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THE EVOLUTION OF WORK ORGANIZATION AND ITS IMPLICATION FOR EDUCATIONAL POLICIES AND MANAGERIAL PRACTICES

UTJECAJ EVOLUCIJE ORGANIZACIJE RADA NA OBRAZOVNE POLITIKE I MENADŽERSKU PRAKSU

ABSTRACT

Career development is seen as an important concept for understanding development on labor markets and organizational growth at firm level. The usual approach often addresses the problem of employability on policy level (governments' policy and regulation) or from the point of an individual's acquisition and preservation of skills demanded by prospective employers. In this paper, we turn to the role of employers in that process and suggest a five levels scale model to evaluate the complexity and strength of employer to employee relations regarding acquiring competencies and developing personal professional career paths. Our five-level scale model also serves as indicator of firm's level of interference with directing its personnel towards certain strategic direction and shaping their competences towards future occupational needs. We identify five levels in organization's HRM policies as follows: searching for observable physical and intellectual attributes of employees and selecting employees with a priori superb characteristics; looking for inborn predispositions that are easily upgraded with additional trainings; shaping suitable social context and developing employees into it; governing continuous improvement and social engineering through organizational culture and institutional rules; and finally, managing psychological contracts between individuals and organization.

We analyze survey data provided by professionals on their expectation concerning employees' skills and competencies and expected means of acquiring future skills needed to perform work activities and improve the organization. We find that firms differ in their engagement in shaping their employees' competences, depending on firm size and ownership form; however, there are no differences concerning the perceptions of skills expected from their employees.

Key words: *work organization, labor market, managerial education, employees skills and competencies*

SAŽETAK

Razvoj karijere je važan koncept za razumijevanje razvoja tržišta rada i organizacijskog razvoja. Uobičajeni pristupi rješavanju problema zapošljavanja uključuju regulaciju na razini javnih politika (kroz vladine politike i regulacije) i individualno stjecanje i unaprjeđenje vještina koje zahtijevaju potencijalni poslodavci. U ovom radu skrećemo pažnju na ulogu poslodavaca u tom procesu te predlažemo model s pet razina za procjenu složenosti i tipa odnosa poslodavca i zaposlenika koji definira poslodavčev preferirani način oblikovanja kompetencija i utječe na način razvijanja osobne profesionalne karijere. Naš model također služi kao pokazatelj razine utjecaja poduzeća na usmjeravanje svojih djelatnika u određenom strateškom smjeru poduzeća i oblikovanju osobnih kompetencija prema budućim profesionalnim potrebama. Pet razina je identificirano na sljedeći način: selekcija temeljena na vidljivim tjelesnim i intelektualnim osobinama zaposlenika i odabir zaposlenika s apriori vrhunskim karakteristikama; odabir prema urođenim predispozicijama koje se nadograđuju dodatnom obukom; razvoj i oblikovanje zaposlenika kroz stvaranje odgovarajućeg društvenog konteksta; upravljanje kontinuiranim poboljšanjem i socijalni inženjering kroz oblikovanje organizacijske kulture i institucionalna pravila; i, konačno, upravljanje psihološkim ugovorima između pojedinaca i organizacija.

Analizirana su očekivanja poslodavaca u vezi vještina i kompetencija zaposlenika te načini stjecanja vještina potrebnih za obavljanje i unaprjeđenje radnih aktivnosti. Rezultati analize ukazuju da se poduzeća razlikuju u angažmanu u oblikovanju kompetencija svojih zaposlenika ovisno o veličini poduzeća i obliku vlasništva. Međutim, bez obzira na različita očekivanja vezana uz način stjecanja kompetencija, ne postoje statistički značajne razlike u vještinama koje očekuju od svojih zaposlenika.

Ključne riječi: organizacija rada, tržište rada, obrazovanje menadžera, kompetencije djelatnika

