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What Factors Predict the Values of an Organization and How?

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Abstract

The objective of the present paper is to outline the regularities in the formation of organizational values. New organizational values measurement tool – Organizational Values Questionnaire was developed by author of the paper. A study of organizational values in Estonian organizations took place in the period 2004–2008. Values were analyzed in terms of the Competing Values Framework, according to which organizational values could be qualified into four broad categories (Open System, Rational Goal, Internal Processes and Human Relations). A binary logit regression analysis was applied in order to test the impact of industry, organizational size and age on organizational values. The findings of the study demonstrate that both contextual and organizational determinants are significant predictors of organizational values; however, different factors do not have equal power in explaining organizational values. It became evident that the impact that industry had on organizational values was the greatest, but size of organization is also a significant predictor of values. Although arguments about organizational age as a determinant of organizational values have been given in the literature, our study

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showed that organizational age does not predict organizational values in Estonia. This finding may be explained by the path dependency of the country because the processes that have taken place in a society certainly have an influence on organizations. The findings of the present study reveal some regularities about the influence of contextual and organizational factors on organizational values, but they also encourage organizations to discover the potential for shaping their values in order to ensure the survival of the organization in complicated times and its development in that particular environment.

JEL Classification: M14

Keywords: organizational values, determinants of values, Competing Values Framework, Estonia

1. INTRODUCTION

Organizational values reflect the beliefs and understandings of individuals or groups about the means and ends of the organization (Enz, 1988), and because values are socially validated and shared they predict much of the behaviour of organizational members (Schein, 2004). The formation of organizational values takes place within the sphere of influence of external and internal forces, and therefore, a combination of several important determinants should be taken into account in order to understand the rationale behind the values held by organizations. Literature on the topic of the formation of organizational values (especially in respect to some determinants of values) is abundant, but empirical research seldom focuses on those particular factors, and moreover, studies usually focus on only one factor. To better understand how to cope with internal and external pressures, especially in a turbulent organizational environment, it is important to understand the extent to which different factors may influence organizational values and how.

There is a long tradition of research into organizational values in Western countries, but no systematic overview and analysis of the topic has been made in transition countries like Estonia. Because of its historical background and the transition processes of the last two decades, Estonia makes a good case for studying the impact of environment as well as several organizational characteristics on organizational values. Estonia was occupied for almost fifty years and since the situation started to change at the end of the 1980s, Estonia has experienced rapid and radical economic reforms and development, which have placed organizations in an intriguing context. It put pressure on old organizations to change and provided opportunities for newly founded organizations to implement structures and organizational forms to fit the turbulent and dynamic environment (Vadi and Vedina, 2007). Therefore, Estonia provides a good opportunity to analyze, for example, whether organizational values in new organizations, which were established on new foundations after Estonia regained its independence and the ideas of the market economy were accepted and applied in economic activities, differ from the old

organizations that were formed under the Soviet system. The present research focuses on Estonian organizations, and although other transition countries may have experienced a similar path of development, limitations in making generalizations about organizational values should be taken into account. Still, every study is important because it enriches our understanding of the field: the present study contributes to future studies because it brings organizational and contextual factors into the one framework, and analyzes how these factors influence organizational values under particular circumstances.

The present study analyzes the impact of the industry, age and size of the organization on organizational values, because on the one hand, these factors have been considered as important determinants of organizational values in the literature, but on the other hand, studies on the impact of these factors on organizational values are quite fragmented. We believe that combining and analyzing their influence in the scope of a single study advances our understanding of the magnitude of the influence that those factors have on values.

While the variety of values adopted by organizations is notable, it is reasonable to create categories and analyze values in terms of types. It has been argued that typologies help to make sense and provide some order out of observed phenomena (Schein, 2004: 190), and they also facilitate comparisons between different organizations based on counter-intuitive empirical data (Furnham, 2005). In the present study the types of organizational values will be defined as an aggregate of values organized along certain dimensions. In this respect the types of organizational values always remain abstract because the types can never be exhaustive.

The Competing Values Framework (Quinn and Rohrbaugh, 1981) has been used in the present study as a frame of reference. This framework captures the dimensions of flexibility/stability and the external/internal focus of organizations and makes it possible to distinguish between four types of organizational values. *The Open System type* encompasses values such as flexibility, external organizational orientation, adaptability, the capacity to change, uniqueness and an orientation towards customers (Cameron and

Quinn, 1999). *The Human Relations type* of values is supported by an internal focus, cohesion, morale, trust and belongingness (Kalliath et al. 1999). The central values of the *Rational Goal type* are planning, productivity, efficiency, competition, stability and control over external matters as ends (Cameron and Quinn, 1999). Stability, consolidation, control, formalization and centralization are core values of the *Internal Processes type* (Lamond, 2003). The dimensions that form the framework have been considered important for organizations by different authors (e.g. Schein, 1983; Trice and Beyer, 1993). Moreover, in today's globalized and turbulent environment, the question of being flexible or pursuing stability, but also the issue of where core resources of the organization are embedded (whether opportunities for effectiveness proceed from the organization itself or from the external environment), are critical for every organization.

The paper is structured as follows. Firstly, a brief summary of the existing literature on the impact of industry and organizational characteristics on organizational values will be provided and the research propositions will be set up. Then a description of the sample, method, overview of the development process of organizational values measurement tool and a presentation of the results will follow. The paper concludes by discussing the findings.

2. DETERMINANTS OF ORGANIZATIONAL VALUES

Discussions in the literature about the determinants of organizational values are notable and diverse. Some authors (e.g. Gagliardi, 1986; Schein, 2004) have seen the role of the founder, leader and organizational members as the most significant in organizational values development, but at the same time there are also critics that are against focusing on internal matters rather than on the external, societal and cultural context within which the organizations are embedded (Martin, 1992). Besides organizational actors, the external environment (e.g. national culture and industry) has a significant impact on organizational values. Moreover, we

argue that organizational characteristics like size and age could be seen as factors that mediate the influence of internal and external factors on organizational values.

It has been argued that organizations are founded on industry-based assumptions about customers, competitors and society, and from those assumptions certain values are derived which serve as the basis for the strategies, structures and processes needed for the survival of the organization (Gordon, 1991). Therefore, it could be assumed that organizations that operate in a same industry are quite similar in terms of their values because the specific environment and regulatory demands of the industry prescribe what kinds of structures organizations implement or what the orientation of the organization should be. An organization's accordance with its environment is important for maintaining legitimacy, surviving and developing (Christensen and Gordon, 1999). The influence of industry on organizational values has recently been demonstrated in several studies (e.g. Silver, 2003; Savič and Pagon, 2008; Wright, 2005), but still, studies that can draw conclusions on the basis of wide-ranging comparisons at the industry level are not frequent, and therefore, most studies offer limited conclusions about industry effects on organizational values.

Dastmalchian et al. (2000) have found that organizations operating in manufacturing, finance, trade, hospitality, communications, utilities and health and social services differ a great deal in terms of their organizational culture. There are several studies that provide empirical evidence of organizational values dominating in particular industries. For instance, market oriented values tend to be most characteristic of manufacturing companies (Dastmalchian et al. 2000), but also some service organizations (Chatman and Jehn, 1991). It has been proposed that the organizational values in service organizations depend on the technologies implemented – service sector organizations from industries with intensive technologies are more people oriented than outcome oriented, but service organizations in industries with long-linked technologies will be characterized more by outcome oriented than people oriented values (Chatman and Jehn, 1991). The Internal Processes type of values has been found to be most common among organizations operating in the public sector (Parker and Bradley,

2000), utilities (Dastmalchian et al. 2000); healthcare (e.g. Dastmalchian et al. 2000; Lok and Crawford, 1999; Savič and Pagon, 2008) and in prisons (Wright, 2005).

