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TIME PERSPECTIVE AS PREDICTOR OF PERCEIVED STRESS IN MANAGERS

ABSTRACT: The aim of this study was to determine relation between dimensions of time perspective and perceived stress among managers, who have one to three years of working experience as managers. The basic assumption was that dimensions of time perspective are empirically confirmed correlates of numerous psychic functions, thus they can also be correlates of perceived stress. Therefore, we set hypothesis that dimensions of time perspective are significant predictors of perceived stress in managers. The study was conducted on the sample of 92 managers of both genders (37% of men and 63% of women). Average age of examinees was 36.58 years. Selective variable for formation of the sample was the length of working experience in management - from minimum one up to maximum three years. The assumption for the sample justification was that managers-beginners experience bigger number of stimuli from the environment as stressors. An adapted version of Zimbardo's time perspective questionnaire (ZTPI, Zimbardo & Boyd, 1999, adaptation of Kostić & Nedeljković, 2013) was used to operationalize the time perspective. The questionnaire with 52 items determines five dimensions of time perspective – negative and positive past, hedonistic and fatalistic present and future. Perceived stress is determined by score on Cohen's questionnaire for perceived stress (The Perceived

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Stress Scale, PSS-10, Cohen et al, 1983). Significant regression model was obtained, which explains 17,6% variance in perception of stress in managers. As the only independently significant predictor in the group of dimensions of time perspective, *future* was highlighted ($\beta = 0,416$). Managers who are turned towards the future have higher scores of the perceived stress. The results confirmed the initial assumption on predictor power of dimensions of time perspective in predicting intensity of the perceived stress. The results represent contribution to understanding the relationship between dimensions of time perspective and stress perception during the first years of management and may be the starting point for future research of those constructs.

KEY WORDS: time perspectives, perceived stress, managers

Introduction

Capability of managers to cope with various stressful situations started becoming increasingly important factors for successfulness of organizations (Giorgi et al, 2015). Complex phenomenon of management also includes both additive and integrative mechanisms of individual psychological and contextual factors, that is, both personal characteristics of an individual and influence of social environment. In his study on management Kotter (Kotter, 2012, p.18) says: “probably the greatest challenge that managers face today is preserving their own competitiveness in constantly stressful environment.” Some researchers define management as *feature* or *behavior*, while others view management primarily as *information processing* and observe it from the relation point of view (Northouse, 2016). With regards to contribution to the management theories, empirical researches should provide conceptual contribution by creation of original knowledge and gradual progress in explanation of that phenomenon (Mathieu, 2016). It does not have to be revolutionary change of paradigm, but raising new questions for which we do not have quick and quite precise answers, may be a good strategy

for the development of management theories (Davis, 2010). From results of previous studies, some authors conclude that persons who prefer the manager position (or later become managers) are more ambitious, more aggressive, more competitive, more inclined to self-evaluations compared to others (Čizmić et al, 1995, according to Panić, 2016), so we can conclude that management, among other things, is also projection of the manager's personality (Marković, 2006). Criteria of effective leadership and management have changed over time, from easily visible, typical leadership attributes to integrative approach that includes the interplay of personal traits and contextual factors (Zaccaro, 2007, Kalisch & Gil, 2016). Although no agreement on the key traits of a successful manager has been achieved, most researchers agree that this approach should not be abandoned, but new variables and connections should also be included in the study that will explain complexity of the management phenomenon (Hellrigger & Slocum, 1989, according to Marković et al., 2004).

In our study, we dealt with correlation of variables the time perspective and perceived stress in managers who are at the beginning of their careers, that is, they manage their organizational units for only 1-3 years, starting from the assumption that perception of social environment stressors is not the same in managers who are beginners at that position compared to those who are much more experienced, and that probably managers with shorter length of management service experience bigger number of the social environment stimuli as the stressors. We consider the dominant time perspective of the manager as a possible predictor of perceived stress.

Regardless the fact whether we define the time perspective as an attitude, a flexible dynamic process or a stable disposition of personality, the studies suggest that the time perspective affects many significant phenomena in the modern world (Zimbardo, Keough & Boyd, 1997; Harber, Zimbardo & Boyd, 2003; Holman & Zimbardo, 2009, according to Kostić and Nedeljković, 2013).

Zimbardo & Boyd, determined the connection between time perspective and a large number of demographic, behavioral and personal variables (Dunkel & Weber, 2010, according to Kostić and Nedeljković, 2013), and also significant predictive power of their questionnaire

in relation to the academic success, procrastination and anti-social behavior. (Adelabu, 2007; Horstmanshof & Zimitat, 2007; Diaz-Morales et al., 2008; Kruger, Reicshi & Zimmerman, 2008; according to Kostić and Nedeljković, 2013).

