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Organizational Mental Map and Conative Competences

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Employees with their knowledge, skills, behavior and personal traits impact the organizational learning. The concept of organizational mental map and conative competences, as inborn underlying characteristic that is influenced by employees being involved as well as endogenous and exogenous factors, is presented. Three Slovene small to mid-sized companies were studied in respect to the individual factors, especially conative competences, of their employees. The study suggests that conative side of mind and thus conative competences can actually influence the organizational learning. What matters in contemporary management practice is how hidden potentials are set free and how they intrinsically motivate employees according to their personal differences in capabilities. As conative competences are inborn and can not be learned but only encouraged, contrary to cognitive competences, it is important to better understand employees' personal traits.

Key words: organizational learning, SME, conation, conative competences, organizational mental map

1 Introduction

Learning has been coherent to human beings from the ancient times. It depends not only on the process of socialization, first in the family and then later on in school, at work and other forms of social encounters, but also on personal characteristics. Nowadays, is the organizational learning becoming one of the most important contemporary managerial concepts.

Organizational capacity of learning is based on the combination of many factors. Besides exogenous factors, i.e. social, cultural and economic environment and endogenous factors, i.e. relationships within organization, also the individual factors, i.e. personal traits of employees have influence on the organizational capacity of learning, learning outcome and corporate performance. It is argued that this is even more important in post-transition economies, because they face, after market liberalization, many previously unknown challenges of increased competition and unprecedented changes in culture and social life.

The purpose of this paper is to develop a better understanding of organizational learning and personal traits in post-transition economy of Slovenia. It is focused on the personality of employees within studied organizations rather than the concept of learning organization itself. The paper aims to answer the question whether all competences can be learned or some inborn competences already exist. Non-teachable attributes of employees, i.e. personal traits embedded in conative competences are investigated and the model of conative competences which aims to explain the impact of individuals on the organizational learning capacity is introduced.

The paper is structured as follows: first to establish the conceptual basis that guide the study and then it is tested empirically on a sample of companies. Finally, the results are discussed, pointing out the main limitations of the study and indicating possible future lines of research.

1.1 Objectives of the study

The main objective of this study is to analyze employees' non-teachable personal traits in small and medium sized enterprises in the post-transition economy of Slovenia and their influence on organizational learning. Research question which is dealt in this study is influence of individual factors and in particular inborn personal traits on organizational learning hence we analyzed the existence and influence of individual factors and in particular inborn personal traits on organizational learning. Moreover, we study employees' skills, knowledge and behavior which are clustered in a model of competences. Thus the model of organization mental map was contrived. The proposed model of competences is based on tripartite dichotomy of mind: cognitive, behavioral and conative competences, all being a part of organizational mental map. The conative competences of all employees in the sample are measured with the Kolbe A™ Index and

results compared to their job-related self-expectations measured by Kolbe B™ Index.

Hypothesis was set:

H: conative competences as a part of organizational mental map vary in different organizations.

2 Organizational learning

The concept of organizational learning is not new and the purpose of this article is not to clarify differences between the concept of organizational learning and related concepts of learning organization, knowledge management, and organizational knowledge. Reader is referred to Easterby-Smith and Lyles (2003) who provide a comprehensive and systematic mapping of the area and differentiate among the four terms. Organizational learning is engaged with the studies of learning processes of organizations, learning processes within and between organizations, hence the learning organization is considered as a form of organization - an entity.

De Geus (1988) claims that the ability to learn faster than your competitors may be the only sustainable competitive advantage. The concept of single-loop and double-loop learning was introduced; single-loop learning happens when errors are corrected through a feedback loop, and double-loop learning is cognitive and means development of principles that may inform and determine future organizational behavior and lead to new ways of doing business hence it goes beyond the immediate solution (Argyris, 1977, 1992; Argyris and Schön, 1978). Sengežs (1992) concept of adaptive learning is cantered on evolutionary changes in response to developments in the business environment which are necessary for survival of organization. On the other hand, generative learning means building new competences or identifying and creating opportunities based on leveraging existing competences. Huber (1991) sees that as a combination of four processes: information acquisition, information distribution, information interpretation, and organizational memory.

