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Manifestations of organizational
culture based on the example of
Estonian organizations

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THE LIST OF AUTHOR'S PUBLICATIONS AND CONFERENCE PRESENTATIONS

I. SINGLE PUBLICATIONS OR PARTS OF COLLECTIVE MONOGRAPHS

1. **Reino, A., Tolmats, E.** (2009). Interplay of Emotions and Culture: Insights from Two Estonian Prisons. In: Koufopoulos, D. N.; Argyropoulou, M. (Eds). "*Doing Business in the Global Economy*". ATINER, pp. 49–60.
2. **Tolmats, E., Reino, A.** (2007). Interconnections of Emotional Intelligence and Knowledge-Sharing Organizational Culture: the Example of Estonian Organizations. In: Malafeev, A., Ionesov, V. (Eds.). "*Social Innovations in Cultural Process: Art of Management*". Samara: Samara Scientific Centre of Russian Academy of Sciences, pp. 220–237.
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4. **Tolmats, E., Reino, A.** (2006). The relationships between emotional intelligence and organizational culture: based on example of two business sectors in Estonia. In: Vadi, M; Reino, A; Hämmal, G. (Eds.). "*National and international aspects of organizational culture*." Tartu: Tartu University Press, pp. 27–48.
5. **Reino, A.** (2003). Organisational values: a concept and research methods. In: Vadi, M. (Ed.). "*Organisational Culture in Estonia: Manifestations and Consequences*". Tartu: Tartu University Press, pp. 224–236.

II. Articles in international publications

1. **Jaakson, K., Reino, A., Vadi, M.** (2008/2009). Organizational Values and Organizational Practice: What Makes Them Diverge. *EBS Review, Special Issue on Research in the Estonian Business Context*, 25 (2), pp. 9–25.
2. **Reino, A., Kask, T., Vadi, M.** (2007). Organizational culture and environment: dynamics in dynamics. Case of Ordi. *Trames, Journal of the Humanities and Social Sciences*, Special Issue "Dynamics around and within organizations", 11(2), pp.124–138.

III. Working Papers

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IV. Conference publications

1. **Reino, A., Tolmats, E.** (2008). From Exposed Values To Real Values: Is It Long Way To Go? Example of Estonian Companies. In: Galperin, B.L. (Ed.) *"Work Values and Social Responsibilities in a Changing World: From Being Good to Doing Good: The 11th International Conference on Work Values and Behavior"*. Singapore; June 22–25, 2008. Shreveport, LA, USA: ISSWOV, pp. 22–31.
2. **Reino, A., Tolmats, E.** (2007). Handling mix of emotions and culture: Experiences and insights from two Estonian prisons. In: Türk, K., Vadi, M., Aidla, A.(Eds) *"Management Theory and Practice: Synergy in Organizations: III International Conference"*; Tartu, Estonia; 3–4 April, 2007. Tartu: Tartu University Press, pp. 191–209.
3. **Reino, A., Tolmats, E.** (2006). Examining link between relationships aspect of organizational culture and organizational members' interpersonal competencies. In: Stashevsky, S. (Ed). *"Work Values and Behavior: 10th International Conference on Work Values and Behavior"*. Tallinn, Estonia; 25.–29.06.2006, pp. 483–490.
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V. Unpublished conference/workshop presentations

1. **Reino, A.** (2008) “Integrating ethics in business courses. Estonian case.” Presentation on Fourth Global Business Ethics Symposium and Global Business Ethics Teaching Workshop, 18.–23.05.2008, Bentley College, US.

INTRODUCTION

Motivation for the research

Research into organizational culture has shifted to the forefront of organizational studies because of the growing acceptance of the importance of “soft” issues in organizational life. Some authors (e.g. Wilson and Rosenfeld, 1990) have highlighted that organizational approaches based only on the description of formal structures do not capture the essence of life in the company, and this is why one should turn to concepts of organizational culture to get an idea of the essence of the organization. It is not possible to ignore the concept of organizational culture while aiming to discover the true meaning of a particular organization.

Organizational culture has recently gained even more importance as new management approaches have been recognized (e.g. management by values approach) and organizational culture has been approached, for example, from the perspective of strategic management (see for example Dolan and Garcia, 2002). Findings from empirical studies demonstrate the importance of organizational culture in organizations, in particular that organizational culture is connected to the economic performance of the organization, but relationships have also been found between organizational culture and work-related outcomes like commitment, job satisfaction and turnover.

However, there are plenty of studies that seek to discover the consequences of organizational culture for the organization vigorous discussion exists at the conceptual level as well. There is still no consensus on how to approach organizational culture, and vagueness in the concept is a widely discussed topic in management and organizational studies literature. One of the classics in the organizational studies field, Edgar Schein, has expressed skepticism about whether the organizational culture as a concept will survive as “a useful and viable addition to the armamentarium of organizational studies” at all because it is difficult or even impossible to build a useful concept if there is no agreement about how to define, measure and apply it to the real world of organizations (Schein, 1991: 243).

Several of the core topics in studies of organizational culture have inspired and triggered the author of the dissertation to conduct research in this field. The motivating factors behind the present study are many and varied. Firstly, from the theoretical perspective it seeks to systematically analyze the nature of the concept of organizational culture and clarify the essence of related phenomena, while explaining methodological issues connected to this field. Secondly, the dissertation intends to broaden the scope of research into organizational culture in terms of factors influencing manifestations of organizational culture. The author argues that a gap exists between the theoretical discussions about the formation of organizational culture and influential forces in that process, and empirical research on the topic. Though in theory, several contextual and

organizational factors are seen as important determinants that influence manifestations of organizational culture, empirical research seldom focuses on those particular factors (national culture could be an exception here). Previous notions highlight a number of issues, which clearly demonstrate that there are still several aspects to be studied in the field of organizational culture. Lastly, research into organizational culture has long traditions in Western countries, but no systematic overview and analysis of the topic has been made in transition countries like Estonia. Research conducted on organizational culture in Estonia has been quite fragmented, both in terms of the samples and the methods. For example, individual characteristics and values as determinants of organizational culture are rather well investigated in Estonia (see for example, research by Vadi *et al*), but the impact of organizational characteristics and the influence of the external environment on organizational culture are topics that have not been investigated at sufficient depth. Therefore, extensive research covering variables not yet investigated and also considering the peculiarities of the local context to explore the regularities in manifestations of organizational culture is crucial.

The phenomenology and different interpretations of the concept of organizational culture have usually been analyzed only briefly, which does not further a deeper understanding of the multi-facetedness of the phenomenon. The different understandings of the concept are also undermined by ambiguity at the terminological level. For example, no consensus has been reached about the use of “organizational culture” and “corporate culture”: sometimes both terms are used interchangeably, but at other times a distinction is made between them. The author of the dissertation believes the two concepts overlap, but to separate them, the term “corporate culture” seems to be used to indicate a culture that is devised by the management and then transmitted, marketed, sold or imposed on the rest of the organization (Linstead and Grafton-Small, 1992). “Organizational culture” by contrast denotes a more organic and rooted phenomenon, which grows and develops rather than being created by the efforts of a single person or group. In the scope of the dissertation the term “organizational culture” will be used because in the author’s view organizational culture is an organic, dynamic phenomenon, which is influenced by several leverages simultaneously, and so being able to manage organizational culture directly seems unrealistic.

Schein (2000) has indicated another widespread misconception according to which organizational culture and the organizational climate are equal. Differences exist between the two concepts, though they are not always easy to explain. However, Denison (1996) has argued that sometimes the task of a definitive differentiation between the concepts is a perplexing one because of disputable borders between the phenomena. Here the most widely accepted distinction between organizational culture and climate considers culture as denoting the deeper structure of the organization. This means that organizational culture is rooted in values, beliefs and assumptions, and this meaning is established in the socialization process. Organizational climate is an individual’s cognitive map, construed out of one’s experience with the organization

(Allaire and Firsirotu, 1984: 203). From this comparison, one could argue that whereas organizational culture is rather stable, climate by contrast is relatively temporary and subject to direct control of the social environment perceived by the individual.

Furnham and Gunter (1993) have pointed out several disagreements that exist in the field of organizational cultural research, both at the conceptual and instrumental level. There is still no consensus about the exact components of organizational culture or about the forces that shape and influence manifestations of organizational culture. Last but not least, the question of the connections between organizational culture and an organization's success or failure remains to be answered.

From the methodological point of view, several traps also exist for anyone conducting research in the field of organizational culture. While criticism has been expressed about the "clinical research" of organizational culture (more specifically quantitative analysis), there are also proponents that advocate using typologies as analytical tools of organizational culture in particular. Typologies make it possible to cope with diverse data and to a certain extent make generalizations, and they may be considered especially useful when analyzing the impact of several factors on the features of organizational culture. Using typologies means that organizational cultural types will be defined on the basis of certain dimensions. Organizational culture is rich and is a mix of different features captured within various types, and organizations do not differ in terms of whether they represent a certain organizational cultural type, but rather to what extent a certain organizational cultural type is characteristic to its culture. Therefore, the author of the dissertation argues that it is meaningful to discuss organizational culture in terms of organizational cultural patterns. In the scope of the dissertation the notion of an organizational culture pattern is defined as a cultural profile which characterizes organizational culture from two perspectives: firstly, it demonstrates the relative importance of organizational cultural types in a particular organization and secondly, it denotes the relationships between different organizational cultural types.

While the researchers of organizational studies still argue about the essence and a comprehensive definition of organizational culture, practitioners are more interested in the question of how to manage organizational culture and how to create an appropriate culture for the organization. For example presentations given by practitioners at the series of conferences, "Management Theory and Practice: Synergy in Organizations" (2007–2009), have clearly demonstrated that organizational culture is vital for organizations. When discussing the topic of organizational culture with practitioners from different organizations, it becomes evident that every single organization is different; however, to some extent similar development patterns and organizational cultural characteristics can be noticed as well, which in turn raises the question of the forces that shape organizational culture.

Changeable, uncertain, turbulent, unpredictable are just some of the words that could be used to describe the environment Estonian organizations have been surrounded by in recent decades. It has been argued that the relevance of organizational culture as a topic is especially important in unpredictable economic conditions, where the human side of organizations may be critical for their survival. For example Vadi (2003a: 13) has argued that the performance of organizations is often impeded by problems that could be “successfully solved by tapping into organizational culture”. Examples of such problems, which might have their roots in organizational culture, include innovation in organizations, implementation of new technologies, customer orientation and cooperation within the organization, but also with external counterparts. In order to have a deep understanding of organizations, how processes are directed in organizations and how to predict further developments in organizations, a profound knowledge of organizational culture is needed.

The aim and research tasks of the dissertation

The aim of the present dissertation is to outline regularities and patterns in manifestations of organizational culture using the example of Estonian organizations. To achieve this, the following research tasks were set:

1. Analyze the essence of organizational culture through the angle of different conceptual approaches and typologies;
2. Explore the factors that have an impact on the formation of organizational culture;
3. Analyze methodological approaches in organizational cultural research and work out the basis and methodology for mapping organizational culture in Estonian organizations;
4. Formulate research propositions about the patterns of organizational culture and the impact of organizational and contextual variables on organizational culture;
5. Analyze the impact of different factors on organizational cultural patterns in Estonian organizations;
6. Discuss the research results in terms of the impact of contextual and organizational variables on organizational culture;
7. Present the implications for theory and for organizations on the basis of the research results.

The originality of the research

The previous discussion has demonstrated that organizational culture is a keenly discussed and studied topic, but a systematic overview of the field is still lacking. Very often scholars rely on prevalent definitions and conceptions of

organizational culture without presenting a more general picture of the field, which may result in oversimplifications of the phenomenon. Therefore, the author of the dissertation meets the challenge of analyzing and discussing both the concept of organizational culture, but also methodological issues in the field.

Moreover, the dissertation analyzes the factors influencing manifestation of organizational culture with a particular focus on contextual and organizational factors. The originality of the present dissertation derives from combining several factors and their influence, which has been discussed on theoretical grounds. The impact of those factors has also been analyzed empirically, but as far as the author knows, to date there are no studies that have focused on contextual and organizational factors in one single study. The author believes that considering the impact of several forces simultaneously makes it possible to draw more substantial conclusions on the topic.

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, but also several organizational characteristics, on organizational culture. Estonia had been occupied for almost fifty years and had gone through a period of stagnation towards the end of the occupation (1970–1986) when “social life seemed unchanged for more than fifteen years” (Lauristin and Vihalemm, 1997a), when the situation started to change at the end of the 1980s. The Baltic countries, and Estonia among them, were different from other parts of the Soviet empire in many respects: for example, the pressures of the totalitarian system were weaker in the Baltic countries, the majority of Estonians did not accept the new soviet identity because they remembered the times of independence, due to its location Estonia was open to cultural influences from Western and Nordic countries, and last but not least, Estonia was an economic laboratory for the Soviet Union, and therefore several experimental reforms were tested here (*Ibid*: 75–76).

Estonia has experienced rapid and radical economic reforms and fast-growing development, which have placed organizations into an intriguing context. Vadi (2003b: 34) has argued that the “environment bucketed [boomed] and organizations had to keep in step with the speed of developments”, which on the one hand, provided an opportunity for newly founded organizations to implement structures and organizational forms to fit the turbulent and dynamic environment, but on the other hand, it also put pressure on old organizations to change. Estonia provides a good opportunity to analyze, for example, whether the organizational culture of new organizations that were established on new foundations, after Estonia got 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. In this vein it is worth analyzing whether considerations of organizational culture made on theoretical grounds, but also on the basis of previous studies, apply to Estonian organizations – or to put it differently – whether the developments in society induce certain organizational cultural patterns.

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 culture should be taken into account. As mentioned before organizational culture is a multi-faceted or even ambiguous phenomenon. Most of the studies on organizational culture have been conducted in the scope of a single country, where country-specific factors may influence the manifestations of organizational culture, and therefore it may be complicated to make generalizations that apply under different circumstances. Still, every study is important because it enriches our understanding of the field. In the author's opinion, the present study contributes to further studies because it brings organizational and contextual factors into the one framework and analyzes how these factors influence manifestations of organizational culture under particular circumstances. The findings will expand our knowledge of the field, and although this is not the purpose of the present dissertation, it will nevertheless facilitate a synthesis of results from various studies in order to find out more general patterns of manifestations of organizational culture.

Another novel aspect of the dissertation is its instrument for measuring organizational culture. The author of the dissertation has developed a new measurement instrument for analyzing organizational culture. Although the initial idea for the Organizational Values Questionnaire proceeded from the Competing Values Framework, the author compiled an original instrument in Estonian and Russian. Few tools for analyzing organizational culture have been used in academic research in Estonia. One of the instruments developed by Roots (2003) has unfortunately only been applied in a few master-level studies. Another instrument, the Organizational Culture Questionnaire compiled by Vadi *et al* (2002), has been used in several studies and the instrument analyzes organizational culture from the perspective of task and relationship orientations. Although the author of the dissertation considers these dimensions important, there are other aspects of organizational culture that are also relevant for analysis.

The Organizational Values Questionnaire developed by the author captures the dimensions of flexibility/stability and the external/internal focus of organizations. Several scholars in the field of organizational culture see these dimensions as important (e.g. Deal and Kennedy, 1982; Hofstede, 1998; Harrison, 1972; 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. From that perspective, the Organizational Values Questionnaire makes it possible to analyze organizations from angles that have not been captured before in the Estonian context.

The structure of the dissertation

The present dissertation consists of two parts: the first part creates the theoretical and conceptual basis for the research and the second part of the dissertation consists of empirical research on the regularities of manifestations of organizational culture in Estonian organizations. An overview of the structure of the dissertation is presented in figure 1.

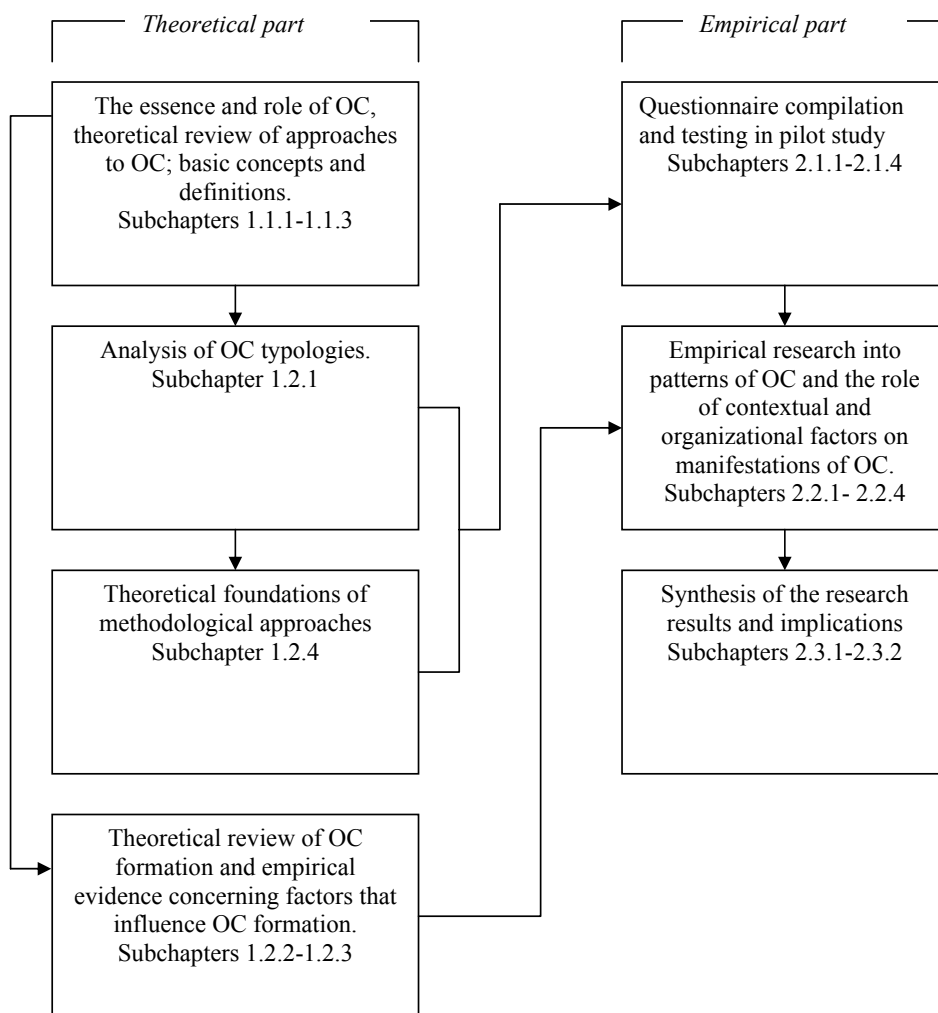


Figure 1. The structure of the dissertation

Note: OC= organizational culture.