Zimbardo & Boyd, determined the correlation between time perspective and large number of demographic, behavioral and personal variables (Dunkel & Weber, 2010, according to Kostić and Nedeljković, 2013), while prediction power of their questionnaire in relation to the academic success, procrastination and anti-social behavior is also significant. (Adelabu, 2007; Horstmanshof & Zimitat, 2007; Diaz-Morales et al., 2008; Kruger, Reicshi & Zimmerman, 2008; according to Kostić and Nedeljković, 2013).

Problem and aims of the study

The aim of the study is to determine relations between the time perspective and perceived stress in managers who have occupied manager position from 1 to 3 years. Therefore, we set **the hypothesis** that dimensions of time perspective are significant predictors of perceived stress in managers. The basic assumption was that time dimensions are empirically confirmed correlates of numerous psychic functions, thus they can be correlates of the perceived stress. Assumption was that the managers-beginners experience more stimuli from the environment as stressors.

Method

Sample

92 managers of both genders (37% of men and 63% of women). Average age of examinees was 36.58 years. Selective variable for formation of the sample was length of working experience in management (1-3 years).

Table 1: Structure of sample in relation to gender

	Frequency	Percent
Male	34	37.0
Female	58	63.0
Total	92	100.0

In our sample of managers, as we can see in the table, there were almost two thirds of women and one third of men. Balancing the sample by gender criterion would require a lot of time, it would extend the research and increase costs due to the fact that initial criterion for inclusion in the sample was 1-3 years length of working experience in management.

Table 2: Structure of the sample in relation to age

	N	Minimum	Maximum	Mean	Std. Deviation
Age	92	20	59	36.58	9.683
Working experience (in years)	92	1.00	3.00	1.8913	.84133

The youngest manager in our sample was 20 years of age while the oldest was 59 years, and the average age of the examinees was 36.58 years, which shows that most of our examinees started occupying managerial positions in mature years, after gaining work experience.

Procedure

The study was conducted on the territory of central and southern parts of the Republic of Serbia and in several municipalities of the Autonomous Province of Vojvodina. Managers with 1-3 years length of working experience in management were employed by organizations of both state and private ownership status, of different sizes in relation to

the number of employees. The state-owned organizations included in the study were local governments, health institutions, educational institutions, public companies, funds or agencies, and similar, while privately owned organizations that were included in the study were from the sectors of production, trade, services, private educational or smaller private health organizations. In all of the above organizations, management functions are formally defined by internal structure of the organization. The study participants gave oral information consent, after being acquainted with nature and objectives of the study, and they filled in the questionnaires individually.

Measures

An adapted version of Zimbardo's time perspective questionnaire was used to operationalize the time perspective (*ZTPI, Zimbardo & Boyd, (1999), adaptation of Kostić & Nedeljković, 2008*). The questionnaire with 52 items determines five dimensions of time perspective – negative and positive past, hedonistic and fatalistic present and future.

Perceived stress is determined by score on Cohen's questionnaire for perceived stress (*The Perceived Stress Scale, PSS-10, Cohen et al, 1983*). The questionnaire with 10 items is about feelings and thoughts according to events that happened in the last month, which were stressful for them.

Data analysis

Measures of descriptive statistics (frequency, percent, mean, standard deviation), correlation and linear regression analysis have been used in data analysis process. Before applying correlation techniques and regression analysis, the variables were transformed into *z-scores*.

Results

Table 3: Correlation between time perspectives and perceived stress

		Past Negative	Past Positive	Present Fata- listic	Present Hedo- nistic	Future
Perceived stress	Pearson Corre- lation	.188	.150	.147	-.012	-.400**
	Sig. (2-tailed)	.073	.155	.163	.911	.000
	N	92	92	92	92	92

As it is shown, the only significant and high negative correlation exists between perceived stress and dimension of time perspective *Future*. Managers with dominant time perspective *future* experience greater number of stimuli from the social environment as stressors.

Table 4: Parameters of the regression model estimation

R	R Square	Adjusted R Square	Std. Error of the Estimate
.419 ^a	.176	.128	1.01432599

Table 5: Indicators of the Regression model significance

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	18.856	5	3.771	3.665	.005
Residual	88.482	86	1.029		
Total	107.338	91			

A significant regression model was obtained which explains 17,6 % variance in perception of stress in managers with 1-3 years length of working experience in management. Dimensions of time perspective can be a significant predictor of perceived stress in managers.

