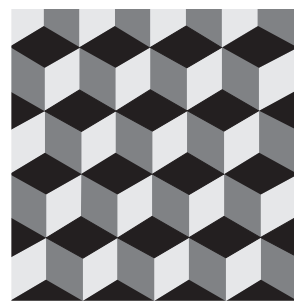


PRIMENJENA PSIHOLOGIJA



RAZLIKE IZMEĐU ZAPOSLENIH I NEZAPOSLENIH U ZADOVOLJSTVU ŽIVOTOM, SUBJEKTIVNOJ SREĆI I LATENTNIM I MANIFESTNIM BENEFITIMA OD ZAPOSLENJA

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PROFESIONALNI RAZVOJ U ADOLESCENCIJI: KONSTRUKCIJA KARIJERE, POTEŠKOĆE U DONOŠENJU PROFESIONALNIH ODLUKA I PROFESIONALNA ADAPTABILNOST UČENIKA SREDNJIH ŠKOLA U HRVATSKOJ

Toni Babarović i Iva Šverko



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INTRODUCTION TO THE SPECIAL ISSUE

The context for work and organizational (W/O) psychology researchers in South-East Europe (SEE) has significantly changed during the last two and a half decades. On the one hand, problems of the transition to market economies and trends in the labor markets (e.g., high unemployment rates, increasing number of flexible work arrangements) have raised a number of important issues such as psychological consequences of unemployment, employability and job quality. On the other hand, both the transformation of existing companies and increasing number of international corporations in the SEE economies, have largely changed the role of W/O psychology practitioners. Traditional personnel administration has developed into a vibrant field of human resources management characterized by enhanced need for the “old” W/O psychology themes (e.g., personnel selection and career development) but also some new issues (e.g., organizational behavior management).

In this volume, we have collected five papers written by twelve authors coming from five research institutions in SEE. In the first paper, Ivana Strizović and Aleksandar Martinković explored differences in latent and manifest benefits of work, life satisfaction, and happiness between employed and unemployed people. Among other findings, the study reveals importance of work for well-being considering that the employed individuals reported their days to have more time structure, had better financial situation, and were more satisfied with life than the unemployed participants. In the second paper, Nebojša Majstorović, Boris Popov, Jelena Matanović and Vanja Slijepčević reported the results of a study that monitored psychophysical health of a group of unemployed individuals on three occasions spanning over a more than a year-long period. Their results showed that the unemployed individuals reported fewer symptoms of ill-health at the later measurement occasions. Still, women and older participants were identified as more vulnerable subgroups of the unemployed during the whole course of the study. Using a sample of Croatian workers, in the third paper, Mojra Dautović and Zvonimir Galić explored how Generation Y employees differ from their older counterparts in the contents of psychological contracts they create with their employers and the reactions to the psychological contract breach. The results of this study revealed that Generation Y employees seem to expect more from their employers and more often react to unfulfilled promises with intentions to leave the organization. In the fourth paper, Zoran Sušanj and Ana Jakopec reported the results of a comprehensive, multisource study that examined the relationship between the extent to which supervisors felt trusted by team members and the team effectiveness on a sample of 659 employees nested within 196 teams. Their results showed that supervisors’ feelings about being trusted by their team members

are related to higher team effectiveness. The authors identified team members' supervisory justice perceptions and team work engagement as the mediators of that relationship. Finally, in the fifth paper Toni Babarović and Iva Šverko explored career development among Croatian high school students. The authors showed that, although the older students reported somewhat higher career maturity and lower career decision-making difficulties than their younger colleagues, observed increase was generally small, indicating a need for comprehensive career guidance in high school programs.

Judging by the papers reported in this volume, W/O psychology in SEE seems to be alive and well. The studies reported here suggest that the SEE W/O psychology researchers have kept pace with international W/O literature but also remained highly sensitive to the social context in which they live. Moreover, issues covered in this volume remind us how important W/O psychology problems are for enhancing individual, organizational, and even societal outcomes. We believe that this issue will bring W/O researchers from this part of Europe closer together and foster their future collaborations. More importantly, we hope that this volume will attract the attention of SEE psychology students and serve as a tool for recruitment of new generation of W/O psychology researchers and practitioners.

Zvonimir Galic, Ph.D.
Guest editor
Department of Psychology
Faculty of Humanities and Social Sciences
University of Zagreb
Croatia

Ivana Strizović¹
Aleksandar
Mratinković

Department of
Psychology, Faculty
of Philosophy,
University of Novi
Sad

DIFFERENCES BETWEEN EMPLOYED AND UNEMPLOYED PEOPLE IN SATISFACTION WITH LIFE, SUBJECTIVE HAPPINESS, AND LATENT AND MANIFEST BENEFITS OF WORK

The problem of this study was to explore differences in well-being between employed and unemployed persons in Serbia, as well as the differences between the employed and the unemployed in prediction of well-being based on manifest and latent benefits of employment. The study consisted of 237 participants from Serbia, whereby 61.6% were employed. Participants varied by gender, work status, education, place of living and socioeconomic status, but employed and unemployed participants did not differ according to socio-demographic variables. The used instruments were Satisfaction With Life Scale, Subjective Happiness Scale, and The Latent and Manifest Benefits Scale, which measured benefits of employment. Results showed that the employed people had higher satisfaction with life, more financial security, and more structured time than the unemployed. However, there was no difference in subjective happiness between the employed and unemployed participants. Using hierarchical regression analysis it was shown that the best predictor of satisfaction with life in the subsample of the employed was financial status, followed by more social contacts and better time structure and social status. The best predictor of satisfaction with life in the subsample of unemployed was latent benefit which included social contacts, and then financial status. Based on these results we could assume that, in Serbia, financial strain is more important than latent benefits in prediction of satisfaction with life, at least in the case of employed people.

Keywords: employment, satisfaction with life, subjective happiness, benefits of employment

¹ Author's address:
ivana.strizovic@gmail.com.

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The fact that job is one of the most important aspects of one's life, does not seem to need special justification. Not only that job provides a main source of income, but it often defines a social role and the person's self. Considering mentioned circumstances, the fact that job loss is rated as the eighth most stressful life event does not seem surprising (Holmes & Rahe, 1967). After losing a job, a person becomes unemployed. The unemployment can be defined as a status of someone who has unwillingly lost his/her job, but is willing to work and is actively looking for one (Majstorović, 2011).

There are research which demonstrate differences between employed and unemployed persons on dimensions that reflects one's well-being: the unemployed people have reported higher level of depression (Mossakowski, 2009), lower level of psychological and physical well-being (McKee-Ryan, Song, Wanberg, & Kinicki, 2005), as well as lower level of self-esteem (Waters & Moore, 2002a). Goldsmith, Veum, and Darity (1996a) have suggested that unemployment is related to low self-esteem, low self-confidence, and symptoms of depression. The same authors (Goldsmith, Veum, & Darity, 1996b) pointed out that the longer period of unemployment can increase one's external locus of control, and thus lead to helplessness.

Justifications for the claim that job loss is considered as one of the most stressful experiences (Latack, Kinicki, & Prussia, 1995) are found in a great number of research that indicate correlation between unemployment and many negative physical, behavioral and psychological outcomes, such as physical and mental health (Paul & Moser, 2009), mortality, the use of mental health services, heart disease, heavy drinking, and the use of mental health services (Jin, Shah, & Svoboda, 1995), suicide (Blakely, Collings, & Atkinson, 2003; Laanani, Ghosn, Jougla, & Rey, 2015) and somatic symptoms (Hammarström & Janlert, 2002). Besides mentioned outcomes, a job loss is associated with reduction of general well-being (DeWitte, 1993) and increased anxiety (Westman, Etzion, & Horovitz, 2004). A research conducted on a sample of unemployed people from Serbia has indicated correlation between unemployment and psychophysical health, especially anxiety and social dysfunction (Majstorović, 2011).

However, it should be mentioned that presumption of causality between employment and well-being cannot be based on these data. There is also a possibility that unemployment is actually a consequence of negative mental and physical states. Maybe those who are more depressive and anxious, or who have health issues, are simply more likely to lose their job? Some researchers have tried to answer this question. Winkelmann and Winkelmann (1998) conducted research using panel data, and their results suggested that unemployment actually caused low well-being, and not otherwise. Other longitudinal studies confirmed a causal relationship (Creed, 1999; Winefield, Tiggemann, Winefield, & Goldney, 1993).

Although there is a consensus that unemployment has significant influence on well-being, the psychological literature suggests a widespread disagreement over which element of the job is essential for this relationship. Two opposing concepts have the same basic assumption that the influence of unemployment on

well-being can be explained by two factors, latent and manifest. However, there is a disagreement over which element is crucial. One of the first studies that examined the influence of unemployment on well-being (Eisenberg & Lazarsfeld, 1938) suggested that deprivation of labor income could not fully explain the impact that unemployment had on well-being. One of the research conducted over German population (Gerlach & Stephan, 1996) showed that unemployment reduced life satisfaction more than it would be expected from the loss of income.

A model which corresponds to these findings is Jahoda's Latent Deprivation Model (Jahoda, 1981, 1982) which states that paid work is important not only for its financial element, but that there are latent dimensions of job that are connected with one's well-being. Although the person's main motive for employment is usually of financial matter, a person unintentionally gains benefits by being employed: time structure, social contact, common goals, status and activity. After losing a job, it is the loss of these latent benefits that has the most influence on diminishing one's well-being. Of course, Jahoda does not exclude the influence of manifest (financial) dimension, considering it as the notable one. However, she states that latent dimensions are more important for understanding the effects of unemployment on psychological distress. Other studies have confirmed correlation between latent dimensions and well-being (Evans & Haworth, 1991; Miles, 1983; Miles & Haworth, 1984). We will now briefly present Jahoda's description of earlier mentioned latent benefits.

Time structure. Jahoda considers that employment is the main provider of scheduled time, and that individuals need time organization, i.e. obligations that will fulfill their time. The results of some studies suggest that the unemployed people actually have less structured time than employees (Jackson, 1999), which is associated with poorer well-being (Evans & Haworth, 1991). Also, according to Jahoda, time structure is a dimension with the biggest influence on well-being.

Collective purpose refers to the sense of purpose, usefulness and contribution to the society. Also, it can be described as being needed by other people and feeling like a part of society. Although this domain has not been studied much, there are some records that collective purpose is associated with well-being (Evans & Haworth, 1991; Haworth & Ducker, 1991).

Social contact can be characterized as a need for contact with people outside the family, which cannot be satisfied by more frequent contact with people inside family. It has been found that the unemployed people experience less social activities than those who are employed (Underlid, 1996), and that the lower scores on this subscale are correlated with higher levels of depression (Bolton & Oatley, 1987) and lower levels of well-being (Haworth & Ducker, 1991).

Social status is an essential dimension for forming a person's identity. People tend to see themselves as others see them, and one's job has a large contribution for this kind of identification. Some studies have suggested that there are correlations between social status and well-being (Evans & Haworth, 1991; Haworth & Patterson, 1995). Creed and Machin (2001) have stated that this dimension is the single best predictor of psychological well-being.

Activity. Naturally, employment implies some kind of activity. It has been found that the unemployed people have lower levels of activity than the general population (Underlid, 1996).

Each of these five latent dimensions is important for one's well-being according to Jahoda (1982), as the dimensions are associated with basic human needs, and, of course, the satisfaction of these is necessary for the psychological well-being. It should be noted that Jahoda (1982) states that latent dimension can also be satisfied by any other involvement (religion, political activity), but that the job is the only one that can significantly contribute to all dimensions. Therefore, the unemployed persons are deprived of some latent dimension which has a negative impact on their mental health.

Few studies from different countries, such as England (Haworth & Paterson, 1995), USA (Wanberg, Griffiths, & Gavin, 1997), Australia (Muller, Creed, Waters, & Machin, 2005) and Germany (Paul & Batinic, 2009) have confirmed correlation between latent dimensions and mental health. Some studies have shown significant differences between the employed and unemployed people in all of these dimensions (Creed & Reynolds, 2001; Paul & Batinic, 2009; Waters & Moore, 2002b). Yet other studies reported differences in all the dimensions except collective purpose (Miles, 1983), or only in social contact and status (Isaksson, 1989).

The second model that describes effects of employment is Agency Restriction Model (Fryer, 1986). Fryer, the author of this model, believes that Jahoda does not give enough importance to manifest dimension (i.e. financial element), which he considers to be the essential element of paid work with the biggest influence on one's well being.

Jackson (1999) found that the unemployed individuals reported greater financial strain than the ones who were employed, or were students. Other researchers have found similar results (Kokko & Pulkkinen, 1997). Association between financial strain and depression has also been demonstrated (Price, Choi, & Vinokur, 2002). Whelan (1992) demonstrated (using the Irish national database) that poverty (weather operationalized as a subjective experience or an objective material deprivation) was an essential domain which moderated the effects of unemployment on mental health. The contribution of both latent and manifest variables on explaining the variance of well-being was tested in one of the few studies, (Creed, 2001). The results revealed that the financial strain had the highest contribution to one's well-being, explaining the largest part of the variance (16.81%), while the second predictor was status (7.84%). According to some studies, manifest and latent dimensions explain approximately the same percentage of mental health variance (Paul & Batinic, 2009), with a slight advantage of latent dimensions (20% vs 26%).

The problem of this study was to explore differences in well-being between the employed and unemployed persons in Serbia, as the differences between the employed and the unemployed in prediction of well-being based on manifest and latent benefits of employment. We used satisfaction with life and subjective happiness as indicators of well-being. Based on the previous literature (DeWitte, 1993;

McKee-Ryan et al., 2005), we expected that the employed people would have higher level of satisfaction with life and subjective happiness. Also, we wanted to explore differences between the employed and unemployed persons in manifest and latent benefits of employment. Based on previous studies (Creed & Reynolds, 2001; Isaksson, 1989; Miles, 1983; Paul & Batinic, 2009; Waters & Moore, 2002b), we expected that the employed people would have more manifest and latent benefits from employment than the unemployed people. For our last goal, we intended to explore which benefits of employment, either manifest or latent, better explained satisfaction with life in the employed and unemployed persons from our country. We assumed that the latent benefits had the significant contribution in the explanation of satisfaction with life in both employed and unemployed people.

Method

Sample and procedure

In the present study we used convenience sampling method. Participants provided information on their gender, age, place of living, level of education, professional status (employed/unemployed), duration of employment/unemployment, perception of financial situation, a number of members (and employed members) in their household, current relationship status, and a number of children. The sample consisted of 237 participants from Serbia (83 were male), with the mean age of 30.35 years old ($SD = 7.65$, age range 18–60). A number of employed participants was 146 (61.6%), while 91 were unemployed (38.4%). In the subsample of employed participants, there were 37% males. 61% of employed participants were single, 36.3% married and 2.7% divorced. 30.1% of participants had children. The mean number of months employed was 42.41 ($SD = 14.65$). Employed participants distinguished by how much they loved their job (3.4% not at all, 5.5% a little, 16% not sure, 25.7% pretty much, and 24.1% very much). In the subsample of unemployed participants, there were 31.5% males. 72.8% of unemployed participants were single and 27.2% were married. 19.6% of participants had children. The mean number of months unemployed was 31.50 ($SD = 34.66$). The subsamples did not significantly differ by basic socio demographic variables. 90.7% of participants were living in the city, and 9.3% of them lived in the village. Respondents differed by level of education (21.3% went to middle school, 10.1% to college, 34.6% had faculty degree, and 34.2% had Master's degree or Ph.D.) and marital status (65.4% single, 32.9% married, and 1.7% divorced). Only 62 participants (26.2%) had children. Participants also differed by perception of their financial status (16% said it was good, 61.2% said it was moderate, and 22.8% said it was bad). In total sample, participants had between 1 and 9 members in their households. All of the measures were administered to participants who agreed to complete the study on a voluntary basis. In order to examine the statistical differences between the employed and unemployed participants in demographic vari-

ables, we used chi-square tests and *t*-tests for independent samples. There were no significant differences between the employed and unemployed participants in gender ($\chi^2(1, N = 237) = 0.65, p = .42$), age ($t(235) = 1.82, p = .07$) or level of education ($\chi^2(1, N = 237) = 5.79, p = .21$).

Measures

Satisfaction With Life Scale (SWLS: Diener, Emmons, Larsen, & Griffin, 1985). The SWLS scale consists of five items and is designed for measuring global life satisfaction through five statements to which participants respond on a seven point scale (1 = *strongly disagree* to 7 = *strongly agree*).

Subjective Happiness Scale (SHS: Lyubomirsky & Lepper, 1999). The scale consists of four items measuring subjective happiness. The first item is designed for characterizing oneself by using absolute ratings (1 = *a very unhappy person* to 7 = *a very happy person*). The second item characterizes oneself in relation to their peers (1 = *much less happy* to 7 = *much more happy*). The third and the fourth item describe, respectively, happy and unhappy people, whereby the task of the respondents is to define happiness for themselves, and estimate to what extent each characterization describes them (1 = *not at all* to 7 = *a great deal*).

The Latent and Manifest Benefits Scale (LAMB: Muller, Creed, Waters, & Machin, 2005). The LAMB scale consists of 36 items designed for measuring five latent (time structure, collective purpose, enforced activity, status and social contact) and one manifest benefit of employment (financial strain), whereby every scale has 6 items. Participants indicate the strength of their agreement to statements using a 7-point response format (1 = *strongly disagree* to 7 = *strongly agree*). It is important to admonish here that the Time Structure subscale is inverted, with items such as "I often have nothing to do.", "I often wish I had more things to do to fill up the time in my days.", which means that higher scores on this subscale mean less organized time structure and vice versa.

Results

Differences between employed and unemployed participants

The values of means, standard deviations, skewness and kurtosis for SHS, LAMB and SWLS are presented in Table 1. Based on the more lenient criteria (values between -2 and 2: Finney & DiStefano, 2006), the value of skewness and kurtosis can be considered acceptable for all scales of all of the questionnaires. Reliability of used scales is good, except for the SHS and subscale Enforced activity from the LAMB scale.

Table 1

Descriptive indicators for questionnaires SWLS, SHS, and LAMB (N = 237)

	Group	<i>M</i>	<i>SD</i>	Skewness	Kurtosis	α
SWLS	Empl.	17.06	4.53	-0.41	-0.38	.84
	Unem.	15.85	4.24			
SHS	Empl.	17.24	3.33	0.45	0.45	.68
	Unem.	16.68	2.98			
Collective Purpose	Empl.	23.26	7.23	-0.12	-0.57	.86
	Unem.	21.86	8.31			
Financial Strain	Empl.	23.35	9.20	0.21	-0.80	.92
	Unem.	19.17	8.88			
Social Contact	Empl.	28.35	7.77	-0.22	-0.48	.88
	Unem.	27.16	7.60			
Status	Empl.	34.82	5.09	-0.83	0.93	.86
	Unem.	35.01	5.22			
Time Structure	Empl.	13.65	6.39	0.78	0.01	.88
	Unem.	19.57	8.59			
Enforced Activity	Empl.	30.31	5.21	-0.26	0.36	.67
	Unem.	30.68	4.98			

The employed and unemployed participants did not differ in subjective happiness ($t(235) = 1.32, p = .18$, Cohen's $d = 0.18$). However there were significant differences in satisfaction with life ($t(235) = 2.03, p = .04$, Cohen's $d = 0.28$), with higher scores for the employed participants. Also, there were significant differences between the employed and unemployed participants in LAMB subscales ($F(6, 230) = 8.24, p < .01, \eta_p^2 = .17$). Univariate tests showed that significant differences were in financial strain ($F(1, 235) = 11.87, p < .01, \eta_p^2 = .05$) and time structure ($F(1, 235) = 36.62, p < .01, \eta_p^2 = .14$). Based on the mean values of groups, the results showed that the employed had more financial security, and better time structure (since the Time structure subscale was invert) than the unemployed persons.

Prediction of satisfaction with life based on the latent and manifest benefits of employment

For our last hypothesis, we examined which subscales of LAMB scale were the best predictors of satisfaction with life (SWLS). As stated earlier, we wanted to see whether the other benefits, besides manifest, contributed to prediction of satisfaction with life. For this hypothesis, we used hierarchical regression analysis for the employed and unemployed participants separately (see Table 2).