1. Introduction

Croatia is one of the European countries facing serious imbalances in its labor market. At a very high rate of 12.8 in 2016 and an unemployment rate between 16-17.3% in the 2012-2015 period, Croatia holds the third worst position in EU concerning the utilization of its labor potential (after Spain and Greece). Still, according to latest European Commission Unemployment Statistics Report (2017), Croatia registered the largest decreases in February 2017 compared to a year before. Another emerging problem is a deficiency of some, mostly vocational, workers for industries that have started along a path of accelerated growth, such as the hotel and hospitality industry, IT, metal processing and construction. This mismatch of available labor force and employers demand often raises the question of adequacy of the educational and vocational system in Croatia. Labor market imbalances coincide with very negative and long-term demographic trends. Discussions demanding active national demographic policy are actualized from time to time mostly during election times, only to be postponed until another election round. The concerns voiced include high immigration rates, with especially the young and better educated leaving the country and seeking jobs in a better performing economic environment in the western European countries. Such trends in circumstances of feeble economic performance demand an active policy effort in influencing development in labor markets, welfare and economic prospects in general (Herwartz, Niebuhr, 2011). It has been noted that labor market misbalances represent a worldwide phenomenon and that distinct and opposite directions development patterns for different occupations coincide in the same economic period, independently from economic cycles (growth or depression) (OECD, 2015; EPSC, 2016). By consulting recent documents produced as part of research efforts undertaken at European and world scale, it can be observed that the questions troubling Croatian researchers are not unique for our region. The European Commission is quite clear in establishing a rather broad framework in describing contemporary work. The developments in the broader social, economic and technological environments have led to a new conception/paradigm of work, with "work" being explicitly defined

as an “umbrella concept”. Such a definition implies a complexity of factors shaping different aspect of operationalization of work as a concept.¹

Depending on case specific situations, new ideas are needed to predict requirements in skills and competencies that working persons will need in the future. On one side, there a destabilization of employment positions due to process-based organizational arrangements and contracting out for an ever-broader range of services. Some of these temporary employments are occurring through employment agencies, but here is also a constantly growing number of self-employed. Consequently, changes are occurring in the way personal qualification will be defined and so are changes expected in the description of tasks being performed by a specific job position. Lack of available personnel trained accordingly to employers’ expectations is becoming a common phenomenon. On a more theoretical level, as pointed by Dibiaggio (2007), the dilemma is whether some business processes have led to a situation where the division of labor does no longer correspond with the division of knowledge.

Another interesting observation we came upon concerns the implicit “allocation” of responsibility in maintain employability.² Mainly, the studies reviewed suggest that governments are responsible for building safety nets that will help workers transition among jobs and employers. The responsibility for employability is also personalized, as individuals are expected to invest more thought and resources towards maintaining their own “market” value for prospective employers. According to the EC study, governments should take a more active position since “...not all workers have the tools to be equally self-resilient” (EPSC, 2016). It appears that, so far, little has been researched about the role of employers, whether in public or private sector, in “maintain” or even “enhancing” the employability of the employees they are responsible for. As stated in the same study, “...as for workers, the burden of employment is shifted to her/his abilities to adapt and remain relevant, and to ensure adequate access to welfare...“.

2. Starting premises

Studies on labor markets developments in different countries and geographic regions produced by several international organizations report three crucial observations:

1. A diversity of career trajectories is becoming an accepted fact. Variations should be observed in terms of expected salaries, advancement possibilities and durability of expected skills (something like a payback period for efforts invested into obtaining a skill or qualification),
2. Individuals and public authorities are the ones more likely to perceive the employability (career trajectory) problem and become actively engaged in handling it, resulting in our expectation (hypothesis) that
3. Employers can contribute to alleviate the pressure on governments and individuals because they control much of the employees’ actions and time during periods of employment.

Such considerations led us to construct a scale of 5 levels of employee-employer relations. We are referring to the evolution of organization theory approaches when it comes to the attributes employers seek in employees and employers’ (or the manager’s) interaction with the employee:

¹ An ILO research paper (Meda, 2016a) comes out with a significant statement that: “...employment is dying out; the nature of work is changing“.

² Employability is often observed through skills and competencies. In fact, research on labor markets during the past decade has very much revolved around the concept of employability. Van der Heijde and van der Heijden (2006) relate employability to a possession of a combination of occupational skills and generic competences.

- 1- *List of observable physical and intellectual attributes* (classical organization theory premise inclined to seek objectification and controllability of business, mainly production, processes);
- 2- Inborn predispositions *incremented by learned skills* (the nature-nurture extension of the classic idea that for each job description, a best fitting person should be found; basically the idea that we are partly self-made individuals);
- 3- **Social context** (mid-20th century idea of work place psychological influences explaining variation in individual performance: influence of personality, attitudes, feelings and emotions);
- 4- *Continuous improvement and social engineering* (the 90-s, with a focus on organizational cultures and institutional rules governing labor relations made it preferable to maintain same/stable work force; here the focus is still on employers dominantly controlling the individual's career development);
- 5- *Psychological contracts between individual and organization* (individualization of skills/competencies and raising importance of personalized networks); professional career development becoming a dominant preoccupation of individuals, especially those in the position to "choose" placements and employers in creating a desirable CV.