However, in some sectors it may be complicated to point out the dominant values – for instance education seems to be a case in point. While analyzing educational organizations from the perspective of organizational culture a divergent picture may be captured. It has been even argued that universities do not have an organizational culture at all; rather universities should be interpreted as a set of subcultures (Silver, 2003). Summarizing the statements of several authors Ellström (1983: 231) describes educational organizations as orderly and rational bureaucracies, characterized by a hierarchical and coordinated structure while at the same time ambiguous and loosely coupled. Fragmentation, bureaucracy and individualism have also been stressed by Froman (1999); moreover, Bartell (2003) shows that the goals of *academia* are often unclear, differentiated and fuzzy. Although they primarily hold the values of tradition, higher education organizations are now experiencing pressure to show organizational innovation (Obenchain et al. 2004), which certainly may have an impact on their values. Examples of how changes in the general environment have influenced ideologies of industries can also be brought from different sectors (see for example Gordon, 1991).

The impact of organizational age and size on organizational values has received less attention in the research compared to contextual factors, and often the literature on the implications of organizational age and size for organizational values follows theoretical argumentation, and so empirical research on this topic is rather modest. There are several approaches for measuring organizational size (including for example, physical capacity, measures concerning input and output, and financial resources pointed out by Evers et al. 1976; Price, 1997; Camison-Zornoza et al. 2004). In the present paper we define organizational size using the number of organizational members. We believe that from the organizational culture and values perspective, the number of organizational members is an appropriate measure of organizational size because organizational culture is a social phenomenon and could not exist without people. Furthermore, the

number of organizational members explains organizational structure and its complexity (Evers et al. 1976). Traditionally only employees are considered under the term *organizational members*, but in this paper organizational members are defined as “individuals who are legitimately subject to organizational norms” (Price 1997: 490). According to this criterion, for example, students should be considered organizational members of universities, but for example members of governing boards are not considered to be members (Price, 1997). Nord and Tucker (1987 cf. Damanpour, 1992) have suggested using size categories instead of approaching organizational size as a continuous variable, arguing that “it is not clear what the nature of *smallness* is or where it ends and *largeness* begins”.

The effect of size on organizational values is manifested in internal processes, intra-organizational relationships and structures – growth in the size of the organization will cause changes in its structure and result in a higher level of bureaucratic structures and processes. Dastmalchian et al. (2000) have found that the larger the organization the more characteristic the Internal Processes type of values and the less characteristic Human Relations type of values are for the organization. The influence of organizational size on relationships between organizational members is believed to be a restrictive one, because in larger organizations it is complicated to foster close and friendly relations between organizational members, organizational culture may become more fragmented because of the subgroups and subcultures that exist in the organization. If the subcultures are not aligned, the conflicts that may occur between subcultures may become a source of system pathology (Schein, 2006). But organizational size is believed to have an impact on the relationships between the organization and its environment as well: for example, a study of SMEs by O’Regan and Ghobadian (2004) reported that compared to small organizations externally oriented values were more emphasized by medium sized organizations. Other authors have argued that larger organizations tend to be more bureaucratic and less entrepreneurial (Sørensen and Stuart, 2000), more complex structures could be found in large organizations (Hannan and Freeman, 1984), and therefore, they are less flexible towards changes in the external environment.

Active discussion about the influence of organizational size on the innovativeness of the organization continues in management literature. Innovation is a critical factor for organizational survival because of the rapidly changing and increasingly competitive environment (Flynn and Chatman, 2001). The principles of bureaucracy tend to be in sharp contrast to the values needed for innovation in an organization (see for example Denison and Mishra, 1995; Martins and Treblanche, 2003; Tellis et al. 2009; Tesluk et al. 1997). Still, findings considering the effect of organizational size on innovation-related aspects are somewhat divergent: on the one hand, because of the existence of more complex and diverse skills, capabilities and resources, large organizations are believed to be more innovative, but on the other hand, small organizations are usually more flexible, experience less inertia (Schein, 2006) and their ability to accept, adapt and implement changes is higher, which would also facilitate innovation (Damanpour, 1992). Concerning sector-based differences, it has been found that organizational size is more positively related to innovation in manufacturing than in service organizations (Damanpour, 1992), but at the same time, the findings of Camison-Zornosa et al. (2004) are contrary – size was more positively related to innovation in service organizations. These kinds of results demonstrate that there are also other variables than size that have a moderating effect on innovation in organizations. O'Regan and Ghobadian (2004) proved that organizational size influences only a small number of cultural aspects and it is not a significant variable in explaining organizational values.

However, there is some evidence from Western countries about the relationships between organizational age and organizational values, but studies carried out in transition economies are scant and fragmented. A strong positive correlation between organizational size and age have often been reported (Barron et al. 1994), and it has been argued that changes in organizational culture occur mainly due to internal pressures whereas the size and age of the organization are the main factors that push the organization to change (e.g. Cameron and Quinn 1999). Some authors have proposed that it is reasonable to analyze the dynamics of organizational culture within the framework of the life-cycle model

(e.g. Goffee and Jones, 1998; Greiner, 1972; Quinn and Cameron, 1983), and in that case it is not important to consider organizational age in years, but rather to analyze what stage of development the organization is experiencing. We still see some limitations in using the life-cycle model for analyzing the impact of organizational age on organizational values. First of all, there are no clear categories for determining the phases in an organization's life cycle and this presumes a case-study approach. Secondly, the traditional life-cycle model cannot be applied in all contexts. For example, the traditional life-cycle model hardly fits a context of radical changes and transformations (e.g. recent transitional and former catch-up societies).

Thus, organizational age is often an unspecified category and no clear definition of what is meant by "old" or "young" exists for organizations. Organizations with a long history usually have rooted cultures and their members perceive the organization in a more homogeneous manner (Kekäle and Kekäle, 1995; Wiener, 1988). Greater sharing of organizational values is associated with lower innovativeness, while greater diversity of beliefs and values within the organization leads to higher innovativeness (Jaskyte and Dressler, 2004). Calantone et al. (2002) have reported that in organizations with a long history, a strong relationship between a learning orientation and company innovativeness was found, whereas in younger organizations the relationship was weak. The authors explain these kinds of relationships with a better understanding of the organization's environment (customers, competitors and emerging technologies) by older organizations (Calantone et al. 2002). On the one hand, we believe that if old organizations have succeeded to incorporate the values of a learning organization then organizational age may indeed be seen as a facilitator of innovativeness, but on the other hand, it has often been reported that old organizations fail to create dynamic oriented cultures. For example, Alas (2004) has demonstrated that success in implementing change and progress through creating a learning organization varied with regard to the age of the organization: older companies were less successful in adjusting to change. It has also been proposed that older organizations tend to be more stability oriented because of inertia (Tsui et al. 2006; Van Wijk et al. 2007) and older organizations "suffer from the ossification of

their routines, non-learning processes, blindness, and conservatism, which cause poor performance and decline” (Durand and Coeurderoy, 2001: 473). Nevertheless, we believe that this is not always the case, especially if we consider the phenomenon of path dependency.

