receiving it⁵⁰. The effect of caregiving on the person who gives care quite depends on some psychological characteristics, therefore it would be good to examine the influence of negative aspects of caregiving among helping professions in some future researches. This considers particularly caregiving hyperactivation, which represents self-sacrificing approach to caregiving with an intense desire for increased closeness⁵¹. Hyperactivated caregivers put demands on themselves so they are constantly stressed which results in lower quality of life and job satisfaction.

Conclusion

The results of this study are mainly theoretical and point out that affective temperaments can be regarded as predictors of life satisfaction, but in order to predict job satisfaction we have to take in consideration the aspects of wider social surrounding and sources of stressors at work.

Future researches should also consider other indicators of life satisfaction such as family satisfaction, health satisfaction, free time etc. It is entirely possible that these aspects are differently influenced not only by personality traits, but also by situational factors that we examined. Furthermore, there are evidences that domestic stresses as well as the aspects of work environment lead to psychology disorders in healthcare professionals, therefore the lack of this study is that we did not examine stressors outside of work situations. This fact is important because it is known that job interference with family life and constant interruptions correspond with high levels of job dissatisfaction and negative well-being in healthcare professionals.

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