In experiential learning, the Kolb model (1984) is widely used. Concrete experience (receptive modality), reflective observation (perceptual modality), abstract conceptualization (cognitive modality) and active experimentation (behavior modality) are elements of Kolbžs learning cycle. Knowledge, behavior, and effective side are considered.

In fact, learning is both organizational and individual, the former relying heavily on the latter (Kamoche, 1997). Learning arrangements that exist within the organization influence individual learning and they can accelerate or slow down the learning process. These arrangements for learning are called "organizational context" (Stonehouse and Pemberton, 1999) and should be considered in individual learning as well.

Lam (2001: 213) decomposes the process of learning in organizations in: getting information, distribution of information, interpretation of information, and flowing of shared and interpreted information into organizational memory. Senge (1992) introduces the concept of mental model and personal mastery. When individuals consolidate their personal mental models into a systematic thinking by realigning personal beliefs, values and behaviors into shared representations of reality, then it becomes a public forum. It happens through dynamic and collective experimental learning. Individualistic orientation is slowly giving way to shared vision and team learning; however, intrinsic personal differences in capabilities and motivation make the difference. According to Lam (2001: 214) different individuals in the organization may be appealing to different types of knowledge acquisition. Most find new insights from past experience helpful in their search for fresh references. They may also engage in trial and error experimentation to locate the best possible way of handling new situations.

Organizations have according to Hegberg (1981: 6) conscious systems and memories. Hegberg (1981) likens it to human beings, so he claims that organizations can change and develop their personalities, habits, beliefs, and ideologies over time. He claims that organizational memories preserve certain behaviors, mental maps, norms, and values. So, do individuals adapt or do they still bear some unchangeable personal traits and which are they? And if there are some inborn personal traits how stressful is for individuals to adapt? Is the behavior stored in organizational memory in contradiction to their own?

2.1 Conative competences

Organizations strive for committed employees who identify themselves with organizational challenges and expect from them to have attitudes, personal traits and values which ensure commitment and identification. Without that commitment, much of the learning, especially at the group level, cannot take place (Ashton, 1998). Intuitively, the competence concept is closely connected to organizational learning.

The competence concept was investigated by many authors (Ellström, 1997; Ulrich, 1998; Mansfield, 1999; Miller et al., 2001; Jacobs and Pons, 1993; Deakins and Freel, 1998, Christensen, 1998; Downes and Mui, 1998). Drejer (2000) perceives organizational core competences as a dynamic concept due to inherent disruptive changes which can be "competence-destroying" as well as company-destroying. Drejer (1996) further reasons the dynamics of core competences' changes in the product-market strategy. Drejer and Riis (1999, 2000) define the competence as consisting of four elements and their relations – technology, people, organizational structure and organizational culture.

OECD (2000: 67) definition of competences focuses on functional approach which places complex demands at the forefront of the concept. According to this viewpoint, competences are structured around demands and tasks. However, defining types of competences in more detail would go beyond the purpose of this paper. The reader is referred to Draganidis and Mentzas (2006) for further information.

Focus of this paper are not functional competences, often linked with occupational standards, but personal competences. We use the division of competences into behavioral ("soft") competences and technical or functional ("hard") competences (Miller et al., 2001). It is claimed that hard competences combine skills and knowledge (cognitive side of the mind), and soft competences circumvent the behavioral aspect (affective side of the mind). We argue that conative competences help to explain better learning process in organization. Extracting conative competences from cognitive and behavioral ones explain not only "…source of actions in your deep inner nature, but also shows you how to build on those strengths" (Kolbe, 1997: 4). Kolbe 1997) claims that human beings have a conative style, or a preferred method of putting thought into action or interacting with the environment. It is separated from a person's intelligence or personality type. Conation as an emerging concept can help to clarify the competence model. Conation is close to the concept of volition, defined as the use of will, or the freedom to make choices about what to do (Kane, 1985). Some authors perceive conation as a proactive aspect of behavior (as opposed to reactive or habitual) which is the personal, intentional, deliberate, goal-oriented or striving component of motivation (Baumeister et al., 1998; Emmons, 1986) or as the tendency to take purposive action toward goals (Snow, Corno and Jackson, 1996). To summarize several definitions, conation could be defined as the volitional steering of action toward some goal.