For example, Üksväre (1995) analyzed the transition process in Estonian organizations and described four types of firms and corresponding patterns of organizational culture. Large enterprises and their remaining parts that were affected by new tendencies, but had also retained something from the past belong to the *first* type of organization. An essential feature of organizational culture in those organizations was pride tied to the former large size and good reputation of those organizations. Well-developed feelings of cohesiveness, a paternal managerial attitude towards employees and a lack of a sense of ownership were also characteristic of these organizations. The *second* type was referred to as recently established small firms, where one person’s ideology ruled the others’ behavioural patterns, social issues in the organization were not discussed, and young people were preferred to older employees. The *third* type was financial firms, which had introduced a new substance of operation and were characterised by using special concepts and language as well as computers, which considerably distinguished these companies from others in the first half of the 1990s. Banks were at the forefront of the use of new technologies, and they disseminated this attitude to the rest of the business community. The *fourth* type in the outline was based on foreign firms or partnerships with foreigners, which brought in new attitudes and behavioural patterns. Üksväre (1995) argues that the organizational culture of those organizations was shaped by the size of the foreigners’ holding. Hence, the background of organizations in catch-up societies varies to a great extent, and therefore, it may become problematic to set a general hypothesis about the impact of organizational age on organizational values.

In respect to the factors that influence the formation of organizational values the following propositions will be set up:

- P1:* Industry is a significant predictor of the Open System, Human Relations, Internal Processes and Rational Goal types of organizational values.
- P2:* Large organizations adopt more Internal Processes and less Human Relations and Open System types of values.
- P3:* Organizational age is a significant predictor of organizational values as follows: Human Relations, Rational Goal and Internal Processes types of values are more characteristic of old organizations, whereas organizational values belonging to the Open System type are more characteristic of new organizations.

3. SAMPLE AND METHOD

3.1. Sample

The study of organizational values in Estonian organizations took place during the period 2004–2008. The principle of providing diversity among the organizations was the criteria for selecting organizations for the study, and therefore, organizations from different industries, of different sizes and with a different historical background (age of organization) were included in the study. Altogether 29 organizations with 2986 respondents participated in the study. The organizations represented five different industries: education (11 organizations with 882 respondents), services (8 organizations with 990 respondents), production (7 organizations and 327 respondents), legal protection (2 organizations, 331 respondents) and health care (1 organization with a sample of 456 respondents). A more detailed description of the purview of organizations in the sample is presented in appendix 1. The average response rate was 50.7%, but it varied within different organizations (lower response rates were gained from education organizations where the average response rate was 26%).

There are 19 large and 10 medium-sized organizations in the sample. The composition of the sample in respect to organizational size could be considered one of the limitations of the study – small

organizations were not included in the sample because small organizations did not agree to participate in the study. On the other hand, the composition of the sample in terms of organizational size was determined by the choice of study method. It is not meaningful to apply quantitative research methods when analysing small units because of the biased results.

Fifteen organizations in the sample were founded after Estonia regained its independence in 1991 (referred to later as “new” organizations), and 14 organizations existed before 1991 (referred to later as “old” organizations). The organizations’ web pages were also analyzed and additional criteria for distinguishing old versus new organizations was based on information provided by the organizations themselves after analyzing how organizations regard themselves from the perspective of organizational history.

The average age of respondents was 35.7 years (SD=12.6, N=1886), altogether 945 (31.6%) men and 1 770 (59.3%) women participated in the study (271 respondents did not mark their gender). As a limitation, some organizations refused to include questions about socio-demographic data in the questionnaire. Organizational members from all organizational levels were involved in the survey as follows: 932 specialists (31.2% of sample), 969 workers (32.5%) and 280 managers (9.4%). In the case of educational organizations, students were also included (N=589, i.e. 19.7%). The average tenure of the respondents was 6.7 years (SD=8.3, N=1689).

3.2. Development of the Organizational Values Questionnaire

Organizational values were studied using the Organizational Values Questionnaire, which is an original questionnaire worked out by Anne Reino. The questionnaire is based on the ideas and principles of the Competing Values Framework by Quinn and Rohrbaugh (1983).

There are several reasons for deciding to work out an original questionnaire. Firstly, the initial methodology of the Competing Values Approach is based on a scenario approach with the aim of highlighting polarities of organizational culture using an ipsative rating scale: there were six aspects of organizational culture with four alternative scenarios (brief descriptions), and the respondent is asked to divide 100 points between those alternatives (the alternative that is more characteristic of the organization gains higher points) (Cameron and Quinn 1999: 19). Therefore, a high score in one quadrant implies a low score in other quadrants. Problems with these assessments may arise when there are several alternatives that are not always mutually exclusive ones – according to this methodological approach one cannot give a maximum score to more than one alternative (other alternatives should be given 0 points in such cases). This kind of assessment methodology probably makes it possible to highlight characteristic types of organizational culture more distinctly, but there is also the danger of a bias that the respondent feels forced to confront the traits of types of culture. Secondly, the scenarios contain several aspects, and therefore, it could be difficult to assess that particular scenario. This is what is referred to as *double barrelled*, which means that items convey two or even more ideas, so that an assessment of the item may refer to different ideas captured in that particular item. It is also recommended that exceptionally lengthy items be avoided in the development of the scales because the length of the items increases complexity and diminishes clarity (De Vellis, 2003: 67–68). Lastly, depending on the general environment, different aspects of organizations may be relevant for studying, and therefore, we believe that it is important to consider the contextual peculiarities when developing analytic tools for studying organizations. For example, there are certainly some characteristics of organizations in catch-up societies, which may not be captured by the tools created in developed countries.

The process of developing scales consisted of several stages (see figure 1). In the *first stage*, theoretical matters about the nature of organizational culture and values, but also methodological issues were analyzed and a basic choice for methodology development was made. *The second stage* consisted of forming items in Estonian for the item pool on the assumption of the selected

framework. Twenty-one keywords were developed to reflect the Open System, Human Relations, Rational Goal and Internal Processes types of organizational values. The keywords were for example as follows: initiative, freedom and willingness to take risks to reflect the Open System type (Model 1); procedures, stability and formality to reflect the Internal Processes type of organizational culture (Model 2); traditions, care for employees and cohesiveness to reflect the Human Relations type (Model 3); and competition, commitment to goals and rationality to reflect the Rational Goal type (Model 4). Then 79 assertions were construed with each of them reflecting a certain keyword (several items were construed for each keyword).