Table 2
Hierarchical regression analysis: Prediction of satisfaction with life based on manifest and latent benefits of employment

Predictors	Employed		Unemployed	
	β	r	β	r
R^2	.32		.12	
Financial Strain	.22**	.56**	.10*	.35**
ΔR^2	.10		.11	
Collective Purpose	.06	.25	-.016	.19
Social Contact	.12**	.40**	.19**	.41**
Status	-.16*	.08*	-.02	.17
Time Structure	-.14**	-.27**	-.06	-.18
Enforced Activity	.07	.24	.02	.14
R^2	.43		.24	

* $p < .05$. ** $p < .01$.

The first step of the analysis included finances as a manifest variable of employment, which explained 32% of the variance of satisfaction with life in the employed subsample. After including latent benefits of employment in the second step of the analysis, the model explained 43% of the total variance ($F(6, 139) = 17.18, p < .01$). Latent benefits explained additional 10% of the variance. In the final model, the financial strain had somewhat higher contribution, followed by the status, time structure and social contacts. It could be noticed that status had negative contribution to the prediction of satisfaction with life.

For the unemployed participants, finances explained less variances of the satisfaction with life (12%), compared to the employed participants. After including latent benefits of employment, the model explained 24% of the total variance ($F(6, 84) = 4.43, p < .01$) in the second step. Latent benefits explained additional 11% of the variance. In the final model, only the financial strain and social contacts had a significant contribution to the explanation of satisfaction with life, whereby social contact had higher contribution.

Discussion

The main aim of this study was to examine the differences between the employed and unemployed people in Serbia in indicators of well-being, such as satisfaction with life and subjective happiness. The results showed that there were significant differences in life satisfaction between the employed and unemployed participants, but there were no differences in subjective happiness.

As demonstrated by many other research, (Feather & O'Brien, 1986; Henwood & Miles, 1987; Muller, Hicks, & Winocur, 1993), a significant difference was found between the well-being of employees and unemployed people, which once again pointed out to the importance that employment had on well-being. At first, the absence of significant differences on subjective happiness might seem surprising, but considering results of previous studies, the cause could be assumed. Some research suggest that the unemployed people report higher level of well-being in the areas in which the unemployment rate is high (Clark, 2003; Cohn, 1978; Jackson & Warr, 1987). It is the phenomenon known as a social-norm effect (Clark, Knabe, & Rätzel, 2010) which suggests that the more people are unemployed in some area, one's unemployment is considered as a smaller deviation from the norm, which thus leads to less negative effects on well-being. Since the unemployment in Serbia is very high (19% in the first quarter of 2016, according to Trading Economics², it is possible that people experience their unemployment less stressful, bearing in mind that a large number of people in their environment is also unemployed.

Considering the content of Subjective Happiness Scale (SHS) and Satisfaction With Life Scale (SWLS), it is evident that the first one is constructed in a way that 3 of 4 items include other people as well. Therefore, it is expected from a person to compare oneself to others in order to assess their own happiness. On the other hand, SWLS does not include other people, but focuses exclusively on the experience of respondents without reference to the surrounding in which they are found. It seems that these circumstances may explain the difference in results for SWLS and SHS.

The next aim was to examine which benefits, either manifest or latent, had higher contribution in prediction of one's well-being. First, the results showed that there were significant differences between the employed and the unemployed in financial strain, as the manifest benefit, and in time structure, as the latent benefit. The results which confirmed significant differences between employees and the unemployed in latent and manifest benefits were consistent with a large number of studies mentioned earlier (DeWitte, 1993; McKee-Ryan et al., 2005). The results showed that the employed people had higher scores on financial strain and time structure. Based on the effect sizes, it seemed that latent benefit, namely time structure, had the larger effect on differences between the employed and unemployed participants than manifest benefit. This is in line with the results of some studies that suggested that unemployed people actually had less structured time than the employees (Jackson, 1999).

Second, the results of hierarchical regression analysis showed that although the contribution of the manifest benefit was important and high, this benefit was not the only one which could explain satisfaction with life. These results were consistent with the results of the previous studies (Creed, 2001) which showed that the financial strain had the highest contribution to one's well-being, explaining the

² Information retrieved from <http://www.tradingeconomics.com/serbia/unemployment-rate> on 25.06.2016.

largest part of the variance, while the second predictor was latent benefit – status. Namely, our results showed that latent benefits contributed to explanation of satisfaction with life above manifest benefit in both the employed and the unemployed subsamples, and in almost the same percent for both subsamples. However, there were differences between the employed and unemployed participants in prediction of satisfaction with life based on manifest and latent benefits of employment. While financial strain was the best predictor of satisfaction with life of the employed, this was not the case with the unemployed people. Considering this, we can assume that, in our country, the financial security is more important than latent benefits, and presume that Fryer's (1986) model is more convenient in describing benefits of employment in our country, at least in the case of employed people. This finding can be explained with the fact that our society is in transition, that there is not enough working positions, that not everyone can find a job, and that job often is not permanent, so the financial concern is much bigger. It is possible that latent benefits become more important than finances when there are enough opportunities for people to find jobs, or when countries are financially stable. .

For the unemployed, social contacts, followed by financial strain had the biggest contribution to satisfaction with life. Findings about the role of social contacts were consistent with the previous studies that found that the lower scores on social contacts were correlated with higher levels of depression (Bolton & Oatley, 1987) and lower levels of well-being (Haworth & Ducker, 1991).

It is important to point out that the social contacts are also a significant predictor of well-being of the employed, but to a somewhat lesser extent. Besides financial security and social contact, the significant predictors of well-being of the employed were well organized time structure and lower level of social status as the latent benefits. The result that the lower level of social status predicts higher well-being of employees seems surprising. However, given the fact that this subscale is directed mainly towards friends and family, and also towards helping others ("People often rely on me for help.", "I often help others.", "My friends usually value my company.", etc.), it is possible that this context can influence well-being in a way that the employees costs of helping (time, resources, etc.) become higher than benefits.

As we have already said, these results have confirmed that the manifest and (at least some) latent benefits of employment affect the well-being. Bearing in mind that the job is the one ensuring the satisfaction of manifest and latent variables (Fryer, 1986; Jahoda, 1981), the importance given to employment seems justified. However, based on our results, it could not be said that only job gives these benefits to a person. Such latent benefits can be provided by volunteering, by being a student, and so on. These kinds of responsibilities affect time structure, social contacts, etc. In order to confirm financial strain as the best predictor of one's well-being, the future research should be directed towards examining the differences in the level of these benefits between employees and people who are retired. Perhaps, the financial security in both groups can lead to a greater importance of latent benefits, and therefore bigger differences in perceiving them.

The future research could also resolve a question whether relations between well-being and the latent and manifest benefits of employment change over time. Also, the research could be directed towards examining changes over time as a person gets and loses a job. Neither Jahoda's nor Fryer's model address these circumstances. Practical contribution of these findings is in a possibility of the activities organized for the unemployed (where they can meet other people and spend quality time together) to affect the well-being of the unemployed, till the day they get a job. On the other hand, team building and organizing seminars can positively affect the employee well-being, and their productiveness at work, accordingly.

It is important to state that our research has several limitations. First, our sample was convenient, with participants having higher educational and socio-economic level. The question remains whether these variables could influence the results. Second, the sample was relatively small comparing to the population in our country. The future research should include a larger sample, with more heterogeneous socio-demographic characteristics. Also, SWLS scale is relatively short and cannot include all the aspects of well-being. The future research should include more aspects of well-being, such as general health, depression, level of stress and anxiety, loneliness, etc.

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**Ivana Strizović
Aleksandar
Mratinković**

Odsek za psihologiju,
Filozofski fakultet,
Univerzitet u Novom
Sadu

**RAZLIKE IZMEĐU ZAPOSLENIH I
NEZAPOSLENIH U ZADOVOLJSTVU
ŽIVOTOM, SUBJEKTIVNOJ SREĆI I
LATENTNIM I MANIFESTNIM BENEFITIMA
OD ZAPOSLENJA**

Posao predstavlja jedan od najznačajnijih aspekata života osobe. On ne samo da predstavlja glavni izvor prihoda, već često definiše društvenu ulogu pojedinca, i predstavlja deo selfa. Iako su istraživači saglasni da zaposlenost ima značajan uticaj na blagostanje, u psihološkoj literaturi postoje podeljena mišljenja u vezi sa pitanjem koji element posla je značajniji za razumevanje ove povezanosti – manifestni (finansijska dobit) ili latentni (socijalni kontakti, ograničavanje vremena, socijalni status...). Prema Jahodinom modelu Latentne deprivacije naglašava se značaj latentnih benefita od zaposlenja. S druge strane, Frayerov Model ograničavanja delovanja manifestne benefite od zaposlenja smatra esencijalnim za blagostanje. U ovoj studiji želeli smo ispitati postoje li razlike između zaposlenih i nezaposlenih u Srbiji u pokazateljima blagostanja, kao što su subjektivna sreća i zadovoljstvo životom. Pored toga, interesovalo nas je postoje li razlike u izraženosti manifestnih i latentnih benefita od zaposlenja između zaposlenih i nezaposlenih, kao i šta više predviđa zadovoljstvo životom – manifestni ili latentni benefiti. U istraživanju je učestvovalo 237 ispitanika iz Srbije (146 tj. 61.6% zaposlenih). Za ispitivanje blagostanja primenjena je Skala zadovoljstva životom (Satisfaction With Life Scale – SWLS) i Skala subjektivne sreće (Subjective Happiness Scale – SHS), dok su manifestne i latentne benefiti od zaposlenja merene Skalom latentnih i manifestnih benefita (The Latent and Manifest Benefits Scale – LAMB). Rezultati su ukazali na značajne razlike između zaposlenih i nezaposlenih u nivou zadovoljstva životom, ali ne i u nivou subjektivne sreće. Zaposleni su pokazivali veće zadovoljstvo životom u odnosu na nezaposlene. Takođe, dobijene su i značajne razlike u odnosu na finansijsku sigurnost, kao manifestne benefiti, i u odnosu na organizaciju vremena, kao latentne benefiti od zaposlenja. Pokazano je da zaposleni imaju veću materijalnu sigurnost i bolje strukturirano vreme u odnosu na nezaposlene. Hijerarhijskom regresionom analizom je pokazano da iako manifestna benefit tj. finansijska sigurnost, značajno doprinosi zadovoljstvu životom kako zaposlenih, tako i nezaposlenih, latentne benefiti takođe ostvaruju značajan efekat na zadovoljstvo životom. Na poduzorku zaposlenih pokazano je

da je finansijska sigurnost najbolji prediktor zadovoljstva životom, a potom i socijalni kontakti i organizacija vremena, dok socijalni status ostvaruje negativan doprinos predikciji. U slučaju nezaposlenih, najbolji prediktor zadovoljstva životom su socijalni kontakti, pa potom finansijska sigurnost. Na osnovu rezultata možemo pretpostaviti da je, u našoj zemlji, za zadovoljstvo životom finansijska sigurnost važnija od latentnih benefita, barem u slučaju zaposlenih, dok su kod nezaposlenih važniji socijalni kontakti.

Ključne reči: zaposlenje, zadovoljstvo životom, subjektivna sreća, benefiti of posla

**Nebojša
Majstorović¹
Boris Popov
Jelena Matanović
Vanja Slijepčević**

Department of
Psychology, Faculty
of Philosophy,
University of Novi
Sad

PSYCHOPHYSICAL HEALTH DURING PROLONGED UNEMPLOYMENT: LONGITUDINAL DATA²

Research on health effects of unemployment have shown inconsistent findings, both in terms of stability and factors of overall health during time without a job, and in terms of the significance of factors based on which one can reliably predict the health of the unemployed. The Psychophysical health scale was conducted on a sample of 222 unemployed individuals in the Republic of Serbia, in order to analyze factors of general psychophysical health. By applying a longitudinal study design, we measured general health of the unemployed from four regions in the Republic of Serbia on three occasions (March 2012, October 2012, and May 2013). During the course of the study, the results have indicated that, unemployed individuals show significantly fewer symptoms of ill-health, that women, as a group, are more vulnerable in most aspects of health, that the oldest unemployed report symptoms of health deterioration most often, and that job loss does not produce different effects on health in people with different levels of education. These results are discussed in light of findings from previous research studies.

Keywords: unemployment, psychophysical health, longitudinal data

¹ Author's address:
majstorovicn@ff.uns.ac.rs.

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From 2007 to 2010, it was estimated that 210 million people worldwide lost a paid job (International Labor Organization, 2010, as cited in Wanberg, 2012). According to Eurostat, unemployment in the EU varies across countries, ranging from 24.0% in Greece to 4.3% in Germany. In Serbia the unemployment rate estimated for 2016 is 18.5% (IMF Country Report, September 2016). Unemployment support also varies, from 0.7% of BDP in Czech Republic to 3.4% in Spain, with a different percentage of people in these countries eligible for temporary unemployment help (OECD data for 2011). In Serbia, 8.8% of the unemployed are eligible to receive financial support for three months to one year, depending on their work tenure. These contextual differences are important for the research of unemployment and its consequences on the well-being of individuals and their communities.

Why does job loss matter if we know that people will find another job, sooner or later? It does matter because it diminishes human resources both in an individual, and in the local community, as well as globally. Unemployment alters way of life and represents a new status of employable and employ-willing person occurred after involuntary lost of a paid job (Majstorović, 2011). This individual, social and economic phenomenon and its consequences on psychological and physical health have attracted the attention of researchers in recent decades. Literature often perceives job loss as one of the most difficult forms of stress in an individual's life (Latack, Kinicki, & Prussia, 1995). Research results indicate that, compared to the employed, the unemployed show more depressive symptoms (Feather & O' Brien, 1987), a higher level of anxiety (Henwood & Miles, 1987; Price & Fang, 2002), and social isolation (Šverko, Galić, & Maslić Seršić, 2006). The job loss is associated with a reduction in general welfare (DeWitte, 1993), somatic symptoms such as insomnia, headaches and chronic diseases (McKee-Ryan & Kinicki, 2002), leading to feelings of guilt, shame and loss of identity (Björklund, Söderlund, Nyström, & Häggström, 2015).

Based on 104 studies of unemployment effects on general psychophysical health, the conceptual model that describes the factors of the level of psychophysical well-being after a job loss has been formulated (Figure 1, see McKee-Ryan & Kinicki, 2002). Although unemployment generally has negative consequences on different aspects of daily functioning and health, the intensity and duration of these consequences are not the same for all groups of unemployed people.

When it comes to the importance of demographic characteristics for unemployment health consequences, research results vary to a great extent. Most researchers agree that there is a positive correlation between length of unemployment and health deterioration (e.g. Dragun, Russo, & Rumboldt, 2006; Feather & Barber, 1983; Galić, Maslić Seršić, & Šverko, 2006; McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Šverko, Maslić Seršić, & Galešić, 2004). Paul and Moser (2009) discover linear and non-linear detrimental effects of prolonged unemployment on health, and explain that the severity of these effects is related to contextual factors such as the level of economic development, equality of income distribution in society, and the strength of unemployment protection in the system. Some research,

however, mention positive effects of short-term unemployment, where job loss is perceived as a 'healthy break' (Maccoby, 1998, as cited in Reine et al., 2004). According to curvilinear hypothesis, the peak of negative effects is reached around the 6th month of unemployment, when the 'improvement' takes place (Warr & Jackson, 1984). Some other researchers indicate that "well-being remains fairly constant up to 9 months, and shows deterioration from then on" (Winnfield & Tiggemann, 1990, p. 464). Gordo (2006) finds that a stabilization of ill-health symptoms occurs after 12 months of work deprivation. In a sample of the unemployed in Serbia, Majstorović and associates (Majstorović, Popov, Matanović, Slijepčević, & Jelić, in press) reveal that the incidence of symptoms of health disorders grow during up to 7 months of unemployment, when a drop in their frequency occurs.

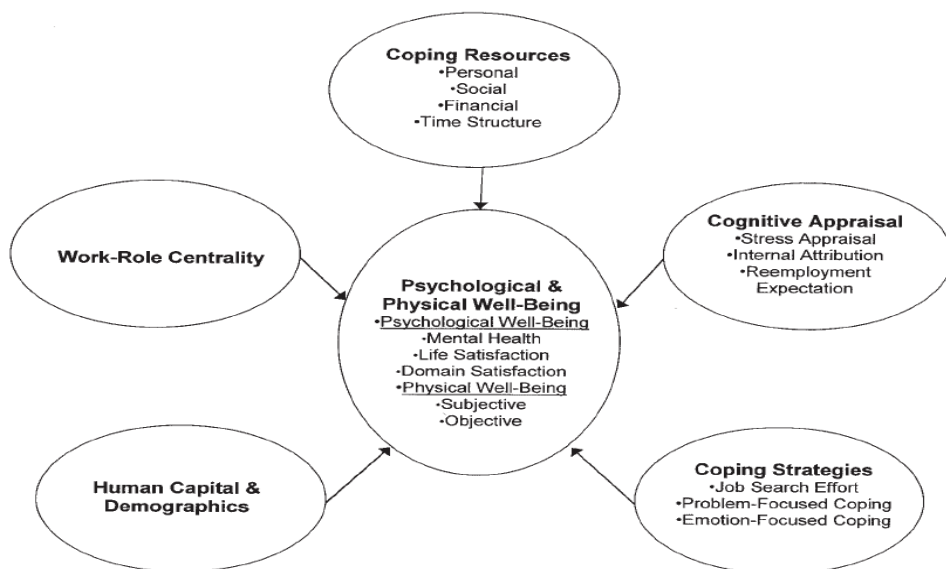


Figure 1. Model of employees' psychophysical health (McKee-Ryan & Kinicki, 2002).

Furthermore, results of one group of studies indicate that women tolerate the loss of a paid job more easily than men (Leana & Feldman, 1994; Reine, Novo, & Hammarström, 2004), while the other group argues that labor deprivation has a more negative impact on women than on men (Fryer & Payne 1986; McKee-Ryan et al., 2005).

It has been also found that the negative effects of unemployment differ in younger and older people, and that this relationship is curvilinear. In their longitudinal study Reine and associates (Reine et al., 2004) concluded that work deprivation had a higher correlation with psychophysical problems at the age of 21 than among unemployed who were older (30 years old or older). Maslić Seršić

(2006) found that health differences between unemployed and the general population increased with age and reached their peak in the middle age group. Other studies pointed out that the effects of unemployment were largely manifested in people aged 30 to 59. (e.g. Daniel, 1974; Hepworth, 1980; Warr & Jackson, 1984).

McKee-Ryan and associates (McKee-Ryan et al., 2005), Marić (2005) and Maslić Seršić (2006) established that individuals who were more educated showed fewer symptoms of health disorders after losing a job, and were more likely to have positive expectations regarding their re-employment (Price & Fang, 2002). However, on a sample of the unemployed in Serbia, Majstorović (2011) found no significant differences in health among groups with different levels of education.

In conclusion, a majority of previous studies suggest a positive correlation between job loss and health deterioration. Some studies, however, indicate an 'improvement' in health after some period of unemployment. The significance of demographics in job-loss-ill-health relations remained unclarified due to many opposing findings.

Objectives and hypotheses

The main objective of this paper was to examine unemployed employees' health status over time by using a longitudinal research design. In addition, two specific objectives of this research are the following:

1. To describe psychophysical health of the unemployed over a period of 14 months.
2. To analyze the importance of demographic characteristics for psychophysical health during the course of unemployment.

Based on the findings from previous unemployment-health researches (e.g. McKee-Ryan et al., 2005; Marić, 2005; Majstorović, 2011; Majstorović et al., in press; Wanberg, 2012) we formulated the following hypotheses:

H1: The frequency of symptoms of ill-health increases up to 7 months of unemployment, and then decreases indicating an 'improvement' in measures of psychophysical health.

H2: Job loss has the greatest impact on the health of unemployed people between the age 35 and 50.

H3: The biggest effect of unemployment on health is among unemployed individuals with lower education.

H4: Gender has no significant effect on the relationship between job loss and health.