However, when explaining conation, the problem we face is that conation is difficult to separate from cognition, emotion and behaviour (Snow, 1989). Moreover when measuring cognition or emotion, conative components are often interweaved. For example, the Wechsler scales of intelligence include a conative component (Cooper, 1997; Gregory, 1998). The Goleman's construct of emotional intelligence includes both affective (e.g. empathy, optimism, managing emotions) and conative (e.g. setting goals, self-regulation) components (Goleman, 1995). On the other hand, some authors claim that conation has cognitive and affective, as well as volitional, components (Gollwitzer, 1990; Snow & Swanson, 1992).

We claim that conative competences represent inborn, almost instinctive part and are as such most stable ones. On the other hand they can not be learned unlike cognitive and behavioral competences. Conative competences can only be fostered.

Conative competences compose together with cognitive and behavioral competences the organizational mental map. Organizational mental map is a dynamic concept which represents all employees who are involved in the process of achieving corporate goals. It can change through time in accordance with employees' dismissals or by adding new employees. On the other hand, it depends on organizational learning process, codified knowledge (as explicit one) and tacit knowledge, intellectual property (patents, trade marks) and relational capital in the form of formal know-how and know-what (see Figure 1).

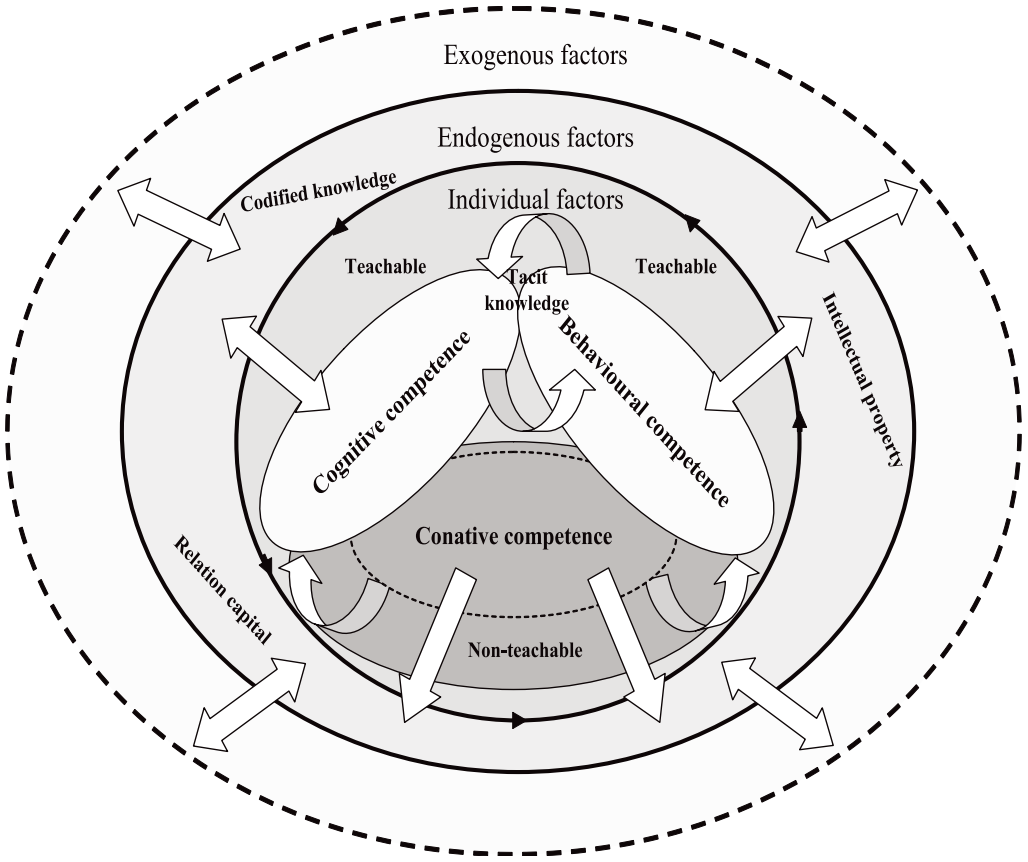


Figure 1: Impact of exogenous, endogenous and individual factors on organizational mental map

It depends on individual factors whether organizational learning process will be static or dynamic. Lam (2001) claims that there is sufficient empirical evidence supporting the assertion that retaining status quo is far more normal phenomenon for an organization than its engagement in change, given that there are sufficient historical, institutional and performance factors that encourage individual and organizational inertia. Propensity of organization to changes and prompt adaptation to speeding up changes in environment (exogenous factors) depends on mentioned individual factors, clustered in organization mental map. Individual factors influence endogenous factors as well. It is employees who will inspire systems and processes within organization. According to Kavčič and Tavčar (2008) long-term orientation of the organisation depends on the organisation culture, management philosophy, and long-tern and enduring choice of resources (capital, work, knowledge).