First four phases can be traced through dominant issues drawing the attention of organization theory (and management theory) during the 20th century (Ruona and Gibson, 2004)³. We believe today we are, at least conceptually at fifth phase, which is increasingly becoming actuated in the a 21st century. One of the terms we find suggestive of complexity of social and economic consequences of changes in labor patterns is the term "boundary-less career" used by Van Buren (2003). Moreover, there are explicit acknowledgments of social contract idea in more recent studies (ILO, 2016).

3. Research design

The idea behind this research was that a firm that was able to achieve a higher level on our scale (more complex relations and expectations between employers and employees) will be less likely to expect "ready-made" employees appearing on the markets. Rather, already a phase 3 firm will be likely to "tailor" the development of its human capital, with the "internal efforts" in managing career development continuing to increase as relations develop further into levels 4 and 5. We expect to find correlation among firm size, or even firm ownership with HR practices. The rationale was that larger firms have more expertise and more intensive exposure to hiring situations and therefore will be conceptually more advanced. The same was expected of private firms in comparison to publicly owned organizations.

To estimate employers' attitudes we used survey answers obtained as part of a research project inquiring into the expectation of Croatian companies dealing with the career development of their employees. In the spring of 2016, a survey was conducted on 126 Croatian companies with the purpose of investigating the role of employer in employees' career development. We were also interested in the impact of firm specific attributes, such as size and ownership type, on employers' expectations regarding employees' capabilities, work attitude and behavior related to their professional development.

The sample consists of relatively balanced number of companies in relations to number of employees, and it is divided into five size categories: micro, small, medium, large and very large companies, as described in Table 1a. Regarding ownership, 69% firms in sample are privately owned,

³ Ruona and Gibson (2004) identify three distinct phases of HRM development: Their first, HRM, corresponding to our second phase, their second, HRD (human resource development), similar to our third and their final, OD (organization development), corresponding to our 4th phase.

following by 25% of public companies, and a small number of cooperatives and NGO-s (mostly union organizations). Descriptive statistics on ownership are presented in Table 1b.

Table 1a: Sample statistics according to firm size

Company size		Mean	Std. Dev.	Sample range		Category	
				Min	Max	Min	Max
Micro	20	4.9	2.0749	1	9	1	9
Small	21	22.33	9.1287	11	42	10	49
Medium	34	138.53	49.85	60	233	50	249
Large	26	442.88	152.88	260	861	250	999
Very large	25	1948.52	1465.12	1000	7800	1000	
	126	519.881	974.94	1	7800		

Source: Authors

Table 1b: Sample statistics based on ownership

Ownership	N=126	Mean	Std. Dev.	Min	Max
Private	87	576.67	1119.14	1	7800
Public	32	457.16	547.56	15	1715
Cooperative	3	74.67	104.36	9	195
NGO	4	120.5	219.69	7	450

Source: Authors

The **survey** questions are divided into 4 groups of questions. The first group provides general information on employers and is followed by three groups of questions regarding key competences, general skills and psycho-motoric skills needed to perform jobs in various sectors upon graduation in different fields of economics. The answers to questions on employees' skills and competencies are distributed on a scale from 0 to 5, with zero indicating competency is not needed for the job; while, in Likert scale from 1 to 5, 1 indicating skill or competency is slightly needed (extremely weak need) and five indicating skill or competency is extremely needed for job. The descriptive statistics of results obtained is presented in Table 2.

Table 2: Descriptive statistics on key competencies generic skills and psycho-motoric skills expectations

Group	Key competencies	Obs	Mean	Std. Dev.	Min	Max
Key competencies	Oral communication in mother tongue	126	4.246	0.892	0	5
	Written communication in mother tongue	126	4.246	0.873	0	5
	Math literacy	126	3.714	1.123	1	5
	Computer skills	126	3.651	0.673	2	5
	Dedication to learning	126	4.452	0.873	0	5
	Initiative and entrepreneurial skills	126	3.770	1.253	0	5
	Successful communication and cooperation with others	126	4.540	0.628	2	5
Generic skills	Decision making	126	3.881	1.048	0	5
	Responsibility	126	4.659	0.554	3	5
	Human resources management	126	3.246	1.495	0	5
	Resources management	126	3.754	1.378	0	5
	Team work	126	4.548	0.722	2	5
	Empathy	126	3.643	1.092	0	5
	Persuasion	126	3.968	1.058	0	5
	Presentation skills	126	4.635	0.733	1	5
	Analytic skills	126	4.571	0.731	1	5
	Creativity and innovativeness	126	3.944	1.061	0	5
	Planning and organizing	126	4.365	0.854	1	5
	Customer orientation	126	4.135	1.061	0	5