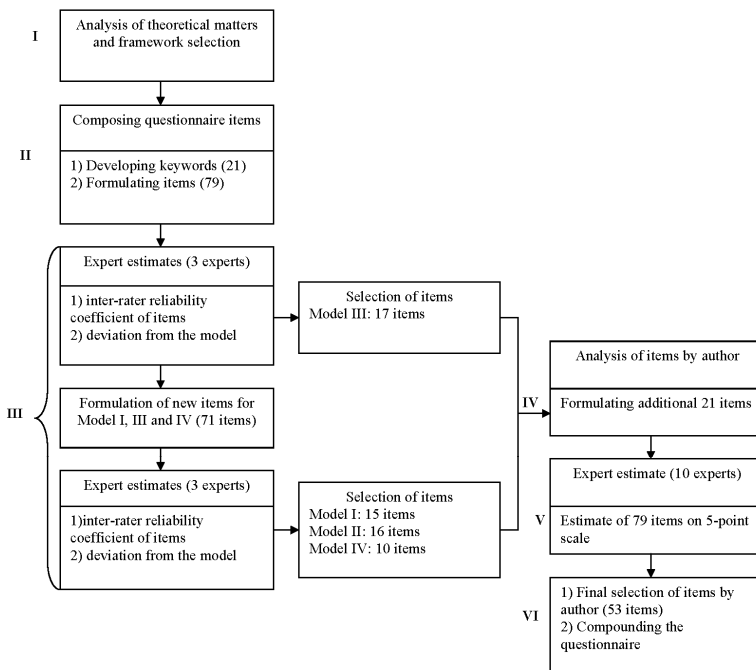


Figure 1. The process of developing the item pool

Source: compiled by the authors

In *stage three*, three independent experts were asked to participate in an assessment task in order to judge the quality of the items. The

experts had university degrees, where two of them had no previous theoretical knowledge of the topic of organizational culture and one had an MA degree in organizational behaviour. The experts were asked to analyze the list of items and select one or several items for each keyword that would reflect that particular dimension in the best way. The participants were not provided with a description of the models of organizational values. They were also encouraged to express their opinions about the comprehensibility and clarity of the formulation of the items. The inter-rater reliability coefficient for each item was calculated; in addition, whether those estimations fitted the authors' initial idea about the models of organizational values (i.e. deviation from the original model) was also analyzed. One criterion set up by the authors for the further selection of items was that at least two opinions out of three had to accord. One other criterion was based on the deviation of opinions from the initial model: in cases where the inter-rater reliability was high, but the experts positioned the item next to the keyword belonging to a different model of organizational values compared to the authors' original idea, the latter analyzed those particular items and decided whether to include them for further analysis or not.

As a result of the analysis of the experts' estimations and opinions, it became evident that Model 3 (i.e. Human Relations type) was described well enough by the items (17 items belonging to this model had high inter-rater reliability coefficients), for Models 1 and 2 the coefficient was only high enough for 5 items. Items that described Model 4 were most confusing as there were no items that obtained sufficiently high inter-rater coefficients. Those items that only obtained moderate agreement were eliminated from the questionnaire, and in the next phase of the methodology development, 71 new items were worked out for those three models that were not yet sufficiently described. The same experts were asked to assess the new items. Again the inter-rater reliability coefficients were calculated and the selection of items was based on the same criteria as in the previous stage. Based on the experts' estimations, 15 items were selected to describe Model 1, 16 items for Model 2 and 10 items for Model 4.

In the *fourth stage* of the development of the questionnaire, the author analyzed the questionnaire, and considering the fact that the questionnaire should be balanced in the sense that all underlying keywords should be represented by a more or less equal number of items, the author decided to include some supplementary items in the questionnaire. The new questionnaire consisted of 79 items. In the *fifth stage* of methodology development, another expert group was involved. The item pool and a brief description of the models of organizational values were given for assessment to one professor and nine doctoral and master students studying management and marketing in the Faculty of Economics and Business Administration at the University of Tartu. The items were divided between the models they should belong to and the members of the expert group were provided with instructions for judging the items on a 5-point scale where “5” meant that the item described the particular model perfectly and “1” that the item did not suit the model at all. The experts were also encouraged to provide comments that would explain their estimates. To select the most appropriate items for the questionnaire, a mean value, a median and an inter-rater reliability coefficient was calculated for each item. Higher estimates and higher coefficients were indicators that facilitated the selection of the items for the final version of the questionnaire. The final decision was not only based on the statistical analysis, but also on the analysis of the essence of each of the items by the authors.

Finally, in the *sixth stage* of developing the questionnaire, 53 items were selected for the item pool (four statements were construed as reverse statements). The item pool consisted of 14 statements for the Human Relations type, 13 statements for the Open System type, 14 statements for the Rational Goal and 12 items for the Internal Processes type of organizational values.

In order to find a combination of questionnaire items that would be suitable for mapping organizational values on the basis of four values types, a factor analysis was applied. Several combinations of items were tested in the factor analysis. The loading for items over 0.40 was selected in order to be sufficient to represent each subscale (three-, five- and six-factor solutions did not give interpretable units of items). Finally, the factor analysis resulted in

four subscales (i.e. types of organizational values) later labelled Human Relations, Open Systems, Rational Goal and Internal Processes types of organizational values. The parameters of the factor analysis given in table 1, appendix 2 show the items and factor loading of the varimax-rotated four-factor solution for a set of items across all respondents. In the present factor analysis, a KMO test statistic was obtained as high as .90, which demonstrates that the factor solution is stable. Bartlett's test of sphericity is significant ($p=.00$), which also confirms that the factor analysis is a relevant method for data analysis. The reliability of the constructed subscales measured using Cronbach's alpha is quite high (ranging from .78 to .80 – see table 1).

Table 1. Summary of the factor analysis

Parameters of the factor analysis	Organizational Values Questionnaire
Sample size	2986
No of items	53
No of factors extracted	4
Bartlett test of sphericity	$p= .00$
Kaiser-Meyer-Olkin measure of sampling adequacy	.90
Total variance explained	57.73
No of items in factors	Factor 1: 5 items Factor 2: 5 items Factor 3: 5 items Factor 4: 4 items
Cronbach's Alpha for extracted factors	Factor 1: .79 (N=2715) Factor 2: .80 (N=2676) Factor 3: .78 (N=2734) Factor 4: .79 (N=2680)

Note: Cases with missing values were excluded from the analysis

Source: authors' calculations on the basis of research database.

A factor is considered interpretable to the extent that the items associated with it are similar to each other and make theoretical and logical sense representing a coherent construct (De Vellis 2003: 115), and therefore, the factor analysis should not be performed only considering numerical indicators – in appendix 2, loadings higher than 0.4 are marked in boldface, but when items

received high loadings in two factors at the same time, considering the content of the item and the factor, the authors decided which factor the item should belong to.

The initial item pool was designed in Estonian, and then the questionnaire was translated into Russian because several of the organizations the research was planned for were multicultural. Seven experts (native Russian speakers who also speak Estonian fluently) were engaged in the process. The results of the different translators were compared to the original Estonian version, and in order to remove any cultural ambiguities, the ultimate choice among the items was made by consulting a person of Russian ethnicity that spoke Estonian fluently.

3.3. Statistical methods

Descriptive statistics (means, t-test) were used to analyze estimations of organizational values, and a binary logistic regression analysis was applied to analyze the impact of independent variables (industry, age and size of organization) on estimations of organizational values. The data were transformed into dummy variables and to code the dependent variables; the mean estimation given to each type of organizational values was set as the reference point. Estimations above the mean were considered above-average estimations of the particular type of organizational values and were coded as 1, while estimations below the average were coded 0. Three independent variables were included in the models: (1) *industry* (coding will follow the logic: 1 if the organization operates in the particular industry, and 0 if it operates in other industries); (2) *organizational size* (large organizations were coded 1 and medium-sized organizations 0) and (3) *organizational age* (1 for new organizations and 0 for old). No interactions of predictors were included in the analysis because the number of observations would have become too low in different groups. Specific organizational effects were also not checked (the organization as an independent variable was not included) because no organizations could be included in some groups. Concerning individual characteristics, missing data exists for several organizations, and therefore, variables reflecting individual characteristics were also left out of the model.

Four binary logit models were constructed; the impact of the explanatory variables on the probability of high estimations for types of organizational values were expressed as marginal effects. In the case of the industry variable, educational organizations were taken as the reference group because educational organizations had the most balanced pattern of organizational values. The models will take into account possible heteroscedasticity (robustness).