Table 6: Coefficients

	β	t	sig
(Constant)		1.973	.052
Past Negative	.023	.208	.835
Past Positive	.101	.957	.341
Present Fatalistic	-.066	-.578	.565
Present Hedonistic	-.070	-.677	.500
Future	.416	3.505	.001

The *future* has been highlighted as the only single significant predictor in the group of dimensions of time perspective ($\beta = 0,416$). Managers who are turned towards *future* have higher scores of the perceived stress.

Discussion and conclusion

The dominant time perspective of managers “beginners” and individuality in perception of stress represent the psychological constructs, which correlation we have determined in our study. The results confirmed our hypothesis regarding the prediction power of dimensions of time perspectives in prediction of perceived stress in managers. In the group of possible dominant time perspectives in managers with up to 3 years length of working experience in management, as the only independently significant predictor, the time perspective *future* has been highlighted, which suggests that managers who are more orientated towards future experience greater number of stimuli from the social environment as stressors.

Earlier studies have confirmed the influence of psychological timeliness on overall human behavior at work (Bluedorn & Denhardt, 1998; Strobel, Tumasjan, Sporle & Welp, 2013, according to Ortiz & Davis, 2016). Studying the influence mechanisms of the dominant time perspective on management-related variables is an important step towards understanding the effects of time perspective on overall organizational behavior, including perception of stress at work, work commitment, job satisfaction, absenteeism, and similar. Capability of anti-

cipation and making plans for future, as well as organization of effective behavior, represent very important trait of managers, and this starting assumption points to possibility that person has capacities for functional behavior in the present and planning of adequate goals for the future (Locke, 1975; Gjesme, 1983; according to Seijts, 1998). It also represents basic potential of the manager to deal with social environment stressors. Lazarus and Folkman point out that stress is highly personalized process that largely depends on the personality traits (Lazarus & Folkman, 1984). The same stressor, through the prism of perceptive-cognitive treatment of different individuals, causes various stress reactions (Zotović, 2002), which was the starting point for our assumption that managers with shorter length of working experience in management will probably experience greater number of stimuli from the social environment as stressors.

Time perspective, as “the general capacity of man to foresee, illuminate and structure the future” (Gjesme, 1983, p.452, according to Seijts, 1998) is the “pillar of management” that incorporates maturity of thinking and adequate affective attitude towards the past, the present and the future (Munro, 2012). Awareness of the time span to which certain activity is related, largely defines general perception of the social environment, and especially of those stimuli from the environment that we perceive as stressors, but it also defines type of activity, mode of action and goals that a person sets before him/her (Seijts, 1998). The time perspective is one of the most influential dimensions of human psychic life because it can channel behavior towards forms that are unproductive or even destructive to personality or organization, or towards behaviors that bring both personal and collective well-being, and it is therefore particularly important to perceive its influence in the context of stress perception in the social environment of managers (Zaleski & Przepiorka, 2014). The above stated assumptions suggest that there may be different management outcomes in relation to dominant time perspective of the manager, which can determine whether he/she will act with maturity and properly define priorities, that is, whether he/she will be able to respond adequately at the cognitive and behavioral level in stressful situations. (Munro, 2012).

The time perspective (TP) *future* can be defined as ability to plan and organize an activity beyond the present moment (Suto & Frank, 1994, according to Seijts, 1998). Persons with dominant TP *future* are ready to delay instant gratification in order to achieve important goals in the future. Therefore, in the context of studying the management process, the time perspective *future* as a related variable has great research significance because it can explain cognitive understanding of relationship between the major time blocks, past events, perception of reality, and anticipation of goals in the future (Lock & Latham, 1990, according to Seijts, 1998). The time perspective *future* is related to the ability to organize direct activities which benefits are not seen at the moment, which is especially important for management and probably more complex issue for those managers who are beginners at that position, that is, they have short working experience in management (like the participants in our study). Ability to overcome problems in most cases grows with working experience, but long period of stress exposure can undermine mental health and general capacities of the manager for overcoming the problems (Backović et al., 2000). The study findings by Knežević (2016) indicate that more than half of managers have increase in various indicators of professional stress. According to the above mentioned, we consider that clarifying the correlation of stress perception in managers with as many variables as possible can be of great theoretical and practical significance. The results also raise the question of changes in quality and intensity of the established correlations. The initial period of “learning the craftsmanship” of management and adapting to social position of the manager can be distinguished by one set of traits, including the dominant time perspective, but in time, expression and dominance of traits, as well as perception of the social environment, may change.

The results of our study represent a contribution to understanding the relationship between dimensions of time perspective and stress perception during the first years of management, and can be the starting point for future research of these constructs.

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