Method

Sample and procedure

Data were collected from a representative sample of unemployed individuals from four regions in the Republic of Serbia. Three measurements were performed within intervals of six-seven months (March 2012, October 2012 and May 2013). From a total of 1,038 completed questionnaires, which were collected from 438 unemployees in T1, from 358 in T2, and from 242 in T3, the final sample consisted of 222 participants who had valid data in all three measurements and who remained truly unemployed during the survey period. The attrition rate of 49% indicated a high dropout of participants during the study. However, the analysis of differences between drop outs and those who remained in the final sample showed no significant differences in regard to general health, level of education, gender, or age in the first measurement. The sample consisted of individuals representing the unemployed population in Serbia, of which 44.4% were women, age between 26 and 59, 68% with secondary school education, 14.4% with primary education, 6.8% have completed college and 10.8% with higher education, 22% with unemployment tenure up to 12 months, and 71% being unemployed longer than 12 months³. Regarding unemployment tenure, unemployees were divided into two groups: the short-term unemployed (up to 12 months) and the long-term unemployed (out of work for 12 months or longer), based on the definition given by the OECD (1988). Respondents were also categorized based on the highest level of completed formal education (primary, secondary, BA or higher), and they were divided into 4 age categories (26–35 years old, 36–45 years old, 46–50 years old, and 51–59 years old). Psychologists in regional branches of the National Employment Service collected all data by obtaining previous informed consent from all participants, and giving a signed statement on secrecy of findings. Due to the design of the study, which included repeating measures on the same participants, it was not possible to achieve the complete anonymity.

Instrument

Psychophysical Health Scale (PHS-1: Majstorović, 2011). Psychophysical health is defined as the degree of absence of ill-health symptoms in the form of expressed ill-physical health, fear and anxiety, chronic fatigue, depression, and social dysfunctions, considered here as five dimensions of health. PHS-1 contains 23 items with a four-point Likert scale, requiring from participants to rate frequency of ill-health symptoms during the past several weeks (e.g. 'In the past several weeks ... did you have headaches?'). Status of the respondents in this questionnaire is calculated as a mean value on all items of the questionnaire. The internal consistency of the PHS-1 questionnaire is high at $\alpha = .92$, while the range of Cronbach's reliability

³ 7% were missing data.

coefficients for five PHS-1 subscales (Physical ill-health, Fear and anxiety, Depressive reactions, Fatigue, and Social dysfunctionality) is from .61 to .85.

Results

Health improvement: Cross-sectional data from the first measurement

As already emphasized, based on our earlier research, we expected a significant decline in ill-health symptoms after 7 months of being unemployed. For the sake of simplicity, we divided all our participants in two groups: the group with unemployment tenure up to 7 months (1), and the group with the unemployment tenure of more than 7 months (2). Our results showed that individuals who were unemployed for 7 months or less showed significantly more symptoms of ill-health compared to those who were out of work for more than 7 months ($t(204) = 2.63, p < .01$).⁴ Two groups of the unemployed differed significantly in all dimensions of health, except in the dimension of Depressive Reactions. The diagram below shows a noticeable decline in the symptoms of almost all dimensions of psychophysical health (Figure 2).

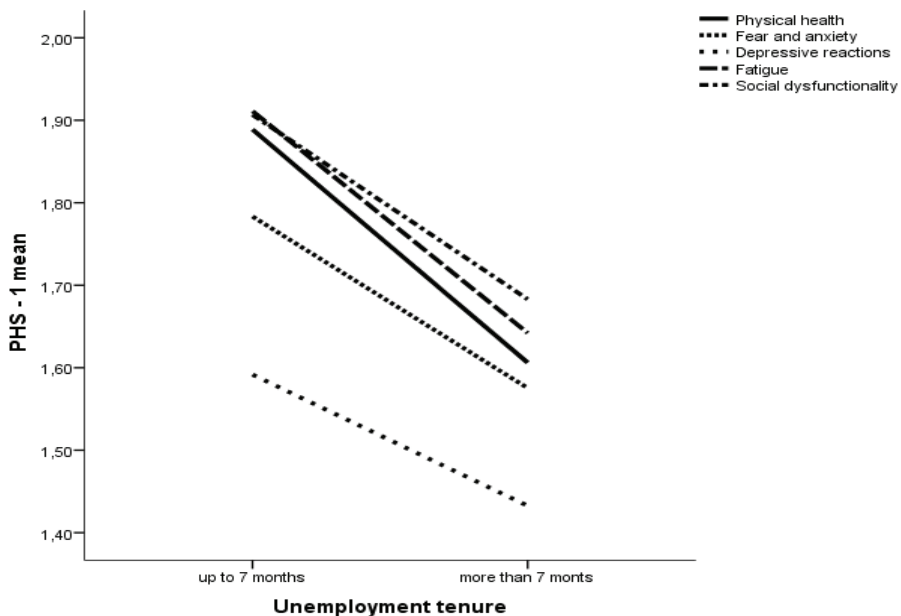


Figure 2. Drop of symptoms ('improvement') after 7 months of unemployment: evidence fom cross-sectional data ($N = 222$).

⁴ This analysis was possible in the first measurement only, since there were no participants with less than 7 months of unemployment in the second measurement (after a passage of 7 months).

Health improvement: Evidence from longitudinal data

As shown in Figure 3, mean values of general health measures that were obtained three times showed that the unemployed estimated the frequency of ill-health symptoms most commonly between the degrees of 1 = *never* and 2 = *yes, but rarely* (Table 1). These descriptive measures indicated that the unemployed seemed to 'improve' their overall psychophysical health during the course of the study, i.e., they showed a tendency to reduce the frequency of ill-health symptoms ($F(2, 220) = 4.49, p < .01$). Still, cross-correlations among measures of general health in three time-points revealed relatively high stability ranging from .56 (correlation between the first and the third measurement) and .70 (correlation between the second and the third measurement, both $p < .001$).

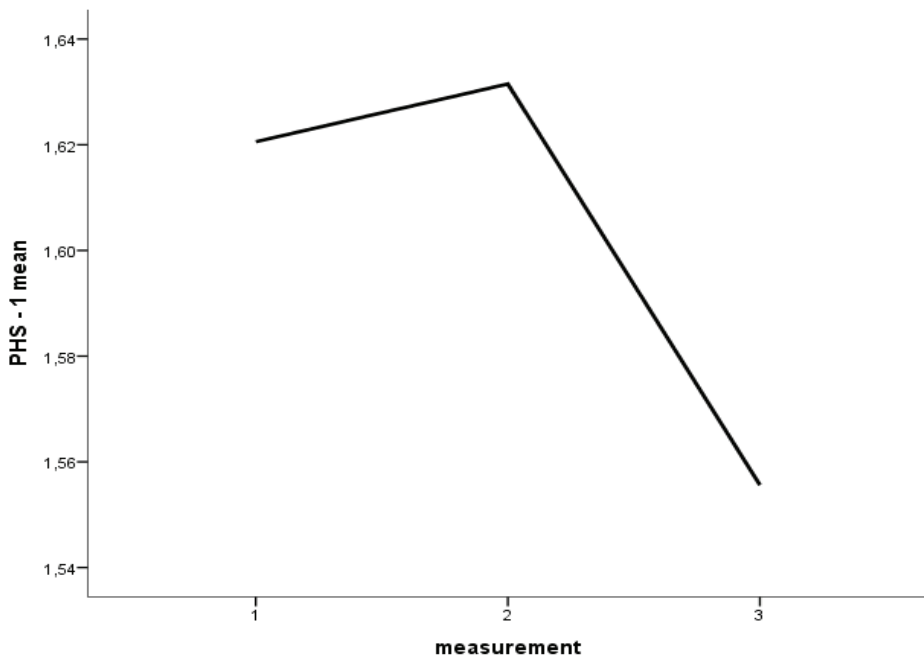


Figure 3. Mean values of frequency of ill-health symptoms measured three times ($N = 222$).

Longitudinal data: Unemployment tenure and health

Figure 4 clearly shows a tendency of general psychophysical health 'improvement' among all unemployed who participated in this research. We can see that symptoms of ill-health were most frequently manifested in those who were unemployed up to 12 months, while less symptoms were reported among the un-

employed who were without a job longer than 12 months. More specifically, the analysis showed that the time-flow affected the incidence of general ill-health symptoms with significantly lower mean values in the third measurement than in the second one ($F(2, 220) = 2.01, p < .05$). When the time effect was combined with unemployment tenure no significant interaction effect was found ($F(2, 203) = 0.35, p > .05$). The significant effect of unemployment tenure was also detected ($F(1, 204) = 3.99, p < .05$). Namely, it was found that two unemployment tenure groups differed significantly, with a higher mean symptom rate in the group who was up to 12 months jobless than in the group being without a job longer than 12 months. Since we did not have an interaction effect, but a significant drop in ill-health symptoms over time, we carried out an additional analysis of differences among all six groups (2 groups in 3 time points), in order to find a declining tendency within one of the unemployment tenure groups. A significant difference emerged within the unemployment groups that were searching for a job longer than 12 months. This group demonstrated a significantly higher rate of symptoms in time 1 than in time 3. We could notice from these findings that a significant decline of ill-health symptoms took place during the period of 14 months of unemployment, but only among those who were looking for a job longer than 12 months. The unemployees who lost their job up to one year ago did not show an improvement in psychophysical health during the survey time of 14 months.

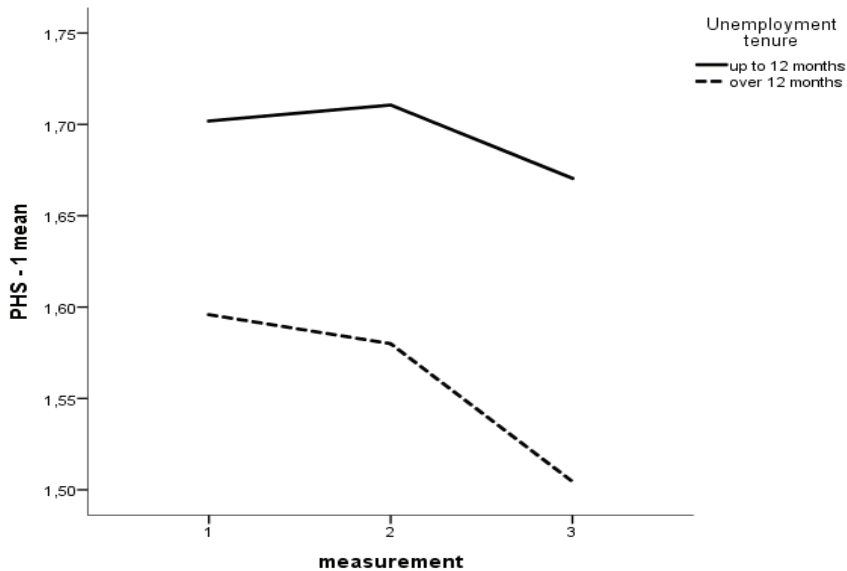


Figure 4. Mean values of ill-health symptoms and unemployment tenure ($N = 222$).

Longitudinal data: Gender and health of unemployed

When it comes to gender, the results indicate a tendency to higher vulnerability in women (Figure 5).

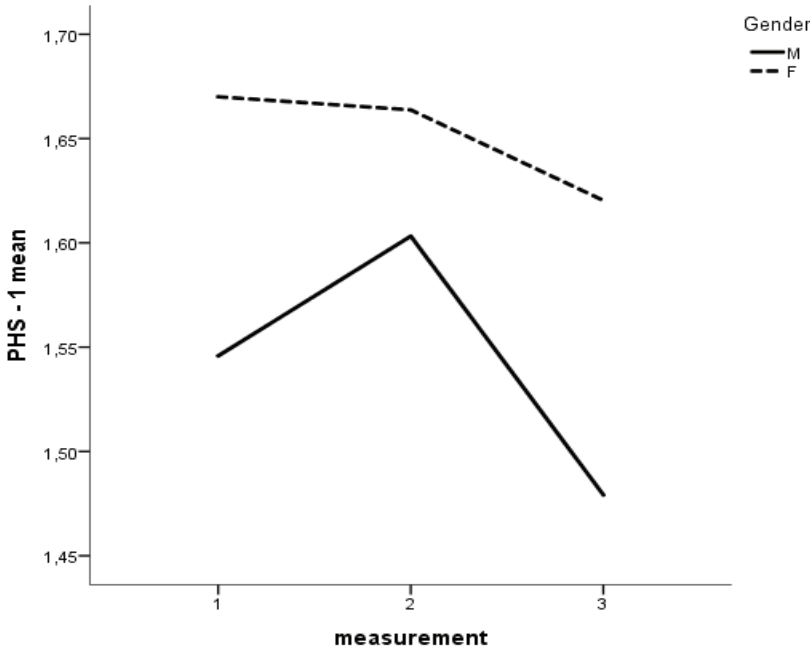


Figure 5. Mean value of symptoms frequency and gender ($N = 222$).

The analysis of the difference among gender groups showed that, according to the total score of health, the effect of time was significant ($F(2, 204) = 4.52, p < .01$), but the effect of gender ($F(1, 205) = 3.28, p > .05$) and interaction between time and gender were not insignificant ($F(2, 204) = 1.08, p > .05$). However, it was obtained on univariate level that women were significantly more vulnerable in all dimensions of health, except in Social Dysfunctionality.

Age and health of the unemployed

When it comes to the effects of age on job loss in relation to health, the effect of time was significant ($F(2, 217) = 4.89, p < .01$). The significant differences between age groups according to the frequency of symptoms of impaired psychophysical health over time were also observed ($F(6, 434) = 2.44, p < .05$), while the effect of age was found to be non-significant ($F(3, 218) = 1.90, p > .05$). Based on the significant interaction effect, it was determined that the oldest unemployed had the largest increase in symptoms in the second measurement compared to

the first measurement, while the third lead to stabilization. As shown in Figure 6, a group of unemployees whose age was from 36 to 45 showed the lowest average frequency of ill-health symptoms, and very mild fluctuations in symptoms over time.

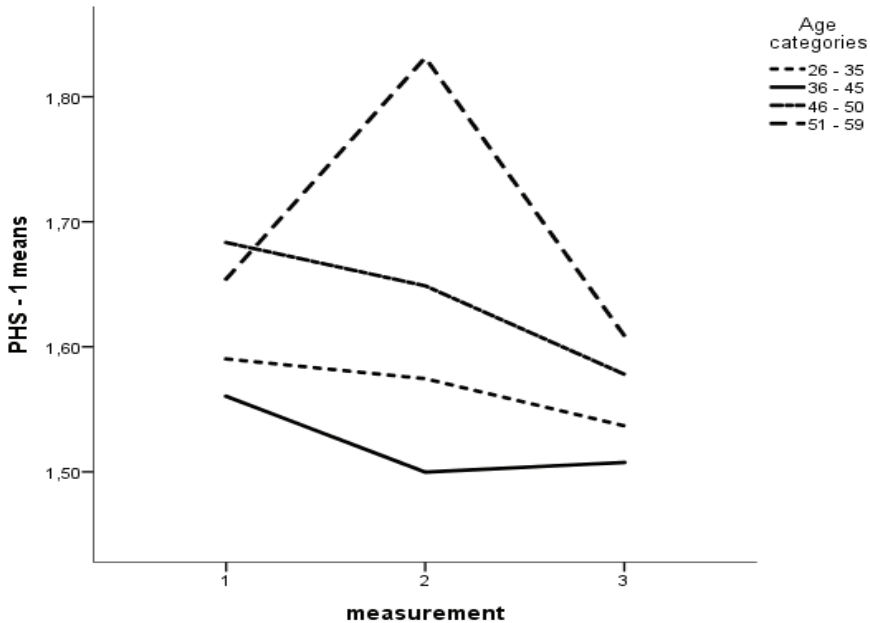


Figure 6. General health of the unemployed of different ages ($N = 222$).

Education and health of the unemployed

Considering the educational level of the unemployed, the significant differences were found neither in the frequency of ill-health symptoms over time ($F(2, 203) = 3.20, p > .05$), in the interaction of time and groups ($F(4, 406) = 0.53, p > .05$), nor among educational groups regardless of the time of measurement ($F(2, 204) = 0.01, p > .05$).

Discussion

The main objective of this paper was to examine the health status of the unemployed over time. Results concerning the description of total psychophysical health of the unemployed show that this is a relatively healthy population that most frequently rates its symptoms with 2 = *yes, but rarely*, or with 1 = *no, never*. Furthermore, distribution of incidence shows a clear tendency towards health im-

provement with the time-flow. It has been confirmed that unemployment tenure, gender and age play an important role in the frequency of symptoms of ill-health among the unemployed.

It has been assumed that there is a curvilinear relation between unemployment tenure and health, that is to say, that after the initial increase in ill-health symptoms we see a significant decrease after 7 months of waiting for a job (H1). The results have confirmed this expectation (find more about this further in the discussion), however indicating other dynamics of health and tenure after 7 months though. Namely, if we follow the classification of the unemployment tenure given by OECD (1988) 'up to 12 months' and 'longer than 12 months', we can find that a higher rate of ill-health symptoms is reported by the unemployed who have been waiting for a job shorter (up to 12 months). The basis for the decrement of symptoms and differences in general psychophysical health between two tenure groups has been found in the declining frequency of symptoms of social dysfunctionality, fatigue, and fear and anxiety. Our results have also indicated that the decrement of symptoms in these health dimensions during 14 months of survey time rather characterises the health of the long-term unemployed persons, while the group of short-term unemployed persons keeps symptom frequency of their ill-health higher and approximately on the same level.

The analyses of the significance of age of the unemployed show that the group of oldest participants is the most vulnerable, and that the lowest degree of symptoms is recorded in the group aging between 36 and 45. These findings disallow hypothesis H2, and differ from the findings of studies in which it has been determined that middle aged unemployed persons are most sensitive to job loss (Šverko et al., 2004; Warr & Jackson, 1984). However, these results are in line with many other studies that point out that health of the elderly (50–65 years) is deeply affected by job loss (e.g. Alavinia & Burdorf, 2008). Bearing in mind the current circumstances of employment in the Republic of Serbia, it is possible that the loss of work produces the greatest stress in people who are from 51 to 59 years old, while the middle-aged have had relevant working experience, and the highest level of optimism with regard to employment.

As for gender differences, hypothesis H4 has been refuted and the results show that women are more likely to report ill-health symptoms than men, in all three measurement points. This finding is consistent with results of previous studies (Fryer & Payne, 1986; McKee-Ryan et al., 2005) that claim men tolerate the unwanted job loss more easily. Specifically, from five measured health dimensions, in four of them women have shown a significantly higher frequency of symptoms. The pattern of changes in ill-health symptoms over time is also different. In women, the frequency of symptoms drops monotonously, while in men decrease of symptoms occurs after seven months of waiting for a job.

The results also show that there are no significant differences in the level of health deterioration symptoms among the unemployed with different levels of education (H3). These results are not in line with previous research (Marić, 2005;

McKee-Ryan et al., 2005; Price & Fang, 2002), but they are in line with our previous findings (Majstorović, 2011).

In accordance with the curvilinear hypothesis (i.e. 6 months as a breaking point for the health 'improvement', Warr & Jackson, 1984), the results of this study clearly indicate that those who are unemployed for less than 7 months have shown significantly more symptoms of ill-health compared to those who are waiting for a job longer than 7 months.

Besides the effect of unemployment on general health per se, in this discussion we should pay attention to the effect of time, which seems to be largely independent from the effect of previous employment tenure. Even though the interaction of the time-flow and previous unemployment tenure is not statistically significant, we can notice that groups of short-term and long-term unemployed behave differently in terms of health improvement. In the first cohort of the unemployed, the 14 months of time-flow do not produce an improvement in health. Our results indicate that this takes place only if an individual is unemployed for at least 12 months, and the additional 14 months have passed. The implication of this finding is that a trend towards healing arises after 7 months of unemployment. We might assume that this improvement can reach the level expected to be found in the normal and employed population. Of course, in order to test such an assumption we would need a comparative longitudinal study of changes in the employed and the unemployed. In this discussion, we should also bear in mind the remark of some researchers that this health 'improvement' is not a real healing process but, rather, a state that might be formed due to the occurrence of so called resigned adaptation 'characterized by an impairment of ... aspiration, autonomy and competence' in the circumstances of unemployment (War & Jackson, 1987, p. 1223).

Conclusions

The results of this study provide the basis for the following conclusions:

1. Results are in accordance with the curvilinear assumption, showing that health of the unemployed in the Republic of Serbia has a tendency to 'improve' during the course of unemployment.
2. Health 'improvement' is related to the individual's coping strategies, and occurs if the unemployed use the problem-focused strategy more frequently.
3. The oldest group of the unemployed (51–59) is the most vulnerable of the unemployed population, while the least symptoms of health deterioration have been recorded in the group aged between 36 and 45.
4. Results reveal that the loss of employment does not produce significantly different effects on general health in people with different level of education.
5. Women are more likely to report ill-health symptoms as a consequence of unemployment in comparison to men.