Exogenous factors disrupt such state of equilibrium. They cause organizational stress (Dill, 1958; Hall and Mansfield, 1971) which influences individuals and they respond with adaptation to such organizational strain. External threats (Amburgey et al., 1990) are "logic of action" at the institutional, managerial, and technical levels (Bacharach et al., 1996) or basis for intensive negotiation for a new order.

3 Research

In this section, research methodology, data of analyses and discussion are presented.

3.1 Research methodology

For the purpose of this study, a sample of three randomly selected Slovene SME companies is used. Our sample consisted of 43 top and middle managers, out of that 20,9 % were female and 79,1 % male respondents. At the time of our study, 69,8% were over 30 years old, 44,2% had more than 10 years of work experience and 30,2% of them had college education. Sample is presented in Table 1.

Table 1: Sample characteristics

	Company 1		Company 2		Company 3		Total	
	No.		No.		No.		No.	
Sample size	*28*	*100%*	*8*	*100%*	7	*100%*	43	*100%*
Prior education level								
Secondary/high school	22	*78,6%*	8	*100%*	0	*0,0%*	30	*69,8%*
College/university	6	*21,4%*	0	*0,0%*	7	*100,0%*	13	*30,2%*
Work experience								
10 years or less	13	*46,4%*	5	*62,5%*	6	*85,7%*	24	*55,8%*
Over 10 years	15	*53,6%*	3	*37,5%*	1	*14,3%*	19	*44,2%*
Age								
30 years or less	8	*28,6%*	4	*50,0%*	1	*14,3%*	13	*30,2%*
Over 30 years	20	*71,4%*	4	*50,0%*	6	*85,7%*	30	*69,8%*
Gender								
Female	4	*14,3%*	2	*25,0%*	3	*42,9%*	9	*20,9%*
Male	24	*85,7%*	6	*75,0%*	4	*57,1%*	34	*79,1%*

The companies in the sample were chosen in a random manner in different sectors of industry:

- Company 1: Engineering and related technical consultancy.
- Company 2: Cutting, shaping and finishing of ornamental and building stone.
- Company 3: Legal, accounting and market research.

Four of respondents were excluded from further analyses because their natural instinctive abilities could not be recognized.