4. FINDINGS

The analysis showed that relatively higher estimations were given to the Rational Goal ($m=7.16$) and Internal Processes types ($m=7.06$) of organizational values, whereas the t-test proved that the difference in mean estimations is not statistically significant. Open System type values were found to be less dominant for organizations (mean estimation 6.31 on the 10-point scale), but values that characterize the Human Relations type are even less characteristic for the organizations that participated in the study ($m=5.95$). Table 2 presents the logit models for the types of organizational values, and as can be seen from the table, the models contain several significant variables.

All four models for organizational values display a significant fit with the data (Chi²-test $p= .00$), but the level of the description of the overall variation is different for different models (26.4% for Rational Goal, 9% for Internal Processes, 2.3% for Open System and 2.8% for the Human Relations type of organizational values).

4.1. Industry as a predictor of organizational values

In the *Rational Goal* type of values, industry increases the probability of having above-average estimations for this type of values: in services the probability of having an above-average score for this type of values is 61%, in the production industry 51% and in health care 17% higher than in educational organizations. In the case of legal protection, the probability of scores

higher than the average for the Rational Goal type is 10% compared to the education sector.

Above-average estimations of the *Internal Processes type* are predicted by affiliation with the services industry (the probability of high estimations is 39% higher than for educational organizations), the production industry (35% higher probability than in education) and legal protection (37% higher than in education). The health care sector does not predict different estimations of the Internal Processes type.

The results for the *Open System type* model are broadly similar to the previous model because again industry seems to be the most powerful predictor of the type of organizational values. Although industry is a significant predictor of the Open System type (health care as an exception), compared to the Internal Processes type, the marginal effects are smaller, and in the case of legal protection organizations, even negative.

The last model constructed for the *Human Relations type* of organizational values gives different results compared to the other values types. Although some industries predict higher estimations for the Human Relations type compared to educational organizations (for service and legal protection organizations, the probability of higher estimations for the Human Relations type of values is 3% higher than in educational organizations), the marginal effects are quite small.

To sum up, industry significantly predicts all types of organizational values, which means that Proposition 1 was supported by the study.

Table 2. Determinants of the organizational values types: binary logit analysis

Rational Goal type of values				Internal Processes type of values			
	Para-meter estim.	z-statistic	Mar-ginal effect		Para-meter estim.	z-statistic	Mar-ginal effect
Service	3.34*	21.03	0.61	Service	1.74*	14.14	0.39
Production	3.55*	13.12	0.51	Production	1.68*	9.03	0.35
Legal protection	0.43*	2.74	0.10	Legal protection	1.91*	12.24	0.37
Health care	0.74*	5.35	0.17	Health care	1.38	10.47	0.30
Large	0.67*	3.19	0.17	Large	0.59*	3.96	0.15
New	-0.16	-1.19	-0.04	New	0.19	1.67	0.05
Constant	-1.87*	-7.72		Constant	-1.53*	-4.11	
Log pseudo-likelihood		-1348.38		Log pseudo-likelihood		-1676.51	
Pseudo R ²		0.26		Pseudo R ²		0.09	
Chi ² -test prob.		0.00		Chi ² -test prob.		0.00	
Number of observations		2663		Number of observations		2663	
Open System type of values				Human Relations type of values			
	Parameter estimate	z-statistic	Marginal effect		Parameter estimate	z-statistic	Marginal effect
Service	0.66*	5.81	0.16	Service	0.37*	3.33	0.03
Production	1.07*	5.66	0.24	Production	0.20	1.13	0.04
Legal protection	-0.50*	-3.58	-0.13	Legal protection	-0.59*	-4.14	0.03
Health care	0.10	0.81	0.03	Health care	0.02	0.16	0.03
Large	0.73*	4.92	0.18	Large	-0.44*	-2.99	-0.11
New	0.05	0.53	0.01	New	0.04	0.43	0.01
Constant	-0.73*	-4.11		Constant	0.34*	-4.11	

Table 2 (*continuation*)

Log pseudolikelihood	-1822.99	Log pseudolikelihood	-1831.54
Pseudo R ²	0.02	Pseudo R ²	0.03
Chi ² -test prob.	0.00	Chi ² -test prob.	0.00
Number of observations	2760	Number of observations	2722

Notes: Education sector is used as reference group. *= coefficient estimate is significant at 0.01 level.

Source: Author's calculations on the basis of the research database

4.2. Size as a predictor of organizational values

Our findings demonstrate that being a large organization increases the probability of above-average estimations of the *Rational Goal type* of organizational values by 17% compared to medium-sized organizations. In respect to organizational size, the probability of having an above-average score for the *Internal Processes type* is 15% higher in large organizations.

Organizational size (i.e. being a large organization) increases the probability of above-average estimations of the *Open System type* by about 18%, but at the same time, in large organizations the probability of high estimations for the *Human Relations type* of values is lower by 11% than in medium-sized organizations. Thus, our findings provide partial support for Proposition 2.

4.3. Impact of age on organizational values

Our analysis showed that among other dummies, an organization's age was the only variable that was not a significant predictor of any types of organizational values. Results indicate that the probability of having above-average scores for Internal Processes, Open System and Human Relations type of values is slightly higher in younger organizations, while higher scores for Rational Goal type of values may be expected in older organizations. But as the marginal effect is not statistically significant we may conclude that organizational age does not predict any of the types of organizational values, and therefore, Proposition 3 was not supported by the study.

5. DISCUSSION AND CONCLUSIONS

Organizational values were approached through typologies in the present study, because this facilitates quantification and better comparison of values between organizations. The findings of this

study showed that both, contextual and organizational variables count for organizational values, but they do not have equal power in explaining the scores for organizational values types.

Emphasis on some types of organizational values is predicted more by external factors, more specifically industry (see figure 2). For example, the Rational Goal and Internal Processes types of values are more determined by industry than the Open System and Human Relations types of values. Business sector organizations have adopted the values of the Rational Goal and Internal Processes types more than other organizations, whereas somewhat surprisingly, for example, belonging to the service sector predicts the Internal Processes type even more than belonging to the public sector (legal protection and health care in the present case).

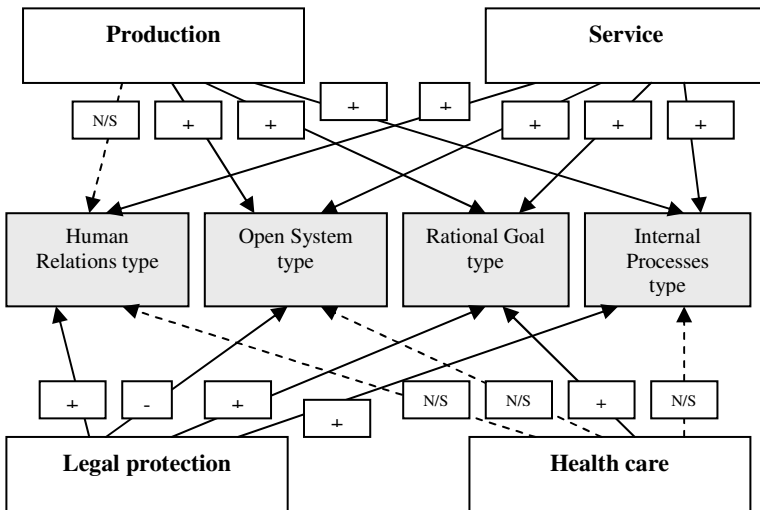


Figure 2. Impact of the industry on the types of organizational values

Notes: “+” significant predictor of above-average estimations of organizational values types; “-“ significant predictor of below-average estimations of organizational values types; “N/S“ not significant predictor
 Source: authors’ figure based on the results of regression analysis