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**Nebojša
Majstorović
Boris Popov
Jelena Matanović
Vanja Slijepčević**

Odsek za psihologiju,
Filozofski fakultet,
Univerzitet u Novom
Sadu

PSIHO-FIZIČKO ZDRAVLJE TOKOM PRODUŽENE NEZAPOSLENOSTI: LONGITUDINALNI PODACI

Istraživanja efekata nezaposlenosti na zdravlje pokazuju ne-konzistentne nalaze, kako u pogledu stabilnosti i faktora ukupnog zdravlja tokom trajanja nezaposlenosti, tako i u pogledu značaja faktora na osnovu kojih se može pouzdano predviđati zdravlje nezaposlenih osoba. Na uzorku od 222 nezaposlene osobe u Republici Srbiji sprovedeno je istraživanje sa ciljem analize faktora nivoa ukupnog psiho-fizičkog zdravlja. Primenom longitudinalnog nacrta istraživanja izvršena su tri ponovljena merenja ukupnog zdravlja nezaposlenih (mart 2012., oktobar 2012. i maj 2013. godine) u četiri regiona Republike Srbije. Rezultati pokazuju da tokom 14 meseci studije nezaposleni izveštavaju o začajno manje simptoma poremećaja zdravlja, da su nezaposlene žene vulnerabilnija grupa po većini aspekata zdravlja, da najstariji nezaposleni pokazuju i najčešće simptome poremećaja zdravlja, da gubitak posla ne proizvodi različite efekte na zdravlje kod osoba sa različitim nivoom obrazovanja. Nalazi su razmatrani u svetlu rezultata prethodnih istraživanja.

Ključne reči: nezaposlenost, psiho-fizičko zdravlje, longitudinalni podaci

**Mojra Dautović
Zvonimir Galić¹**

Department of
Psychology, Faculty
of Humanities and
Social Sciences,
University of Zagreb

**GENERATIONAL DIFFERENCES IN
PSYCHOLOGICAL CONTRACT CONTENT
AND REACTIONS TO PSYCHOLOGICAL
CONTRACT BREACH IN THE TRANSITION
CONTEXT: A STUDY OF CROATIAN
EMPLOYEES**

In our study we explored generational differences in psychological contract content (PCC) and reactions to psychological contract breach (PCB) among Croatian employees. We collected the data on a sample of 432 participants and compared the PCC between Generation Y (born from 1981 to 1993) and older employees (born between 1946 and 1980). The results showed that the Generation Y employees expected more from their employers regarding career development, work-life balance, and social atmosphere. At the same time, the older generation perceived stronger employer obligations related to organizational policy, and stronger employee obligations related to in-role performance. We also tested the moderating effect of age on the relationship between PCB and job attitudes (job satisfaction, organizational commitment, and turnover intention). The moderating effect was observed only for the relationship between PCB and turnover intention: the younger employees reacted to PCB with a stronger turnover intention than the older employees.

Keywords: psychological contract, generational differences, psychological contract breach, job attitudes

¹ Author's address:
zgalic@ffzg.hr.

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The world of work has significantly changed during the past several decades. Strong and long-term bonds between employers and employees have been replaced with temporary and more flexible working arrangements (Anderson & Schalk, 1998; Freese, Schalk, & Croon, 2011). Especially large transformations on the labor market have been witnessed in the former socialist countries where global changes co-occurred with the process of the transition from a socialist, centrally planned to a free market economy.

The changed relationship between an employee and an employer can be best understood if the employment relationship is analyzed within the psychological contract framework (Guest, 2004; Rousseau, 1995). Psychological contract represents the psychological foundation of the employment relationship, and is defined as the employee's beliefs about mutual obligations between him/her and the employer (Rousseau, 1995, 1998).

In this paper we have described a study that explored the differences in psychological contract content (PCC) and psychological contract breach (PCB) reactions between Generation Y employees (born between 1981 and 1993), and an older group of employees (born between 1946 and 1980; labeled as Generation 1), encompassing both Baby Boomers and Generation X. We focused on the differences between these two groups because the two different generations of employees in Croatia have grown up in different social realities and, consequently, probably developed different models of mutual obligations between employees and employers. Before we describe our research in more detail, we will briefly describe the PCC and PCB constructs, shortly review current research on generational differences in psychological contract literature, and give a more detailed description of the motivation for our study.

Psychological contract content and psychological contract breach

Denise Rousseau (1995), the leading scholar in psychological contract literature, defines the psychological contract as an employee's beliefs regarding the exchange terms between himself/herself and the organization. Therefore, the psychological contract is an implicit psychological model that represents the employment relationship from the perspective of an employee – what the employee perceives (s)he has to offer the organization and what (s)he should receive in return. The purpose of forming such a model is to reduce insecurity, establish a sense of control over the work environment (McFarlane Shore & Tetrick, 1994), and improve behavior regulation (McFarlane Shore & Tetrick, 1994; Robinson, Kraatz, & Rousseau, 1994).

Psychological contract can be analyzed in terms of its content (i.e. PCC), and its evaluation. PCC refers to the specific mutual obligations the employee perceives in his relationship with his employer, and can be measured with a few instruments differing in the PCC dimensions (see Freese & Schalk, 2008 for overview). Employment conditions are being continuously evaluated throughout the

duration of the employee's relationship with the employer. If the employee perceived that (s)he did everything that was expected of him/her, and the employer, at the same time, did not deliver the other side of the bargain, (s)he would perceive that the contract had been breached. PCB represents a cognitive evaluation of the discrepancy between what has been promised and what has been delivered by the employer, and often leads to the feelings of violation and betrayal (Morrison & Robinson, 1997). PCB has been shown as related to lower job satisfaction, lower trust in the organization, higher turnover, and lower job performance (Robinson & Rousseau, 1994), neglect of in-role work duties, and reduced organizational citizenship behavior (Turnley & Feldman, 2000). Recent meta-analysis by Zhao, Wayne, Glibowski, and Bravo (2007) confirmed the negative effect of PCB on a number of work-related outcomes, including the most salient job attitudes, such as job satisfaction or organizational commitment, but also job performance dimensions (e.g. in-role performance). More importantly, the effect sizes for some of the observed relations (e.g. $-.54$ for job satisfaction and $-.42$ for turnover intention), indicates that PCB has a strong negative effect on employees' well-being and work motivation.

Generational differences in psychological contract and psychological contract breach

The psychological contract is a schema of the employee-employer relationship that develops based on both pre-employment and employment experiences (Guest, 2004; Rousseau, 1995). One of the major pre-employment influences on psychological contract development might be related to the generation an employee belongs to. Different generations of employees have been raised in different societal circumstances, and have had different formative experiences that lead them to develop different ideas about the employee-employer relationship (Lyons & Kuron, 2014).

To the best of our knowledge, the research on generational differences in psychological contract was conducted exclusively in well-developed market economies. Most researchers focused on three generations: the Baby Boomers (born from 1945 to 1964), Generation X (born from 1965 to 1980) and Generation Y (born from 1981 to 1993) (Lub, Nije Bijvank, Matthijs Bal, Blomme & Schalk, 2012; Lub, Matthijs Bal, Blomme, & Schalk, 2015). Regarding the PCC, Lub and associates (Lub et al., 2012) found that generations X and Y perceived more employer obligations when it came to stimulating work and intra-organizational mobility than Baby Boomers. Also, Generation X was shown to require more work-life balance compared to the other two generations, and more autonomy and security than Generation Y.

When it comes to the generational differences in PCB, research seems to be scarce. In most of the cases, researchers used age as a proxy for generation and tested its effect on the relationship between PCB and various work outcomes. A

stronger negative relationship between PCB and job satisfaction (Matthijs Bal, De Lange, & Jansen, 2013), and PCB and job performance (Matthijs Bal et al., 2013; Matthijs Bal, De Lange, Jansen, & Van Der Velde, 2008) was observed among younger than among older employees. However, the findings were not consistent for all outcomes and across studies. A meta-analysis of the moderating effect of age on the relationship between PCB and outcomes (Matthijs Bal et al., 2008) confirmed a stronger effect of PCB on trust in the employer and organizational commitment among younger employees, but showed that the negative relationship between PCB and job satisfaction was stronger among older employees.

Our study

Although some generational differences in psychological contract literature have been found and reported elsewhere, they cannot be easily generalized due to the fact that generation boundaries are socially and culturally defined (Costanza & Finkelstein, 2015). Different generations of employees have developed their ideas about the employment relationship based on their formative experiences. In transition countries, formative experiences related to employment, economy, and even social justice differ greatly among different generations of employees (ten Horn, Šverko, & Zinovieva, 1999).

In our research we wanted to keep the comparability with the literature about workplace generations, and still adapt to the specificities of the transitional context. Therefore, we focused on generational differences in PCC, and reactions to PCB between Generation Y (born from 1981 to 1993) and a group of older employees that encompassed both Generation X and Baby Boomers (born from 1943 to 1980), which we labeled as Generation 1. The Generation Y employees had their first work experiences in the changed, transition socio-economic context, while the other group spent a significant portion of their lives influenced by the values of a significantly different society (i.e. a socialistic republic with a centrally planned economy). According to the developmental literature, basic values of adults were significantly influenced by the socioeconomic conditions of their childhood and adolescence (Ingelhart, 1997). Considering that the conditions of their development strongly differed between the two generational groups, we believed that they should reflect in their PCC and their reactions to PCB.

Our first goal was to compare the PCC between Generation 1 and Generation Y employees. We expected that Generation Y would have significantly different beliefs regarding both the employer and the employee obligations than the older employees. Considering the ambiguity of previous research and the specificities of the cultural context, we did not have clear expectations about the exact nature of the differences.

Second, we wanted to explore whether there were any differences in the reactions to PCB between Generation 1 and Generation Y, as indicated with three job attitudes: job satisfaction, organizational commitment and turnover inten-

tion. In accordance with social exchange theory (Thibaut & Kelley, 1959), and findings from earlier studies (e.g. Zhao et al., 2007), we expected that PCB should be negatively correlated with job satisfaction and organizational commitment, and positively correlated with turnover intention. We also expected that age as a proxy for generation would moderate the relationship between PCB and job attitudes. According to socio-emotional selectivity theory (Carstensen, 1993) older employees are more focused on maintaining a positive perception of the relationship with their employer, and are better at regulating their emotions after negative events (Carstensen, Fung, & Charles, 2003; Gross et al., 1997). We, therefore, expected the younger generation to have stronger negative reactions to PCB for all three job attitudes.

Method

Sample

Our sample consisted of 432 employees who were not self-employed and were with their current employer for more than 6 months. There were 237 employees representing Generation 1 (born from 1946 to 1980), and 195 employees representing Generation Y (born from 1981 to 1993). The average age and average tenure of the participants in the two subsamples were 46.2 ($SD = 7.4$) and 21.3 ($SD = 8.9$) years in Generation 1 subsample, and 28.1 ($SD = 3.2$) and 4.1 ($SD = 3.3$) years in Generation Y subsample.

Both groups were dominated by female participants (74.7% in Generation 1 and 64.4% in Generation Y), and respondents with a university degree (59.9% in Generation 1 and 64.1% in Generation Y). The percentages of participants working in private sector were 40.9% for Generation 1, and 65.1% for Generation Y subsample. Finally, regarding employer size, Generation 1 subsample was dominated by employees working for large employers (over 500 employees, 42.6%), while the largest proportion of Generation Y subsample worked for medium sized employers (10 to 100 employees; 44.8%).

Considering that the differences between subsamples regarding gender, education level, sector of employment and employers size were significant (all $p < .05$), and that they could be important for the PCC and PCB, we decided to statistically control for those variables in our analyses.

Instruments

Tilburg Psychological Contract Questionnaire (TPCQ: Freese & Schalk, 1997). We used the TPCQ for psychological contract content measurement. This questionnaire consisted of two parts. The first part examined employee's beliefs about employer's obligations towards employee, and consisted of 6 dimensions: job content, career development, social atmosphere, organizational policies,

work-life balance, and rewards. On a scale from 1 to 5, respondents indicated the extent to which they believed that their employer had an obligation to provide listed employment relationship elements (e.g. "Participation in important dimensions" for the organizational policies subscale or "Variation in your work" for the job content subscale). The second part of the questionnaire examined employees' beliefs about their own obligations towards the organization, and it consisted of two dimensions: in-role behavior and extra-role behavior. On the scale from 1 to 5, respondents indicated the extent to which they believed that they had an obligation to provide listed employment relationship elements (e.g. "Carrying out your work with dedication" for the in-role behavior and „Volunteering to do additional tasks“ for extra-role behavior subscale). Cronbach's alpha coefficients for the subscales ranged between .81 and .89, except for the dimension of work-life balance that was slightly lower, but still acceptable (.72).

Psychological Contract Breach (PCB: Robinson & Morrison, 2000). In PCB, respondents expressed their agreement with five statements on a five-point scale, where a higher score indicated a higher level of perceived contract breach. The sample item was "My employer has broken many of its promises to me even though I've upheld my side of the deal." Cronbach's alpha for this scale in our study was .92.

Job attitudes. Job satisfaction was measured with a one-item general job satisfaction measure by Maslić Seršić and Šverko (2000): "Taking everything into account, to what extent are you generally satisfied with your job?" where 1 = *totally dissatisfied*, and 5 = *completely satisfied*. Organizational commitment was measured with the three-item scale developed by Colquitt (2001). The sample item was "I feel emotionally attached to this organization." Finally, turnover intention was measured with the three-item scale developed by Konovsky and Cropanzano (1991). The sample item from this scale was "I often think about quitting my job in this organization." A respondent's task on organizational commitment and turnover intention scales was to rate their agreement with the statements using a five-point response scale (1 = *strongly disagree*, 5 = *strongly agree*). The internal consistency coefficients for both scales were satisfactory (.82 for organizational commitment and .83 for turnover intention scale).

Procedure

We used two different procedures to recruit our participants. First, we developed an on-line questionnaire that was distributed to potential participants through social networks, business portals, and job recruitment sites. In that way, we collected data from 337 participants (88.01% of the total sample). Considering that the sample was dominated by Generation Y participants, we developed a paper-and-pencil survey that was identical to the on-line questionnaire. The paper-and-pencil questionnaire was then distributed to additional 95 participants through the network of the researchers' friends and acquaintances.

In order to be sure that the method of data collection did not influence obtained conclusions, we compared responses from the participants that belonged to the same generation, but were recruited through different procedures. In both generation samples, no significant differences were found on the PCC, PCB, job attitudes or demographic variables.

Results

Generational differences in psychological contract content

Descriptive statistics for the two groups in Table 1 revealed that there were no differences in the rank order of perceived employer's obligations, as measured with the TPCQ. Both generations perceived the employer's obligations related to organizational policies to be the strongest, and those related to the job content to be the least strong.

Table 1

Descriptive statistics and ANCOVA results comparing two generations of employees in the employer's obligations dimensions of psychological contract (N = 432)

Dimension	Generation 1 ¹ (n = 237)		Generation Y ² (n = 195)		F ³
	M (SD)	Adjusted M	M (SD)	Adjusted M	
Organizational policies	4.28 (0.71)	4.25	4.14 (0.64)	4.18	4.66**
Career development	3.87 (0.79)	3.82	3.89 (0.74)	3.94	3.59**
Rewards	3.79 (0.87)	3.77	3.84 (0.76)	3.87	1.75
Social atmosphere	3.70 (0.87)	3.70	3.76 (0.77)	3.77	2.83*
Work-life balance	2.87 (0.81)	2.88	3.11 (0.82)	3.12	2.76*
Job content	2.70 (1.01)	2.71	2.90 (0.96)	2.86	1.65

Note. Adjusted M represents the mean corrected for the covariates of gender, level of education, sector and organization size; ¹born between 1946 and 1980; ²born between 1981 and 1993, ³ degrees of freedom = 1, 426.

* $p < .05$. ** $p < .01$.

To examine the extent to which the two groups differed in expectations they had from their employers, we conducted a set of ANCOVAs, where gender, level of education, sector of employment, and the employer size were used as control variables. The ANCOVAs revealed some significant differences in the perceptions of employer obligations between these two generations. Compared to the older generation, Generation Y employees perceived that their employers had stronger obligations toward them regarding career development ($\eta^2 = .043$), social atmosphere at work ($\eta^2 = .034$) and work-life balance ($\eta^2 = .034$), while they had lower expectations related to organizational policies ($\eta^2 = .055$).

Table 2

Descriptive statistics and ANCOVA results comparing two generations of employees in the employee's obligations dimensions of psychological contract (N = 432)

Dimension	Generation 1 ¹ (n = 237)		Generation Y ² (n = 195)		F ³
	M (SD)	Adjusted M	M (SD)	Adjusted M	
In-role behavior	4.53 (0.55)	4.52	4.44 (0.48)	4.46	2.86*
Extra-role behavior	3.23 (0.72)	3.23	3.17 (0.73)	3.17	0.60

Note. Adjusted M represents the mean corrected for the covariates of gender, level of education, sector and organization size; ¹born between 1946 and 1980; ²born between 1981 and 1993; ³degrees of freedom = 1, 426.

* $p < .05$.

As in the case of the employer's obligations, Table 2 reveals a similarity in the absolute levels of the employee's obligations between the two groups, with both generations perceiving more obligations related to in-role behavior than to extra-role behavior. However, ANCOVA indicated that Generation Y employees perceived less obligations toward employer related to in-role behavior than the older generation ($\eta^2 = .035$), whereas the difference in extra-role behavior was non-significant.

Generational differences in reactions to psychological contract breach

Before testing the differences in reaction to PCB between participants belonging to the two generations, we tested the differences in the PCB between two subsamples of employees by using ANCOVAs analogous to those described earlier. The ANCOVA revealed that the participants belonging to Generation 1 subsample reported higher PCB levels ($F(5, 401) = 3.99, p < .001$). Covariate adjusted means were 2.71 for Generation 1 and 2.51 for Generation Y, revealing a

relatively strong PCB in both our samples (score 1 denoted complete psychological contract fulfillment and 5 total PCB).

From the correlation coefficients in Table 3, it was evident that the relationships between PCB and the attitudes were as hypothesized. PCB showed a positive correlation with turnover intention, and a negative correlation with job satisfaction and organizational commitment. The pattern of correlations was similar in both generational groups, with the correlations being slightly stronger in Generation Y subsample.

Table 3

Pearson correlation coefficients between psychological contract breach (PCB) and job attitudes for Generation 1 (n = 237) and Generation Y (n = 195) employees

Variable	1.	2.	3.	4.
1. PCB	-	-.61**	-.52**	.59**
2. Job satisfaction	-.60**	-	.51**	-.60**
3. Organizational commitment	-.46**	.54**	-	-.55**
4. Turnover intentions	.49**	-.58**	-.43**	-

Note. Below diagonal axis – generation 1946–1980, above diagonal axis – generation 1981–1993.

** $p < .01$.

In order to determine the generational differences in the reactions to PCB, we tested the moderating effect of age on the relationship between PCB and job attitudes by using three three-step hierarchical regression analyses, one for each of the job attitudes. In these analyses, we decided to use the continuous age variable instead of the dichotomous generation variable, because dichotomization of a potential predictor when testing interaction terms in a hierarchical regression lowered statistical power of the data analysis and increased the probability of Type 2 error (Aguinis & Gottfredson, 2010).

In the first step we introduced control variables (gender, level of education, sector and organization size), in the second step the age and PCB variables, and in the third step the interaction between age and PCB. The predictors were standardized before the interaction term was calculated. Due to space constraints, in Table 5 we report only the last step data for all three regression analyses.

Table 4
Results of the hierarchical regression analysis for testing the interaction between age and psychological contract breach (PCB) in predicting job attitudes (N = 432)

	Job attitudes		
	Job satisfaction	Organizational commitment	Turnover intention
	Last step β s		
Gender ¹	.019	-.110*	.022
Education ²	.124**	.051	.031
Sector ³	-.047	.044	.160**
Organization size ⁴	.018	-.050	-.059
PCB	-.594**	-.478**	.539**
Age	.039	.177**	-.303**
Age x PCB	-.007	.030	-.086*
R^2	.379**	.257**	.379**

Note. ¹1 = male, 2 = female; ²1 = elementary school ... 5 = graduate degree; ³1 = public, 2 = private; ⁴1 = small (up to 10 employees) ... 5 = large (more than 500 employees).