Implemented assessment tools were the Kolbe A™ Index as a measure of inborn personal traits clustered in conative competences and the Kolbe B™ Index as a measure for an individual's job-related self-expectations. Kolbe A™ Index is according to Kolbe (2003) reliable and valid tool in terms of test-retest. According to the Kolbe Corporation, there is no bias in gender, age, race, or national origin in Kolbe instrument results (for more details see Kolbe Corporation Statistical Handbook, 2003 and 2004).

Kolbe suggests that human beings have a conative style or a preferred method of putting thought into action or interacting with the environment. It is our knack of get-

ting things done, achievement aspect of ability, the process through which we fulfill our goals (Kolbe, 1997).

Kolbe identifies four Action modes™ or conative modes through which we act with different intensities and can be determined with the Kolbe A™ Index (conative reality):

- FF - Fact Finder - instincts to probe, refine, and simplify, which is based on instinctive need to probe and relates to the way we gather information.
- FT - Follow Thru - instincts to organize, reform, and adapt, which is based on instinctive need to pattern and deals with the way we organize information.
- QS - Quick Star - instincts to improvise, revise, and stabilize, which is based on instinctive need to innovate and how we deal with unknowns.
- IM - Implementer - instincts to construct, renovate, and envision, which is based on instinctive need to demonstrate and relates the way we seek tangible solutions.

The degree of intensity each individual has in an action mode is defined on a scale from 1 to 10, with 10 being the most intense (Kolbe, 1997). Each mode has three zones of operation on a scale of 1 to 10 (Kolbe, 2004). In Preventive zone (1 to 3) one prevents problems, in Responsive zone (4 to 6) one acts in an accommodating way and in Initiative zone (7 to 10) one initiates solutions. The Kolbe A™ Index has become popular for different business applications, such as career development, interpersonal relationship management, personnel selection, team management, consulting, and training (Wongchai, 2003).

Possible conflict can be studied by comparing Kolbe A™ Index results of different individuals with those individuals with different instincts that cross each other's progress by insisting on their own paths to problem solving. Kolbe claims that there would be stress between individuals working directly with one another if they have a difference of 4 or more in any mode (Kolbe, 1997). Strain on the job can be spotted if Kolbe A™ Index results are compared to Kolbe B™ Index results, which measures individuals job's self expectations. Strain occurs when an individual tries to live up to false self-expectations (Kolbe, 1997).

Some authors claim that more research is needed to explore how Kolbe A Action Modes™ can be used to predict learners' attitudes and achievements. Wongchai (2003) based on limitations of her studies concluded that Kolbe A Action Modes™ did not predict how well did learners liked content formatted to match learning styles of mentionef four modes, nor how well learners remembered the content regardless of the format. Harper (1997) researched learning strategies of high school students with Kolbe™A Index. Her findings show correlation with learning strategies and Fact Finder and Follow Thru action mode. No findings were related to Quick Start and Implementor.

3.2 Data analyses

Due to small sample we calculated median values for conative competences for Kolbe A™ Index results and Kolbe B™ Index results (Table 2) .

Median value of Kolbe A™ Index results and Kolbe B™ Index results differs in particular companies.

Table 2: Median values for conative competences for Kolbe A™ Index results and Kolbe B™ Index results

			FFa	FTa	QSa	IMa	FFb	FTb	QSb	IMb
Company 1	N	Valid	28	28	28	28	28	28	28	28
	Median		5	5	4,5	4	5	6,5	4,5	4,5
Company 2	N	Valid	7	7	7	7	7	7	7	7
	Median		7	5	6	4	5	6	6	3
Company 3	N	Valid	7	7	7	7	7	7	7	7
	Median		6	4	4	6	4	6	4	8

Because we wanted to calculated standard deviation mean values were calculated. Thus mean values for conative competences, and standard deviation for all four action modes, measured by the Kolbe A™ Index are presented in Table 3, and Table 4.