The theoretical part of the dissertation (chapters 1.1 and 1.2) analyzes the theoretical foundations of the concept of organizational culture and its manifestations in organizations. Concerning the structure of the theoretical part of the dissertation, the author will approach organizational culture from different perspectives: on the one hand, the essence of organizational culture will be analyzed and secondly, methodological issues related to the topic will be discussed. In subchapter 1.1.1 the phenomenology of the concept of organizational culture and the main ideas of the schools of thought in organizational cultural research are analyzed. These schools of thought may be broadly divided into two categories: firstly, symbolic approaches to organizational culture, which have roots in theories that approach culture as an ideational system, and secondly, socio-cultural approaches of organizational culture, which have developed from the ideas of those scholars that understand culture as a socio-cultural system.

Subchapter 1.1.2 analyzes fundamental definitions of organizational culture in the framework of the socio-cultural school of thought and systemizes basic notions used to define organizational culture. It could be argued that although there is a notable variety of definitions of organizational culture, most of these definitions consider at least one of the core dimensions of organizational culture: stability/flexibility and internal/external focus. Analysis of approaches to organizational culture demonstrates the multi-facetedness of the phenomenon, and in this way, the various components of organizational culture are also discussed in subchapter 1.1.2.

A review of empirical research on the consequences of organizational culture for organizations is provided in subchapter 1.1.3. Although the present dissertation does not focus on the relationships between organizational culture and its effects for organizations as such, this overview of studies provides an understanding of the relevance and importance of organizational culture for organizations. Analysis of previous research demonstrates that studies in organizational culture may be classified into two broad categories: those studies that aim to find connections between organizational culture and organizational performance, and those studies that demonstrate relationships between organizational culture and work-related outcomes such as commitment, job satisfaction, motivation and so on, which clearly underline the importance of organizational culture for organizations.

Issues affecting the formation of organizational culture and their analysis are considered in chapter 1.2. Subsection 1.2.1 analyzes the essence of typologies and both advantages and disadvantages of using the typologies approach in organizational cultural research. The subchapter also provides an overview of the main typologies used in the field of organizational cultural research.

Subchapters 1.2.2 and 1.2.3 analyze the process of the formation of organizational culture and the role of different factors in this process. From this perspective, it could be argued that the learning process that involves organizational members, leaders, and managers, but also the founders of the organization

is a crucial element in the formation of organizational culture. The learning process means that the actors involved are interacting with the organizational environment, and therefore, also several contextual and organizational factors have an impact on organizational culture. A conceptual framework of the formation of organizational culture, which will also be the basis for developing the research propositions, will be set up in subchapter 1.2.3.

The terrain of organizational cultural research from the methodological point of view is rich, and in order to be able to choose the most appropriate method and analytical tools one should consider all the limitations of the methodological approaches available. Therefore, subchapter 1.2.4 will analyze the methodological issues in research into organizational culture, and the advantages and limitations of quantitative and qualitative research methods in the field.

The empirical part of the dissertation is divided into three subchapters. Subchapter 2.1 provides an overview of the research outline, describes how the author developed the methodology, introduces the sampling procedure and presents the results of the pilot study.

Subsection 2.1.1 introduces the stages of the empirical research and the statistical methods used in each phase. Information is also provided about the mean comparison methods t-test and the analysis of variances (ANOVA), factor analysis, correlation analysis, cluster analysis and regression analysis. Here the paper also discusses what each of the methods is used for and what assumptions are made in regard to each method. A new method for measuring organizational culture is developed with the help of two expert groups. The development of the measurement tool consisted of six stages, each being described in detail in subsection 2.1.2.

The development of the items for the Organizational Values Questionnaire took place in 2003, and the empirical research was carried out from 2004 to 2009. The principles of data collection and a description of the sample are presented in subchapter 2.1.3. The main principle of selecting organizations for the sample was diversity in terms of the industries represented by organizations, the size of the organizations and the age of the organizations in order to develop a reliable instrument for measuring organizational culture. Several sampling methods were used in the study. Subsection 2.1.4 presents the results of the pilot study carried out in three educational organizations and introduces the process of constructing the subscales. Applying factor analysis made it possible to find out four subscales applicable for analyzing organizational culture in terms of four types of organizational culture. The instrument is used in the empirical research in order to test propositions set up in the theoretical part of the dissertation.

In order to keep the structure of the dissertation clear and easy to follow, the author of the dissertation keeps the presentation and discussion of the findings of the study separate. The results of research into organizational culture in Estonian organizations are presented in subchapter 2.2. The results are pre-

sented in four different subsets: subchapter 2.2.1 provides the analysis of patterns of organizational culture in terms of connections between types of organizational culture; subchapter 2.2.2 considers those results that demonstrate the effect of contextual variables on patterns of organizational culture; the impact of organizational factors on organizational culture is analyzed in subchapter 2.2.3 and lastly, the main results of the regression analysis, aiming to take into account effects of different independent variables on organizational culture, are presented in subchapter 2.2.4.

Chapter 2.3 presents a synthesis and discussion of the results of the empirical study. More particularly, subsection 2.3.1 discusses the results concerning patterns of organizational culture and subsection 2.3.1 presents a summary of the impact of contextual and organizational factors on organizational culture. Consequently, some implications of the dissertation for organizational cultural analysis and for organizations are brought forward.

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I. THE THEORETICAL FOUNDATIONS AND MANIFESTATIONS OF ORGANIZATIONAL CULTURE

1.1. Fundamentals of organizational culture

1.1.1. The range of approaches to organizational culture

The primary focus of the present dissertation is organizational culture – a concept that helps explain how organizations function. For a better understanding of the notion of organizational culture and the variety of approaches to understanding and studying the phenomenon, it is also important to review the fundamental concept of culture itself. Culture is a notion that could be applied in order to describe people's way of living in the most general sense. Organizational culture is a term that could be used to decipher ways of thinking and acting at the organizational level. The roots of the organizational culture concept are the same as for the concept of culture itself, and therefore, the author believes that a systematic analysis of the concept of culture makes it possible to explain the origins of different schools of thought in studies of organizational culture. The present subchapter investigates different approaches to the concept of culture followed by an analysis of the main ideas presented by different schools of thought in research into organizational culture and connections between these two.

It has been argued that culture is all around us at every moment. But paradoxically we do not notice it because it is not a rational or instrumental phenomenon; however, people must have a sense of “what reality is all about” in order to function (Pettigrew, 1990: 574). Culture could be defined as “the system of publicly and collectively accepted meanings operating for a given group at a given time” (*Ibid*: 574). At the core of every culture there are assumptions about the proper way for individuals to relate to each other in order to make the group safe, comfortable, and productive (Schein, 2004). However, these are only a few of many possible approaches to the culture phenomenon. The systematizations of the concept of culture most often referred to in literature are those created by Kroeber and Kluckhohn (1952) and Allaire and Firsirotu (1984).

Kroeber and Kluckhohn (1952) have identified 164 definitions of culture, which demonstrates the diversity of the concept. These definitions could be classified into six broad categories on the basis of the primary focus of the definitions:

1. *Descriptive* definitions of culture view culture as a comprehensive totality and stress the enumeration of the aspects culture contains.

2. The *historical* approach emphasizes social heritage or tradition as an important feature of culture.
3. *Normative* definitions emphasize a rule or way of living involving ideals, values and behavior.
4. The *psychological* approach to culture focuses on learning and habits as adjustment and problem-solving devices of culture.
5. The *structural* approaches put emphasis on the patterning of culture.
6. The *genetic* approaches try to explain how culture has formed and views culture as a product or artifact, where ideas and symbols are central elements that define the culture.

From this list it is clear that culture is a multifaceted phenomenon comprising a whole range of aspects that should be considered when defining the concept. However, the categorization proposed by Kroeber and Kluckhohn (1952) is quite broad and does not provide clear units of analysis, because several definitions fit into the proposed categories.

Another attempt to systematize culture is presented by Allaire and Firsirotu (1984). In the author's opinion this approach is more valuable because it makes it possible to explain where different schools of thought spring from. Here, the most essential distinction has been drawn between theories that consider *culture as a part of the social system* and those that view *culture as the ideational system*.

Those authors handling culture as a part of a social system (e.g. Malinovski, Radcliffe-Brown, Kluckhohn and Kroeber) believe that harmony exists between the culture and the social system, and the culture is manifested in the behavior and artifacts of bearers of culture. Theorists that view culture as a system of ideas (e.g. Levi-Strauss, Goodenough, Wallace) admit that cultural and social realms are distinct, but interrelated, and these theories support the idea that the core of any culture is in its shared meanings and symbols – culture is located in the minds of culture bearers (Allaire and Firsirotu, 1984).

Following the dichotomy of the concept of culture into a socio-cultural and ideational system, Allaire and Firsirotu (1984) end up with eight schools of thought that approach culture from different slants. Table 1 provides an overview of the schools of thought and their main ideas about culture. It also indicates the main representatives of each theory and the era each theory was developed.

The approaches presented in table 1 are rather divergent, and therefore it is complicated to find consensus for the concept of culture. This is not to say that any attempt in this field is meaningless, but rather that it is better to admit that different schools exist, which is logical because culture is a complicated and multi-facet phenomenon.

Table 1. System of theories of culture

Dichotomy of culture theories		Schools and main postures	Representatives and period
Culture as an ideational system	Culture in minds of culture bearers	Cognitive (ethnographic school): culture as a system of knowledge, of learned standards for perceiving, believing, evaluating and acting.	Goodenough (1950s)
		Structural: culture as shared symbolic systems that are cumulative products of the mind, a reflection of unconscious processes of the mind that underlie cultural manifestations. Universals exist in human culture at the level of unconscious structure, never at the level of manifest acts. Formally similar unconscious processes and structures produce the variety of cultural elaborations and artifacts.	Levi-Strauss (1950s)
		Mutual equivalence: culture as a set of standardized cognitive processes, which create the general framework for the mutual prediction of behavior among the individuals who interact in the social setting.	Wallace (1970s)
	Culture in products of the mind (shared meanings and symbols)	Symbolic (semiotic) school: culture is in the meanings and thoughts shared by social actors.	Schneider; Geertz (1960s and 1970s)

Table 1. Continued

Dichotomy of culture theories	Schools and main postures	Representatives and period
Culture as a socio-cultural system	Synchronic studies (focus on the study of culture at particular points in time and space)	Malinowski (1940s)
		Functionalist: culture is an instrumental apparatus that enables a person to cope with the specific problems faced in the course of need satisfaction. Manifestations of culture (e.g. institutions, myths) are explained by the functional necessity for the satisfaction of basic human needs.
		Functionalist-structuralist: culture as an adaptive mechanism by which human beings are enabled to live a social life as an ordered community in a given environment. Culture as a means in order to maintain society.
	Diachronic (considers the dimension of time and focuses on the processes involved in the development of particular cultures)	Historical-diffusionist: culture consists of temporal, interactive, super-organic and autonomous configurations or forms produced by historical circumstances and processes.
		Benedict (1930s); Kroeber and Kluckhohn (1950s)
		Ecological-adaptationist: culture as a system of socially transmitted behavioral patterns that relate human communities to their ecological settings. The environment has an active and selective role in the evolution of culture.
		White (1940s); Service; Rappoport; Vayda (1960s); White and Dillingham; Harris (1970s)

Source: author's synthesis based on Allaire and Firsirotu (1984)

Understanding the diversity of paradigms of culture is important in any study of organizational culture because the variety of approaches to culture as such have devolved also to the field of organizational culture. Theories of organizational culture have obtained their ideas from theories about culture and that is one reason why the theories of organizational culture were developed decades after the theories about culture. The concept of culture was brought into focus in management studies in the late 1970s and early 1980s¹. Organizational culture is a phenomenon defined and investigated in various ways by different researchers, and there is still no solid understanding of the true meaning of organizational culture.

Sackmann (1997: 4) takes the position that the picture researchers capture of organizations may be “full of contrasts and contradictions, showing aspects of harmony next to differentiation with or without dissent and a multiplicity of cultural identities that may be in constant flux....” This quote sheds light on the complexity and even incompatibility of elements of organizational life. The different positions in the research into organizational culture could be explained by the fact that in anthropology, from where the concept of culture is “borrowed”, there is also no consensus on the interpretation of culture (see for example, Sackmann, 1991; Smircich, 1983). Therefore, several dominant schools in the research into organizational culture could be determined. Figure 2 aims to bring out the dichotomy of approaches to organizational culture and explain what kinds of links exist between particular schools of thought about organizational culture and approaches to culture in general.

Two approaches to organizational culture – the symbolic and the socio-cultural approach – are based on different understandings of culture as such. The symbolic school of organizational culture is based on culture as an ideational system (more precisely on the ideas of the symbolic school of thought), and the origins of the socio-cultural approach to organizational culture could be found in cultural theories that approach culture as a socio-cultural system (see table 1).

From the symbolic perspective, organizational culture is about the symbols, symbolic behaviors and interpretations of these phenomena (Hatch, 1993). Symbolic approaches tend to see culture as the very substance of the organization, so that proponents of that idea approach organization itself as a culture (e.g. Smircich, Alvesson, Sackmann). For example, Smircich (1985: 347) argues, that “culture is something an organization is” and agents of this kind of approach try to attain an in-depth understanding of organizations as cultural arenas. From this viewpoint organizations are only “figments of participants’ aspiration of meaning to, and interpretation of, their organizational experience”,

¹ In fact, Blau and Scott (1962, cf. Wallace *et al* 1999) had discussed already earlier that all organizations consist of formal and informal dimensions and it is impossible to capture the essence of organization without a sound understanding of its informal character.

which means that organizations have no external reality (Allaire and Firsirotu, 1984: 221). Thus, symbolic theories support the idea that culture is the product of negotiated and shared symbols and meanings from the past and this emerges from social interaction. It is an interpretive or subjectivist paradigm of organizational culture, which approaches the phenomenon of culture from an “antipositivist view” (Erez and Earley, 1993: 68). This particular approach focuses on understanding the deep nature of organizational culture, and giving the subjectivist view of the culture of a particular organizational setting.

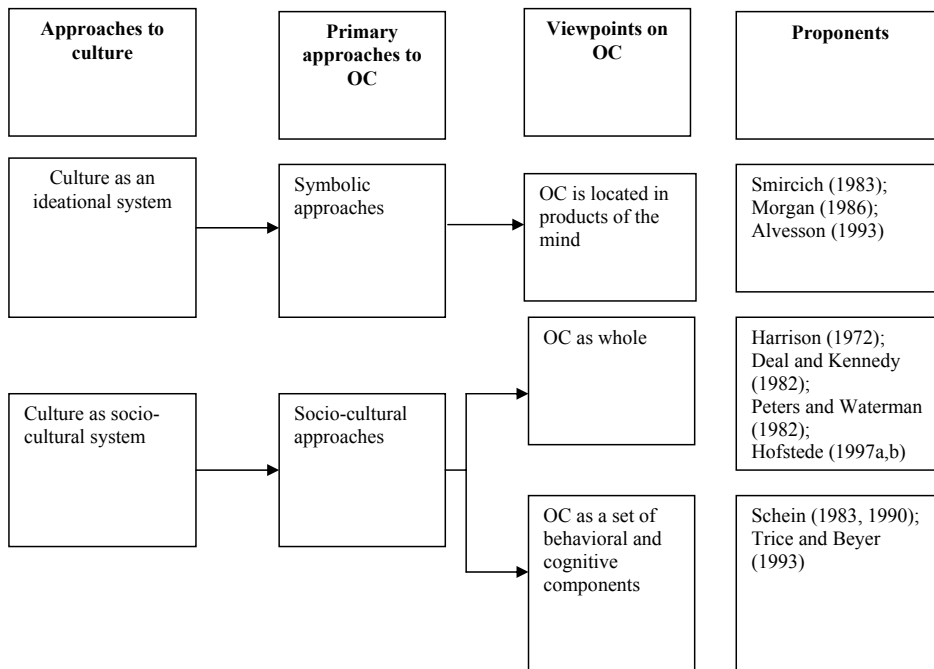


Figure 2. Roots of the concept of organizational culture

Note: OC= organizational culture

Source: author’s synthesis based on Allaire and Firsirotu (1984), Smircich (1983), Vadi (2000)

Another school of thought approaches organizational culture from the socio-cultural perspective. The anthropologist Sahlins (1985, cf Schein 2000) has argued that social phenomena cannot be understood without understanding the historical events and the cultural meanings attributed by actors to those events. However, organizational culture is more than meaning. From the socio-cultural perspective, organizational culture is seen as a combination of two components: the first being the cultural system that includes the organization’s shared and meaningful symbols manifested in values, ideologies, myths and rites; and the second (and at least the same important component of organizational culture) being the socio-structural system of organization encompassing structures,

strategies, policies and processes. Both of these systems are in complex relationships (Allaire and Firsirotu, 1984). The socio-cultural approach regards organizational culture as a variable, advocating the view that the organization *has* a culture (e.g. Hofstede, 1997; Quinn, 1988; Schein, 1990; Schwartz and Davis, 1981 etc). Sackmann (1990 cf Furnham, 2005) has argued that the approach to organizational culture as a variable is based on three assumptions: 1) culture as one of several organizational variables; 2) culture consisting of a finite and patterned set of components, and 3) culture serving several functions that contribute to the success of organizations, or as Meek (1992: 199) has put it, organizational culture “can be manipulated to serve the ends of management”.