	Work results oriented	126	4.595	0.622	3	5
	Adaptability	126	4.389	0.790	2	5
	Stress response and emotional self-control	126	4.198	0.867	2	5
	Environmental protection awareness	126	2.825	1.605	0	5
Psycho-motoric skills	Steering precision (with machinery or other equipment)	126	1.183	1.541	0	5
	Coordination of sight and movement	126	2.087	1.565	0	5
	Manual dexterity	126	1.444	1.287	0	4
	Digit dexterity	126	1.651	1.405	0	5
	Response time	126	2.349	1.731	0	5
	Focus attention	126	3.111	1.740	0	5
	Physical strength and endurance	126	1.056	1.310	0	5

Source: Authors

As can be seen from Table 2, employers most highly value skills related to interpersonal relations (i.e. *Successful communication and cooperation with others* (m=4.5, s.d.=0.6) and *Team-work* (m=4.5, s.d.=0.7)). Attitudes towards work are seen to be highly important, which can be seen from *Responsibility* and *Work results orientation*, confirming the importance of achievement motivation, as a factor and term identified by EPSC (2016).

4. Statistical analysis and results interpretation

First, we identify dominant attitude of Croatian employers towards their role concerning employees' training and eventual career development. The results are presented in Table 3.

Table 3: Expectations on pursuing professional development depending on firm size (mlogit regression)

	Firm size	Micro 0-9	Small 10-49	Medium 50-249	Large 250-999	Very large 1000<
Professional development						
Self-development		-0.802 (0.675)	-0.185 (0.732)		-1.226** (0.598)	-0.398 (0.632)
Internally managed development		0.717 (0.639)	0.0264 (0.620)		1.262** (0.634)	0.618 (0.581)
Externally provided employees development		-1.982*** (0.697)	-1.661** (0.685)		-0.670 (0.740)	-0.841 (0.691)
No need for continuous professional development		-16.37 (1,364)	-0.983 (1.264)		-15.54 (1,249)	-1.280 (1.404)
Constant		1.079 (0.853)	0.805 (0.884)		0.307 (0.886)	0.335 (0.848)
Observations		126	126	126	126	126
LR chi2 (12)	= 29.88	Pseudo R2		= 0.0745		
Prob > chi2	= 0.0186	Log likelihood		= -185.50335		

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Source: Authors

The relative probability of a firm expecting employees to manage their own professional development (self-development) decreases with firm size. It is significantly lower in large companies compared to middle sized companies. At the same time, the management in large companies is likely to rely significantly on internally managed employee development in comparison with management in middle sized companies. In addition, the relative probability of a firm stressing comparison with middle sized companies. Although indecisive, results point on higher internally structured human resource management approach as firm size rises. This finding suggests that larger firms are more to rely on internal professional development and external education, rather than directing personnel towards self-crafted professional development.

A paired t-test was run on a sample of 126 companies to determine whether there was a statistically significant mean difference between the expectations related to generic skills needed to carry out assigned work compared to need for psycho-motoric skills needed for the same job.

Table 4: Comparison of expectations related to generic skills vs. expectations on psycho-motoric skills needed

Variable	Observations	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
Generic skills	126	65.35714	.8765346	9.839077	63.62237	67.09191
Psycho-motoric skills	126	12.88095	.7082827	7.950454	11.47917	14.28273
diff		52.47619	1.043238	11.71031	50.41149	54.54089
mean(diff) = mean(sumarno_29_test - sumarno_31_test)					t = 50.3013	
Ho: mean(diff) = 0					degrees of freedom = 125	
Ha: mean(diff) < 0		Ha: mean(diff) != 0		Ha: mean(diff) > 0		
Pr(T < t) = 1.0000		Pr(T > t) = 0.0000		Pr(T > t) = 0.0000		

Source: Authors

Managers evaluated the employees' possession of generic skills (65.36 ± 0.88) more important than obtaining psycho-motoric skills (12.88 ± 0.71). With a statistically significant increase of 52.4761 (95% Conf. Interval, 50.41 to 54.54), $t(125) = 50.30$, $p < .05$, it can be concluded that there is a statistically significant difference between two groups of skills employers expect (or desire) employees to develop prior to employment.