In FF action mode, the employees in Company 3 exhibit the highest mean value (FF = 6,1). The highest mean value in FT mode have employees in Company 2 (FT = 5,2). Employees in Company 3 have the highest mean value in QS action mode (QS = 5,6) and the highest mean value in Company 2 in IM action mode (IM = 5,3). Standard deviation is the highest in Company 1 in all four Action modes™, except in IMa Action mode™ in Company 2, which could be attributed to industry, company is in. In other Action modes™ standard deviation is lowest in Company 2.

In Table 5, the mean values for an individual's job-related self-expectations measured by Kolbe B™ Index are presented.

Employees in Company 3 exhibit the highest mean value for an individual's job-related self-expectations in three action modes (FF = 5,0; FT = 6,6; QS = 5,7). In IM

Table 3: Mean values for conative competences

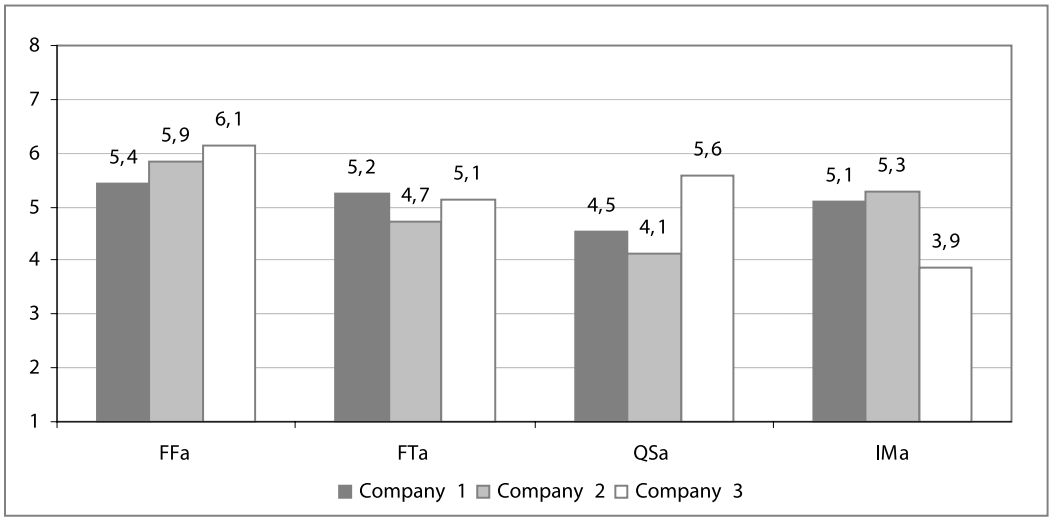
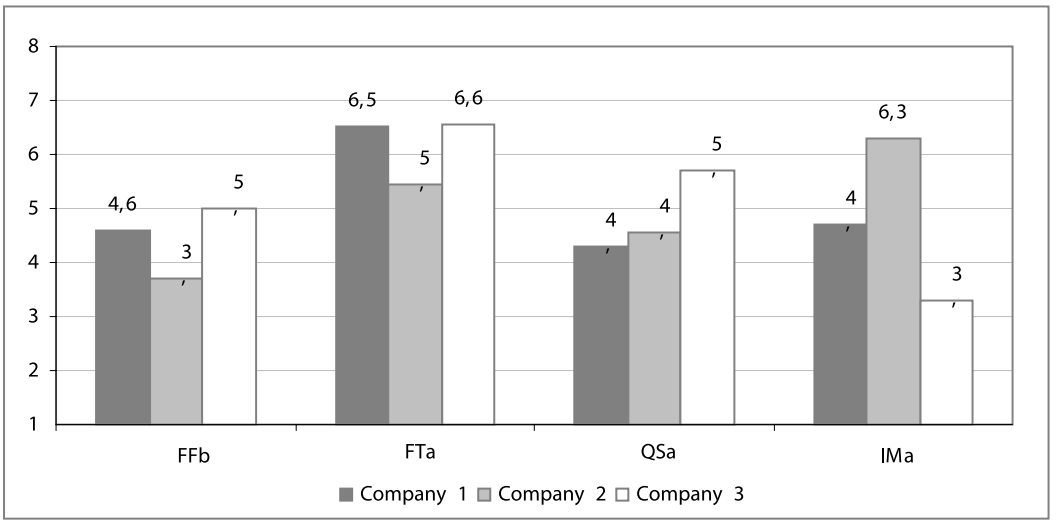