Some of the theories built on this could be labeled “the practitioners’ view” or “the functionalist approach”, because the interest here is to capture the concept of organizational culture in terms of its functionality (see for example, Deal and Kennedy, 1988; Peters and Waterman, 2004). Martin (2002: 4) summarizes briefly that the functionalist studies of organizational culture offer the promise that a “strong” culture will lead to outcomes like greater productivity and profitability. Other researchers (e.g. Schein, 1997; Trice and Beyer, 1993) take the position that organizational culture is an important source for attaining organizational goals, but the idea of a “strong” culture is not ultimate. Culture could be approached as an instrument for universalizing the management’s interests, the suppression of conflicting interests and reinforcing organizational unity (Ogbor, 2001). Schein (1997), Trice and Beyer (1993) propose that organizational culture could be subject to changes, but several consequences, included unintended ones, should be considered in the process (Harris and Ogbonna, 2002).

Though the socio-cultural approach in studies of organizational culture is rather dominant, it also has its critics. For example, Alvesson (1993: 5) has expressed quite ironically that academic writings on organizational culture have become “practitioner-friendly”, concentrating on the research of practical problems and a specific research object rather than on broader theoretical and conceptual issues. While the functionalist approach springs from the idea that discovering linkages between cultural phenomena and performance would help the organization cope with its problems, the subjectivist approach assumes that a holistic understanding of organizational life enables free thought from its traditional patterns and that kind of *modus operandi* is needed to understand the organizational setting profoundly.

To sum up the previous discussion, organizational culture could evidently be approached from different perspectives, and therefore, there is no definite and consensual understanding of the concept of organizational culture. Whilst the foregoing discussion demonstrated that two primary paradigms exist in the conceptualization of organizational culture, and that both of them deserve consideration to obtain a holistic view of the concept of organizational culture indeed, most debates over the essence of organizational culture and the majority

of the research carried out on the field seem to follow the ideas of the socio-cultural school. That is particularly evident in the case of the studies that aim to discover and explain connections between organizational culture and some particular organizational variable or phenomena. In the author's opinion, the popularity of the ideas of the socio-cultural school could be explained using a less abstract approach to organizational culture – authors who follow the ideas of the socio-cultural approach try to explain the essence of organizational culture using instrumental (sub)categories that enable approaching organizational culture in a more structured and even quantified manner.

Nevertheless, socio-cultural approaches to organizational culture also have several limitations. Using instrumental categories could be seen as an advantage of a particular approach, but at the same time it is quite difficult to create meaningful and univocal categories for analyzing and explaining organizational culture. Therefore, subjectivity will always be a part of analyses of organizational culture. Moreover, the problem of semantic ambiguity often arises because interpretations of the notions used for analyses of organizational culture by different authors may vary significantly, and although the representatives of the socio-cultural school mostly share similar ideas about organizational culture, disparities can also be found in the viewpoints of different authors. The definitions and features of organizational culture from the perspective of the socio-cultural school of thought will be studied in the next subchapter.

1.1.2. Basic concepts and definitions of organizational culture within the framework of the socio-cultural school of thought

Comparison of approaches to organizational culture

The previous subchapter demonstrated that diverse understandings of culture have shaped conceptually different approaches to organizational culture – the symbolic and the socio-cultural schools of thought. As discussed, the boundary between the symbolic and socio-cultural approaches to organizational culture is more or less clear, and a plethora of definitions and understandings of organizational culture exist in the socio-cultural school. The variety of definitions that originate from the ideas of the socio-cultural school is notable and this has been discussed, for example, by Allaire and Firsirotu (1984); Vadi (2000); Verbeke, Volgering and Hessels (1998). Moreover, while analyzing definitions of organizational culture proposed by different authors, we can see that different concepts have been used to define organizational culture, and there is even greater vagueness because the same term may have different meanings in discussions by different authors. Thus, it is evident that even more systemization is needed both at the conceptual and terminological level, and therefore the aim of

this subchapter is to analyze definitions of organizational culture in a comparative manner.

Roger Harrison, one of the first researchers in the field of organizational culture does not use the term “culture”, but instead applies the concept of ideologies. In Harrison’s (1972: 119) view, ideology refers to the systems of thought that are central determinants of the organization’s character affecting the behavior of people, the organization’s ability to effectively meet its members’ needs and demands and the way the organization copes with the external environment. Thus, from this very basic definition two essential dimensions of culture can be identified: the first dimension could be specified as an interest towards intra-organizational matters; and the second is a concern for relations with the external environment. The same dimensions can also be found in the definition of culture brought out by Trice and Beyer (1993: 2), who define culture as a “collective phenomenon that embodies people’s responses to the uncertainties and chaos that are inevitable in human experience”.

These dimensions have served as a basis for several approaches to organizational culture. Deal and Kennedy (1982) have stressed the internal cultural dimension, defining organizational culture as a set of “assumptions, understandings and implicit rules that govern day to day behavior”. They also believe that there are certain values (e.g. “close to the customer” and “productivity through people”) characteristic to excellent organizations, and that certain types of values contribute to organizational behavior through guiding and shaping the attitudes of employees. Hofstede (1998: 2) also accentuates the integration aspect through the angle of differentiation and the creation of boundaries, defining organizational culture as “the collective programming of the mind which distinguishes the members of one organization from another”. Thus, from this perspective the primary function of organizational culture is keeping the organization together, making it possible to define “who we are” and “who we are not”.

Probably one of the most influential conceptual frameworks of organizational culture has been developed by Schein, who has defined organizational culture as a “pattern of shared basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration – a pattern of assumptions that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems” (Schein, 1983: 14). The main problems of external adaptation that the organization has to deal with are, for example, developing consensus on its primary task, mission, goals and strategy. It also covers the means that should be used to accomplish the goals (e.g. how to build a reward system, what should the structure of the organization be etc) and the criteria for measuring performance. Questions of internal integration that the organization faces include setting the criteria for organizational boundaries (e.g. criteria for distinguishing “us” and “others”), as well as criteria for the allocation of power and status,

rewards and punishments. Internal integration encompasses the set of rules for intimacy, friendship and love (*Ibid.*).

The author of the dissertation supports the basis of Schein's definition of organizational culture. This definition similarly emphasizes the theory that culture is a phenomenon created on a collective basis. Organizational culture is a shared phenomenon, which means that the process of the creation and re-creation of shared meanings is the very core of organizational culture. In this respect Schein's (1983) approach differs from the other approaches discussed previously because several other definitions do not explain what the agencies in the formation of organizational culture are important. For example, in Harrison's (1972) approach the role of organizational members in creating ideologies remains ambiguous. Moreover, Schein (1983) has added new dimensions – flexibility and stability – into the definition of organizational culture. Flexibility was also pointed out earlier by Harrison (1972), and it has been considered an important feature because it facilitates adaptation with the environment (see also Ogbonna and Harris, 2002). But at same time, another characteristic feature of organizational culture is stability, because being rooted in organizational history it provides more or less rigidity for the organization.

Table 2 presents descriptions of organizational culture from different authors in a comparative manner, focusing on the presence of the internal-external and stability-flexibility dimensions in those particular definitions.

From the brief overview of the different definitions of organizational culture presented in table 2 it can be seen that different researchers share similar positions on organizational culture on several points. Hofstede *et al* (1990) have also pointed out that most researchers handle organizational culture as a socially constructed phenomenon – organizational culture is about people and it cannot be separated from the people who actually create the culture via shared knowledge, norms and rules. In addition, Trice and Beyer (1993) suggest that culture encompasses symbolic aspects and is an emotionally charged phenomenon. However, the fact that the culture is connected to organizational members does not mean that the organizational culture will be destroyed, for example, when some individuals or groups leave the organization because organizational culture is socially constructed and historically determined (Hofstede *et al*, 1990) and therefore rather entrenched. An organizational culture, which has been entwined with the organization's history, influences both the present and the future of the organization (Pettigrew, 1990: 268).

Following the previous analysis of different definitions of organizational culture, two main conclusions arise. Firstly, the definitions of organizational culture vary along the functionality, which means that authors discuss the role of culture in organizations. Most of the discussions focus on the question of whether the culture is there to regulate intra-organizational matters or rather to facilitate relations with the external environment, or does organizational culture contribute to both. The second conclusion concerns the time dimension as an aspect that could serve as a basis for differentiating between the conceptual

approaches. Here by the time dimension we mean the extent to which organizational culture is dynamic or static in its essence. Although the dimension of flexibility and stability seems to be relevant in defining organizational culture, it is still less exploited in the definitions discussed above.

Table 2. Comparison of definitions of organizational culture

Authors	Essence of organizational culture	Primary function of culture	Primary focus of culture	
			Internal – external	Stability – flexibility
Harrison (1972)	systems of thought	influence on member's behavior, on ability to meet their needs and demands and on ability to cope with external environment	Internal and external	flexibility
Schein (1983)	pattern of shared basic assumptions that a given group has invented, discovered, or developed	cope with integration and adaptation	internal and external	stability and flexibility
Hofstede (1998)	the collective programming of the mind	distinguish members and non-members	Internal and external	–
Deal, Kennedy (1982)	assumptions, understandings and implicit rules	govern behavior, keep organization together	Internal	–
Trice and Beyer (1993)	set of ideas	help cope with uncertainties and ambiguities	Internal	–

Source: compiled by the author

When specifying dynamics and flexibility as the ability to change over the time, researchers have more or less agreed about the dynamic nature of organizational culture, but views diverge more when discussing the ability to change organizational culture. Although, some authors (e.g. Cameron and Quinn, 1999; Deal and Kennedy, 1982; Harrison, 1972) argue that managerial interventions are mostly successful in changing organizational culture, there are also authors that take a different position (e.g. Hofstede, 1998; Schein, 1983; Trice and Beyer, 1993 and others) contending that change in organizational culture is more often an evolutionary process, and rapid changes in organizational culture are usually not possible. Leaders of organizations have been seen as powerful “engines” in the process of the development of organizational culture. Schein

(2006: 296) has argued that “leaders create cultures through imposing their personal values and assumptions on their colleagues and employees”. The positive impact of leaders on organizational culture has been mostly discussed in management literature, but for example, Kets de Vries and Miller (1986: 266) have created a typology of dysfunctional executives and organizations, arguing that the impact of dysfunctional leaders is extremely significant in organizations where decision-making power is centralized and the organization is managed by a relatively small, homogeneous dominant coalition.

In attempting to describe the general features of organizational culture, it has been argued that organizational culture is inherently fuzzy (Trice and Beyer, 1993), and for example, political and plurality issues should be taken into account while analyzing organizational culture (Pettigrew, 1990). Organizational culture usually endorses the values of some subgroups while ignoring those of others and this kind of “struggle” can cause changes in organizational cultures (see Baumard and Starbuck, 2001). Rigidity of organizational culture could also be explained by the fact of interdependency: organizational culture is interconnected to the politics, structure, systems, people and priorities of the organization (Pettigrew, 1990) and change efforts should encompass several interrelated aspects of organizational life. Besides, being broad, organizational culture is believed to be deep as well, which means that organizational culture could be analyzed at several levels (Hofstede *et al*, 1990; Pettigrew, 1979; Schein, 1997; Trice and Beyer, 1993). The levels (or layers) of organizational culture can be interpreted as an analytical tool, which then can be defined as “the degree to which the cultural phenomenon is visible to the observer” (Schein, 2004: 25). Organizational culture could be seen as a complex system that includes various components observable on different levels. A more detailed discussion of the multi-layered quality of organizational culture will follow in the next section of the thesis.

Consistency of organizational culture

When analyzing the ideas of different authors about the nature of organizational culture, it is possible to notice that their definitions capture several components of organizational culture (assumptions, ideas, implicit rules etc). The multi-layered quality of organizational culture as a phenomenon is derived most directly from the traditional definitions of culture. Erez and Earley (1993: 42) conclude that culture refers to “both objective and subjective aspects of man-made elements”. While objective aspects of culture in this sense consist of tools and artifacts produced by people, the subjective part of culture includes categories of social stimuli, associations, beliefs, attitudes, norms, values and the roles individuals share (*Ibid.*).

The idea of different components of organizational culture was initially brought out by Pettigrew (1979: 574), who stated, that approaching culture as a unitary concept lacks “analytical bite”, and therefore a “potentially more fruitful approach is to regard culture as a source of a family of concepts”. The idea of

different layers of organizational culture is also captured in the works of other authors (e.g. Deal and Kennedy, Hofstede, Schein, Trice and Beyer). Schein (1983: 14) has argued that “*culture is not the overt behavior or visible artifacts one might observe on a visit to the company. It is not even the philosophy or value system that the founder may articulate or write down in various “characters”*”, but according to him, the real core of culture is found in basic assumptions, which underlie the values and determine behavior patterns and visible artifacts.

There is significant agreement among researchers that organizational culture could be handled as a multi-layered phenomenon. For example, Trice and Beyer (1993) differentiate between the *substance of culture* and *cultural forms*; Hofstede *et al.* (1990) also propound the idea of two levels of culture (*values* and *practices*). Schein (1997) distinguishes three levels of culture (*basic assumptions, values and artifacts*). Those authors who support the idea of culture as a multi-level phenomenon are agreed that there are some elements on the surface of organizational culture that are more accessible to external spectators, but a more profound layer of organizational culture also exists that includes elements that are complicated to understand because they are manifested indirectly. But still, there are different opinions about what the elements that form the different levels of organizational culture are. While other authors distinguish between layers of organizational culture (or umbrella terms) that capture different components, and those layers are believed to follow a gradation, Pettigrew (1979) does not collate organizational culture components in a hierarchical manner. Those authors who support the idea of culture as a multi-layered phenomenon agree that there are some elements on the surface level which are more accessible to external spectators, but a more profound layer of organizational culture also exists that includes elements which are complicated to understand because they are manifested indirectly. Still there are different opinions about what elements form the different levels of organizational culture.

Sackmann (1991: 25) has expressed that differentiating between several components of organizational culture may be wise, but this primarily functions to clarify how and why terms are used by one author and not by others. Indeed, even if the conceptual frameworks of different authors are rather similar, and admitting that different levels could be identified in organizational culture, it is still ambiguous whether the bases of these distinctions are the same. There is a notable diversity in the connotation of the terms used as we can see in table 3.

On the surface organizational culture is believed to consist of artifacts (Schein 1997) or practices (Hofstede *et al.* 1990) including visible or explicit organizational structures and processes (Schein 2004). The explicit level of organizational culture embodies also symbols and rituals (Hofstede *et al.* 1990, Pettigrew 1979), language, beliefs, myths (Pettigrew 1979²), heroes (Hofstede *et al.*, 1990) and physical layout (Schein 1990).

² Pettigrew has expressed the position that OC components are interdependent, but not structured in a hierarchical manner.

Table 3. Layers of organizational culture according to different authors

Author	Layers of organizational culture	Essence of components of organizational culture
Schein (2004)	Artifacts	Artifacts include elements that are easily visible, but hard to decipher (e.g. language, technology, products, clothing, ritual, ceremonies, language, published list of values etc).
	Espoused beliefs and values	Espoused beliefs and values are socially validated and shared ideas and ideals which predict much of the behavior of organizational members.
	Basic underlying assumptions	Basic assumptions are “taken-for-granted solutions” to problems that derive from common experiences of success and shared traumas.
Hofstede <i>et al</i> (1990)	Practices	Rituals are collective activities that are socially essential (even if technically superfluous). Symbols consist of words, gestures, pictures or objects that carry a particular meaning within a culture. Heroes are people, alive or dead, real or imaginary, who possess characteristics highly prized in the culture and who serve as models for behavior.
	Values	Values are broad, nonspecific feelings about good and evil.
Trice and Beyer (1993)	Cultural forms	Symbols are things that stand for or suggest something else (i.e. natural and manufactured objects, settings, performers, functionaries) Language is a shared system of vocal sounds, written signs, or gestures used by members of a culture to convey categorized meaning to each other (jargon, slang, gestures, signals, signs, songs) Narratives (stories, legends, sagas, myths) are verbal forms of transforming the sense of experiences, feelings and beliefs. Practices include behaviors that express cultural meanings. Meanings appear in rituals, rites, ceremonials, but also in taboos.
	Substance of culture	Ideologies are general sets of ideas. An ideology is a shared, relatively coherently interrelated set of emotionally charged beliefs, values and norms that bind some people together and help them to make sense of their worlds. Values express a preference for certain behaviors or for certain outcomes. Norms express which behaviors are expected by others and are culturally acceptable ways to attain outcomes. Beliefs express cause and effect relationships.