* $p < .05$. ** $p < .01$.

The results of the data analyses (Table 4) revealed that PCB was a significant and the strongest predictor of all job attitudes. The interaction between age and PCB was significant only in predicting turnover intention. In order to better understand the interaction, we plotted the relations between PCB and turnover intention for participants with $M - 1SD$ age and those $M + 1SD$ on age in Figure 1. As it could be seen from Figure 1, although stronger PCB perceptions lead to higher turnover intention in both groups of participants, the line was steeper and, therefore, the strength of the relationship between PCB and turnover intention was stronger among younger participants.

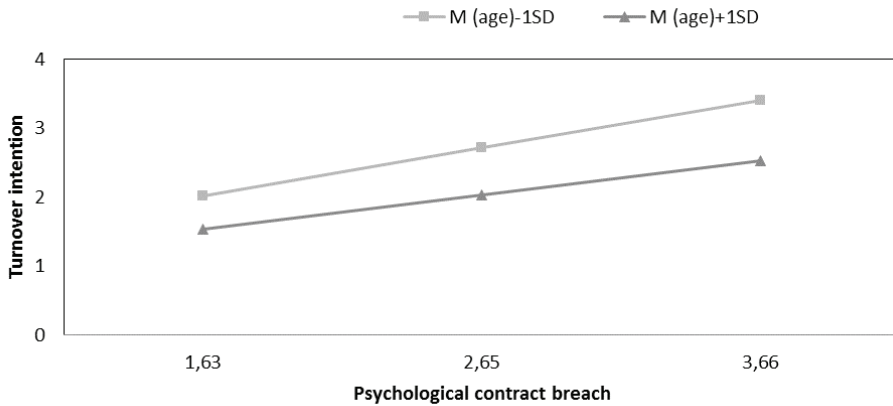


Figure 1. The moderating effect of age on the relationship between psychological contract breach and turnover intention.

Discussion

Generational differences in psychological contract content

Our analyses revealed certain differences in PCC between the younger and the older generation of Croatian employees. The two groups differed in the perceptions of employer obligations regarding career development, work-life balance, organizational policies and social atmosphere. With the exception of the employer's obligations related to organizational policies, Generation Y employees revealed themselves as more demanding employees in all other aspects. The two groups did not differ on the job content and rewards components of the PCC scale. Regarding perceived employee obligations, a significant difference was observed on the in-role behavior, but not on the extra-role behavior dimension: the employees belonging to the older generation perceived greater obligations related to the core work tasks.

Observed generational differences in perceived employer's obligations were highly consistent with the differences observed in studies conducted in developed market economies (e.g. Lub et al., 2012, 2015; Matthijs Bal, 2009) and probably did not result from the specificities of a transitional economy. It was more likely that they resulted from the age differences in life priorities and/or recent trends in the global labor market. For example, age differences could account for the finding that Generation Y perceived stronger employer's obligations related to career development. In the work context, it has been shown that the motivation for career development and professional education declines with age (Ng & Feldman, 2012). Therefore, the fact that Generation Y employees expect more

when it comes to opportunities for career development may be a reflection of their priorities in this particular stage of life.

Generation Y also expected more from their employer when it came to providing work-life balance. Recent research on generational differences in work values showed that the generation born after 1982 placed a significantly higher emphasis on their leisure time than the older generation (Twenge, Campbell, Hoffman, & Lance, 2010). This shift in values probably reflected on the PCC in this generation.

Another dimension of PCC where Generation Y participants were found to be more demanding towards their employers was the social atmosphere at work subscale. On one hand, Generation Y was exposed to the trend of more developed recruitment and employer branding strategies (Lievens & Slaughter, 2016). These strategies usually evoked companies which started the trend of attracting new talent by promoting a friendly and relaxed work environment (e.g. Google and Facebook). On the other hand, being consistent with the trend of longer working time and more demanding jobs (Green, 2006), younger employees' social world might be more limited to their companies. In comparison to them, older employees might already have well-formed social networks that were less related to their organizations.

The only dimension of the employer obligations where the older generation was shown to have more expectations from their employers was related to organizational policies. This could be a reflection of the older employees' increased focus on the socio-emotional aspect of their relationship with the organization (Matthijs Bal, 2009), and a greater need for open and direct communication with the employer (Schalk, 2004).

When it comes to the employee obligations, we found that the older employees in our sample perceived their obligations related to in-role behavior to be stronger than Generation Y subsample. These results might be attributed to a greater feeling of personal responsibility and maturity that develops with age (Roberts & Mroczek, 2008). However, it could also be true that the older employees developed a stronger feeling of loyalty towards their employers that reflected in more effort invested in main job tasks.

However, we must take into account that all observed differences between the two subsamples in PCC dimensions were small in size, and that the rankings of particular employer duties were similar for both generations, probably dominantly reflecting the current situation in the global labor market.

Generational differences in reactions to psychological contract breach

The three hierarchical regression analyses testing the moderating effect of age on the relationship between PCB and job attitudes partly confirmed our expectations. PCB was shown to have a strong negative effect on all three attitudes even when we controlled age, gender, employer size, and employment sector. However, the expected stronger reaction to PCB among younger employees was

observed only for turnover intention. On one hand, this finding was consistent with the before mentioned findings that older people were better at regulating their emotions after negative events (Carstensen et al., 2003; Gross et al., 1997). On the other hand, this finding might point to the fact that younger employees perceived their employability to be higher and saw more opportunities for themselves on the labor market, and thus resort to deliberating about turnover when faced with PCB. The fact that no moderating effect of generation was found for the relationship between PCB and organizational commitment/job satisfaction indicated that employers' unfulfilled promises created equally dissatisfied and less committed employees regardless of the generation they belonged to.

Implications

Observed differences offer organizations important insights that could help them shape their recruitment and employee management practices, and tailor them to the specificities of different generational groups of employees.

In addition to that, our study stresses the importance of keeping promises given to employees by demonstrating a strong relationship between PCB and job attitudes. The latter might be especially important in the case of younger employees who represent the most potent part of human resources in an organization, and who are more inclined to turnover in the case of PCB.

Conclusion

Considering the scarceness of research of psychological contract in the transitional context, our study conducted on a sample of Croatian employees offers certain contribution to the understanding employment relationship within the psychological contract framework. We have established that, although small, there are some generational differences in PCC, and reactions to PCB that those differences are highly consistent with those observed in more developed market economies.

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Mojra Dautović
Zvonimir Galić

Odsjek za psihologiju,
Filozofski fakultet,
Sveučilište u Zagrebu

GENERACIJSKE RAZLIKE U SADRŽAJU PSIHOLOŠKOG UGOVORA I REAKCIJAMA NA NJEGOVO KRŠENJE U TRANZICIJSKOM KONTEKSTU: STUDIJA HRVATSKIH ZAPOSLENIKA

Nedavne promene političkog i ekonomskog sistema su u mnogočemu promenile sliku tržišta rada u tranzicijskim zemljama. Osim što su se promenili uveti rada, promenila su se i očekivanja zaposlenika o razmeni između njega i poslodavca, a koja su opisana psihološkim ugovorom zaposlenika. U našoj smo studiji pretpostavili da će generacije zaposlenika odraslih u različitim političko-ekonomskim sistemima imati različita očekivanja u pogledu obaveza poslodavca i sopstvenih obaveza u međusobnoj razmeni. Takođe, pretpostavili smo da će zaposlenici različitih generacija različito reagovati na kršenje tih očekivanja. Tačnije, istražili smo generacijske razlike u sadržaju psihološkog ugovora i reakcija na prekršaj psihološkog ugovora na jednom velikom i heterogenom uzorku hrvatskih zaposlenika. Sakupili smo podatke na uzorku od 432 učesnika i uporedili sadržaj psihološkog ugovora između Generacije Y (rođeni između 1981. i 1993. godine) i generacije starijih zaposlenika (rođeni između 1946. i 1980. godine). Sadržaj psihološkog ugovora promatrali smo kroz 6 dimenzija obaveza poslodavca i dimenzije obaveza zaposlenika. Dimenzije percipiranih obaveza poslodavca činili su sadržaj posla, razvoj karijere, socijalna atmosfera, balans između privatnog života i posla, organizaciona politika, i nagrade, a dimenzije percipiranih obaveza zaposlenika ponašanja vezana uz osnovne radne zadatke i ostala ponašanja na poslu. Rezultati analiza kovarijanci u kojima smo uspoređivali dvije generacijske skupine zaposlenika, uz istovremenu kontrolu razlika među uzorcima u spolu, obrazovanju, sektoru i veličini organizacije, su pokazali da zaposlenici Generacije Y očekuju više od svojih poslodavaca što se tiče razvoja karijere, balansa između privatnog života i posla te socijalne atmosfere. Istovremeno, starija generacija je percipirala više obaveza poslodavca vezanih za organizacionu politiku i više sopstvenih obaveza vezanih uz osnovne radne zadatke. Iako se pokazalo da se ove dve generacije razlikuju u sadržaju psihološkog ugovora, radilo se o malim veličinama efekata. Testirali smo i moderacioni efekat starosti na odnos između prekršaja psihološkog ugovora i stavova prema poslu (zadovoljstvo poslom, organizaciona lojalnost i namera odlaska iz organizacije) koristeći multiple hijerar-

hijske regresione analize. Moderacioni efekat je dobijen samo za odnos između prekršaja psihološkog ugovora i namere odlaska iz organizacije: mladi zaposlenici su reagovali na prekršaj snažnijom namerom davanja otkaza nego stariji zaposlenici.

Ključne reči: psihološki ugovor, generacijske razlike, prekršaj psihološkog ugovora, stavovi prema poslu

Zoran Sušanj

Department of
psychology, Faculty
of Humanities and
Social Science,
University of Rijeka

Ana Jakopc¹

Department of
psychology, Faculty
of Humanities and
Social Science,
Josip Juraj
Strossmayer
University of Osijek

¹ Author's address:
ajakopc1@ffos.hr.

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TOWARDS AN UNDERSTANDING OF THE RELATIONSHIP BETWEEN SUPERVISORS' FELT TRUST AND TEAM-EFFECTIVENESS EVALUATION²

This study explores the relation between the supervisors' felt trust, a perception that subordinates are willing to accept vulnerability to their supervisor's actions, and evaluation of the team effectiveness. The results of structural-equation modelling performed on a multiple-source sample of 659 employees, nested within 196 teams, along with 196 team leaders, suggested that the supervisors' felt trust directly raised the evaluation given to the team effectiveness. In other words, when a supervisor feels more trusted, he or she appraises team effectiveness more positively. Moreover, we consider the potential underlying mechanism linking the latter. The results reveal that, when the supervisor feels trusted by his or her subordinate team members, they share the perception of fair treatment by the supervisor, which enhances their work engagement and further alters the team effectiveness. Namely, due to the perceptions of supervisory justice climate and the team work engagement, the supervisors' felt trust raises the team-effectiveness evaluation. To put it differently, the supervisors' felt trust alters the team-effectiveness evaluation both directly and indirectly, via the teams' supervisory justice climate and work engagement. Trustees may not sometimes feel the trust of trustors: leaders may not recognize subordinates' trust, as it may be internal and non-verbal. These results show that the recognition has beneficial effects, primarily on the team-effectiveness evaluation, and also on the supervisory justice climate and the team work engagement.

Keywords: supervisors' felt trust, supervisory justice climate, team work engagement, team effectiveness

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Trust is an essential part of an effective work relationship. It is difficult to imagine long-lasting cooperative work relationships existing without mutual trust. There is an agreement that trusting – being willing to be vulnerable to the actions of other stakeholders in the belief that their intentions or behaviour in relevant matters will be positive (Rousseau, Sitkin, Burt, & Camerer, 1998) – is a beneficial component of work relationships (Dirks & Ferrin, 2001). Meta-analyses have reinforced the agreement, showing that employees who trust their supervisors tend to have higher job satisfaction and organizational commitment, greater job performance and more frequent citizenship behaviour (Colquitt, Scott, & LePine, 2007; Dirks & Ferrin, 2002).

The same agreement extends to a newer streamline of research, addressing the feeling of being trusted, the perception that another person is willing to accept vulnerability to one's actions. Trusting and feeling trusted are the two unique sides of the same coin of a trusting relationship (Lau, Lam, & Wen, 2014). Placing trust in employees signals to them that they are valued members of the organization (Pfeffer, 1998), which is a key to the employee work engagement and empowerment (Mishra & Mishra, 2013). At least three empirical studies have supported these arguments, by linking subordinates' perceptions of their leaders' trust in them to enhanced performance (Lau et al., 2014; Lester & Brower, 2003; Salamon & Robinson, 2008). Namely, subordinates' feelings obviously count when it comes to their performance.

However, do the supervisors' feelings count as well when it comes to the former? To date, scholars have focused mostly on the subordinates' felt trust, thereby neglecting the role of the supervisors' felt trust in relation to job performance. The aim of this study is to address the aforementioned by exploring the relation between the supervisors' felt trust and the team-effectiveness evaluation, as well as the possible underlying mechanisms. By doing so, this study aims to make three contributions to the existing literature. First, this study contributes to the understanding of team effectiveness by examining the role of the supervisors' felt trust, an as-yet under-explored predictor of team effectiveness. Second, it explores the underlying mechanisms linking the supervisors' felt trust and the team effectiveness, supervisory justice climate and team work engagement, concepts that scholars have not yet studied as mediators of the relationship between the supervisors' felt trust and the team effectiveness. Third, this study contributes to the understanding of the literature of both justice climate and the team work engagement by highlighting the role of the additional construct of the supervisors' felt trust in explaining supervisory justice climate and the team work engagement.

In the paragraphs to follow, we present the relations between the constructs considered in this study, as well as the theoretical arguments guiding its hypotheses.

Development of theory and hypotheses

There is a recent streamline of research exploring the effects of feeling trusted. To date, scholars have highlighted the role of felt trust in responsibility norms, organi-

zational performance and pro-social behaviour (Deutsch-Salamon, 2003), emotional exhaustion (Baer et al., 2015) and team effectiveness (Lau et al., 2014; Lester & Brower, 2003; Salamon & Robinson, 2008). Lau and associates (Lau et al., 2014) found that employees' organization-based self-esteem mediated the effect of felt trust on the employees' work performance. Lester and Brower (2003) revealed that subordinates' perceptions of their leaders' trust in them influence their performance, organizational citizenship behaviour, and job satisfaction. Moreover, the same authors found that felt trust was a more significant predictor of these outcomes than the subordinates' perceptions of their leaders' trustworthiness. Salamon and Robinson (2008) developed and tested a model which showed that the employees' perceptions, which they are trusted by management, increase the presence of responsibility norms, as well as the sales performance and customer-service performance of the organization. Additionally, the same authors found that responsibility norms fully mediated the relationship between perceptions of being trusted and sales performance.

All the above-mentioned studies examined the subordinates' reactions of felt trust. Since leaders have the ability to bring changes to the entire team (Lau & Lam, 2008), it seems worthwhile to investigate the effects of the supervisors' felt trust as well. As noted by Lau and Lam (2008), in the relatively few research studies about 'felt trust', trustees' performance and citizenship behaviour were significantly better when the trustees perceived that they were trustworthy in the eyes of the trustors (Lester & Brower, 2003). Lau and Lam (2008) examined the role of the leaders' felt trust in the team organizational citizenship behaviour, and found that teams were engaged in more citizenship behaviour, when leaders felt more trusted. To our knowledge, this is the only study addressing this issue to date. Since Lau and Lam (2008) have confirmed that the citizenship behaviour of the team members depends directly on their supervisors' felt trust, and since some authors (e.g. Ehrhart & Naumann, 2004) have discussed citizenship behaviour as a construct of the team performance, it seems logical to assume that the effectiveness of the team members might also depend directly on their supervisors' felt trust. Additionally, supervisors' ratings of felt trust and the team effectiveness might also be related through the need for self-consistency (Korman, 1976; Lecky, 1945). In this regard, the supervisor's felt trust most likely reinforces his or her self-schema as 'being a trust-worthy supervisor'. Once they are formed, self-schemas direct person's behaviour in a way that would elicit feedback consistent with constructed self-schema. In this sense, the supervisor's raised evaluations of the team effectiveness might reflect a supervisor's need for consistency of self-schema, leading the supervisor either to actively seek information in line with his or her self-schema, or neglect information that would contradict his or her self-view, while evaluating the team effectiveness. On the basis of all the above, we propose that:

H1: Supervisors' felt trust directly raises the team-effectiveness evaluation.

Additionally, it seems valuable to investigate the underlying mechanisms in the relation between the supervisors' felt trust and the team-effectiveness evaluation. Seppälä, Lipponen, Pirttilä-Backman, and Lipsanen (2012) suggested that leaders' willingness to increase the trust placed in them motivated their fairness enactment. Moreover, they made a call for the research to provide evidence about

whether leaders' feelings that they are trusted by their subordinates motivate the leaders' fairness. As evidenced by a cumulative amount of research, when immersed in high-quality social exchange relationships, which felt trust might be a signal of, individuals (e.g. the supervisor) become motivated to engage in behaviour that is beneficial to the party with whom they are interacting (e.g. the subordinates, or the team) (Ehrhart, Bliese, & Thomas, 2006; Gong, Chang, & Cheung, 2010). Following the same logic, when supervisors feel trusted by their subordinates, they might be motivated to treat them fairly. When supervisors treat the team members fairly, the fair treatment emerges as a supervisory justice climate, a shared reality among the team members about their leaders' fairness (Mossholder, Bennett, Kemery, & Wesolowski, 1998; Naumann & Bennett, 2000). Therefore, we hypothesize that:

H2: Supervisors' felt trust directly enhances supervisory justice climate.

Justice climate has proved to be an important predictor of the team work engagement (Abbasi & Alvi, 2012), defined as a positive affective-motivational and work-related state shared by the team members, characterized by vigour, dedication and absorption (Salanova, Llorens, Cifre, Martinez, & Schaufeli, 2003). The team work engagement positively affects perceptions of self-efficacy, the team's efficacy in performing tasks, and team performance in general (Bakker, van Emmerik, & Euwema, 2006; Salanova et al., 2003; Torrente, Salanova, Llorens, & Schaufeli, 2012a, 2012b). In line with this evidence, it appears logical to assume that:

H3: Supervisory justice climate enhances the team work engagement, which further alters the team effectiveness.

H4: Supervisors' felt trust affects the team effectiveness indirectly as well, through supervisory justice climate and the team work engagement (see Figure 1 for all hypotheses).

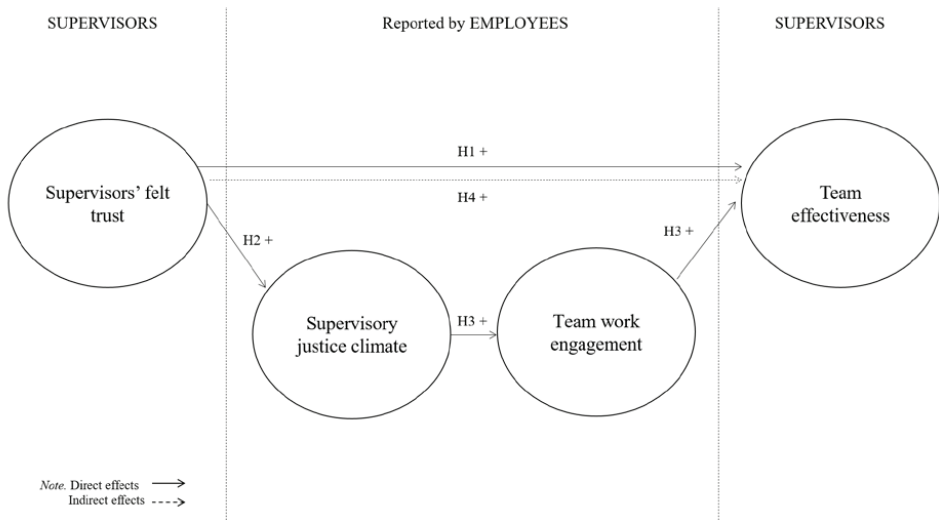


Figure 1. The proposed model of the relationship between supervisors' felt trust and team effectiveness evaluation.