Table 4: Mean values and standard deviation for conative competences

Company		FFa	FTa	QSa	IMa
Company 1	Mean	5,44	5,24	4,52	5,08
	Std. Deviation	1,60935	1,3626	1,68622	1,73013
Company 2	Mean	5,8571	4,7143	4,1429	5,2857
	Std. Deviation	1,06904	0,95119	0,89974	1,88982
Company 3	Mean	6,1429	5,1429	5,5714	3,8571
	Std. Deviation	1,06904	1,57359	1,71825	0,89974
Total	Mean	5,641	5,1282	4,641	4,8974
	Std. Deviation	1,44162	1,32147	1,61387	1,68265

Table 5: Mean values for an individual's job-related self-expectations

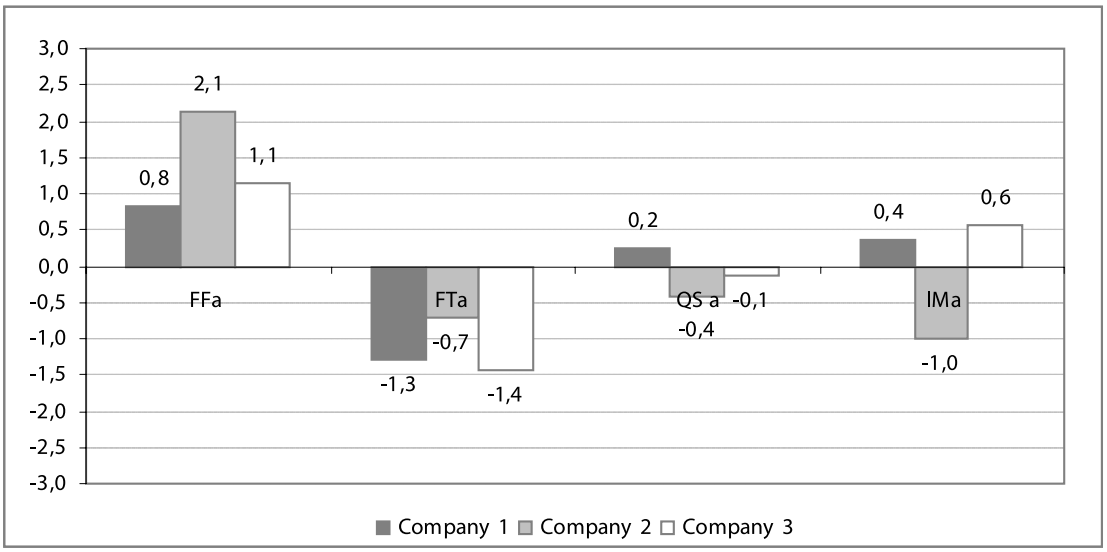


action mode, the mean value for an individual's job-related self-expectations is the highest in Company 2 (IM = 6,3)

Mean values for conative competences measured by Kolbe A™ Index and mean values for an individual's job-related self-expectations measured by Kolbe B™ Index are compared and the result shown in Table 3.

For FF conative action mode are differences in mean value for conative competences and mean value for an in-

Table 6: Comparison of mean values between Kolbe A™ Index results, and Kolbe B™ Index results



dividual's job-related self-expectations the highest in Company 2 (FF = 2,1). In FT conative action mode, the difference is the highest for employees in Company 3 (FT = -1,4). By comparing all four action modes it is observed that the difference is the lowest in all three companies in QS action mode. This action mode is most leveled, however employees in Company 2 exhibit highest difference (QS = - 0,4). And in IM conative action mode, the difference is the highest in Company 2 at (IM= -1,0).