Table 3. Continued

Author	Layers of organizational culture	Essence of components of organizational culture
Pettigrew (1979)		<p>Ideology is a set of beliefs about the social world and how it operates, containing statements about the rightness of social arrangements and actions.</p> <p>Symbols are objects, acts, relationships or linguistic formations that stand ambiguously for a multiplicity of meanings, evoke emotions, and impel men to action (i.e. vocabulary, design of buildings, beliefs about power distribution).</p> <p>Language is the system of vocal signs that typifies and stabilizes experience and integrates those experiences into a whole.</p> <p>Ritual is the symbolic use of bodily movement and gesture in a social situation to express and articulate meaning. Through rituals social relationships may become stylized, conventionalized and prescribed.</p> <p>Myths are narratives of events (often with a sacred quality) playing a crucial role in the continuous processes of establishing and maintaining what is legitimate and what is labeled unacceptable in organizational culture.</p>

Source: compiled by the author based on Schein (2004), Hofstede *et al*, (1990), Trice and Beyer (1993), Pettigrew (1979).

Schein (2004) has underlined that the visible level of organizational culture is easily observable, but very difficult to decipher. Observers can see, hear and feel visual elements of organizations, the behavioral patterns adopted and routines followed by organizational members and the language used in organizations, but the meaning of these elements can only be fully understood by organizational members. Interpretations by non-members may diverge from the members' perceptions to a great extent. It has been discussed that interpretations of (basic) values, which are unobservable as such are often based on behavioral patterns, but this may be misleading because theoretical arguments have still made only a modest contribution to understanding how basic assumptions actually shape behavior and if there is no clarity in the processes that generate the basic values it is not correct to interpret behaviors as a direct reflection of values (Hechter, 1993). Schein (2004: 27) has also argued that it is dangerous to try to infer the deeper grounds of organizational culture from artifacts alone because interpretations can be subjective and project feelings and reactions.

The deeper level or substance of organizational culture has been labeled values (Hofstede *et al*, 1990; Schein, 1997) or ideologies (Trice and Beyer, 1993). Schein (1997) believes that there is an even deeper cultural level – basic

assumptions – that lay the foundation for values and artifacts. Basic assumptions could be approached as a form of tacit knowledge in the organization.³ They are “taken-for-granted solutions” to problems that derive from common experiences of success and shared traumas (Schein, 1997). Assumptions are beliefs that organizational members hold about themselves and others, about their relationships to other people and also about the nature of the organization in which they live or work (Lundberg, 1985: 172). Schein (2004: 25) argues that basic assumptions are “treated as nonnegotiable” by group members and “someone who does not hold them is viewed as a “foreigner” or as “crazy” and is automatically dismissed”. Hence, although basic assumptions are subliminal and not always specific they are a source of values and actions in organizations.

Organizational values⁴ have been interpreted as espoused or internalized beliefs held by organizational members (Sathe, 1985) and used by them “to depict the culture to themselves and others” (Schein, 2004: 25). Schein (2004) argues that values are not taken for granted as basic assumptions are, but values are quite open to discussion and organizational members may agree or disagree about them. Nevertheless, this is not the only possible understanding of values – for example, Hofstede has interpreted values as “the broad, nonspecific feeling about good and evil” (Hofstede et al, 1990: 291) and this specification demonstrates that values may be quite general, subliminal and non-verbalized. Thus, the interpretation of values by Hofstede *et al* (1990) is conceptually rather similar to the concept of basic assumptions discussed by Schein (2004).

Ideology is seen by Pettigrew (1979) and Trice and Beyer (1993) as a core element of organizational culture, and in this context ideology could be defined as a set of beliefs about the nature of an organization and its environment (Price, 1997: 393). Trice and Beyer (1993) point out that although organizational members may become accustomed to the ideologies and even not be fully aware of them, the ideologies are still not the same as basic assumptions. Ideologies involve more specific ideas and are not so deeply hidden. Thus, the ideology as a deeper layer of culture (or the culture’s substance) is rather close to the values concept, hence also encompassing the features of being peculiar as in basic assumptions.

While there is concord about the surface level of organizational culture, notable ambiguity about the kernel of organizational culture could be found in

³ Cultural knowledge is tacit because it is unspoken and knowledge holders are not consciously aware of it (Sackmann, 2001: 149)

⁴ Value as a concept has been handled on different levels – individual, group, organizational or national. Values in general could be defined as “concepts or beliefs that pertain to desirable end states or behaviors that transcend specific situations, and guide the selection or evaluation of behavior and events” (Schwartz, 1992: 4). Though initially Rokeach (1973) has considered values as characteristic to the individual, Roe and Ester (1999) stress that the holders of values are not necessarily only individuals, but may also be collectives (e.g. organization, occupational group, subculture, etc) – like an individual holds several values, so do organizations.

the works of different authors. To be more specific, first of all there is ambiguity in the use of the concepts of values and ideology. Figure 3 aims to bring more clarity to the substance of concepts used by different authors, presenting the comparison of different authors' positions as compared to Schein's conceptual framework of organizational culture.

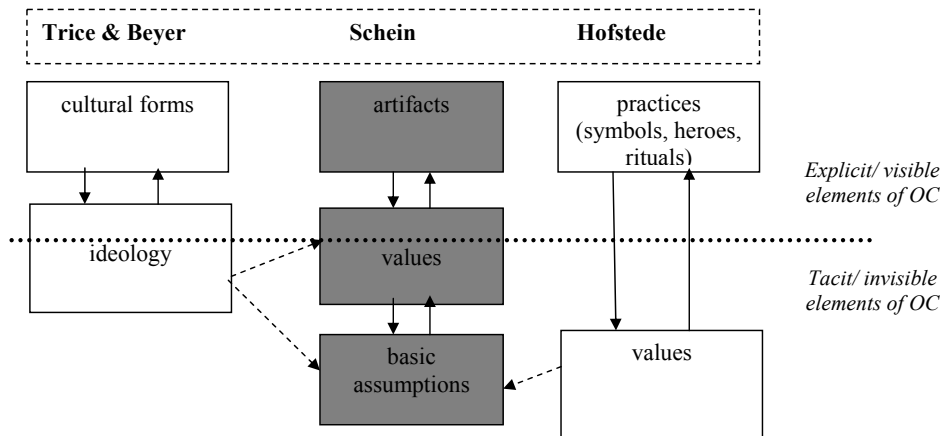


Figure 3. Components of organizational culture and interactions between different authors' positions

Source: compiled by the author based on Hofstede *et al* (1990); Schein (1997); Trice and Beyer (1993).

Note: OC= organizational culture

Thus, in several approaches to organizational culture, values are seen as a core element and therefore have been the focus of most studies of organizational culture, and artifacts have been considered less⁵. Organizational values could be interpreted as “the beliefs held by an individual or group regarding the means and ends that organizations “ought to” or “should” identify in the running of the enterprise, in choosing what business actions or objectives are preferable to alternative actions, or in establishing organizational objectives” (Enz, 1988: 287). Deal and Kennedy (1982: 14) define values rather concisely – values are “basic concepts and beliefs of an organization” which form the heart of organizational culture. They propose that values define “success” in concrete terms for employees and establish standards of achievement within the organization.

From the previous discussion on the essence of organizational culture, the conclusion was made that organizational culture has several functions and two focuses of organizational culture could be brought out (see table 2). The values

⁵ Symbolic approaches to organizational culture turn more attention to interpretations of the artifacts level.

needed for internal integration may differ from those required for external adaptation, that is, for survival (Meglino and Ravlin, 1998: 357). If there is no balance between the values needed for adaptation and integration, the organization may fail to survive (e.g. interaction among employees in a highly efficient manner does not give any proof of the organization's sustainability in the longer perspective; other values are needed as well). Sørensen (2002) has demonstrated that organizations with a strong culture show more reliable performance in stable environments, but in dynamic environments the benefits of the reliability of strong cultures disappear. Selznick (1957: 119) has also stressed that regardless of an organization's inner strength, the integrity of the organization may be threatened if sufficiently great force is applied to it. That is especially relevant when the values are tenuous or insecure (*Ibid*: 120) because then the organization is especially vulnerable. Thus, both values groups – those focused on internal integration and external adaptation – must be in balance for organizational well-being; the fact of sharing values by organizational members is not a precondition for the sustainability of the organization, but the fact of not sharing the values is certainly a step towards vulnerability.

In the author's opinion certain values probably exist that have the power to sustain the organization's prosperity, but those values cannot be treated as universal. First of all, an integrated and effective set of values are necessary to attain certain organizational goals, but the criteria for effective values may vary in different business and cultural environments.

Moreover, it is important that organizational members agree and share organizational values, because they enable the organization to be maintained as a single unit, and in that sense they are essential for organizational survival (Chatman and Jehn, 1994). If there is no substantial agreement that a limited set of values is important in a social unit, a strong culture cannot be said to exist (O'Reilly, Chatman and Caldwell, 1991). Roe and Ester (1999: 4) bring up the issue of defining the meaning of shared values. It is not easy to verify whether the values are shared or there is just a certain amount of homogeneity, which is not a sufficient precondition for sharing. They stress that shared values are not a mere aggregation of individual values.

In large decentralized organizations multiple value systems could exist, but even if there are several subgroups in an organization all holding differing values, there should be some core values shared by the whole organization, and the values of different subgroups should not be contradictory (Wiener, 1988). For example, different departments in an organization could have different value systems because of the different tasks they perform (e.g. in manufacturing the values of the marketing and production departments could be rather different), but those values should complement the values of the whole organization.

The congruence of values is a topic that has attracted the attention of several researchers. The author of the dissertation believes that the topic of values congruence accrues from the essence of the values concept. Generally, values

specify an individual's personal beliefs about how he or she "*should*" or "*ought to*" behave, and this means that the values do not necessarily reflect how he or she *wants* or *desires* to behave or *actually behaves*, but rather "describe his or her internalized interpretations about *socially desirable* ways to fulfill his or her needs (Meglino and Ravlin, 1998: 354). Rokeach (1973) proposes that the more widely shared a value is, the greater the societal demands placed upon us, and the greater the "oughtness" we experience. At the organizational level this means that there is always pressure to expose values that are socially desirable, because meeting the expectations of stakeholders favors fulfilling organizational aims. Argyris and Schön (1978) distinguish values "in use" from "espoused" values, which are the values that are not really a part of an organizational member's behavioral repertoire (Meglino and Ravlin, 1998: 357). Values are socially desirable, and therefore, there is a pressure to express and validate values publicly ("espoused values") whether or not they are held internally ("in use"). In organizations, there could be a great difference between the values expressed publicly and those that are actually shared inside an organization (*Ibid.*). Espoused values are the same as what Anthony (1994) calls "inspirational views" of organizational culture. He argues that individuals are prone to take a particular view of themselves, and this view might be different from the way the organization unrolls for its inhabitants or the observer.

Not only should external stakeholders be taken into account, but internal audiences also have to be considered. For example, Padaki (2000) stresses the congruence of the values derived from the employees and management, and if that is not the case, the organization has two "parallel systems" of values. On the one hand, there are "formal" or "official" values (written down in official papers or on the homepage), and on the other hand, those which are really espoused by organizational members (values that guide the behavior in organization) (*Ibid.*). One may realize that a situation like that is not favorable for any organization, as organizational members can perceive the mismatch of values and the situation could lead to frustration in the organization. If there is a significant discrepancy between the values "in use" and those expressed publicly, a "dysfunctional organization" (Kets de Vries and Miller, 1986) may emerge.

In summary, different approaches to organizational culture exist in the socio-cultural school of thought, but most of the definitions of organizational culture point out the same notions – organizational culture focuses both on internal and external matters of the organization that provide stability for the organization, whereas only a few conceptions of organizational culture stress aspects of flexibility in organizational culture as well. Different authors consider organizational culture a multi-faceted phenomenon, which means that organizational culture consists of explicit and tacit elements. It has been argued that organizational culture has an influence on many aspects of the organization, making it possible to explain organizational outcomes, but due to the multiple elements and layers of organizational culture, it is not always easy to bring out direct

connections between organizational culture and, for example, performance indicators. Empirical studies have highlighted the impact of organizational culture on different aspects of the organization, and the next subchapter will discuss the consequences of organizational culture for the organization, bringing examples from studies in this field. Although, the dissertation does not empirically analyze connections between organizational culture and organizational performance in Estonian organizations, the overview of studies does allow us to explain the role and importance of organizational culture for organizations. Moreover, it also gives hints for future research.

1.1.3. Consequences of organizational culture for the organization

All settled and identifiable communities, nations, ethnic groups and organizations possess cultural characteristics as signifiers of their identity: their members tend to share systems of values and beliefs and to transmit them to newcomers by established means (Anthony, 1994: 3). It has been argued that organizational culture fulfills several important functions in the organization, and these are summarized by Smircich (1983) as follows – it (1) creates a sense of identity for organizational members; (2) facilitates the commitment to a larger unit than the self; (3) enhances the stability of the system and (4) has an impact on the behavior of organizational members. Organizational culture could be handled as a means for ensuring the social order in an organization, and it has been seen as the most powerful force for cohesion (Goffee and Jones, 1998) and alignment in modern organizations (Ghosal and Westney, 2005). Since the seminal study by Peters and Waterman (1982), research in the field of organizational culture became extensive, and a variety of research methods and instruments have been applied in research into organizational culture.

Organizational culture is an interdisciplinary concept, and therefore, the research in this domain is rich. Often studies have been guided from different perspectives. On the one hand, there are numerous studies in management literature that attempt to prove a linkage between organizational culture and different aspects of an organization's performance. Cameron and Quinn (1999) list several successful companies (e.g. Coca-Cola, Disney, General Electric and others) that have been able to develop a distinctive organizational culture, which is believed to have become a competitive advantage for the company. Though a clear link between organizational culture and performance has often remained undiscovered, rhetorically there are still plenty of studies that have found connections between organizational culture and performance in terms of pure economic indicators. Organizational performance has been defined differently in different studies, and therefore, any connection that has been found between organizational culture and organizational performance may also be divergent.

On the other hand, an abundance of studies has focused on interactions between organizational culture and different work-related outcomes (e.g. commitment, job satisfaction, turnover etc), but the connection between these phenomena and organizational performance often remains conceptual (see for example, the discussion in Marcoulides and Heck, 1993). Examples from such studies, and the main results from both fields will follow. This subchapter is divided into two parts: firstly, an overview will be given of empirical studies on the topic of the impact of organizational culture on organizational performance; and secondly, examples of studies will follow showing the influence of organizational culture on work-related outcomes. Tables that summarize the main research principles used in studies and the most important results are included in appendices 1 and 2.

Overview of studies of the connection between organizational culture and organizational performance

Studies that aim to analyze the influence of organizational culture on an organization's performance will be divided into two parts. Firstly, there are several studies that analyze how certain traits of organizational culture (e.g. the strength of organizational culture) influence performance, and secondly, there are many studies that try to find connections between types of organizational culture and organizational performance. As the present dissertation will use the typology approach for analyzing organizational culture, a more detailed examination of those studies that have applied typologies will be provided.

One of the earliest quantitative studies to focus on the relationships between organizational culture and organizational performance was conducted by Denison (1984). A comparison was made between firms that were in the top half of work organization and participation indicators and those that were in the lower half. The results proved that firms with more positive perceptions of work organization (higher scores on scales of the organizational climate, work design, leadership, group work, and satisfaction) were found to be consistently better in performance than firms with less positive views. However, the style of decision-making was found to be less clearly related to performance: more participative firms had slightly better performance initially, gradually improving over time. Similar results were obtained when these firms were compared to the rest of their industry, which led the author to conclude that "soft measures do, in fact, predict hard outcomes" (Denison, 1984: 17).

Several studies have found that a strong culture (i.e. values of the organization are shared and supported by organizational members) has a positive impact on organizational performance. For example, the study by Gordon and DiTomaso (1992) revealed that the strength of organizational culture had a positive effect on short-term organizational performance. Furthermore, it was found that the organization's short-term performance was positively correlated to the adaptability of organizational culture, while the correlation between performance and stability was negative. Kotter and Heskett (1992) have shown that

a strong culture has a positive effect on return on investment, net income and share price. Mallak *et al* (2003) have found that strength of culture was positively correlated to performance indicators (job satisfaction, patient satisfaction etc) in hospitals.

Studies that have used typologies in order to decipher organizational culture have indicated that certain organizational types may have a positive effect on organizational performance, while others do not. For example, Deshpandé and Farley (2004) have demonstrated that a consensual culture, which is internally oriented, decreases performance, while the externally oriented competitive culture has a positive effect on performance. Competitive and innovative organizational culture types were also found to be positively related to performance indicators in a study conducted in the UK (see Ogbonna and Harris, 2000).

In service organizations, service quality is often taken as the criteria of performance. “Close to customers” or being client-centered is probably one of the most often communicated values by organizations. The customer is why an organization exists (Voon, 2006) and it is believed that certain cultural traits are needed to provide a high level service to customers (see for example, Bellou, 2007; Mayer *et al*, 1995; Deshpande *et al*, 1993). Huang and Dastmalchian (2006) have argued that a culture for change has a positive influence on customer orientation, but not exclusively; cautiousness and job satisfaction was also found to be related to customer orientation. Besides being flexible and able to anticipate and respond to customer demands, some other traits of organizational culture may account for customer orientation and service quality. For example, Voon (2006) has empirically developed a service-driven market orientation (SERVMO) construct⁶. This study demonstrated that the most important variable in determining the service quality is *employee orientation*; other important variables are *long-term orientation* and *performance orientation*. The study could not reveal any significant effect from *interfunctional orientation* on service quality. The latter finding at least partly supports the argument from Peters and Waterman (2004) that those cultures that focus on internal politics rather than customers could be strong as well, but they are dysfunctional, and therefore, this will not lead to success or excellence in the company.