Method

Sample and procedure

In the study, we used a multi-source sample consisting of 659 employees nested within 196 work teams, along with 196 team supervisors, from 69 organizations from the public and private sectors in Croatia. Almost 60% of the teams had a majority of female members, about 65% of the teams had most of their members under 41 years old, more than 50% had most of their members with an organizational tenure of over six years, and more than 40% of the teams had a majority of members with a team tenure of over six years as well. A little over 50% of the teams comprised members who had a university degree on average. Finally, the team size ranged from three to five team members. Regarding the supervisors, 51% of them were male, 70% of them were over 41, and almost 60% of them had an organizational tenure of over ten years. Additionally, 25% of them had a supervising tenure (of the current team) up to two years, 26% from two to five years, 14% from six to ten years, and 35% of over ten years of supervising tenure. Finally, slightly over 70% of the supervisors held a university degree.

After reaching an agreement about the organization's participation in the study, the researchers surveyed one team at a time, *in situ*, and during working hours. We included neither temporary project teams or committees, nor recently-formed teams (all teams had a minimum team tenure of at least six months) or teams with more than one supervisor. The team supervisors were not present, while the team members were surveyed. The researchers gave the same instructions to all participants, and guaranteed confidential and voluntary participation. After each team member completed his or her survey, a researcher put it in an envelope in front of him or her. After surveying the team members, a researcher contacted the team supervisor and asked him or her to complete a short survey as well.

Measures

Measures from employees. We presented all the measures from employees at a unit level of analysis, by aggregating the individual estimations of each team member to the unit level, as mean value estimation for each team. All the items were measured by using a 5-point Likert-type scale and a referent-shift approach (see Chan, 1998). Additionally, we confirmed the factorial structure of each construct by using confirmatory factor analysis (CFA). Namely, we ensured that we met the conventional aggregation prerequisites: $r_{wg} \geq .70$ (multi-item interrater agreement; James, Demaree, & Wolf, 1984), $ICC_{(1)} < .12$, and $ICC_{(2)} > .70$ (intraclass correlation coefficients; Bliese, 2000). Besides the aggregation prerequisites, we ensured that we met conventional cut-off criteria for the fit indices: CFI, NFI and $TLI \geq .95$ (comparative fit index (CFI), normed fit index (NFI), Tucker-Lewis index (TLI); Hu & Bentler, 1999), PGFI within the .50 region (parsimony goodness-of-fit index; Mulaik et al., 1989), and RMSEA close to .06 (root-mean-square error

of approximation; Hu & Bentler, 1999). Although the chi-square is the standard statistic to assess the overall fit of the model to the data, it is practically impossible not to reject the null hypothesis when large samples are used (Jöreskog & Sörbom, 1993). To address this limitation, along with the above-mentioned additional fit indices employed, we proposed calculation of the normed chi-square statistic (NC), with desirable values < 3 (Kline, 1998).

Supervisory Justice Scale (SJC: Jakopec & Sušanĳ, 2014). Seventeen items, adjusted (in terms of applying the referent-shift approach) from SJC, assessed supervisory (distributive, procedural, and interactional) justice climate (e.g. "Our supervisor rewards my team fairly for a job well done.", "Our supervisor provides my team with clear feedback about our performance.", "Our supervisor respects my team."). All the items saturated on one latent factor of overall supervisory justice climate ($r_{\text{wgi}} = .87$; $\text{ICC}_{(1)} = .24$; $\text{ICC}_{(2)} = .95$; $\chi^2 [df = 62; N = 196] = 113.2, p < .001$; $\text{NC} = 1.8$; $\text{CFI} = .99$; $\text{TLI} = .97$; $\text{NFI} = .97$; $\text{PGFI} = .38$; $\text{RMSEA} = .06$).

Team Work Engagement Scale (TWES: Torrente et al., 2012b). Nine items validated for aggregated data at the team level assessed three aspects of team work engagement: Vigour (e.g. While working, my team feels full of energy), Dedication (e.g. "My team is enthusiastic about the task.") and Absorption (e.g. "While working, we forget everything else around us."). Again, all the items saturated on one latent factor of work engagement ($r_{\text{wgi}} = .89$; $\text{ICC}_{(1)} = .18$; $\text{ICC}_{(2)} = .89$; $\chi^2 [df = 20; N = 196] = 26.0, p > .05$; $\text{NC} = 1.3$; $\text{CFI} = .99$; $\text{TLI} = .99$; $\text{NFI} = .98$; $\text{PGFI} = .43$; $\text{RMSEA} = .04$).

Measures from supervisors. The supervisors also answered all the items by using a 5-point Likert-type scale, ranging from 1 (*totally disagree*) to 5 (*totally agree*). Again, employing the above cut-off criteria, we confirmed the factorial structure of each construct by using Confirmatory Factor Analysis (CFA).

Organizational Trust Inventory (OTI: Nyhan & Marlowe, 1997). Eight items, adjusted from OTI captured supervisors' felt trust. All the items saturated on one latent factor ($\chi^2 [df = 19; N = 196] = 37.2, p < .05$; $\text{NC} = 1.9$; $\text{CFI} = .97$; $\text{TLI} = .95$; $\text{NFI} = .94$; $\text{PGFI} = .51$; $\text{RMSEA} = .07$). Example items: "The team members that I supervise believe that I am technically competent at the critical elements of my job.", "The team members that I supervise believe that they can rely on the information I provide them with."

Perceived Group Performance Scale (PGPS: Jung & Sosik, 2002). Team effectiveness was assessed by five items of PGPS, saturated on one latent factor ($\chi^2 [df = 4; N = 196] = 9.93, p = .04$; $\text{NC} = 2.5$; $\text{CFI} = .99$; $\text{TLI} = .97$; $\text{NFI} = .98$; $\text{PGFI} = .26$; $\text{RMSEA} = .08$). Example items: "The team that I supervise accomplishes its goals successfully.", "The team that I supervise is effective in getting things done."

Additionally, we tested the whole measurement model (including all four concepts), in order to strengthen the conclusion about the discriminant validity of the measures. The tested four-factor model consisted of four interrelated latent factors ($\chi^2 [df = 628; N = 196] = 985.9, p < .001$; $\text{NC} = 1.6$; $\text{CFI} = .94$; $\text{TLI} = .93$; $\text{NFI} = .85$; $\text{PGFI} = .64$; $\text{RMSEA} = .05$), with the intercorrelations between latent factors

ranging from .22 to .67, and thereby confirmed the discriminant validity of the measures used.

Results

Descriptive statistics and correlations

Table 1 shows descriptive statistics, Cronbach alpha coefficients and the intercorrelations of all the study variables.

Table 1

Descriptive statistics, Cronbach alpha coefficients and the intercorrelations of all variables

	Descriptive statistics			Correlations		
	<i>M</i>	<i>SD</i>	α	2	3	4
1. Supervisors' felt trust	4.23	0.49	.86	.21**	.32**	.53**
2. Supervisory justice climate	3.69	0.63	.97	-	.62**	.23**
3. Team work engagement	3.78	0.48	.90		-	.35**
4. Team effectiveness empowerment	4.24	0.58	.87			-

** $p < .01$.

As expected, when supervisors feel trusted by the team they supervise, they evaluate the team as being more effective. Moreover, when supervisors feel trusted by the team members, the team members share the perception that their supervisor treats them fairly, and they are more engaged in the work they do. Finally, the supervisory justice climate positively relates to the team work engagement, as well as to the team effectiveness.

Model testing

To compute SEM, we used the aggregated database that included the supervisory justice climate and the team work engagement, as well as the supervisor's felt trust and the team-effectiveness rating. We used IBM SPSS Amos Version 22 to perform structural-equation modelling (SEM) by using the maximum-likelihood estimation method. The results of the SEM analysis, employing the above cut-off criteria, indicated that the proposed model fitted the data well, with all fit indices satisfying their corresponding criteria ($\chi^2 [df = 662; N = 196] = 1182.8, p < .001$; NC = 1.5; RMSEA = .05; CFI = .96; TLI = .96; NFI = .93; PGFI = .53). Figure 2 depicts the tested model.

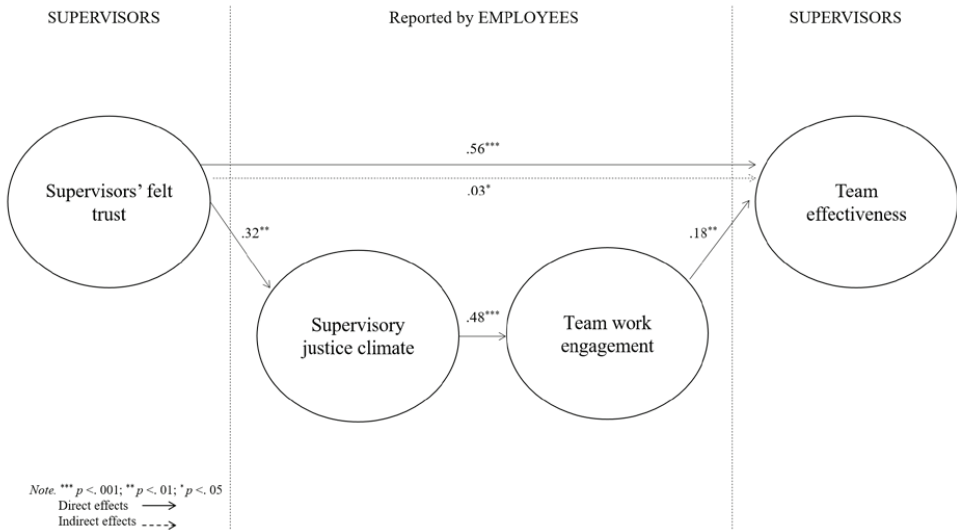


Figure 2. The tested model of the relationship between supervisors' felt trust and team effectiveness evaluation.

In line with the proposed hypotheses, the supervisors' felt trust has a positive and significant direct effect on team effectiveness. Supervisors' felt trust positively contributes to the supervisory justice climate, which further positively affects the team work engagement. Finally, the team work engagement positively and significantly relates to the team effectiveness. Drawing on social-exchange theory, we have proposed that the supervisors' felt trust affects the team-effectiveness evaluation indirectly as well, through the supervisory justice climate and the team work engagement. To assess the significance of any mediation effect, we have obtained a Monte-Carlo (bootstrapping) approximation by constructing a bias-corrected percentile method (1000 samples; confidence interval of 90). Our results suggest that the supervisors' felt trust positively affects the team work engagement through its relation to the supervisory justice climate ($\beta = .15, p < .001$), while the supervisory justice climate alters the team effectiveness via team work engagement ($\beta = .09, p < .01$). Finally, the supervisory justice climate and the team work engagement mediate the effect of the supervisors' felt trust on the team effectiveness. It seems worthwhile to note that the supervisors' felt trust explains 10% of the variance in the supervisory justice climate ($R^2 = .10$), which further explains 23% of the variance in the team work engagement ($R^2 = .23$), and in turn accounts for 38% of the variance in the team-effectiveness evaluation ($R^2 = .38$).

Discussion

Building on prior research of the relationship between the felt trust and the employee performance, this study aimed to explore the relation between the supervisors' felt trust and the team-effectiveness evaluation, along with the possible underlying mechanisms. The results extend the findings of Lau and Lam (2008) by showing that the supervisors' felt trust directly enhances not only the team citizenship behaviour, but also the team effectiveness in performing in-role behaviours as well. In other words, when a supervisor feels more trusted, he or she evaluates the team's effectiveness more positively. Further, our results have revealed that, when the supervisor feels more trusted, the team members share the perception of being treated fairly by him or her, which is in line with the suggestion of Seppälä and associates (Seppälä et al., 2012) that the leader's feeling that he or she is trusted by subordinates motivates the leader's fairness enactment. The team members' shared perceptions about supervisory justice further enhance the team's work engagement, which finally results in enhanced team effectiveness. Namely, we found that, when a supervisor feels trusted by his or her subordinate team, the team members share the perception of supervisory justice, which enhances their work engagement. Due to these perceptions of supervisory justice climate and the team work engagement, the team's effectiveness is enhanced as well.

Based on the multiple sources of data in a realistic setting, we collected data to demonstrate the effects of the supervisors' felt trust on the team-effectiveness evaluation. However, we used cross-sectional data, which prevented us from inferring causality. We could not rule out the possibility that the leaders felt more trusted by their staff when they observed that their subordinates performed efficiently.

Nevertheless, the results of this study have shown that the supervisors' feelings about being trusted by subordinates, often neglected in research, are important in predicting the team effectiveness, along with the supervisory justice climate and the team work engagement. Thereby, this study contributes to further understanding of these three constructs. Besides the well-acknowledged role of the subordinates' felt trust in the team effectiveness (Lau et al., 2014; Lester & Brower, 2003; Salamon & Robinson, 2008), our results show that the supervisors' felt trust counts as well. If supervisors feel trusted, they realize that their followers are assured of their capabilities, benevolence, and integrity (Mayer, Davis, & Schoorman, 1995). This information serves as a positive feedback to the leaders, and their self-efficacy is likely strengthened (Paglis & Green, 2002). Trustees may not sometimes feel the trust of trustors, since trusting and being trusted are perceptions and attitudes of two different stakeholders. Sometimes, the subordinates' trust may be internal and non-verbal: leaders may not recognize it (Lau & Lam, 2008). The results of this study suggest that the recognition is important, having the beneficial effects primarily on the team-effectiveness evaluation, and also on supervisory justice climate and the team work engagement.

Generally, the results of this research once more confirm the notion that trust is a basis of an effective leadership: to become a trustworthy leader, he or she should demonstrate his or her reliability, openness, competence and compassion (Mishra & Mishra, 2013). Four attributes of the trustee - ability, benevolence, integrity, and predictability - appear to be the most important for the trustors (Dietz & Den Hartog, 2006). The consequence of these attributes of the manager is the trust placed by his or her team members in him or her, followed by the feeling of confidence that the manager enjoys among his subordinates. The most important implications of this research refer to the benefits of intra-organizational trust and, in particular, the relevance of the mutual trust between the leader and his or her subordinates for organizational effectiveness in general. The results highlight the role of trust in human-resource management. The development of effective organizations demands the creation of organizations in which an atmosphere of trust prevails. This atmosphere is seen not only in the subordinates' trust of their supervisors, but also in the supervisors' feelings of being trusted by their subordinates. Every supervisor, within his or her jurisdiction, should strive to create and carry out fair, equitable, consistent and transparent systems and procedures of human-resource management to enhance the supervisory justice climate and the team work engagement. Moreover, for the leader that feels trusted by his or her team members, it is much easier to act following the rules of distributive, procedural and interactional justice. In fact, justice, followed by the team's engagement, are apparently at least partial confirmation of the trust placed in the supervisor. A supervisor's recognition of the gifted trust - his or her feeling of being trusted - is therefore a critical component in developing an efficient, high-trust organization. To conclude, the supervisors' feelings count as well.

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Zoran Sušanj

Odsjek za psihologiju,
Filozofski fakultet,
Sveučilište u Rijeci

Ana Jakopec

Odsjek za psihologiju,
Filozofski fakultet,
Sveučilište Josipa
Jurja Strossmayera u
Osijeku

RAZUMIJEVANJE ODNOSA IZMEĐU RUKOVODITELJEVOG PREPOZNAVANJA POVJERENJA I PROCJENE USPJEŠNOSTI TIMA

Ovim se radom ispituje odnos između rukovoditeljevog prepoznavanja povjerenja – percepcije da su podređeni spremni prihvatiti ranjivost uslijed aktivnosti svog neposredno nadređenog – i procjene uspješnosti tima. Podaci su prikupljeni iz više izvora. Preciznije, članovi 196 radnih timova (ukupno 659 zaposlenika) procjenjivali su zajednički doživljaj članova tima o pravednosti njihova neposredno nadređenog te radnoj angažiranosti tima. Rukovoditelji timova (ukupno 196 rukovoditelja) procjenjivali su koliko tim kojim rukovode ima povjerenja u njih, te radnu uspješnost tima. Rezultati strukturalnog modeliranja pokazuju da rukovoditeljevo prepoznavanje povjerenja, odnosno doživljaj rukovoditelja da mu tim kojim rukovodi vjeruje, neposredno povećava procjenu rukovoditelja o uspješnosti njegova tima. Drugim riječima, kada rukovoditelj osjeća da mu njegov tim vjeruje, sklon je pozitivnije procjenjivati uspješnost tima. Dodatno, u radu se provjerava i mehanizam u podlozi navedenog međuodnosa, odnosno razlozi zbog kojih rukovoditeljevo prepoznavanje povjerenja dovodi do pozitivnije procjene uspješnosti tima. Rezultati pokazuju da je rukovoditelj skloniji tim tretirati pravedno kada osjeća da mu članovi tima kojim rukovodi vjeruju. Preciznije, kada rukovoditelj osjeća da mu članovi tima kojim rukovodi vjeruju, radni tim ga je sklon procjenjivati pravednijim, što se očituje u povećanoj klimi pravednosti rukovoditelja – zajedničkom doživljaju članova tima o pravednosti njihova neposredno nadređenog. Povećana klima pravednosti rukovoditelja pozitivno djeluje na radnu angažiranost tima – zajedničko, pozitivno i ispunjavajuće stanje tima koje obilježava energija, posvećenost i udubljenost tima u obavljanje posla, a koje nastaje kao rezultat interakcije i zajedničkih iskustava članova radnog tima. Tako povećana radna angažiranost tima u konačnici pozitivno djeluje i na uspješnost tima. Drugim riječima, rukovoditeljevo prepoznavanje povjerenja pozitivno djeluje na procjenu uspješnosti tima jednim dijelom i zbog povećane klime pravednosti rukovoditelja i radne angažiranosti tima. Dakle, rukovoditeljevo prepoznavanje povjerenja povećava procjenu uspješnosti tima neposredno, ali i posredno, putem klime pravednosti rukovoditelja i radne angažiranosti tima. Osobe katkada ne moraju osjetiti povjerenje onih koji im vjeruju: rukovoditelji ne

moraju nužno prepoznati da im podređeni vjeruju, jer povjerenje podređenih u rukovoditelje može biti internalizirano i neverbalno. Rezultati ovog istraživanja pokazuju da rukovoditeljevo prepoznavanje poklonjenog mu povjerenja od strane njegovih podređenih ima poželjne učinke, prvenstveno na procjenu uspješnosti tima kojim rukovodi, ali i na zajednički doživljaj članova tima o pravednosti rukovoditelja te radnu angažiranost tima.

Ključne riječi: rukovoditeljevo prepoznavanje povjerenja, klima pravednosti rukovoditelja, radna angažiranost tima, uspješnost tima

Toni Babarović
Iva Šverko¹

Institute of Social
Sciences Ivo Pilar,
Zagreb

VOCATIONAL DEVELOPMENT IN ADOLESCENCE: CAREER CONSTRUCTION, CAREER DECISION-MAKING DIFFICULTIES AND CAREER ADAPTABILITY OF CROATIAN HIGH SCHOOL STUDENTS²

This study investigated the vocational development of Croatian high school students. High school students start planning their careers in early adolescence, and they have to make important career decisions at the end of the secondary school. Therefore, we compared the first and the fourth graders ($n_{1st} = 309$, $n_{4th} = 492$) in several aspects of their career development. Participants completed paper-and-pencil measures regarding the realization of career construction tasks (SCCI), career decision-making difficulties (CDDQ) and career adaptability (CAAS). Results showed appropriate reliability and structural validity of all instruments. The senior students had a somewhat higher level of career maturity measured by the Occupational Exploration, Career Decision-Making, and Skilling and Instrumentation subscales of SCCI. Small age differences were observed in career decision-making difficulties (Lack of Readiness, Lack of Information, and Inconsistent Information subscales), where the junior students expectedly expressed more difficulties. The only increase in career adaptability was found for the Concern subscale, showing that career adaptability did not change much during the early-to-middle adolescence shift. Additionally, we did not find a considerable moderating effect of gender on age difference in career maturity, indicating that the same problem equally affected boys and girls. The observed progress in vocational development during secondary school was generally small, both for boys and girls. Therefore, it is very important to foster vocational development of all students by implementing broad and comprehensive career education and guidance programs in regular secondary school curriculum.

¹ Author's address:
iva.sverko@pilar.hr.