These findings are in accordance with the ideas proposed by Gordon (1991), arguing that the dominant values adopted by organizations are determined by assumptions held by external counterparts, and other values that are unrelated to the basic assumptions may develop over time due to the founder's or management's background and/or as a reaction to the environment and company outcomes. In our case, greater emphasis on the Rational Goal type of values for production and service companies proceeds from the nature of the business sector – performance and efficiency are often seen as the most important values for the survival of the company. These values could be understood as terminal values, whereas other types of values should help the organization achieve its targets. The Rational Goal type of values has been adopted by organizations from other sectors than business as well; however, the emphasis on these values is not very high. Even if financial performance indicators are not the primary ones in the legal protection, education and health care sectors, quite important changes due to government regulations and development in the general environment have taken place in those sectors as well – organizations in the education and health care sectors are increasingly under the conditions of free-market competition and must be more active in finding funding for themselves. Therefore, we expect that the importance of the Rational Goal type of values will grow even more and the difference between business and public sector organizations in terms of their values will lessen.

Concerning the impact of industry on the Internal Processes type, we should take a closer look at organizational peculiarities. Basic assumptions exist in legal protection organizations (prisons) based on security, stability and continuity, and these assumptions manifest in the Internal Processes type of values. Many service and production organizations participating in the study operate in sectors where the extent of regulation is high because of environmental issues (e.g. recycling service, mining etc) or because of security issues (e.g. insurance, retail trade of fuel). Moreover, when Estonia joined the EU in 2004, organizations were set into a new framework of regulations: organizations had to adopt and start to follow new requirements and expectations. This process certainly influenced how values were perceived by organizational members.

In the health care sector we see a different pattern – industry did not predict the score of the Internal Processes type of values. We believe that the perception of organizational values may be influenced by recent changes that have been taken place in the organization, but also due to important shifts in the ideology of the industry or expectations from stakeholder groups. As a result, some values may become more articulated, but those values that have been traditionally characteristic for the organizations in particular industry are taken for granted by organizational members. In a large and complex organization such as a hospital, which is expected to provide health care services at the best possible level, organizing the work with the help of internal procedures and explicit rules could be considered the best way to meet the high expectations of patients and the needs of the national health care system. But somewhat surprisingly, the health care sector predicted a higher emphasis on the Rational Goal type of values. Again, one should look to the history of the organization. The economic incentives at the hospital around the study period were driven by hospital reforms at the national level (Fidler et al. 2007), but also by the aims of the restructuring process at the organizational level. Findings indicate that besides internal organizational efficiency, external positioning and the success in the health care market are important to the particular organization. Thus, in health care, the restructuring and reform processes at an organizational or national level are not merely technical processes, but have significantly influenced the front-line employees' perception of the organization.

Our study revealed that another organizational factor that determines organizational values is the size of the organization (see figure 3). The Internal Processes type of values was more characteristic of large organizations; this is a finding that is supported by theoretical arguments (e.g. Hannan and Freeman, 1984). Here also, the mediating effect of industry must be considered – large organizations that belonged to the sample operate in the public sector (health care, education, legal protection), where the emphasis on the Internal Processes type of values is highly expected. The large organizations from the services and production sectors that were included in the study have many subunits located in different places all over the country,

which means that differentiation between subunits facilitates the need for internally orientated values.

Based on the literature, it was assumed that smaller organizations are more flexible and open to change compared to larger organizations, but the findings of this study indicate the opposite – above average estimations of the Open System type of values are predicted to occur in large organizations. This result supports Schein’s (2006) idea that because of the more complex and diverse skills, capabilities and resources engaged in large organizations, they may be more innovative than small organizations. Still, it is too early to make broad generalizations about the impact of organizational size on organizational values, because the sample only comprised medium-sized and large organizations and no micro- and small organizations. This could be considered one of the limitations of the study.

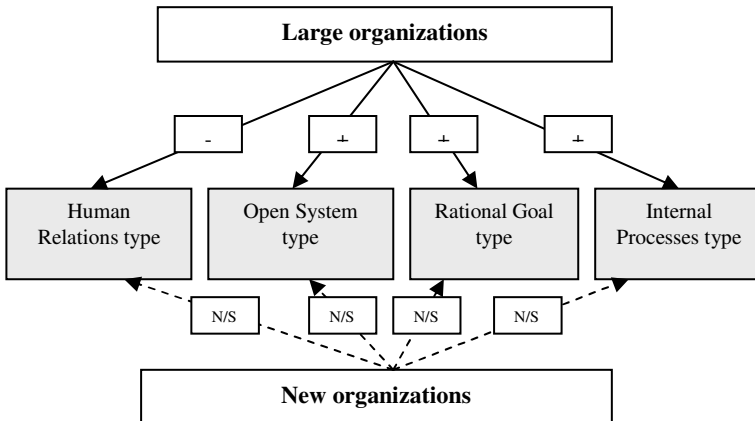


Figure 3. Organizational size and age as the predictors of organizational values types

Notes: “+” significant predictor of above-average estimations of organizational values types; “-“ significant predictor of below-average estimations of organizational values types; “N/S“ not significant predictor.

Source: authors’ figure based on the results of regression analysis

Existing literature and previous studies argue that the values held by old and new organizations are quite different, but this study did

not support that argument because the findings showed that organizational age did not predict scores for any of the types of organizational values. One explanation for this could be found by looking at the history of our society. Old organizations included in the study were established under a command economic system, which essentially differed from a market economy and when the rapid transition from a command economy to a market economy started in the early 1990s, organizations had to adapt to the new conditions and reorganize their activities very quickly (Vadi and Roots, 2006). We believe that it was not always a smooth and painless process for the members of these organizations, but as our findings show, the organizations have nevertheless succeeded to adapt. Many organizations that participated in the study have been restructured several times and the process of the cognitive transformation of values and attitudes at the individual as well the organizational level had to take place. Thus, the label “old” and “new” at the organizational level are rather subjective categories and are somewhat confusing, especially in the context of catch-up economies because of the radical changes the organizations have experienced.

To sum up, our study demonstrated that organizational size and industry explain the Rational Goal and Internal Processes types of values more, while the impact of those variables on the Open System and Human Relations types is slight. This kind of result indicates that although the variables analyzed in the present study are important, there are other factors that should also be considered as determinants of organizational values. More precisely, industry and the organization’s size has a larger effect on orientation towards stability, while dynamics and flexibility of organizations are less determined by these variables. Although not tested in the present study, we believe that individual-level characteristics and leadership style may contribute more than other factors to the Human Relations and Open System types of organizational values.

Our study indicated that a combination of different factors in one study is meaningful because it makes it possible to gain a more complete understanding of this phenomenon. Although, the findings of our study revealed that there are several limitations in the design of our study, we also see several possibilities for further

studies. The formation of organizational values is a complicated and multi-facet process, implicating several factors simultaneously. Therefore, further studies are needed and more factors should be included in the research to gain more reliable results about the determinants of organizational values. One of the limitations of our study is the exclusion of the national culture from the list of independent variables, because of the limited scope of organizations in the sample. A cross-cultural study would make it possible to disclose the impact of national culture on organizational values. In addition, small organizations should also be included in the study because then it is possible to gain more comprehensive findings about the influence of organizational size on organizational values. Since organizational age was found to be an insignificant predictor of organizational values in our study, and existing literature underlines this as an important determinant of values, we suggest that it is meaningful to apply triangulation of methods here. Although technically complicated, future research should consider estimating organizational age from two perspectives: firstly, from the perspective of the life-cycle model, and secondly, in terms of when the organization was founded. This kind of approach may provide some clues about which method is more useful for such an analysis.