Another study conducted in the field of organizational culture and service quality has examined the impact of organizational culture on the customer service orientation of first line personnel in the health care sector. Bellou (2007) argues that while the demands of work in hospitals suggest the need for cooperation between employees, decisiveness and attention to the details, the

⁶ SERVMO is defined as “the set of beliefs, behaviors, and cross-functional processes that seriously focuses on continuous and comprehensive understanding, disseminating, as well as satisfying the current and future needs of the target customers, for service excellence” (Voon, 2006: 598)

research demonstrated that Greek public hospitals underestimate the importance of attention to detail, outcome orientation, team orientation and decisiveness. The study showed that while other organizational culture orientations were positively correlated to customer service orientation, the correlation between outcome orientation and customer service orientation was negative. Thus, serving as many customers as possible may lead to a reduction in service quality and a failure to meet the individual needs of patients.

Beugelsdijk, Koen and Noorderhaven (2006) have argued that organizational performance could be influenced by an organization's relationship skills⁷, which in turn could be determined by the organizational culture of a particular organization. In their study, organizational culture was approached by following dimensions developed by different authors: 1) *outcome or results orientation* (Hofstede *et al*, 1990; O'Reilly *et al*, 1991, Verbeke 2000); 2) *innovation orientation*; 3) *stability orientation* and 4) *team orientation* (O'Reilly *et al*, 1991); 5) *employee orientation* and 6) *open system orientation* (Hofstede *et al*, 1990; Verbeke, 2000). The empirical findings of the study demonstrated that innovation orientation and stability orientation were related positively and results orientation negatively to relationships skills. At the same time, employee orientation, open system orientation and team orientation were not related to the company's relationships skills. The relationship skills were indirectly related to the organization's relationship performance. The authors argue that while innovation-oriented organizations empower and motivate employees to perform boundary-spinning activities and to develop relational power sources, stability orientation is believed to be connected to the organization's relationships skills because these kinds of organizations are more predictable and could be considered more trustworthy. Meanwhile organizations that are too focused on results may not have enough skills, patience and interest in managing close and longstanding relationships.

Some studies have found that relationships between organizational culture and performance are mediated by certain factors (e.g. organizational size and business sector). For example, Denison and Mishra (1995) have demonstrated that culture may have an impact on the company's effectiveness measured in terms of ROA and sales growth, but the correlation between organizational culture traits and effectiveness were dependent on organizational size: in the sample of large companies, the profitability criteria was best predicted by the stability traits (mission and consistency), but the sales growth criteria were best predicted by the flexibility traits (involvement and adaptability). Gordon (1985), Christensen and Gordon (1999) have demonstrated that industry determines the nature of relationships between organizational culture and performance. Gordon (1985) has found that patterns of organizational culture are determined by the

⁷ Relationship skills are defined as a company's "ability and behavioral tendency to actively cultivate and manage its ties with other firms" (Beugelsdijk, Koen and Noorderhaven, 2006)

business sector the company operates in: for example, utilities (gas, electricity, telephone companies) scored higher on integration, top management contact, compensation and human resource development, while the core value of dynamic-marketplace companies (e.g. high technology) was encouragement of individual initiative. Christensen and Gordon (1999) have demonstrated that some traits of organizational culture are related to higher organizational performance, but those linkages are not universal, but industry-specific. For example, in the service industry the emphasis on people and their development was found to be positively correlated to growth in performance, while in energy utilities and manufacturing the correlation was negative. From this research, the conclusion could be that there is no single best culture, but rather each industry determines which cultural patterns tend to support organizational performance.

Studies on the relationships between organizational culture and work-related outcomes

The studies discussed above indicate that organizational culture (or at least some traits or types of organizational culture) has an impact on organizational performance. Those studies that have found evidence of the influence of organizational culture on an organization's economic results usually do not analyze what the mediating mechanisms are that facilitate the performance indicators. One could argue that people actually make things happen and therefore it is important to analyze the influence organizational culture has on other work-related outcomes besides economic indicators.

It has been argued that organizational culture may have profound effects on work attitudes and behavior (Vanderberghe and Peirò, 1999). It has been argued that stabilizing individual behavior is one of the most important functions of organizational culture because organizational culture enables the activity of organizational members through self-control and social mechanisms. Here organizational values play a crucial role, because when they are clearly communicated to organizational members, they become the criteria for making decisions and choices in everyday work (Vadi, 2000). Some authors (i.e. Van Rekom *et al*, 2006) have argued that the core values of an organization have intrinsic meaning and importance for organizational members. When the organization succeeds in communicating the values in an effective manner, so that they force the motivation of organizational members, it could result in work-related behavior. Work-related outcomes like commitment, job satisfaction, motivation, turnover and so on, have been the focus of several studies in the field of organizational culture (appendix 2 gives examples of studies in the field).

Moynihan and Pandey (2007) found that group culture and a sense of organizational purpose have a positive impact on job satisfaction, commitment, job involvement and loyalty. Organizational culture may provide the working environment that makes it possible to satisfy intrinsic employee motivators, which is extremely important for nurturing employee motivation in the long-

term. The idea of a relationship between organizational culture and commitment has also been proposed by Wells *et al* (2007), Silverthorne (2004), Ritchie (2000) and others. Moon (2000) has found a positive association between goal clarity and organizational commitment. Furthermore, job autonomy as one of the components of organizational culture was also positively related to organizational commitment (*Ibid.*).

The relationship between organizational culture and employee commitment has been proven by several researchers (Finegan, 2000; Lund, 2003; Ritchie, 2000; Silverthorne, 2004; Van Vuuren *et al*, 2008; Wells *et al*, 2007 and others). For example, Finegan (2000) found that different types of organizational value perceived by employees predicted different components of commitment. When employees perceived the organization to hold values of humanity (e.g. cooperation and courtesy) and vision (e.g. creativity and openness), a higher level of affective and normative organizational commitment was found. Those employees who perceived their organization to hold values like logic, economy, experimentation and diligence or obedience, cautiousness and formality tended to score higher on the continuance commitment scale (based on the fact that the cost of leaving the organization is too great or that the employee has few options). Van Vuuren *et al* (2008) also demonstrated that different types of organizational culture are related to different dimensions of commitment, and moreover, the distinction between organizational and occupational commitment may be aligned with the core dimensions of organizational culture. Affective organizational commitment was found to be related to the type of organizational culture that is characterized by internal focus and flexibility. This result is in line with Finegan's (2000) study. Besides, Van Vuuren *et al* (2008) have argued that the Internal Processes type of organizational culture, characterized by internal focus and stability, is connected to normative organizational commitment, but those organizational values that stress the external focus of the organization facilitate occupational commitment – the Open System type of organizational culture was related to affective occupational commitment and the Rational Goal type of culture was connected to normative occupational commitment.

Still there are several authors who believe that organizational culture itself has no impact on organizational outcomes, but the congruence between employee values and firm values may lead to greater satisfaction (Amos and Weathington, 2008; Meglino *et al*, 1989) and commitment, and less turnover (Amos and Weathington, 2008; Sheridan, 1992). For example O'Reilly, Chatman and Jehn (1991) have proved that person-organization fit is an important predictor of commitment. Their study brought out a positive relationship between person-organizational culture fit and individual commitment and satisfaction 12 months later. The person-culture fit was also found to be predictor of employee turnover – the better the person-organization fit, the less turnover in the organization. The study by O'Reilly *et al* (1991) demonstrated that the person-culture fit was related to normative, value-based commitment but not to

instrumental, compliance-based commitment. Van Vianen (2000) has argued that besides person-organization (P-O) fit, person-person (P-P) fit should also be considered as an important variable influencing affective outcomes for employees because their findings proved that when both newcomers and supervisors showed a high concern for people's preferences, the newcomers were more committed and their turnover intentions were lower. Van Vianen (2000) has argued that the best affective outcomes could be attained if relatively high concerns for people preferences in newcomers matched the supervisor's preferences, but not necessarily the supervisor's perceptions of the existing organizational culture.

Abbott *et al* (2005) have carried out similar research using the same measurement instruments in a government communications agency and social welfare organization in Australia. The findings were mainly in accord with those of Finegan's (2000) study; however, some contrary results were found. Abbott *et al* (2005) found that perceived organizational values alone did not predict continuance commitment in either of the two organizations. For each organizational commitment component a significant person and organization interaction with conservatism was found in the government communication agency. Namely, the more conservative the person was and the more conservative he/she perceived the organization, the higher the affective and normative commitment level. For continuance commitment, a contrary pattern was found. The authors argue that this kind of result might be organization-specific and further investigation is needed. However, findings of different studies assume that organizational culture may be the variable that makes it possible to predict employee commitment.

It has also been discussed that subcultures existing in an organization and the leadership style practiced by leaders might have an impact on work related attitudes (e.g. research conducted by Lok *et al* (2005) in the health care sector). Lincoln, Hanada and Olson (1981) have found that a match between organizational culture and societal culture also leads to higher job satisfaction for employees.

Several studies have demonstrated that organizational culture influences job satisfaction for organizational members (e.g. Silverthorne, 2004; Lund, 2003). Findings by Tzeng *et al* (2002) have suggested that a people-oriented organizational culture results in higher job satisfaction. This finding is supported by Lund (2003) who found evidence that job satisfaction was higher in those organizations where Human Relations, but also Open System types dominated the overall pattern of organizational culture. Lincoln *et al* (1981) found that employee job satisfaction was higher in those organizations where organizational culture better matched societal culture.

To sum up, several studies have clearly demonstrated that organizational culture influences several aspects of organizational behavior and the performance of the organization. Several studies can be found where economic indicators of organizational performance were combined with organizational

behavior issues to clearly show that no simple or plain connections between organizational culture and organizational performance can be expected. The studies indicated that no broad generalizations can be made about the outcomes of organizational culture because certain traits of organizational culture seem to facilitate organizational performance and some not. Here approaching and analyzing organizational culture in terms of clear categories or analytical units – using typologies – seems to be highly useful. Several studies discussed before indicated that in general, organizational performance is facilitated by innovative and competitive types of organizational culture and restricted by stability-oriented types of organizational culture. However, Denison and Mishra (1995) have argued that both stability and flexibility types of organizational culture facilitate organizational performance, but those types of organizational culture contribute to different kinds of performance indicators. The studies also showed that relationships between organizational culture and performance may be dependent on the industry of the organization. For example, if competitive and results-oriented types of organizational culture result in better performance indicators in organizations in the business sector, results orientation was found to have a negative impact on customer service orientation (interpreted as being an important performance indicator) in the health care sector.

Analysis of previous studies clearly demonstrates that in order to analyze organizational culture, a comparative basis should be created, and using typologies is one of the options. Similar categories enable us to interpret the results of different studies and find more general connections between different variables. Moreover, studies from different sectors and industries, but also from different countries underline the importance of considering contextual issues while interpreting the results. Therefore, the next subchapters of the dissertation will discuss typologies of organizational culture and the factors that influence the formation of organizational culture.

1.2. Conceptual framework of the formation of organizational culture and analysis

1.2.1. Categorization of organizational culture using typologies

Organizational culture is not an easily accessible phenomenon because of its holistic nature, and the analysis of organizational culture becomes even more complicated if one aims to make comparisons between organizations on similar grounds. A parallel between the individual and the organization is often drawn: while the uniqueness of individuals is expressed in their personality, the organization's individuality could be expressed in terms of organizational culture (Allaire and Firsirotu, 1984; Kilman *et al*, 1985). Though each organization has

its own character, for making comparisons between organizations on the basis of their culture there is a need to set up a framework. Organizational culture is often approached through typologies with the aim of making comparisons possible⁸.

Creating typologies means developing categories that could be useful in making sense of the variations in the phenomenon (Schein, 2004: 190). A typological approach is holistic or configural in nature because it does not compare organizations along single-value dimensions⁹ (Kabanoff and Daly, 2002), but typologies are usually created in such a way that differentiating dimensions comprise several aspects. Kabanoff and Daly (2002: 287) argue that typologies compare organizations in terms of their values patterns, and therefore, the typologies are theoretically both “more parsimonious and more satisfying, complex or rich”.

When using typologies as an analytical tool for understanding the phenomenon, it is important to keep in mind that typologies are always abstractions. A type may represent one or several kinds of attributes significant for the problem at hand, and in that sense, the typologies are not exhaustive and durable, but descriptions of typologies are accepted only to the degree that they provide a solution to the problem (Typology, 1991). Thus, typologies help us make sense and provide some order out of observed phenomena (Schein, 2004: 190), but while approaching organizational culture through typologies one always has to remember that the picture captured of the organization through this kind of approach may not provide the whole spectrum of the phenomenon. One of the major advantages of typologies is that they can help make comparisons between different organizations based on counter-intuitive empirical data (Furnham, 2005) and present the results systematically through the types. Still, pure types can hardly be found in practice, and usually the organization could be described through attributes that are characteristic to several types of organizational culture. Thus, organizational culture should be approached as an organic whole, while the typology approach makes it possible to explain the dominant features of a particular organization’s culture.

Though approaching organizational culture through typologies has several advantages, there are also limits that should be considered. First of all, while several authors have admitted the value of using typologies in organizational culture analysis, there is no agreement about what the grounds should be for the typologies (e.g. Cameron and Quinn, 1999; Deal and Kennedy, 1982; Etzioni, 1975; Handy, 1985; Harrison, 1972; Hofstede, 1998; Hofstede *et al*, 1990; Goffee and Jones, 1998; Graves, 1986). A number of dimensions have been

⁸ A typology has been defined as a “system of groupings, usually called types, the members of which are identified by postulating specified attributes that are mutually exclusive and collectively exhaustive” (Typology, 1991: 89).

⁹ Although the term “dimension” has several meanings in different disciplines, here dimensions are interpreted as “component aspects of a particular situation... or an attribute of, or way of viewing, an abstract entity” (Dimension, 2009).

accentuated as relevant for analyzing and classifying organizational cultures. Therefore, one could find a variety of approaches of systematizing the organizational culture phenomenon. Sackmann (1991: 26) argues that the issue of which dimensions of organizational culture are more relevant cannot be decided merely on theoretical grounds – different dimensions could be appropriate for different purposes. The presence of different typologies in the field of organizational culture allows the researcher to choose the one that contributes to fulfilling the research tasks in the best way.

Another limit brought out by Furnham (2005) is the “broad-brush” approach, which means that a relatively small number of distinguishable types of organizational culture will be developed that could result in a problem of insensitiveness, which means that interesting and important subtle differences may remain unconsidered. Typologies tend to oversimplify complex phenomena such as organizational culture, and may provide categories that are not relevant (Schein, 2004). It could be argued that typologies have more power to map the features of organizational culture than explain the reasons behind the differences or similarities in organizational cultures in different organizations. However, typologies make it possible to bring out general regularities between organizational characteristics and types of organizational culture (see for example Vadi and Alas, 2006), which means that generally typologies are quite useful for explaining regularities in organizational culture.

As mentioned before, the terrain of typologies used for any analysis of organizational culture is rich indeed. When analyzing the variety of organizational culture typologies, for example, Reynolds (1986) ends up with 14 dimensions of organizational culture; and Detert, Schroeder and Mauriel (2000) come to the conclusion that there are eight general dimensions through which organizational culture has been approached. The dimensions could be differentiated on the basis of ideas about (*Ibid.*):

1. The basis of truth and rationality in the organization;
2. The nature of time and time horizons;
3. Motivation;
4. Stability versus change/innovation/personal growth;
5. Orientation to work, task, and coworkers;
6. Isolation versus collaboration/cooperation;
7. Control, coordination, and responsibility;
8. Orientation and focus – internal and/or external.

The listing compiled by Detert *et al* (2000) is a good way to bring some clarity to the discussion about appropriate dimensions in research into organizational culture. Analysis of the above-mentioned ideas shows that dimensions that could be used to analyze organizational culture concern not only organization-level, but also individual-level features. For example, the ideas about motivation are obviously connected to our understanding of the nature of human beings as such, and could be verbalized as a belief about whether the people are

inherently good or bad and whether internal or external forces motivate people (*Ibid.*). Other primary individual level characteristics involve ideas about change and stability because in the approach by Detert *et al* (2000) regarding attitudes towards change versus stability, the question is not merely about the organization's intention to ensure sustainability, but rather about individual level characteristics, which means that people are the ones who either desire stability or prefer change. Also, orientations towards the task versus coworkers could be seen as an attribute that distinguishes between individuals and which is evidently connected to individual values: some people see work as an end in itself and they tend to be more concerned about accomplishing the job and productivity than those people who see work as a means to other ends and therefore value social relationships more than the completed task.

Other characteristics or ideas summarized by Detert *et al* (2000) cover more organization-level features. For example, ideas about truth demonstrate the variety of ideas about the essence of truth: in some organizations truth is considered to be the result of the systematic analysis of the data available, while in other organizations intuition and tacit knowledge is considered as a basis for truth (*Ibid.*: 853). Different conceptions of time horizons explain why some organizations adopt long-term planning and goal-setting whereas other organizations rely more on *ad hoc* decisions. The relationship between the organization and its environment involve important characteristics for the analysis of organizational culture by several researchers (e.g. Denison and Mishra, 1995; Quinn and Rohrbaugh, 1983). When the latter dimension explains whether the organization focuses more on external or internal constituents, there are two other dimensions – control and coordination; and isolation versus coordination, which focuses on the internal issues and problems of the organization. Organizations could be differentiated in terms of how much collaboration is favored over autonomy, and also in terms of how much control and coordination is used in organizations in order to assure the functioning of the organization.