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The influence of new approaches on the field of career psychology has become obvious during the last decade. Traditional trait-and-factor theories (Dawis & Lofquist, 1984; Holland, 1959; Parsons, 1909) were integrated into the developmental perspective (Savickas, 2002; Super, 1953, 1957). Today a combination between differential and developmental approaches is favored, and career is seen as a sequence of different choices that are facilitated with personal lifelong vocational development. Due to the impact of the global economy on careers in the 21st century, individuals nowadays face strong demands to cope with lifelong job changes without losing their sense of self and social identity (Savickas, 2013). Career construction theory (Savickas, 2013) emphasizes the interpretative and interpersonal processes through which individuals impose meaning and direction on their vocational behavior. Career construction theory places the central focus on career adaptability, or the ability to deal with demanding vocational transitions and unpredictable adjustments prompted by changes in the world of work (Savickas, 1997, 2013).

In contemporary vocational psychology, a special attention is placed on vocational development and the facilitative force of career self-guidance competencies. Vocational development is a readiness to accomplish vocational development tasks typical for a particular stage in a life span, and is frequently seen as career choice certainty or career decision-making readiness. Career self-guidance competencies are personal strengths that facilitate making career decisions, as well as enhance career exploration and vocational identity conceptualization. They refer to various behaviors and skills that appear when people get engaged in active exploration of their future career, such as showing concern for the future, or actively preparing for it.

Vocational development and career self-guidance competencies

Vocational development, or a sequence of life stages associated with particular career development tasks, is one of the crucial determinants of positive career transition outcomes. According to Super (1953, 1957), vocational development starts with the period of Growth (4–13 years) and finishes with the period of Disengagement (65 and older). However, although all stages of career development are important for one's career, probably the most turbulent is the Exploration stage (14–24 years), which is typical for adolescents and characterized by school-to-work transition (Blustein, Juntunen, & Worthington, 2000). During years of the exploration stage, adolescents explore their preferences and capabilities, and collect information about different occupations and educational programs. They conceptualize their vocational identity and make important career decisions that will allow them to actualize themselves in the world of work. Good accomplishment of developmental tasks leads adolescents to move from occupational daydreams to employment in a job (Savickas, 2002).

Indicators of vocational development can be represented as a number of completed vocational tasks that are relevant for a particular developmental stage (Savickas, 2002). The Student Career Construction Inventory (SCCI; Savickas & Porfeli, 2012c) was developed to measure the realization of five career developmental tasks:

self-concept crystallization, occupational exploration, career decision making, skilling and instrumentation, and transition from school to work. The accomplishment of these tasks reflects the overall degree of vocational development. People with a greater degree of vocational development have realized more career construction tasks and are more likely to achieve favorable career transition outcomes.

Further, people with a higher level of vocational development also face less career decision-making difficulties (Gati, 2013). Career decision-making difficulties can arise due to a lack of readiness to make career decisions, lack of information and lack of consistent information (Gati, Krausz, & Osipow, 1996). People who are facing greater difficulties are unmotivated to make career decisions and lack important information necessary to decide about their future options. They feel disadvantage in the career construction process, and therefore have more problems in career transition. Gati et al. (1996) developed the Career Decision-Making Difficulties Questionnaire (CDDQ) to grasp the hierarchical taxonomy of career decision-making difficulties.

Another important career self-guidance competence is career adaptability, or the individual's ability to cope with tasks, transitions, and traumas in one's career (Savickas, 1997). Career adaptability reflects resources and capacities that a person can rely on in the process of career construction (Savickas & Porfeli, 2012b). These resources are identified as concern with personal career, control over the preparation for a vocational future, curiosity for exploring possible career identities and career paths, and confidence in pursuing career development tasks (Savickas, 2013). The international research team has developed the Career Adapt-Abilities Scale (CAAS: Savickas & Porfeli, 2012a), which measures the following career adaptability resources: concern, control, curiosity, and confidence, which are further aggregated into the global dimension of career adaptability.

In the recently published Handbook of Vocational Psychology, the level of vocational development, career adaptability and career decision-making competencies are considered crucial for good career transition outcomes (Gati, 2013; Savickas, 2013), and therefore fostering the development of these characteristics is essential in adolescence.

Career construction in adolescence

The tipping point of the exploration phase for Croatian adolescents is the age of 18 when they finish secondary school. At that age students have to decide upon suitable university study or adequate job to engage in, and their career decisions will strongly direct their future career paths.

Students in the first grade are at the beginning of their secondary education, and they have just accomplished a very important career construction task, as they have enrolled a secondary school. They are concerned with their current adaptation to the new school and new obligations, and not with their future career choices. In contrast, students in the final grade of secondary school are focused on the forthcoming career transition. In January they begin applying for under-

graduate programs of their choice, and in spring they take national exams if they are willing to study. Those who are planning to find a job have to start exploring employment opportunities very early in order to become recruited.

Therefore, students gradually become more focused on making career choices during their secondary education. They form their vocational identity and explore different career options. As they accomplish more career construction tasks, their degree of vocational development increases. It is widely known that career maturity increases with age, and particularly with transition from lower to higher grades (Babarović & Šverko, 2011; Hartung, Porfeli, & Vondracek, 2005; Neice & Bradley, 1979; Post-Kramer, 1987; Wallace-Broschious, Serafica, & Osipow, 1994). In fact, career context and related demands direct vocational development even more than maturation (Crites, 1978; Gotfredson, 1981; Guthrie & Herman, 1982; Hall, 1963).

However, it is likely that different trends are typical for career adaptability. Career adaptability is related to vocational development, but at the same time it is a more general trait. It refers to a broad range of behaviors, not just those in the area of career construction. Facets of adaptability, as measured by CAAS, are more stable and fundamental constructs, and therefore they are not so easily directed by career context.

Furthermore, the studies have shown that female students systematically express a higher level of career maturity and have more knowledge about the world of work than their male peers (Alvi & Khan, 1983; Babarović & Šverko, 2011; Creed & Patton, 2003; Herr & Enderlein, 1976; Lee, 2001; Luzzo, 1995; Omvig & Thomas, 1997; Rojewski, Wicklein, & Schell, 1995). It is also possible for gender to moderate changes in vocational development that occur in adolescence. It is possible that different vocational development trends may be observed for secondary school girls and boys.

This paper explores vocational development trends during secondary education. In samples of the first and the fourth grade secondary school students (15 and 18 year-olds), we have observed possible changes in the degree of vocational development, difficulties in career decision-making and career adaptability, taking into account eventual gender moderation effects.

Method

Participants and procedure

The participants of this study were students enrolled in the first grade and in the final grade of secondary school. After contacting school principals, testing was organized on the school level, and all students from the first and the final grade were invited to participate in the anonymous survey which was scheduled during their regular classes. Participation was voluntary and students were offered feedback on their characteristics as an incentive for their participation. All the students who were present in the classroom at the day of administration agreed to take part in the survey. In total, 309 first grade students (37.22% boys) and 492 fourth grade

students (36.99% boys) participated in the survey. In order to ensure anonymity of their participation, students who wanted to receive the feedback were instructed to write down a password on their questionnaire. They were afterwards instructed to contact us by an e-mail, referring to their password in order to access their results and feedback. Only a minority of students requested feedback (approximately 15% in both age groups). The first grade students were predominantly 15 years old, and the fourth grade students were predominantly 18 years old. High schools were chosen to represent various fields of work and levels of prestige.

Instruments

The Career Adapt-Abilities Scale (CAAS: Savickas & Porfeli, 2012b). CAAS measures four career adaptability resources, and therefore consists of four scales, as follows: 1. concern with personal future and career (Concern, e.g. "Thinking about what my future will be like."), 2. feeling of personal control over one's vocational future (Control, e.g. "Making decisions by myself."), 3. curiosity about different future options and possible vocational identities (Curiosity, e.g. "Becoming curious about new opportunities."), and 4. confidence in pursuing one's aspirations (Confidence, e.g. "Performing tasks efficiently."). Four career adaptability facets are further combined into general career adaptability. The CAAS scale comprises of 24 items in total (six per each facet). Respondents have to rate how strongly they have developed each of the abilities by using the following 5-point response scale from 1 = *not strong* to 5 = *the strongest*. Previous studies have shown excellent validity and reliability estimates in different international samples (Savickas & Porfeli, 2012), as well as in one Croatian sample (Šverko & Babarović, 2016). In this study, the reliability of the CAAS total score was excellent in both samples, while the reliability of CAAS facets was good (Table 3).

The Career Decision-making Difficulties Questionnaire – Revised (CDDQ-R: Gati, Krausz, & Osipow, 1996). CDDQ-R reflects theoretical taxonomy of career decision-making difficulties. The taxonomy includes three major categories of difficulties, which converge to form general career decision-making difficulties, and which are also further divided into 10 specific categories. The major categories are: 1. Lack of Readiness (includes lack of motivation to engage in career decision-making process, general indecisiveness concerning all types of career decision making, and dysfunctional myths about career decision making; e.g. "It is usually difficult for me to make decisions."), 2. Lack of Information (includes lack of knowledge about the steps in career decision-making, lack of information about the self, lack of information about the occupations, and lack of information about the ways of obtaining information; e.g. "I find it difficult to make a career decision because I do not have enough information about my abilities, for example: numerical ability, verbal skills.") and 3. Inconsistent Information (includes unreliable information, internal conflicts within the individual, and external conflicts with other people's opinions; e.g. "I find it difficult to make a career decision because people who are important to me [such as parents or friends] do not agree with the career options I am consider-

ing.”). The CDDQ comprises 32 items that reflect career decision-making difficulties, and two validity items that are not used in scoring. The participants have to rate on a 9-point scale the degree to which each difficulty describes them (from 1 = *does not describe me* to 9 = *describes me well*). Scores are calculated as mean scores of responses, and higher scores indicate greater career decision-making difficulties. Previous studies have shown good validity and reliability of CDDQ (e.g. Albion & Fogarty, 2002; Gati et al., 1996; Gati & Saka, 2001; Mau, 2004; Tien, 2005), also in Croatian samples (Babarović & Šverko, 2016). In this study, the reliability of the CDDQ total score was excellent in both samples, while the reliability of CDDQ subscales ranged from acceptable to good (Table 3). The lowest reliability was found for the CDDQ Lack of Readiness subscale in both samples, indicating lower internal consistency of the scale. However, the reliability of CDDQ scales was in accordance with reliability estimates obtained on the original CDDQ-R, where median scale reliability was .72, and reliability of the total CDDQ score was .90 (Amir & Gati, 2006). It is important to note that the reliability of scales in this study was calculated on a smaller number of items, since the Dysfunctional Myths subscale was excluded due to the results of CFA, which were presented later. For the number of included items please refer to the Results section and Table 3.

The Student Career Construction Inventory (SCCI: Savickas & Porfeli, 2012c). SCCI is a measure of degree of vocational development. It measures the realization of five career development tasks that adolescents have to accomplish, and therefore consists of five subscales: 1. Self-Concept Crystallization (e.g. “Recognizing my talents and abilities.”), 2. Occupational Exploration (e.g. “Learning about different types of jobs.”), 3. Career Decision Making (e.g. “Planning how to get into the occupation I choose.”), 4. Skilling and Instrumentation (e.g. “Beginning the training I need for my preferred job.”), and 5. Transition from School to Work (e.g. “Making plans for my job search.”). It is a Likert-type instrument consisting of 25 items reflecting various career construction activities. Participants have to indicate how much thinking or planning they have done about each activity using a 5-point response scale (from 1 = *I have not yet thought much about it* to 5 = *I have already done this*). Along with scores that reflect the accomplishment of five career construction tasks, it also yields a total score which represents the overall degree of vocational development. Previous studies have suggested adequate psychometric properties of SCCI (Rocha & Guimarães, 2012; Savickas & Porfeli, 2012c), which has been also confirmed in Croatia (Černja, Šverko, & Babarović, in press). In this study, the reliability of the SCCI total score was excellent in both samples, while the reliability of SCCI subscales ranged from acceptable to good (Table 3).

Results

Confirmatory factor analysis (CFA) was used to examine whether the original structure of the assessed constructs can be applied to the samples of the first grade and the fourth grade Croatian students. The Career Adapt-Ability Scale was assumed to have a four-factor structure with interrelated latent variables. The model fit indi-

cators for CAAS showed acceptable fit in both samples, especially if we looked at the absolute fit indices as a Root mean square error of approximation (RMSEA), or as a Chi-square and degrees of freedom ratio (Table 1). RMSEA lower than .07 (Steiger, 2007) and χ^2/df ratio lower than 3:1 (Kline, 2005) represented a good fit. However the relative fit indices (CFI and NFI) for the CAAS model were little bit below the cut-off point for the acceptable model fit of .90 (Hu & Bentler, 1999).

For the Career Decision-making Difficulties Questionnaire model, data fit was tested on the original interrelated three-factor structure. Examining the factor loadings of each item on its main factor, it was indicated that the Dysfunctional Myths subscale had a low and non-salient loading on the conjectured factor. This finding was already observed in other Croatian samples (Babarović & Šverko, 2016), as well as for the original scale (Gati et al., 1996). Therefore, the Dysfunctional Myths scale was excluded from the CDDQ model. The modified structural model of CDDQ showed good model fit in the fourth grade by all parameters, and acceptable fit in first grade by relative fit indices.

The data obtained for the Students Career Construction Inventory were tested against the expected five-factor model with interrelated factors. The absolute fit indices indicated adequate model fit in the both samples, while the incremental fit indices were a little below the cut-off criteria, and therefore suggested mediocre fit.

It should also be noted that we consulted the modification indices to improve the model-data fit of CDDQ and SCCI. We proposed the existence of a correlation between one pair of within-factor error terms in CDDQ, and between eight pairs of within-factor error terms in SCCI. The interrelations of error terms in SCCI were especially pronounced within the Occupational Exploration scale. Four correlations between error terms were proposed for the first five items of the subscale. Evidently, those items shared a substantial amount of common variance which was unexplained by the conjectured factor. These items had common content and wording, which was the likely cause of exogenous common variability.

Table 1
Model fit indices for the single group models

	χ^2	<i>df</i>	χ^2/df	NFI	CFI	RMSEA
The first grade						
CAAS	561.13	248	2.26	.800	.876	.065
CDDQ	85.78	23	3.73	.914	.935	.094
SCCI	572.32	257	2.23	.857	.915	.063
The fourth grade						
CAAS	787.37	248	3.17	.854	.895	.067
CDDQ	48.65	23	2.12	.973	.985	.048
SCCI	823.50	257	3.20	.823	.870	.067

Note. CAAS = Career Adapt-Abilities Scale; CDDQ = Career Decision-making Difficulties Questionnaire; SCCI = Student Career Construction Inventory.

In order to access measurement invariance between two age samples, a multi-group confirmatory factor analysis (MGCFA) was performed (Table 2). There was tested the typical sequence of models, nested and organized in a hierarchical ordering, by adding the parameter restrain one at a time (Cheung & Rensvold, 2002; Vandenberg & Lance 2000). Firstly the configural invariance was tested, followed by metric, and scalar invariance. If two nested models showed a decrease in the value of CFI or NFI greater than or equal to .01, or an increase of RMSEA greater than or equal to .01, the more restrictive model should be rejected (Chen, 2007; Cheung & Rensvold, 2002).

According to our MGCFA results (Table 2), full measurement invariance was confirmed for CAAS and SCCI, allowing the latent means comparison across groups. For the CDDQ the configural and metric invariance were achieved, but the drop of CFI and NFI, and growth of RMSEA for the scalar invariance test pointed to possible problems in group comparison of latent means. In this paper we did not strive to establish the partial measurement invariance of the CDDQ, so we proceeded to group comparison, interpreting the age group differences in CDDQ scales with caution.

Table 2

Model fit indices for the multi-group models (the first grade and the fourth grade groups)

	Invariance level	χ^2	<i>df</i>	χ^2/df	$\Delta\chi^2$	Δdf	NFI	CFI	ΔCFI	RMSEA	$\Delta RMSEA$
CAAS	configural	1348.55	496	2.72			.836	.889		.047	
	metric	1375.41	516	2.67	26.86	20	.832	.888	.001	.046	-.001
	scalar	1378.88	520	2.65	3.47	4	.832	.888	.000	.046	.000
CDDQ	configural	143.48	46	2.92			.952	.968		.049	
	metric	150.95	52	2.90	16.47*	6	.946	.964	.004	.049	.000
	scalar	258.69	61	4.24	107.94*	9	.908	.928	.036	.064	.015
SCCI	configural	1395.86	514	2.72			.839	.890		.046	
	measurement	1417.95	534	2.66	22.08	20	.836	.890	.000	.046	.000
	scalar	1481.88	549	2.70	63.93*	15	.826	.884	.006	.046	.000

Note. CAAS = Career Adapt-Abilities Scale; CDDQ = Career Decision-making Difficulties Questionnaire; SCCI = Student Career Construction Inventory.

* $p < .01$.

Table 3
Inter-correlations and reliability of CAAS, CDDQ, and SCCI scales in the first grade and the fourth grade samples

	Concern	Control	Curiosity	Confidence	CAAS total	Lack of Readiness	Lack of Information	Inconsistent Information	CDQ total	Self-Concept Crystallization	Occupational Exploration	Career Decision Making	Skilling and Instrumentation	Transition from School to Work	SCCI total	Reliability (Alpha)
Concern (6)	.35	.51	.43	.77	-.22	-.19	-.07	-.20	.48	.40	.40	.40	.37	.26	.49	.83
Control (6)	.49	.33	.49	.70	-.33	-.37	-.33	-.42	.39	.17	.26	.21	.21	.14	.30	.77
Curiosity (6)	.58	.46	.48	.78	-.07	-.05	.07	-.04	.40	.45	.24	.24	.24	.21	.41	.79
Confidence (6)	.52	.60	.55	.78	-.22	-.20	-.14	-.22	.49	.40	.29	.30	.30	.20	.44	.81
CAAS total (24)	.81	.79	.81	.82	-.27	-.26	-.15	-.28	.58	.47	.39	.37	.27	.27	.54	.89
Lack of Readiness (6)	-.30	-.39	-.17	-.38	-.38	.58	.45	.75	-.25	-.20	-.38	-.20	-.21	-.21	-.31	.60
Lack of Information (10)	-.23	-.33	-.13	-.31	-.31	.56	.53	.92	-.33	-.16	-.43	-.28	-.25	-.25	-.36	.90
Inconsistent Information (12)	-.25	-.39	-.12	-.30	-.33	.67	.77	.77	-.19	-.02	-.19	-.14	-.11	-.11	-.16	.79
CDDQ total (28)	-.28	-.41	-.14	-.37	-.37	.73	.92	.86	-.35	-.16	-.43	-.28	-.24	-.24	-.36	.91
Self-Concept Crystallization (7)	.53	.46	.45	.42	.58	-.23	-.27	-.26	-.29	.54	.59	.54	.39	.79	.79	.81
Occupational Exploration (7)	.40	.21	.48	.31	.44	-.13	-.14	-.07	-.12	.43	.56	.61	.53	.84	.73	.73
Career Decision Making (5)	.53	.42	.40	.36	.53	-.28	-.36	-.30	-.37	.57	.44	.67	.58	.84	.83	.83
Skilling and Instrumentation (4)	.48	.42	.39	.42	.53	-.27	-.33	-.27	-.33	.49	.44	.67	.67	.83	.75	.75
Transition from School to Work (2)	.17	.20	.20	.18	.23	-.08	-.10	-.02	-.08	.27	.30	.32	.42	.71	.72	.72
SCCI total (25)	.59	.46	.54	.46	.64	-.26	-.32	-.25	-.32	.78	.77	.81	.77	.53	.93	.93
Reliability (Alpha)	.85	.81	.83	.85	.92	.63	.90	.84	.92	.75	.73	.83	.75	.72	.89	.89

Note. The first grade above diagonal; the fourth grade below diagonal; correlations above .11 or .10 are significant in the first grade and the fourth grade respectively ($p < .05$); a number of items per scale is in parenthesis. CAAS = Career Adapt-Abilities Scale; CDDQ = Career Decision-making Difficulties Questionnaire; SCCI = Student Career Construction Inventory.