Table 3: Expectations on pursuing professional development when different ownership (mlogit regression)

	Ownership	Private (base)	Public	Cooperative	NGO
Professional development					
Self-development			-1.534***	0.0123	15.10
			(0.477)	(1.296)	(1,580)
Internally managed development			-0.137	16.01	-2.077*
			(0.515)	(1,755)	(1,201)
Externally provided employees development			1.449**	-1.786	16.23
			(0.670)	(1.273)	(1,561)
No need for continuous professional development			1.773	-0.386	1.464
			(1.127)	(7,058)	(5,244)
Constant			-1.264*	-17.91	-32.64
			(0.739)	(1,755)	(2,221)
Observations		126	126	126	126
LR chi2 (12) =	39.04	Pseudo R2 =	0.1931		
Prob > chi2 =	0.0001	Log likelihood =	-81.571575		

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Source: Authors

The relative probability of expecting employees to invest (private time and money) in professional development and be dedicated to self-development is 21.6% lower in public companies compared to private companies⁴. In addition, the relative probability of a public employer sending employees to externally organized trainings is 325.86% higher than the case in private companies. In short, private companies lean on employees' intrinsic motivation for personal professional development and desire

⁴ Relative probabilities are similar to log of odds (in this case the value is -1.534).

to contribute to the overall company's goal while public companies rely more on external education providers in directing (and shaping) personnel professional development.

When it comes to employers' expectations on key competencies of their employees, expectations were indicated as high and were equally dispersed across the sample, and did not vary in relation either to firm size or firm ownership type. The regression analysis showed no statistical difference in the expectations of employers in larger or smaller firms.

The same applies when analyzed probability of expected level of generic skills in micro, small, medium, large and very large firms. Nevertheless, we consider interesting finding that there is no statistically significant difference in expectations regarding generic skills such as responsibility, creativity and innovativeness, and stress response and emotional control needed, as well as human management skills and resource management skills across different sized firms.

To conclude, in line with previous results, learning paths for acquiring competences differ in conformance to firm size and ownership structure. However, independent of firm size or ownership, employers value the same resulting competencies, most of which are helpful in managing interpersonal relations.

5. Conclusion and comments

This research was aimed at assessing the stage of development of human resource management approaches in Croatian firms. Smaller firms were expected to rely more heavily on formal educational programs that provide employees with the needed qualifications up-front; once employed, the employee is expected to individually manage his/hers own career path. On the other hand, larger firms put more emphasis on internally managed professional development that is purposely designed to serve organizational goals. In that aspect, we might establish that there is a tendency of larger firms to function in line with stage 4 of our employer to employee relations scale. Our research so far, does not enable us to precisely position the smaller firms in the HRM development scale. It is possible that a number of small firms, being more entrepreneurially oriented, especially the ones employing professionally highly skilled and self-motivated employees, do fall in the so called "social-contract" mode in our categorization of HRM development practices. Even though we would expect most of the smaller firms not to act so progressive, rather focus on surviving, they are exploiting current insufficiencies and imbalances on labor market and, due to lack of sources available to invest directly into personnel development as a firm, they raise expectations on employees to self-direct their individual professional career paths. Basically, this paper has clarified possible paths for future research.

Regarding employers' preferences in terms of employees' abilities, skills and attitudes, we identify the predominant perspective that employers exhibit in assessing prospective employees. Based on answers obtained in a survey of employers' expectations regarding capabilities and motivation of employees obtained through tertiary education, differences related to firm size or ownership between groups in our sample are not statistically significant.

The policy implications of our findings can be manifold. Even though this research only provided indications, companies, depending on their technological and market position, have different expectations when it comes to the competencies they expect their employees to have upon recruitment. There is consensus on the profile of knowledge, but there are different attitudes as to how employees are to attain the competencies that will be required as their employer evolves. This is apparently supported by the difference towards the attitudes expected in different firms (to be confirmed by further research), since smaller firms (which we consider to have a dynamic strategy orientation) expect their employees to be self-guided in: firstly, perceiving, then articulating the firms' needs and,

finally, finding the path, whether process or provider, that will help him/her become the pertinent professional. This finding can be interpreted as a suggestion for educational authorities for providing a flexible life-long learning education system better suitable for individually crafted developmental path at different phases of career development.

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