This comprehensive overview of the dimensions derived from different organizational studies is a good attempt to provide some clarity in the field, but the author of the dissertation would like to point out some shortcomings concerning this approach. As mentioned before, the list of the dimensions of organizational culture brought out by Detert *et al* (2000) include dimensions that are reducible to the individual level while others describe phenomena at the organizational level. Moreover, the list is over detailed – the dimensions have different levels of abstraction and the same dimension often captures several aspects. In spite of being quite detailed, it does not capture the entire range of dimensions of organizational culture used by different researchers in order to decipher organizational cultures. For example, Hofstede *et al* (1990) have brought out several dimensions of organizational culture that are not discussed in the research by Detert *et al* (2000).

Hofstede *et al* (1990) have argued that six mutually independent dimensions should be considered in any analysis of organizational culture. The dimensions are the following (Hofstede, 1998; Hofstede *et al*, 1990):

1. *Process oriented vs. results oriented* cultures. In a process oriented culture people avoid risks and spend a limited effort on the job, because the work is unchanging. A results oriented organizational culture is one where people perceive themselves as being comfortable with change and put maximum effort into their jobs.
2. *Employee oriented vs. job oriented* organizational culture. An employee oriented culture takes responsibility for its members' welfare and supports people in their personal problems. In this kind of organization important decisions are made in groups and committees. A job oriented culture represents the opposite values.
3. *Parochial vs. professional* organizational culture. Organizations described as parochial aim to influence employees both on the job as well as at home; social and family background is considered while hiring new employees. Professional organizations hire people on the basis of competence and the relationships with employees are rather normative and bounded.
4. *Open system vs. closed system*. This dimension explains how the organization feels about newcomers and outsiders (whether the organization is friendly and open or rather closed, reserved and secretive).
5. *Loose vs. tight control*. This dimension describes the amount of internal structuring in the organization. Tight control organizations are cost-conscious and punctual, while loose control organizations represent a more flexible organizational format.
6. *Normative vs. pragmatic*. Basically this dimension defines how to regard the client. Pragmatic organizations are market-driven putting the customer's needs first and considering the results to be more important compared to the procedures. Normative organizations emphasize organizational procedures, which are even more important than results.

The author of the dissertation finds that the underlying ideas of the dimensions proposed by Detert *et al* (2000), Reynolds (1986), Hofstede *et al* (1990) and Hofstede (1998) could be classified into two broad categories: firstly, the relationships between the organization and its environment, and secondly, the principles for how to arrange and manage intra-organizational matters. In respect to those categories two foundation dimensions of organizational culture could be brought out: 1) internal versus external focus, and 2) the tendency towards stability versus flexibility. These are the same dimensions found to be the core dimensions of organizational culture in chapter 1.1.2. These dimensions could be handled as underlying categories that could be used to analyze different typologies used in research into organizational culture.

Table 4 summarizes the most significant typologies used to analyze organizational culture. The original dimensions of typologies are presented in the table, but the author interprets them within the framework of the underlying dimensions of organizational culture (external/internal and stability/flexibility).

Table 4. Comparison of organizational culture typologies

Underlying dimensions of organizational culture		Types of organizational culture	Author(s)
<i>External-internal dimension</i>	<i>Flexibility-stability dimension</i>		
External focus; Internal focus	Flexibility; Stability ¹⁰	Human Relations type; Open System type; Rational Goal type; Internal Processes type ¹¹	Quinn and Rohrbaugh (1981, 1983); Quinn and McGrath (1982); Cameron and Quinn (1999)
Degree of centralization; Degree of formalization		The Power Culture; The Role Culture; The Achievement/Task Culture; The Support/Person Culture	Harrison (1972, 1987); Handy (1985)
Process; Structure		The Elite culture; The Meritocratic culture; The Collegial culture; The Leadership culture	Kabanoff and Daly (2000)
Solidarity; Sociability		The Fragmented culture; The Mercenary culture; The Communal culture; The Networked culture	Goffee and Jones (1998, 2001)
Relationships between individual and organization		Coercive organization; Utilitarian organization; Normative organization	Etzioni (1975)
Amount of risk; Speed of feedback from marketplace		The tough-guy culture; The work hard/play hard culture; The bet-your-company culture; The process culture	Deal and Kennedy (1982, 1988)

Source: Compiled by the author based on Quinn and Rohrbaugh (1981; 1983); Quinn and McGrath (1982); Cameron and Quinn (1999); Harrison (1972; 1987); Handy (1985); Kabanoff and Daly (2000); Goffee and Jones (1998; 2001); Etzioni (1975); Deal and Kennedy (1982; 1988).

¹⁰ Initially the dimensions were labeled as people-organization and flexibility-control (see Quinn and Rohrbaugh 1981). Originally the dimension “control” was used to mean concern for predictability and stability (e.g. Quinn and Cameron 1983), but later other authors have also used “stability” instead of “control” (e.g. Kwan and Walker 2004).

¹¹ Different labels have been used for OC types in different sources: for instance Cameron and Quinn (1999) have renamed the types as follows: Clan, Adhocracy, Market and Hierarchy.

As seen in table 4, several authors have focused on the organization's internal matters and through this angle try to create the typologies. Harrison's (1972) typology is based on intra-organizational features, namely *degree of formalization and centralization*. Formalization could be defined as the degree to which an organization's culture is written (Price, 1997: 382), and centralization describes the degree to which power is differentially distributed within an organization (*Ibid*: 449). Harrison (1972) distinguishes four types of organizational culture (also called archetypes): the Power Culture, the Role Culture, the Achievement Culture and the Support Culture (Harrison, 1987). Handy (1985) supplemented these types with symbols from Ancient Greece and labeled the types of organizational culture respectively Zeus, Apollo, Athena and Dionysus.

The typology worked out by Kabanoff and Daly (2000) has some similarities with Harrison's approach – both find power distribution an important characteristic of organizational culture. Kabanoff and Daly (2000) differentiate organizations on the basis of two dimensions: *structure* (unequal power versus equal power location) and *process* (equitable versus egalitarian policies and practices). These dimensions reflect how organizations resolve the two core tensions of any social system – firstly, allocating resources *efficiently* so that it maximizes outputs, and secondly, allocating resources *equally* enough to maintain social cohesion among organizational members (*Ibid*). Within this framework, four pure types of organizational culture may be distinguished: Elite (unequal power, equitable processes); Meritocratic¹² (equal power, equitable processes); Collegial (equal power and egalitarian processes) and Leadership (unequal power and egalitarian processes). Kabanoff and Daly (2000: 289) stress that although the organization's power structures provide their “basic distributive imperative”, organizational processes and policies will moderate the core tendency towards equality or inequality.

The typology developed by Ellström (1983) distinguishes between the following types of organizational culture: The Rational Model, The Political Model, The Social System Model and The Anarchistic Model. This typology also considers *process* as an important dimension making it possible to differentiate between organizations, but compared to Kabanoff and Daly (2000) here *process* is approached from a different angle – the distinction is based on the transparency (or ambiguity) of the organizational processes. Another dimension in Ellström's (1983) typology – *clarity of organizational goals* (clear versus unclear and shared versus disagreed upon) – is one that is probably rather crucial in making a distinction between different types of organizations. Therefore, it is somewhat surprising that this aspect is not included in any of the other typologies.

¹² The term *meritocratic* derives from the noun *meritocracy*, which is defined as “government or the holding of power by people chosen on the basis of merit (as opposed to wealth, social class, etc.)” (Meritocratic, 2008)

Goffee and Jones (1998) have proposed another typology of organizational culture, which also focuses on intra-organizational parameters and makes it possible to distinguish between types of organizational culture in terms of two types of social relations – *sociability and solidarity*. Sociability refers to affective and non-instrumental relations between individuals who share ideas, attitudes, values and interests (i.e. sociability is a type of social interaction that is valued for its own sake and not for any particular purpose). Solidarity, as another dimension in the typology by Goffee and Jones (1998), is a term that describes the task focused co-operation between individuals (Goffee and Jones, 2001). This is a type of relationship where close friendship or pleasantness is not definitely expected.

The nature of the relationship between the individual and the organization is the basis for differentiating organizational types in Etzioni's (1975) typology. In this approach three types of organizations could be distinguished. The first organizational type is the *coercive organization*, where the individual is essentially captive because of physical or economic reasons. Obeying the rules is ultimate and people would leave this kind of totalitarian organization if possible (Schein, 2004). The second type of organization according to Etzioni (1975 cf Schein, 2004) is *utilitarian*, in which individuals are rationally calculative and they provide "a fair day's work for a fair day's pay" and abide by the rules. The last type is the *normative* organization, in which individuals contribute and commit to the organization because the organization's goals are in accord with the individual's goals (Schein, 2004).

Deal and Kennedy (1982) have differentiated organizational cultures in terms of the *speed of feedback from the marketplace* on whether the decisions and strategies have been successful; and *amount of risk* associated with the company's activities. These dimensions are both related to the external-internal orientation and flexibility-stability categories as marked in table 6. In a 2×2 matrix, Deal and Kennedy (1982) distinguish between four types of culture: 1) the tough-guy or macho culture (organization takes high risks and gets quick feedback); 2) the work hard/play hard culture (few risks and quick feedback); 3) the bet-your-company culture (characterized by high risk level and slow feedback) and 4) the process culture with low risk level and little or no feedback from the marketplace. Mileti *et al* (2002) have also accentuated the nature of the environment as an important force that shapes organizational culture.

As one may conclude from previous discussion, there are several typologies that have been founded on intra-organizational matters and only a few typologies that focus on the relationship between the organization and its environment. There are even less approaches considering the dimension of dynamics (and stability as an opposite) as an essential, while trying to distinguish between different types of organizational culture. This finding is rather interesting because while analyzing definitions of organizational culture given by different researchers, most of them admit that organizational culture has to facilitate internal integration and at same the time cope with external adaptation. Indeed,

these targets require opposing qualities – stability and flexibility. In light of previous considerations, the criticisms of typologies seem to be appropriate – typologies hardly manage to capture the entire complexity of the phenomenon of organizational culture, and each researcher should decide whether and what kind of the typologies enable them to attain the research objectives.

One typology that considers both the external/internal focus and stability/flexibility as core dimensions of organizational culture is the Competing Values Framework worked out by Quinn and Rohrbaugh (1981).¹³ The ideas in this framework have been chosen as the basis for developing the research propositions and methodology used in the empirical part of the dissertation for a number of reasons. Firstly, the framework is based on the dimensions that have been used for defining organizational culture by several authors, as discussed before; secondly, the author believes that these dimensions are also relevant in transition societies, where the dynamics is especially important, and thirdly, the framework distinguishes four types of organizational culture, which are quite easily comprehensive because a larger number of types of organizational culture would make interpretations more difficult. A more detailed discussion of the Competing Values Framework will follow.

The Competing Values Framework

The Competing Values Framework originates from the search for effectiveness criteria in different types of organization, and the term “competing” refers to the belief that each model of organizational culture has a polar opposite and the criteria that are included in the framework carry conflicting messages (Quinn, 1988: 48–49). This highlights the inherently difficult nature of being an effective organization (Clair *et al*, 2000). Still, the contradiction between cultural types is not absolute and in a real system such opposition can mutually exist. The model proposes three values dimensions, which make it possible to conceptualize organizational effectiveness – control-flexibility, internal-external and means-ends (Quinn and Rohrbaugh, 1981). The third dimension, means-ends, describes the organization's objectives and the means by it sustains itself (*Ibid.*), or using Rokeach's (1973) terminology – terminal and instrumental values. As the latter dimension describes the choices the organization has to make within the framework of the other two dimensions, the author of the dissertation considers the model to consist of two rather than three-dimensions.

The *internal-external* dimension is related to organizational focus, which may range from the well-being and development of organizational members to an emphasis on the well-being and development of the organization itself (Quinn and Rohrbaugh, 1981). While the internal focus aims to foster integration that is needed to sustain the organization, the external focus means focusing on competition, adaptation and interaction with the external envi-

¹³ It has been further developed by Quinn and McGrath (1982); Quinn and Rohrbaugh (1983); Cameron and Quinn (1999).

ronment (Denison and Spreitzer, 1991). This dimension captures the dilemma of whether to accomplish organizational tasks in most effective way (which often requires standardization and measurement) or retain the individuality of organizational members (taking into account their character, needs and feelings) (Quinn and Rohrbaugh, 1981).

The second dimension, *flexibility-stability*, is related to organizational structure. It has been argued that for an organization to be efficient, flexibility, adaptability, innovation and individual initiative is required. At the same time, there are other theorists who believe that efficiency could be attained through structure, control and authority (Quinn and Rohrbaugh, 1983). Lawrence and Lorsch (1967 cf Quinn and Rohrbaugh, 1983) have stated that the dilemma of integration versus differentiation is a basic element in organizational design. These dimensions form a framework that makes it possible to map organizational culture in terms of four different types (see figure 4).

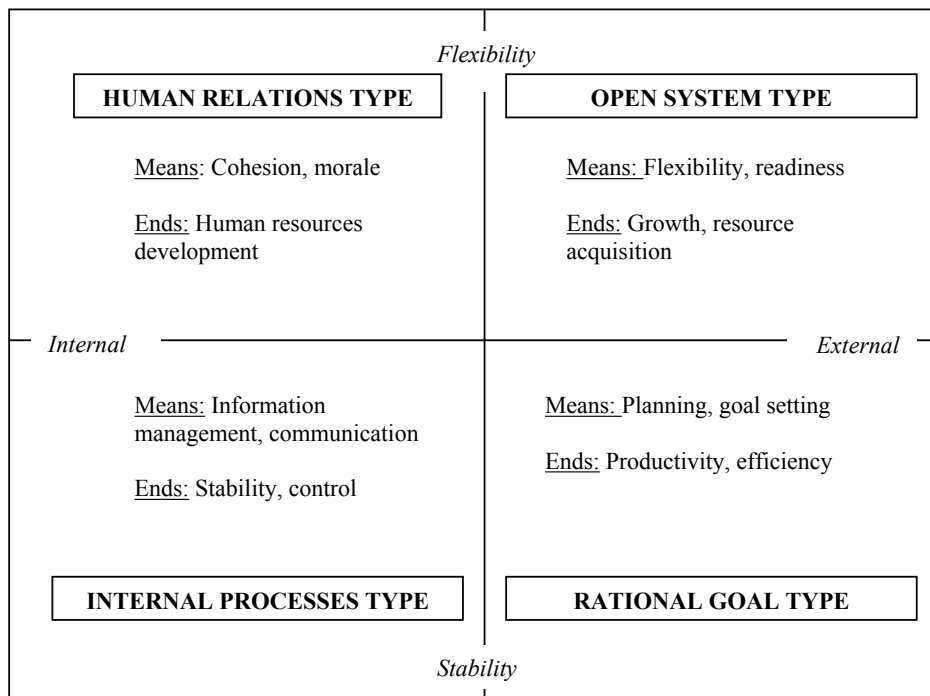


Figure 4. Competing Values Framework

Source: compiled by the author based on Quinn and Rohrbaugh (1983)

The *Open System type* could be described as being characterized by flexibility and external organizational orientation and this has been considered an organizational form that is most responsive to “hyperturbulent, hyperaccelerating conditions that increasingly typify the organizational world of the twenty-first century” (Cameron and Quinn, 1999: 38). This type of organizational culture values adaptability, capacity to change and orientation towards customers (Brown and Dodd, 1998) trying to be flexible in meeting their needs, but it also highly values organizational members with fresh and innovative ideas. Organizations where this kind of organizational culture is dominant take risks and favor creativity (van Muijen and Koopman, 1994). The Open System type of organizational culture stresses rapid growth, resource acquisition and external support as a long-term target, and success is defined in terms of producing unique and original products and services (Cameron and Quinn, 1999; Quinn and Rohrbaugh, 1983).

The *Human Relations type* of organizational culture is characterized by flexibility and internal focus. High cohesion, morale, trust and belongingness serve as means to achieve human resource development (Kalliath *et al*, 1999; Quinn and Rohrbaugh, 1983). Clair *et al* (2000) argue that the global economy has placed more demands on organizations and the means for attaining the ends of the Human Relations type has changed. For instance, at the individual level the emphasis has moved from compliance and cooperation to involvement and empowerment, and at the group level the role of teamwork has increased and often self-managed teams, which are often diverse and global in terms of membership, have been formed in organizations. These kinds of trends suggest that in future the focus of this type of organizational culture will probably shift towards to the external focus (Clair *et al*, 2000). In the author’s opinion this means that the Human Relations type and the Open System type of organizational culture share quite similar features, which in turn can mean that the two types of organizational culture will begin to coexist as a single type.

The *Rational Goal type* of organizational culture favors planning and goal setting to achieve productivity and efficiency as ends (Quinn and Rohrbaugh, 1983). The most distinctive feature of this type of organizational culture is stability and control over external matters. This is an organization where emphasis has been put on external positioning and control, and success is defined in terms of market share and penetration. The glue that holds the organization together is an emphasis on winning (Cameron and Quinn, 1999). Organizations where the Rational Goal type dominates aim to enlarge market share and outpace competitors. This kind of organization strives for profit maximization, and on the whole the management mostly values results.