3.3 Findings and discussion

Beside cognitive (hard) and behavioral (soft) competences, conative competences have influence on learning organizations as well. However focus of this article were conative competences. With conative competences we touch innate, inborn part of competences.

The hypothesis was confirmed. According to median and mean values of conative competences, measured by Kolbe A™ Index, conative competences as a part of organizational mental map vary in different organizations. Mean value for conative competences measured by Kolbe A™ Index reveals that employees in Company 3 have the highest inclination to gather, analyze, research and probe information (conative FFa action mode) .We attribute this to the industry characteristics (consultancy firm). Most leveled in all three companies is conative competence to plan and organize (conative FTa action mode). Instincts to improvise, revise, and stabilize, which is based on instinctive need to innovate (most commonly cited personal traits of entrepreneurs) is the highest in Company 3. Employees in Company 3 easily deal with unknowns (conative QSa action mode). Employees in Companies 1 and 2 have high mean result in their instincts to construct, renovate and envision (conative IMa action mode).

Differences in mean values for conative competences measured by Kolbe A™ Index and mean values for an individuals' job-related self-expectations measured by Kolbe B™ Index reveal possible source of organizational strain in the process of organizational learning. Moreover, it reveals origin of inferior performance. Mean value for an individual's job-related self-expectations is lower than expected in all three companies; this difference is the highest in Company 2. It means that employees, before making any decisions, need more time to analyze, research and justify than according to their job requirements one would expect. This is very important for organizational learning process and it reveals impediment in learning process. All three companies have lower mean value for individual's job-related self-expectations than for inborn conative competences. It means that employees feel that they must stick to procedures and plan more than according to their natural, inborn inclination. Bottom line results reveal that employees in all three companies would like to take more time and analyze and research before they reach decisions. They would not stick to procedures as much as it is expected from them. In dealing with unknown, they suffer the least strain.

The results of the study suggest that personal traits influence learning organizations regardless the model, i.e. double loop learning, adaptive learning or Kolb's model of experimental learning in the way that employees try to adapt to job's expectations. They can adapt cognitive and behavioral competences but conative competences can only be fostered. They can not be changed but would influence not only organizational learning process but also corporate performance in the end.

However, the results of the study suggest that combination of conative competences can have different impact on individual companies. What matters in contemporary management practice is how hidden potentials are set free and how they intrinsically motivate employees according

to their personal differences in capabilities. Hence, in day to day operations individual personal traits should be carefully considered.

4 Conclusions and future research

Sample is to small to extract general conclusions and the results of the study should be interpreted with caution.. It is still work in progress, and further longitudinal researches are needed. Omnipresent question of causality of variables of organizational learning influences results as well, thought in conative competences only with level of adoption, considering they are inborn part of personality. Interpretation of our analyses should take into account that only representatives of some sectors were analyzed and thus should be interpreted with care. Despite these limitations, the authors believe that the study helps to understand better organizational learning in general and provide insightful directions for advanced studies in this area. Moreover, it shows how conative side of mind and thus conative competences can actually influence the organizational learning. Individual responses to changes differ on the account of competences, especially conative ones. We argue that acquiring these competences is an on-going, lifelong learning process.

Individual factors as component of organizational mental map are dynamic and are changing according to people being involved, as well as endogenous and exogenous factors. Cognitive competences can be learned, and behavioral competences can be acquired through process of professional socialization. Contrary to that, conative competences are inborn and can be only fostered.

Further longitudinal research to measure the level of adapting on national level and address the issue of causality, especially in transition economies, is needed. Proposed model of organizational mental map and conative competences should be perceived as a continuation of interesting journey into organizational learning. Discussed issue should be studied with elevated care in Slovenia and in other transition economies due to its potential and as a possible way to catch up with more developed economies.

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