Correlations between explored career-related constructs are presented in Table 3. The students' level of career construction correlated highly with career adaptability, both in the senior and the junior sample. Observed results indicated that career adaptability and career construction shared a substantial amount of common variance, as students with a higher level of career adaptability realized a greater number of career construction tasks, therefore expressing somewhat higher level of career maturity. On the other hand, career adaptability and career construction were less related to career decision-making difficulties. Correlations between career decision-making difficulties and other scales were lower and expectedly negative. The negative correlations between CDDQ and CAAS were weak in the junior sample, and moderate in the senior sample, while negative correlations between CDDQ and SCCI were moderate. Low to moderate negative correlations between these constructs indicated that students with higher career adaptability and higher accomplishment of career construction tasks faced a bit less career decision-making difficulties. Therefore, the results of the correlational analysis showed that career adaptability and career construction were firmly interwoven constructs which were close in the nomological net, while career decision-making difficulties were not so intimately related to them. A similar pattern of correlations was also found between the subscales of the particular instruments.

In order to grasp age differences in career adaptability, career decision-making difficulties, and career construction, we have conducted three separate ANOVAs on the total scores of CAAS, CDDQ and SCCI, and three MANOVAs on groups of subscales belonging to each of the three instruments. Multivariate tests for four career adaptability subscales (Wilks' $\lambda = .956$, $F(4, 780) = 8.91$, $p < .001$, $\eta^2 = .044$), three career decision-making subscales (Wilks' $\lambda = .938$, $F(3, 720) = 15.90$, $p < .001$, $\eta^2 = .062$), and five career construction subscales (Wilks' $\lambda = .914$, $F(5, 742) = 14.04$, $p < .001$, $\eta^2 = .086$) revealed the existence of age differences in each of the three groups of variables, and suggested the need for further group comparisons at the univariate level. The univariate group comparisons are presented in Table 4. For career adaptability, senior students expressed higher level of Concern, while no age differences were observed in other subscales and the total CAAS score. For career decision making difficulties, it was observed that senior students had lower results both on all three CDDQ subscales and on the total score. According to effect sizes, the age differences were greater for Lack of Readiness and Lack of Information than for Inconsistent Information. In career construction, senior students achieved higher results on Occupational Exploration, Career Decision Making, and Skilling and Instrumentation subscales, and on the total SCCI score. The observed effect sizes indicated that somewhat greater differences were found in career construction and career decision making difficulties than in career adaptability (Table 4).

Table 4
Age differences in career adaptability, career decision making difficulties and career construction

	The first grade		The fourth grade		<i>F</i>	<i>df₁</i> , <i>df₂</i>	<i>p</i>	η^2
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
Concern	3.84	0.67	4.06	0.69	19.86	1, 783	.00	.025
Control	4.01	0.61	4.05	0.65	0.70	1, 783	.40	.001
Curiosity	3.85	0.64	3.92	0.68	1.68	1, 783	.20	.002
Confidence	3.94	0.57	3.88	0.64	1.94	1, 783	.16	.002
CAAS total	3.91	0.47	3.98	0.53	3.06	1, 783	.08	.004
Lack of Readiness	4.72	1.33	4.21	1.27	26.08	1, 722	.00	.035
Lack of Information	4.78	1.71	3.99	1.60	39.28	1, 722	.00	.052
Inconsistent Information	3.68	1.24	3.42	1.45	5.83	1, 722	.02	.008
CDDQ total	4.49	1.26	3.93	1.29	33.49	1, 722	.00	.044
Self-Concept Crystallization	3.87	0.62	3.95	0.61	3.02	1, 746	.08	.004
Occupational Exploration	3.04	0.76	3.35	0.73	32.30	1, 746	.00	.042
Career Decision Making	3.52	0.86	3.89	0.72	41.64	1, 746	.00	.053
Skilling and Instrumentation	3.45	0.80	3.69	0.68	2.20	1, 746	.00	.026
Transition from School to Work	3.08	1.00	3.12	1.04	0.29	1, 746	.59	.000
SCCI total	3.44	0.62	3.66	0.53	28.73	1, 746	.00	.037

Note. CAAS = Career Adapt-Abilities Scale; CDDQ = Career Decision-making Difficulties Questionnaire; SCCI = Student Career Construction Inventory.

Finally, we examined possible moderating effects of the student's gender on age differences in the total scores on CAAS, CDDQ and SCCI. As shown in Table 5, the interaction effect was significant only for the total SCCI score. According to the subgroup means (Table 5), it could be concluded that career construction during secondary-school was more rapid for girls than for boys. Girls in the first grade had an almost equal level of career construction as boys, but the level of career construction became significantly higher for females at the fourth grade. However, it should be noted that the effect size of gender moderating effect on age difference in SCCI scores was very low.

Table 5
Moderating effects of gender on age difference in CAAS, CDDQ and SCCI total scores

		The first grade		The fourth grade		<i>F</i> (age × gender)	<i>df</i> ₁ <i>df</i> ₂	<i>p</i>	η^2
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
CAAS	Male	3.86	0.50	3.91	0.55	0.17	1	.68	.000
	Female	3.94	0.45	4.02	0.51		769		
CDDQ	Male	4.40	1.24	3.86	1.32	0.20	1	.66	.000
	Female	4.56	1.28	3.94	1.27		708		
SCCI	Male	3.48	0.60	3.58	0.56	5.56	1	.02	.008
	Female	3.41	0.64	3.72	0.51		735		

Note. CAAS = Career Adapt-Abilities Scale; CDDQ = Career Decision-making Difficulties Questionnaire; SCCI = Student Career Construction Inventory.

Discussion

In the first grade and the fourth grade secondary school samples, Career Adapt-Abilities Scale, Career Decision-Making Difficulties-Revised and Student Career Construction Inventory all showed good structural validity and adequate reliability. Relations between constructs were also sound and logical. A high positive correlation between career adaptability and career construction was observed in both samples, which is not surprising as these constructs come from common theoretical point of view and cover broad concept of career maturity (Larson, Bonitz, & Pesch, 2013; Savickas, 1997; Savickas & Porfeli, 2011). Further, these constructs were negatively moderately related to career decision-making difficulties. This was also expected, since problems in career decision-making are an indication of lower career maturity (Betz & Luzzo, 1996; Gati, 2013; Osipow & Fitzgerald, 1996).

Age differences in vocational development

When considering age differences in vocational development in two adolescent samples, we found that students in the final grade of secondary school expressed greater accomplishment of different vocational development tasks, a lower number of difficulties in career decision-making process, and an equal level of career adaptability when compared to students in the first grade.

The fourth grade students showed somewhat greater results in SCCI than the first grade students. At the subscale level, there was no improvement observed in Self-Concept Crystallization and Transition from School to Work, while some improvements were found in Skilling and Instrumentation, Occupational Explora-

tion and Career Decision Making. Similar findings were observed for career decision-making difficulties. Students reported a decrease in Lack of Information and Lack of Readiness to make career decision, and a small change was also observed in the problem of Inconsistent Information. On the other hand, career adaptability did not change with age, except for the Concern subscale, which showed some increase during secondary education. The effect of age on other aspects of career adaptability was negligible, indicating that the first graders and the fourth graders felt equal control over their vocational future, were equally curious about different future options and possible vocational identities, and equally confident in pursuing their aspirations.

Differences in SCCI and CDDQ indicated the expected course of vocational development in adolescence and were in line with previous findings. Cross-sectional studies typically reported that senior students scored higher on career maturity measures than junior ones. This has been found in Israel (Fouad, 1988), Australia (Patton & Creed, 2001), Canada (Alvi & Khan, 1983), South Africa (Watson & Van Aarde, 1986) and Nigeria (Achebe, 1982). However, changes observed in our samples were small, suggesting that Croatian students did not develop their career-related competencies very much during secondary education.

The fact that career adaptability has been the least sensitive to the effect of age is not surprising, as career adaptability is not exclusively nested in the career context. The Career Adapt-Abilities Scale also includes items that cover general adaptability, like "Preparing for the future" (Concern), "Making decisions by myself" (Control), "Exploring my surroundings" (Curiosity), and "Solving problems" (Confidence). Such general feelings about oneself are more stable than narrower career-related variables. It is known that career adaptability at the same time shares common variability with career maturity and with more stable traits. For example, studies have revealed that career adaptability is moderately related to personality traits, Extraversion and Conscientiousness in particular (Rossier, Zecca, Staufer, Maggiori, & Dauwalder, 2012; Šverko & Babarović, 2016; Van Vianen, Klehe, Koen, & Dries, 2012), as well as the need for achievement, locus of control, future time perspective, and general motivation, while being negatively related to general anxiety (Pouyaud, Vignoli, Dosnon, & Lallemand, 2012).

The role of gender

Although explored in a number of studies, the role of gender in vocational development is not so straightforward. Studies report equivocal results on the effect of gender on career development. The majority of studies have found that females express higher career maturity than males (Fouad, 1988; Luzzo, 1995; Rojewski, Wicklein, & Schell, 1995), even on samples of Croatian pupils aged 10 to 14 years old (Babarović & Šverko, 2011). However, some studies have failed to find any gender differences in career maturity (Kelly & Colangelo, 1990; Watson, Stead, & De Jager, 1995), or even reported higher career maturity for males (Achebe, 1982).

In the present study, we wished to explore the process of vocational development during secondary education in general, and we were not interested in gender differences in career maturity. However, since a majority of international studies and the previous study in Croatian context (Babarović & Šverko, 2011) emphasized the presence of gender differences in career maturity, it was necessary to explore whether the course of vocational development was affected by gender. We wished to check whether the vocational development trend was equal for girls and for boys. Therefore, we explored the possible moderating effect of gender on age differences in career construction, career decision-making difficulties and career adaptability. Our results showed that a weak moderation effect of gender was present only for the SCCI scale, suggesting a somewhat faster increase in career construction during secondary education for girls. However, the observed interaction effect in SCCI was weak, and no interaction effect was observed in CAAS and CDDQ. Therefore our data in general suggested that the course of vocational development during secondary education seemed very similar for girls and for boys. This was in line with results of Babarović & Šverko (2011) who reported the absence of age and gender interaction effect, as girls consistently showed greater career maturity than boys during primary education.

Career maturity of Croatian adolescents

Students who have a higher level of career maturity have greater success in school (Babarović & Šverko, 2011; Luzzo, 1995; Tan, 1989), higher educational aspirations, and plan higher educational attainment (Babarović & Šverko, 2011; Westbrook, Elrod, & Wynne, 1996). However, it is questionable whether secondary school students in Croatia develop a sufficient level of vocational maturity to make adequate career decisions, and construct their careers.

Due to the response scale descriptors in the Croatian version of SCCI, it is obvious that, at the moment of testing, the average first graders and the fourth graders were, still crystallizing their self-concept, that they were in the process of acquiring proper skills, and that they were now making their career decisions. The average first graders and the fourth graders were both planning to start occupational exploration and transition from work to school. Although it could be a proper level of vocational development for the first graders, at the end of the secondary school the fourth graders should have a more stable picture of themselves and their career plans, particularly having in mind that their responses were collected in spring, just few months prior to their crucial career decisions.

When considering the results on CDDQ, it was obvious that both the first graders and the fourth graders still faced a number of career decision-making difficulties. This was manifested particularly in the lack of readiness to make career decisions and the lack of information about the world of work and the self. However, the average level of expressed difficulties was quite similar to comparable age groups of adolescents in other countries. By comparing our results with results of Australian adolescents at the age of 16 (Albion & Fogarthy, 2002), it was observed

that on average, Croatian adolescents reported a similar level of career decision making difficulties as their Australian colleagues. Further, the comparison with the fourth-grade secondary school students from Slovenia (Pečjak & Zagoričnik, 2007) revealed that their average total score on CDDQ, as well as scores on all three CDDQ subscales, were very similar to those of Croatian adolescents.

On the other hand, Croatian secondary school students showed somewhat higher results on CAAS when compared to the results observed in other countries. For example, on a French sample of 17 years old students, Pouyaud, Vignoli, Dosnon, and Lallemand (2012) have observed lower adaptability in all CAAS subscales than in our sample. Similarly, on a US sample of students of the same age, Porfeli and Savickas (2012) have also evidenced lower career adaptability values. However, the higher career adaptability results observed in our samples do not necessarily mean that Croatian adolescents have a higher career maturity in comparison to their foreign colleagues. Since career adaptability is saturated with both core personality traits and career maturity, it is possible that the somewhat higher results on the CAAS scale stem from cultural differences in core personality traits, and not from career maturity.

As Croatian students expressed only a small rise in the realization of career construction tasks, and just a small decline in career decision-making during secondary education, we are somewhat concerned about the pace of their vocational development. By the end of secondary education students should be able to transit to the world of work or tertiary education. Thus, it is necessary for them to acquire the adequate level of career maturity during adolescence. Therefore it is very important to ensure proper career education and guidance during adolescence. From our point of view, vocational development should be fostered through various inter-curricular educational programs. By integrating career development into the curriculum, all students would have the needed support in their vocational development and career construction.

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**Toni Babarović
Iva Šverko**

Institut društvenih
znanosti Ivo Pilar,
Zagreb

**PROFESIONALNI RAZVOJ U
ADOLESCENCIJI: KONSTRUKCIJA
KARIJERE, POTEŠKOĆE U DONOŠENJU
PROFESIONALNIH ODLUKA I
PROFESIONALNA ADAPTABILNOST
UČENIKA SREDNJIH ŠKOLA U HRVATSKOJ**

U ovoj studiji ispitivali smo profesionalni razvoj učenika srednjih škola u Hrvatskoj. Razvoj karijere počinje već u ranoj adolescenciji, a tijekom srednje škole učenici moraju donijeti važne profesionalne odluke. Zato smo usporedili učenike prvih i četvrtih razreda srednjih škola ($n_{1.\text{raz}} = 309$, $n_{4.\text{raz}} = 492$) u nekoliko aspekata njihove profesionalne zrelosti. Sudionici su ispunili papir-olovka mjere koje se odnose na ostvarenje zadataka konstrukcije karijere (SCCI), poteškoće u donošenju profesionalnih odluka (CDDQ) te profesionalnu adaptabilnost (CAAS). Rezultati su ukazali na adekvatnu pouzdanost i strukturalnu valjanost svih mjera. Stariji studenti iskazali su nešto veći stupanj profesionalne zrelosti mjeren subskalama Istraživanje zanimanja, Donošenje profesionalnih odluka te Stjecanje potrebnog obrazovanja upitnika SCCI. Male dobne razlike primijećene su i u subskalama Nedostatak spremnosti, Nedostatak informacija i Nekonzistentne informacije upitnika CDDQ, gdje su mlađi učenici očekivano iskazali više poteškoća u donošenju profesionalnih odluka. Porast profesionalne adaptabilnosti primijećen je samo za skalu Briga za budućnost upitnika CAAS, ukazujući kako se profesionalna adaptabilnost ne mijenja bitno tijekom srednje škole. Također, moderacijski efekt spola na dobne razlike u profesionalnoj zrelosti vrlo je mali, te ukazuje da se profesionalni razvoj u srednjoškolskoj dobi odvija jednako za djevojke i mladiće. Porast profesionalne zrelosti tijekom srednje škole je mali i ukazuje kako učenici četvrtih razreda ne realiziraju sve predviđene zadatke u konstrukciji karijere te se i dalje suočavaju s poteškoćama u donošenju profesionalnih odluka. Stoga je vrlo važno implementirati programe poticanja profesionalne zrelosti u hrvatske srednje škole, kako bi se svim učenicima omogućio bolji profesionalni razvoj i osnažilo ih se za donošenje važnih profesionalnih odluka.

Ključne riječi: konstrukcija karijere, profesionalna adaptabilnost, profesionalna zrelost, poteškoće u donošenju profesionalnih odluka, adolescenti

UPUTSTVO AUTORIMA

Za objavljivanje u časopisu "Primenjena psihologija" prilažu se **isključivo originalni radovi** koji nisu prethodno štampani i nisu istovremeno podneti za objavljivanje negde drugde. **Radovi koji nisu adekvatno pripremljeni neće se recenzirati.** Rukopisi se šalju isključivo elektronskom poštom na adresu:

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Format rada. Rad treba da bude strukturisan u skladu sa IMRAD formatom, propisanim od strane Američke psihološke asocijacije (APA). Shodno tome, rad treba da sadrži odeljke *rezime, uvod, metod, rezultati, diskusija, zaključak, reference, prilozi i rezime na engleskom jeziku.*

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Rezime. Rezime u dužini do 250 reči treba da bude na početku samog rada. Na kraju rezimea treba dati ključne reči (do pet ključnih reči). Po uspešnom završetku recenzije rada, potrebno je priložiti ceo rezime i ključne reči i na engleskom jeziku. Ukoliko je rad na engleskom jeziku, poželjno je priložiti duži rezime (do 2 strane) na srpskom jeziku. Rezime po pravilu ne sadrži reference.

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Tabele. Tabele i grafikoni treba da budu sačinjeni u Wordu ili nekom Word- kompatibilnom formatu. Tabele i grafikone iz statističkih paketa treba prebaciti u Word. Isti podaci ne mogu se prezentovati i tabelarno i grafički. Isti podaci dati u tabeli ili na grafikonu ne smeju se ponavljati i u tekstu, već se može samo pozvati na njih. Svaka tabela treba da bude označena brojem, sa adekvatnim nazivom. Broj tabele treba da bude napisan običnim slovima, a naziv tabele treba da bude dat u sledećem redu, kurzivom. Broj i naziv tabele nalaze se iznad tabele. Tabele ne smeju da sadrže vertikalne linije. Redovi tabele ne treba da budu razdvojeni linijama, ali zaglavlje tabele mora da linijom bude odvojeno od podataka. Horizontalne linije dozvoljene su i u okviru samog zaglavlja, ukoliko to doprinosi preglednosti tabele

Grafikoni i slike. Slike treba slati u elektronskoj formi sa rezolucijom od najmanje 300 dpi. Ukoliko se koristi ilustracija iz štampanog izvora nužno je pismeno odobrenje vlasnika autorskih prava. Naziv slike treba da bude prikazan ispod slike. Npr. *Slika 1. Schwartz-ov model univerzalnih ljudskih vrednosti*

Statistika. Rezultati statističkih testova treba da budu dati u sledećem obliku: $F(1, 9) = 25.35, p < .001$ i slično za druge testove (npr. $\chi^2(5, N = 454) = 5.311, p > .10$ ili $t(452) = 2.06, p < .05$). Treba navoditi manji broj konvencionalnih nivoa p (npr: .05, .01, .001). Ukoliko je broj manji od 0, nula se ne stavlja ispred tačke. Po pravilu, nazivi statističkih

testova i oznaka treba da budu napisani u kurzivu, sem ako je reč o grčkim simbolima koji se ne pišu u kurzivu.

Brojevi. U skladu sa srpskim pravopisom, decimalne brojeve koji se spominju u samom tekstu treba pisati sa zarezom. Uvažavajući statističke konvencije, decimalne brojeve koji su sastavni deo statističkih testova (npr. *F* test, *t* test, x^2 itd.) kao i u tabelama, treba pisati sa tačkom. Ukoliko je rad na engleskom jeziku, koristiti samo tačke.

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Fusnote i skraćnice. Fusnote treba izbegavati. Skraćnice takođe treba izbegavati, osim izrazito uobičajenih. Skraćnice koje su navedene u tabelama i slikama treba da budu objašnjene. Objašnjenja (legenda) se daju ispod table ili slike.

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PRIMENJENA PSIHOLOGIJA

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DIFFERENCES BETWEEN EMPLOYED AND UNEMPLOYED PEOPLE IN SATISFACTION WITH LIFE, SUBJECTIVE HAPPINESS, AND LATENT AND MANIFEST BENEFITS OF WORK

Ivana Strizović and Aleksandar Mratinković

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Nebojša Majstorović, Boris Popov, Jelena Matanović, and Vanja Slijepčević

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Mojra Dautović and Zvonimir Galić

TOWARDS AN UNDERSTANDING OF THE RELATIONSHIP BETWEEN SUPERVISORS' FELT TRUST AND TEAM-EFFECTIVENESS EVALUATION

Zoran Sušanjanj and Ana Jakopec

VOCATIONAL DEVELOPMENT IN ADOLESCENCE: CAREER CONSTRUCTION, CAREER DECISION-MAKING DIFFICULTIES AND CAREER ADAPTABILITY OF CROATIAN HIGH SCHOOL STUDENTS

Toni Babarović and Iva Šverko