The dimensions that characterize the *Internal Processes type* are firstly, focus on internal matters of the organization, and secondly, an orientation towards stability. Organizations where the Internal Processes type dominates the organizational culture aim to achieve stability and control, consolidation and continuity (Lamond, 2003), which could be attained via formalized communi-

cation and a centralized decision-making process (Howard, 1998). These organizations could be characterized as formalized and structured – formal rules and policies hold the organization together (Cameron and Quinn, 1999).

The rationale for setting the first set of research propositions is based on the following considerations. On the one hand, an analysis of organizational culture within the framework of a polarity of dimensions in typologies is expected as a foundation, because the opposing extremes of the dimensions used to create the typologies demonstrate contrast. Organizational culture could be handled in a matrix of two dimensions: firstly, orientation towards internal versus external issues, and secondly, the axis that describes the organization in terms of flexibility versus stability, and from combinations of those dimensions, four types of organizational culture exist as previously described. Moreover, among these types, two pairs of antagonistic types of organizational culture (those with no common dimension) can be found. On the other hand, it could be argued that organizational culture is a holistic phenomenon and because of the different challenges organizations face, organizational culture may encompass a variety of values. Denison and Spreitzer (1991) have recognized that paradoxical combinations of values may be found in organizations. For example, being adaptive and maintaining internal integration (and hence also striving for stability and flexibility) seem to be antagonistic on theoretical grounds, in the real world organizations would not survive if they could not try to meet expectations of being flexible and stable at the same time and being simultaneously focused on internal and external matters.

Some empirical studies have discovered strong relationships between conceptually opposite types of organizational culture. Using the Competing Values Framework, Kalliath *et al* (1999) and Buenger *et al* (1996) have found statistically significant positive relationships between the Internal Processes type and Open System type of organizational culture. Vadi *et al* (2002) have found a moderate correlation between the two dimensions of organizational culture – “attitudes towards organizational tasks” and “interpersonal relationships”.

As seen from table 5, which collects the results of different confirmatory analyses, previous studies have demonstrated contradictory findings concerning inter-correlations between types of organizational culture and no similar patterns of connections between types of organizational culture have been revealed by different authors.

For example, a strong positive correlation between Human Relations and the Open System type of organizational culture was found in the study by McDermott and Stock (1999), whereas some other empirical studies have demonstrated only weak connections between these types of organizational culture (e.g. Kalliath *et al*, 1999). Positive correlations between Internal Processes and Rational Goal, and also between Human Relations and Internal Processes type of organizational culture were found by Kalliath *et al* (1999), whereas McDermott and Stock (1999) could not demonstrate a significant correlation

between those pairs. Estimations of the Open System type were positively correlated to the estimates given of the Rational Goal type in the study by McDermott and Stock (1999) and Kalliath *et al* (1999), where the correlation was rather strong ($r = .62$) in the first study, but in the latter the correlation was weak ($r = .14$).

When analyzing the correlations between types of organizational culture from opposite quadrants of the framework, contradictory results can be noticed again. McDermott and Stock (1996) have reported quite a strong correlation between the Human Relations and Rational Goal type of organizational culture, but Kalliath *et al* (1999) found no significant correlation between these types of organizational culture. Considering the relationships between the Open System type and Internal Processes type of organizational culture, McDermott and Stock (1996) found a weak negative correlation, whereas Kalliath *et al* (1999) report a strong positive correlation ($r = .73$).

Table 5. Comparison of relationships between types of organizational culture in on the basis of different studies

Comparison pairs of organizational culture	Common value sample	Confirmatory studies		
		Kalliath <i>et al</i> (1999)	McDermott and Stock (1999)	Cameron and Quinn (1999)*
		hospitals	manufacturing, 11 industries	business organizations
HR – OS	flexibility	+ (weak)	+ (moderate)	– (weak)
IP – RG	stability	+ (weak)	N/S	– (weak)
HR – IP	Internal focus	+ (weak)	N/S	– (moderate)
OS – RG	External focus	+ (weak)	+ (moderate)	– (weak)
HR – RG	No common value	N/S	+ (strong)	– (moderate)
OS– IP	No common value	+ (strong)	– (weak)	– (moderate)

Notes: * ipsative scale was used; HR= Human Relations type; OS= Open System type; RG= Rational Goal type; IP= Internal Processes type of organizational culture; “+” = positive correlation, “–”= negative correlation, N/S = no statistically significant relationship.

Source: compiled by the author on the basis of Kalliath *et al* (1999); McDermott and Stock (1999); Cameron and Quinn (1999).

From the confirmatory analysis of CVF using the ipsative scale (Cameron and Quinn, 1999), the following conclusions can be made: 1) types of organizational culture are not independent variables; 2) negative correlations exist between types of organizational culture, and 3) correlations between adjacent quadrants are smaller than between the diagonal quadrants. As in this study the ipsative scale was used, the interpretation of the connections may be reverse: the weaker the correlation between type of organizational cultures, the less exclusive or

competing they are; larger correlations demonstrate more contradiction between types. Still, this is the interpretation made by the author and must be taken as speculative.

Example findings from empirical studies about the relationships between types of organizational culture demonstrate that typology provides a theoretical frame of reference for organizational analysis, where certain patterns could be expected, but the relationships between types of organizational culture also need to be examined empirically. It could be assumed that in reality organizations do not differ in terms of whether they represent a certain type of organizational culture, but rather to what extent a particular type of organizational culture is characteristic for its culture, and in that sense types of organizational culture should not be viewed as mutually exclusive, but rather as complementary. The pattern of organizational culture then reflects the relative importance and dominance of types of organizational culture in a particular organization, but also the relationships between types of organizational culture.

Based on the previous discussion, propositions concerning the relationships between types of organizational culture will be set.

Proposition 1a:

Types of organizational culture are complementary to each other, but there are differences in the strengths of relationships between the different types of culture.

However, organizations may differ in terms of patterns of organizational culture to a great extent, some basic regularities could be expected in the manifestation of types of organizational culture. Approaching organizational culture through its types means that different features of organizational culture will be elicited along certain dimensions. In the typology where the framework is based on two dimensions, some culture types share common values along the dimensions, while other types of organizational culture have no values in common, which raises the idea that relationships of a different strength exist between types of organizational culture. Figure 5 presents the idea behind formulating proposition 1b.

The proposition about the relationships between different types of organizational culture will be stated as follows:

Proposition 1b:

Stronger connections exist between those types of organizational culture that share common values (adjacent quadrants) compared to the connections between the types of organizational culture from opposite quadrants.

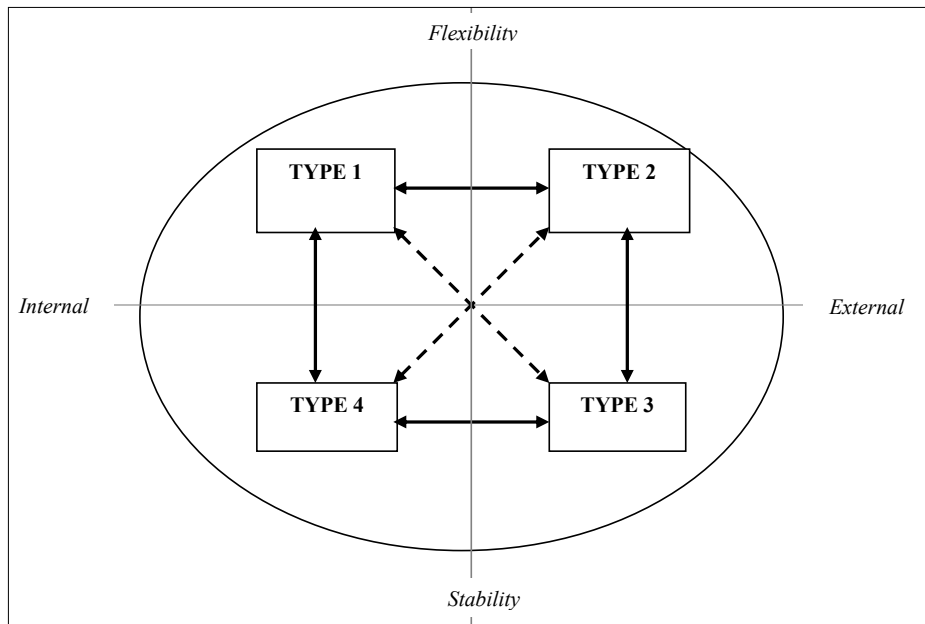


Figure 5. Theoretical relationships between types of organizational culture

Notes: Arrows with a continuous line indicate strong relationships and arrows with a dotted line, weak relationships between types of organizational culture. The oval indicates the holistic nature of organizational culture.

Source: compiled by the author

The present subchapter primarily concentrated on the issues of the concept of organizational culture and its manifestations in the typology framework approach, but in order to bring out the regularities in the manifestations of organizational culture, closer analysis of the organizational culture formation process and influencing factors is required. Therefore, the next subchapter will provide an overview of the organizational culture formation process, and then the effect of some contextual and organizational factors on the formation of organizational culture will be analyzed.

1.2.2. The process of the formation of organizational culture as the basis for patterns of organizational culture

In the literature, the formation of organizational culture has been described as a “fluid, ongoing process whereby cohesion, division and ambiguity continuously intertwine” (Martin, 1992). There are few frameworks that aim to explain the process of the development of organizational culture (see for example Allaire and Firsirotu, 1984; Daft and Weick, 1984; Schein, 2004). In order to

understand the regularities of manifestations of organizational culture, it is important to know what kinds of factors and how they are implicated in the development of organizational culture. This subchapter will analyze the viewpoints of different authors about the formation of organizational culture. Based on different sources, the author of the dissertation will develop a conceptual framework of the formation of organizational culture, and in the next subchapter the factors influencing the formation of organizational culture will be discussed.

According to Gagliardi (1986: 132), the formation of organizational culture is an “incremental process” where the role of the leader and organizational members is crucial. Changes in organizational culture could be evoked when the organization faces a crisis; but whatever the reason behind the need for a new organizational culture, the leaders and organizational members are believed to play an active role in the process (Dyer, 1985). Organizational members have also been seen as an important force in the formation of organizational culture by Allaire and Firsirotu (1984), who developed probably one of the most significant frameworks that aims to summarize the process of forming the organizational culture. They approach the organization as a system of three different, though interrelated components: 1) *a sociostructural system* (composed of formal structures, strategies, policies, goals, management processes, authority and power structures); 2) *a cultural system* (embodying the organization’s expressive and affective dimensions of shared meanings such as rituals, metaphors, architecture etc) and 3) *individual actors* (organizational members with their knowledge, values, needs etc, who could be seen as contributors or molders of meanings). The role of individual actors in shaping organizational culture depends on the position they have in the organization: the more important a role the individual has, the more power he has over the process of forming the organizational culture (*Ibid.*).

Though the framework by Allaire and Firsirotu (1984) has several advantages because it covers different factors that certainly do have an impact on the culture formation process, there are also some limitations to the framework. Firstly, the rationale behind deconstructing the organizational culture phenomenon into three parts in that particular manner is disputable. In their approach, the cultural system covers substantially different aspects, for example values, myths, but also explicit aspects of culture (e.g. architecture). Myths could be considered as verbalized expression of values, and therefore, they should not be taken as belonging to the same category. Allaire and Firsirotu's (1984) approach does not clearly state what function individual actors perform in the organizational culture development process – are individual actors seen as creators of culture or are they seen as a part of the culture? However, the approach points out the main influencing forces and the connection between different factors, but does not consider how the formation process itself takes place in organizations, only stating briefly that actors “strive to construct a coherent picture” of the organization, and as all actors “fabricate their meaning from the same cultural raw materials” shared meanings tend to evolve (*Ibid.*: 215).

Organizational culture is nothing one can separate from the individuals connected to the organization, because organizational culture happens between people (Knapp and Yu, 1999: 16). Organizational culture forms as a result of interactions between an individual and the organization (Schein, 1997). Some authors view powerful members of organizations – founders and leaders – as the main source of organizational culture because their personal values, vision of the organization as a whole and behavior shapes the culture of the organization (Schein, 2004; Ogbonna and Harris, 2001; Padaki, 2000; Wiener, 1988; Jaakson, Reino and Vadi, 2004). It has been argued that organizational culture as an entity could be destroyed by removing key people who are culture carriers, but still the basic assumptions live on in the individuals as parts of their identity (Schein, 2006).

The founder is a significant figure in the organizational culture creation process indeed because when starting his or her own business there is an option of how to run the business and in that sense the founder brings with him basic ideas, which become the foundation for organizational culture and often these basic assumptions reflect the founder's idea about how to succeed in business (Schein, 1983: 14). Therefore, newborn organizations offer the best opportunity for studying the transition “from no beliefs to new beliefs; from no rules to new rules and from no culture to new culture” (Pettigrew, 1979: 574) because this is when the founder's or leader's contribution is most visible. Founders and leaders have a twofold impact on organizational culture: on the one hand, they have an impact on rational and tangible aspects of organizations (for example, structure, technology etc), but on the other hand, they also create symbols, rituals, languages etc. Other people who will join the organization have to adapt to the founder's visions or try to change the values and assumptions of the founder (see figure 6).

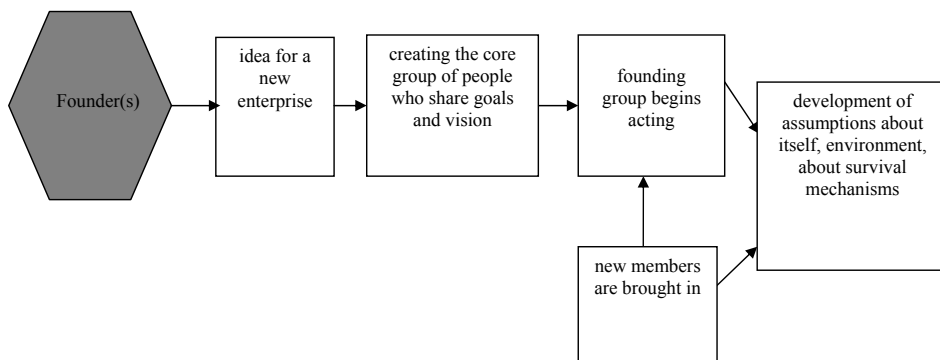


Figure 6. Founder's role in the process of forming the organizational culture

Source: compiled by the author on the basis of Schein (2004).

Founders of organizations, if still alive and associated with the organization, may influence leaders and organizational members most directly, for example, *via* imparting values and principles about the proper way of running the organization. There are several examples of founders and their profound impact on organizational culture discernible over the years. For instance, Herb Kelleher, the founder of Southwest Airlines is behind the organizational core values – humor, altruism and “luv” (Quick, 1992). Another organization, where the founder’s role in culture formation is significant is the Swedish furniture company IKEA. Its founder Ingvar Kamprad has formulated organizational values (known also as IKEA’s Saga) that have not changed over the decades (see for example, Salzer, 1994). But even if the founders of the organization are no longer there, their impact may still be profound in the form of a “cultural heritage”. For example, Ogbonna and Harris (2001) have analyzed the impact of the founder’s strategic decisions going back several generations and propose that the founder’s impact on organizational culture is more pronounced than that of previous and present CEO’s.

The role of managers and leaders in shaping organizational culture is stressed by Gordon (1985: 104), who argues that managers are the main source of organizational culture, and it is not possible to create a unit level culture that is significantly different from the management’s vision about the organizational culture. Managers have an impact on culture either explicitly or implicitly, which means that it is possible to differentiate between primary embedding mechanisms and secondary articulation and reinforcement mechanisms through which leaders influence the organizational culture (Schein, 2004: 246, see figure 7). Primary mechanisms involve resources, rewards and status allocating principles, but also reactions to critical incidents in the organization. Leaders can also influence the culture through recruiting, selection, promotion and other procedures. Secondary mechanisms capture the design of organizational structure, procedures, but also formal statements of organizational philosophy, establishing rituals in the organization. Indeed there should not be inconsistency between the primary and secondary mechanisms.

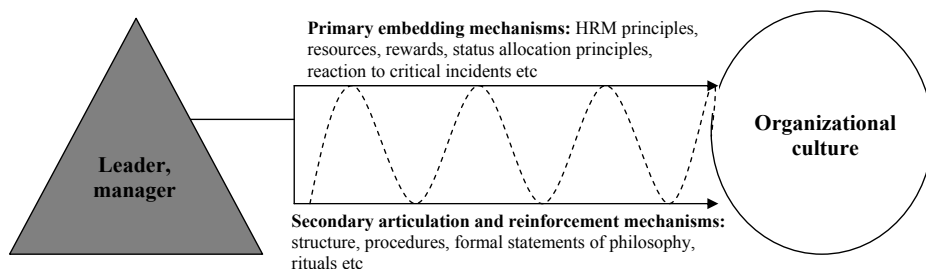


Figure 7. Mechanisms used by leaders and managers in the formation of organizational culture

Source: compiled by the author on the basis of Schein (2004).

In management literature, leaders and managers are often seen as the main source of organizational culture. Though the leaders' personal values, their vision of the organization as a whole, and their behavior shape the organization's culture (see for example, the discussion by Padaki, 2000; Schein, 2004; Wiener, 1988; Jaakson *et al*, 2004), one could not underestimate the contribution of organizational members. Deal and Kennedy (1988) argue that organizational culture is created and managed by the managers while the role of employees is to share the values and behave in order to support those values worked out by the managers. Indeed, in organizations where charismatic values dominate, the leader's role in shaping organizational culture is probably more pronounced than in those organizations where a traditional values system is adopted.¹⁴

There are several researchers who believe that the role of organizational members in the formation of organizational culture is far more significant and active (see for example, Bloor and Dawson, 1994; Gregory, 1983; Martin *et al*, 1985; Van Maanen and Barley, 1984; Young, 1989). The "cultural self-presentation theory" states that the values of societal culture have an impact on the effectiveness of managerial interventions (for instance, goal-setting, job enrichment, the reward system etc), but the impact manifests itself only through the organizational members' reactions to those interventions (Erez and Earley, 1993). Thus, through organizational members' responses to new situations they act as the creators of culture (Daymon, 2000). The role of organizational members in the formation of organizational culture is depicted on the figure 8.