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Appendix 1. Sample description

Industry	Purview of organizations	No of organizations	Age	Size
Education	Higher education	11	6 new, 5 old	large
Service	Recycle services	2	new	large
	Retail trade	3	2 old, 1 new	large
	Assembling and retail of computers, computer services	1	new	medium
	Insurance	1	new	medium
	Entertainment	1	new	medium
Production	Distributing and selling electricity	1	old	medium
	Electrical engineering	1	old	medium
	Producing packaging materials	1	old	medium
	Producing of polyurethane foam	1	new	medium
	Producing prefabricated concrete elements	1	old	medium
	Management of design ad construction work, general contracting	1	new	medium
	Mining	1	old	large
Legal protection	Prison	2	1 new, 1 old	large
Health care	Providing health care services	1	old	large

Appendix 2. The contents and loadings of factors in the Organizational Values Questionnaire

Item	Content of factors	Factors and loadings			
		F 1	F 2	F 3	F 4
Open System type					
2	Our organization is innovation minded	.70	.15	.14	.16
7	Creative people with fresh ideas are highly valued in our organization	.70	.13	.26	.13
11	Our organization's compensation system takes into account the initiative and commitment of organizational members	.77	.07	.17	.02
12	Committed organizational members are the most valuable asset of our organization.	.61	.14	.28	.01
14	The management of our organization has a positive attitude towards the initiatives of organizational members.	.76	.04	.34	.05
Internal Processes type					
31	There are lots of written rules in our organization	.07	.72	-.01	-.07
32	The organization insists that the employees should know and follow the rules	.12	.80	.04	.07
36	In our organization job descriptions are detailed	.22	.66	.18	-.02
45	Our management is very demanding towards organizational members.	.07	.64	-.11	.27
49	In our organization a strict reporting system is applied	.04	.68	.03	.21
Human Relations type					

20	The attitude that “to err is human” and nobody is protected from making mistakes exists in our organization	.16	-.09	.67	.08
23	Members of our organization take part in joint events with pleasure	.21	.14	.62	.05
26	The management has trusting and confidential relationships with organizational members.	.43	.05	.69	.01
27	Our organization is like a big family	.43	.15	.68	.06
28	The members of our organization talk with pleasure about private issues	.13	-.05	.72	.11
Rational Goal type					
46	The aim of our organization is to gain possibly a bigger market share	.17	.07	.09	.80
50	Our organization always tries to outpace its competitors	.27	.20	-.02	.69
51	The result is most important for our management	-.08	.33	.03	.67
53	The aim of our organization is profit maximization	-.03	-.13	.21	.80
Eigen values		3.15	2.76	2.70	2.41
Cumulative variance explained (%)		16.56	31.10	45.31	57.98

Notes: F 1, F 2, F 3, F 4 – factors’ numbers. Loadings higher than 0.4 are in boldface. The items are approximately translated from Estonian into English
Source: authors’ calculations on the basis of research database.

KOKKUVÕTE

Missugused tegurid ja mil viisil prognoosivad organisatsiooni väärtusi?

Organisatsiooni väärtused kujunevad mitmete erinevate tegurite mõjuväljas ning seetõttu on organisatsiooni väärtuste kujunemise seaduspärasuste mõistmiseks vaja arvesse võtta erinevate tegurite kombinatsiooni. Käesoleva artikli eesmärgiks on välja tuua organisatsiooni väärtuste kujunemise seaduspärasused.

Seniste uuringute piiranguna võib välja tuua selle, et enamasti keskenduvad need ühe teguri mõju analüüsimisele, mistõttu taoline lähenemisviis seab olulised piirangud tulemuste tõlgendamisele. Kui arenenud Lääneriikides on organisatsiooni väärtuste uurimise traditsioon küllaltki pikk, siis siirderiikide (s.h. Eesti) organisatsioonide osas puudub süsteemne analüüs. Käesolev artikkel põhineb Eesti organisatsioonide analüüsil ning kuigi teised siirderiigid võivad olla kogunud sarnaseid arenguprotsesse, tuleb siiski üldistuste tegemisel olla ettevaatlik. Koondades erinevad organisatsioonilised ja kontekstuaalsed tegurid ühte uuringusse võimaldab käesolev uuring analüüsida nende tegurite mõju organisatsiooni väärtuste kujunemisele ühes rahvuskultuurilises ja spetsiifilises keskkonna kontekstis. Käesolev uuring analüüsib tööstusharu, organisatsiooni vanuse ja suuruse mõju organisatsiooni väärtuste kujunemisele, sest erinevad autorid on pidanud nimetatud tegureid olulisteks organisatsiooni väärtuste determinantideks, kuid samas on antud tegurite osas läbi viidud uuringud fragmentaarsed.

Käesolevas artiklis kasutatakse organisatsiooni väärtuste analüüsimiseks tüpoloogiat, kuna see võimaldab organisatsioone omavahel võrrelda. Organisatsiooni väärtusi analüüsitakse Konkureerivate väärtuste raamistikus (Quinn and Rohrbaugh, 1981), mis võimaldab eristada nelja organisatsiooni väärtuste tüüpi. *Avatud süsteemi tüüpi* on peetud kõige sobilikumaks

organisatsiooni väärtuste tüübiks kiiresti muutavas keskkonnas, kuna ta väärtustab kohanemisvõimet, paindlikkust, innovatiivseid ideid, initsiatiivi ning orienteeritust kliendile. Antud tüüp rõhutab kiiret kasvu, ressursside (sh organisatsiooniväliste sidusgruppide toetus) omandamist väliskeskkonnast. *Inimsuhete tüüpi* saab iseloomustada paindlikkuse ja sissepoole suunatuse kaudu. Antud tüüp väärtustab inimressursi arengut, mida püütakse saavutada kohesiivsuse, ühtekuuluvustunde, usalduse ja moraali abil. *Tulemustele suunatud* organisatsiooni väärtused hõlmavad planeerimist, eesmärkide püstitamist selleks, et saavutada organisatsiooni tõhusus. Antud organisatsiooni väärtuste tüübi põhiolomuseks on püüd kontrollida väliskeskkonda, organisatsiooni edukust määratletakse turuosa ning läbilöögivõime kaudu. Organisatsiooni sidusaineks võib pidada võitlusvaimu, mis on suunatud kasumi maksimeerimisele ja tulemuse saavutamisele. *Sisemiste protsesside tüüp* keskendub organisatsioonisisestele küsimustele ning väärtustab stabiilsust ja kontrolli. Selle organisatsiooni väärtuste tüübi tunnusjooneks on ka tsentraliseeritus, struktureeritus ja formaliseeritus, mis peavad tagama kogu organisatsiooni stabiilsuse.

Käesoleva uuringu autori poolt töötati välja uus organisatsiooni väärtuste mõõtmise vahend – Organisatsiooni väärtuste küsimustik. Küsimustik koosneb 53 väitest, mida saab hinnata 10-pallisel skaalal. Faktoranalüüs andis omakorda 19-väitelise lahenduse, mis eristab nelja alamskaalat (so organisatsiooni väärtuste tüüpi): 1) *Avatud süsteemi tüüp*, mida mõõdetakse viie väite abil (Cronbach alfa 0.79); 2) *Sisemiste protsesside tüüp* (5 väidet, Cronbach alfa 0.80); 3) *Inimsuhete tüüp* (skaala koosneb 5 väitest, Cronbachi alfa 0.78) ja 4) *Tulemustele suunatud* organisatsiooni väärtuste tüüp, mida mõõdetakse nelja väite abil (Cronbach alfa 0.79).

Organisatsiooni väärtuste uuring Eesti ettevõtetes toimus ajavahemikul 2004-2008. Uuringus osales 29 organisatsiooni 2986 vastajaga. Organisatsioonid tegutsesid viies valdkonnas: haridus (11 organisatsiooni, valimi suurus 882), teenindus (8

organisatsiooni, 990 vastajat), tootmine (7 organisatsiooni, 327 vastajat), õiguskaitse (2 organisatsiooni, 331 osalejat) and tervishoid (1 organisatsioon, valimi suurus 456). Valimisse kuulus 19 suurt ja 10 keskmise suurusega organisatsiooni. 15 organisatsiooni on asutatud peale Eesti iseseisvumist 1991. aastal (uuringus käsitletakse neid uute organisatsioonidena) ning 14 organisatsiooni, mis tegutsesid enne 1991. aastat loetakse käesoleva uuringu raames vanadeks organisatsioonideks.

Organisatsiooni väärtuste analüüsiks kasutati kirjeldavaid statistikuid (aritmeetilise keskmise arvutamist, t-testi). Tööstusharu, organisatsiooni vanuse ja suuruse mõju analüüsiks kasutati binaarset logistilist regressiooni. Analüüsi käigus koostati neli logistilist mudelit ja selgitavate muutujate mõju organisatsiooni väärtustele väljendati marginaalsete efektidena.

Käesoleva uuringu tulemused tõestasid, et mõlemad, nii kontekstuaalsed kui organisatsioonilised tegurid mõjutavad organisatsiooni väärtusi, kuid teguritel on väärtustele erinev mõjujõud. Mõne organisatsiooni väärtuste tüübi puhul saab rääkida suuremast väliste tegurite mõjust – näiteks Tulemustele suunatud ja Sisemiste protsesside tüüp on enam mõjutatud tööstusharu poolt kui Avatud süsteemi ja Inimsuhete tüüp. See tulemus on kooskõlas kirjandusega, mis väidab et organisatsioonis domineerivad väärtused on olulisel määral mõjutatud väliste sidusgruppide ootuste poolt. Antud juhul leiti, et Tulemustele orienteeritus on kõige iseloomuliku ärisektori organisatsioonidele, kuigi sellele tüübile omased väärtused on ka teistele organisatsioonidele küllaltki iseloomulikud. Kuna ka näiteks haridus- ja tervishoiuorganisatsioonid tegutsevad järjest enam vaba konkurentsi tingimustes ning peavad tegelema enesefinantseerimisega, siis võib eeldada Tulemustele suunatud väärtuste olulisuse tõusu ka nendes sektorites tegutsevates organisatsioonides.

Sisemiste protsesside tüübi väärtused olid iseloomulikud teenindussektoris tegutsevatele organisatsioonidele. Kõrget

formaliseeritust ja bürokratlikkust võib selgitada sellega, et uuringus osalenud teenindussektori organisatsioonid tegutsevad valdkondades, mis on küllaltki selgepiiriliselt reguleeritud (nt kaubandus, kütuse jaemüük, jäätmekäitus).

Käesolev uuring näitas, et teine tegur, mis mõjutab organisatsiooni väärtusi on organisatsiooni suurus. Sisemiste protsesside tüüp oli iseloomulikum suurtele organisatsioonidele. Antud tulemus on kooskõlas teoreetilise käsitlusega (nt Hannan and Freeman, 1984). Tuginedes kirjandusele eeldati, et väiksemad organisatsioonid on paindlikumad ja enam muutustele avatud kui suured organisatsioonid, kuid uuringu tulemused tõid esile vastupidise seaduspära – Avatud süsteemi tüübi väärtused on iseloomulikumad suurtele organisatsioonides. Kuigi antud tulemus on selgitatav Schein'i (2006) seisukohtadega, on siiski liiga ennatlik teha kaugeleulatuvaid järeldusi, kuna antud uuringu valim koosnes vaid suurtest ja keskmise suurusega organisatsioonidest ning mikro- ja väikeettevõtted uuringus ei osalenud.

Käesolev uuring näitas, et organisatsiooni vanus oli uuritavatest ainus tegur, mis ei mõjutanud oluliselt organisatsiooni väärtuste esinemist organisatsioonides. Taolist teoreetilise kirjanduse ja varasemate empiiriliste uuringute tulemustega vastuolevat tulemust võib põhjendada teatud keskkonnateguritega. Üks tegur, mis võib organisatsiooni vanuse mõju väärtustele kahandada on ühiskonnas toimunud protsessid. Uuringus osalenud vanad organisatsioonid asutati plaanimajanduse tingimustes, mille toimimise seaduspärad erinesid oluliselt turumajanduse põhimõtetest. Seega, kui 1990ndate alguses toimus üleminek plaanimajandusele, pidid organisatsioonid kiirelt kohanema uute tingimustega. Kuigi see ei olnud alati sujuv ja valutult protsess, näib et organisatsioonid suutsid uute oludega kohaneda. Paljud uuringus osalenud ettevõtted on reorganiseeritud mitmeid kordi ja sellega seoses on muutunud nii indiviidide kui organisatsioonide väärtused ja hoiakud, mistõttu

organisatsioonide jaotamine vanadeks ja uuteks on taolises keskkonnas küllaltki tinglik ja subjektiivne.

Kokkuvõtvalt, käesolev uuring näitas, et organisatsiooni suurus ja tegevusvaldkond selgitab Tulemustele orienteeritud ja Sisemiste protsesside tüübi väärtusi suuremal määral kui Avatud süsteemile ja Inimsuhete tüübile omaseid väärtuseid. Selline tulemus kinnitab, et kuigi analüüsitud tegurite mõju väärtustele on oluline, leidub siiski ka muid tegureid, mis mõjutavad väärtuste kujunemist organisatsioonis. Konkreetsemalt, tegevusharu ja organisatsiooni suurus näib mõjutavat enim stabiilsusega seotud väärtusi, samal ajal kui organisatsiooni paindlikkusega seotud väärtused on antud tegurite poolt vähem mõjutatud. Kuigi antud uuringus ei analüüsitud indiviidi karakteristikute mõju väärtuste kujunemisele, usuvad autorid, et just indiviidiga seotud tunnused ja eestvedamise stiil võivad eelkõige mõjutada Inimsuhete ja Avatud süsteemi väärtuste kujunemist organisatsioonis.

Uuring tõestas, et väärtuste kujunemise analüüsil on oluline võtta arvesse erinevate tegurite kombinatsiooni, kuna see võimaldab saada paremat ülevaadet nähtusest. Tulevased uuringud võiksid kombineerida kontekstuaalseid, organisatsioonilisi ja indiviidiga seotud tegureid, kuna see võimaldaks saada veelgi parema ülevaate organisatsiooni väärtuste kujunemise seaduspärasustest.