Organizational members' reactions to different situations and interpreting the situations may depend on their individual values.¹⁵ These individual values could be seen as complex knowledge systems formed during childhood and enhanced throughout the socialization process throughout one's life and experiences (Erez and Earley, 1993). Even if belonging to different groups and organizations requires accepting organizational values, the individual's values tend to remain the same over time, influencing how the individual perceives organizational culture (see for example, Vadi, 2000; Vedina *et al*, 2006). Thus, individual values among organizational members could be considered a powerful factor that has an impact on the formation of organizational culture because the values could be seen as a filter that makes it possible to interpret and understand ongoing situations.

¹⁴ Charismatic values refer to those values that have been transmitted from the leadership; while a traditional values system is one where values are derived from and passed on between different members of the organization (Wiener, 1988).

¹⁵ Here individual values are defined as „enduring beliefs that a specific mode of conduct or end-state existence is personally and socially preferable to alternative modes of conduct or end-states“ (Rokeach, 1969: 550).

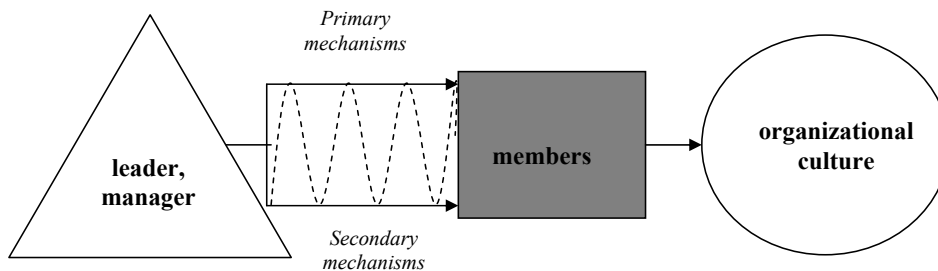


Figure 8. Leader's and members' roles in the formation of organizational culture

Source: compiled by the author on the basis of Daymond (2000); Erez and Earley (1993); Schein (1983, 2004).

Schein (1983) considers the teaching process as the most central mechanism in creating organizational culture – the formation of organizational culture is an interactive process first of all between the founder and organizational members. People who belong to the organization acquire experiences during mutual activities and cultural elements are embedded in the organization via teaching. That teaching process should not be explicit, but rather it follows the logic of evidence: if someone proposes a solution to a problem the group or organization faces and the perception that the proposed solution is working is shared by the members of the group or organization, it is then taken for granted (Schein, 1983: 21). The author of the dissertation believes that teaching is indeed an important vehicle in the culture forming process. Hence, the term “teaching” refers to a rather unilateral process, where one participant teaches another participant; in other words, the “teacher” has an active role while the subject who is taught is in a passive role¹⁶. That is an approach the author would not like to agree to, but rather supports the position of Daft and Weick (1984), who use the concept of organizational learning to explain the logic of the formation of organizational culture.

People, groups and organizations are the sources of meaning in the sense that they interpret ongoing events and make sense of those processes relying on existing interpretative structures (Peterson and Smith, 2000: 104) – interpretations of events take place both in the internal and external environment (Daft and Weick, 1984). Organizations could be conceptualized as a series of nested systems that have their own cognitive systems and memories – “individuals come and go, but organizations preserve knowledge, behaviors, mental maps, norms and values over time” (*Ibid*: 286). The essential mechanism of the formation of organizational culture is learning, which could be viewed as a

¹⁶ However, in his book “Organizational Culture and Leadership” Schein also refers to learning as the essential mechanism for how shared meanings are created (Schein, 2004).

three-step process, including the scanning, interpreting and learning or action taking stages (see figure 9).

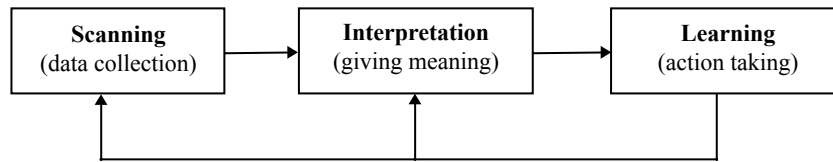


Figure 9. Organizational learning process

Source: compiled by the author on the basis of Daft and Weick (1984).

Organizational learning is an ongoing process, and while Daft and Weick (1984) apply this framework primarily to explain how organizations acquire and interpret information from the external environment, the author of the dissertation argues that a similar process takes place also inside the organization. Scanning could be defined as the process of monitoring both internal and external environments and gaining information about ongoing events. Those who are involved in the process provide meaning about information, but this does not take place in isolation – in the organization the perceptions are shared among the members and as a result cognitive maps are construed. The last phase covers the action stage, where the reactions to the interpretations occur. The learning process is a looped system where feedback is gained on each phase of the process and the recurrence of the process constantly recreates the cognitive maps of the organization influencing interpretations of forthcoming events (*Ibid.*). It has been proposed that the most effective ways of managing culture are through one-to-one verbal communication and role modeling. New behavior is acquired through the influence of stimuli that cue behavior-reinforcing responses in a particular setting (Siehl, 1985:129), meaning that culture is created in day-to-day interactions in working settings (Schein, 2004).

The learning process between different organizational actors takes place and this process is influenced both by intra-organizational and external matters. Organizational studies have been criticized because of their focus on internal matters rather than on the external, societal and cultural context within which the organizations are embedded (Martin, 1992). However, organizations could be regarded as open systems, which are dependent on their environments, and from that dependency reciprocal ties are created through which organizations are intertwined and bound to each other and the environment as whole (Trice and Beyer, 1993: 300). For example, Lundberg (1985) argues that change in organizational culture is usually the result of non-managerial forces; however, managers can guide the changes. Allaire and Firsirotu (1984: 213) stress that organizational culture could not develop in a vacuum, but the organization as a system is influenced by history and ambient society. The national culture in which organizational actors have been socialized has a significant influence on

individual values, but it also has an impact on the deepest level of organizational culture – basic assumptions. It has been argued that industry characteristics also have a significant effect on organizational culture, but the impact occurs on more visible levels of organizational culture, namely in the values and practices. The main postulates of the previous discussion are presented in figure 10 as a framework for the development of organizational culture.

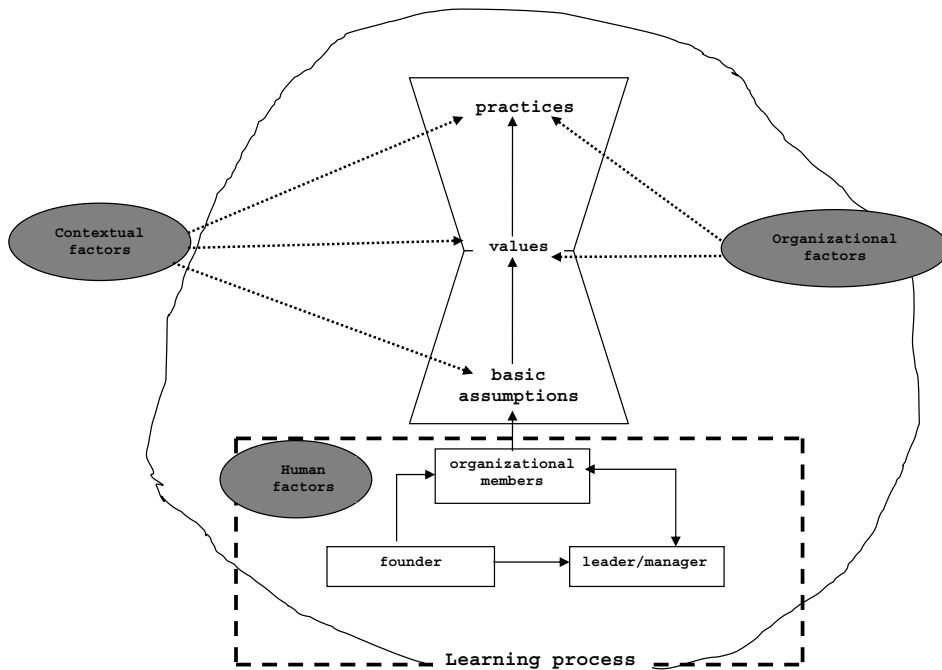


Figure 10. Framework for the formation of organizational culture

Notes: thin dotted lines indicate the possible influence of particular factors on layers of organizational culture.

Source: compiled by the author based on the ideas of Schein (2004), Allaire and Firsirotu (1984), Daft and Weick (1984), Erez and Earley (1993), and Gagliardi (1986).

It is not always possible to differentiate how the environment¹⁷ influences the processes in the organization, and it is even more complicated to bring out straightforward lines from the organization to the environment it exists in. One could assume that these are processes that occur simultaneously, and therefore,

¹⁷ Here environment should be considered both in terms of general and specific environment.

specifications of those influences often remain theoretical and even hypothetical.

A more detailed analysis of the impact of contextual variables (national culture and industry) on organizational culture will follow in the next subchapter. The following section of the dissertation will also discuss how organizational variables influence patterns of organizational culture developed in organizations.

1.2.3. Factors influencing the formation of organizational culture

The variety of opinions in the literature about the most relevant factors implied in the formation of organizational culture is notable, but the author of the dissertation believes that the list of determinants is far of complete and closed. Furthermore, there is probably no single factor impacting the formation of organizational culture, rather the combination of different factors should be considered. Sources of organizational culture in light of different theories and with reference to empirical studies in the field will be analyzed in following sections of the dissertation, and two groups of research propositions will be developed to test the regularities of manifestations of organizational culture in Estonian organizations. The first group of propositions will capture ideas about the impact of contextual variables on patterns of organizational culture, and the second, about the effect of organizational variables on patterns of organizational culture.

Organizational culture is often viewed as an organization's internal attribute rather than an external force that is imposed upon the organization (Erez and Earley, 1993:68). Several authors have discussed the mechanisms involved in the creation of organizational culture and some approaches could be pointed out that stress the importance of various factors in the process of the formation and evolution of organizational culture. For example, Allaire and Firsirotu (1984: 208) bring out three main factors which impact organizational culture: 1) the organization's history, 2) dominant actors via definitions of situations, and 3) members' interpretation and sense-making of ongoing actions and interactions. Those factors are difficult to underestimate in the organizational culture formation process, but in the author's opinion we should not only be considering internal factors. There are many studies that aim to analyze how the values and attitudes of organizational members impact the formation of organizational culture. The individual's role in the development of organizational culture is crucial indeed, but it cannot be approached as an independent factor because it has been argued that organizational members' perceptions of organizational culture depend on the managers' and employees' societal (national) cultural values (Cseh, Ardichvili, Gasparishvili *et al*, 2004: 11).

Therefore, the following external factors contributing to the development of organizational culture are also often highlighted in the literature: 1) values of societies (national culture) and 2) the organization's specific environment (industry characteristics and technology). Numerous studies have focused on the relationship between national culture and organizational culture while linkages between industry characteristics and organizational culture have gained less attention. The impact of organizational variables (e.g. the organization's history, age and size) on organizational culture has gained even less attention and considerations here often remain theoretical. At the same time, it might be expected that organizational variables mediate the impact of national culture and values in specific industries, and therefore, organizational variables could be seen as important in explaining regularities in manifestations of organizational culture, and it could be misleading to leave those variables out of the research focus.

Figure 11 aims to summarize the main factors that impact the formation of organizational culture and three groups of factors are depicted in the figure: contextual, organizational and human. It could be proposed that those groups of factors influence organizational culture most directly. By contextual factors, the author of the dissertation means those aspects that are related to the environment the organization operates in (e.g. national culture, society, industry etc), and while organizational factors may be related to these contextual factors, they are still more organization-specific (organization's size, age, history etc). The third group of factors that has been considered to be important in the formation of organizational culture is human factors. Organizational culture could not develop and exist without the contribution of organizational members, leaders, but also owners and founders.

The list of influencing factors described above is indeed not complete, but the factors that have been considered most influential are brought out in the figure below. There are few studies that focus on other determinants of organizational culture, but as the studies are fragmented it is difficult to draw broad conclusions. From among those factors on the figure, those that will be the focus of the empirical study are denoted with a grey background. Hence, the discussion will focus on the impact of national culture and industry on manifestations of organizational culture, and it will also bring out the regularities in manifestations of organizational culture in respect to organizational-level variables like the organization's age and size. Those factors that have been adopted for the empirical research have been considered as most influential in the literature.

Another argument supporting this choice was the accessibility of the factors because, for example, although individual factors are important determinants of organizational culture, not all organizations provide access to this data. The impact of human factors on organizational culture will also not be the focus of the present dissertation because there are several researches that have investigated the role of individual-level variables on organizational culture in the context of transition societies (see for example Aidla, 2009; Vadi *et al*, 2002;

Vedina *et al*, 2006). Yet another important argument is the comparability of organizations on the basis of the chosen factors. In order to compare organizations on the basis of their age, size or industry more or less clear categories or defined units could be formed. For example, the impact of the socio-economic environment and organizational history will be left out of the analysis, but as mentioned before these forces will be discussed as constituents of background information.

Reciprocal ties could be found between the groups of factors as well (indicated with dotted lines in the figure), but relationships also exist between the elements within each factor group. These connections will not be investigated empirically, but rather will be used as a general frame of reference in the discussion part of the dissertation. From the point of view of the empirical research, it is also important that the number of factors studied should not be very large because otherwise the interpretation of mutual connections becomes difficult. But at the same time, the author understands that making a choice between the factors for the analysis makes acquiring a full picture of the phenomenon more problematic.

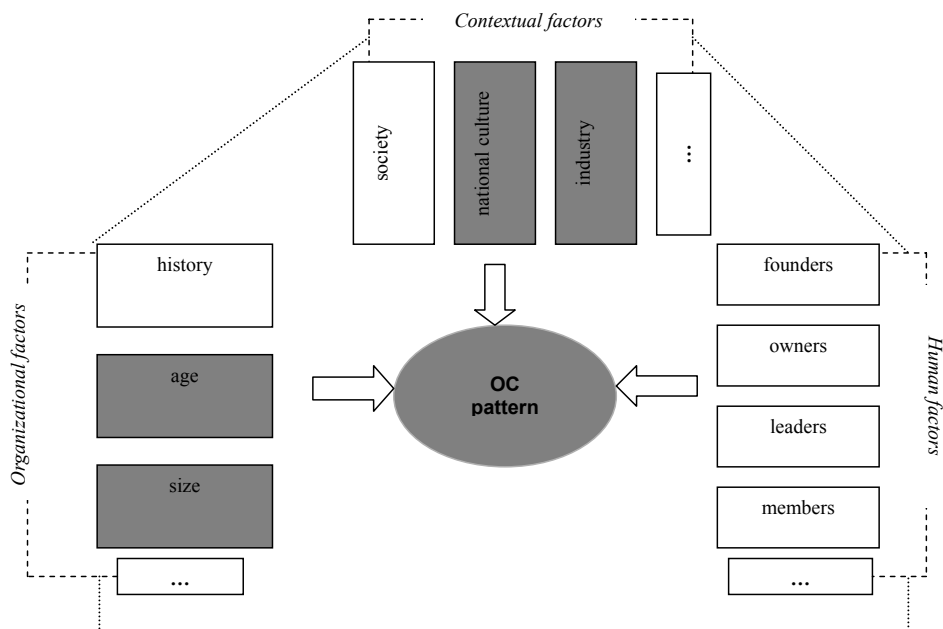


Figure 11. Framework for setting propositions about factors in the formation of organizational culture

Notes: Dotted lines indicate connections between different elements. Factors with grey background are the focus of the empirical study.

Source: compiled by the author

Following the previous argument, subsequent discussion will focus on the impact of contextual and organizational factors on organizational culture. In order to examine the connections between influencing factors and organizational culture in more detail, two sets of research propositions will be specified as a result of the discussion. The first set of propositions will focus on the relationships between contextual factors and organizational culture, and the second group of propositions will aim to specify the connections between organizational-level factors and organizational culture. Due to the fact that the available sources and our understanding of the aspects being studied is quite fragmented, the comprehensiveness of the research propositions varies.

National culture as a determinant of organizational culture

Several studies support the idea of the organization's environment as a significant force in the formation of organizational culture. It has been argued that organizations do not possess cultures of their own, but they are formed as a function of societal culture (Erez and Earley, 1993: 69). Organizations could be approached as products of the dialectic interplay with their environment; the organizations take different forms because of adaptation to environmental characteristics,¹⁸ and therefore, one could argue that organizations reflect, to a certain extent, the values of the society they operate in (Allaire and Firsirotu, 1984: 201). Hence, from that perspective, a national culture¹⁹ is an essential determinant of organizational culture (see for example, Hofstede *et al*, 1990; Koopman *et al*, 1999; Mead, 1994; Van Muijen *et al*, 1999).

For example, a study of national cultures conducted by Koopman *et al* (1999) demonstrated that there is no such phenomenon as a European cultural pattern – each country has its own specific characteristics that also influence organizational values and basic assumptions. The study demonstrated that organizational culture is strongly influenced by the dominant values of the national culture – business sector did not explain the differences in organizational culture. Similar findings have been demonstrated by Deshpandé, Farley and Bowman (2004), who analyzed the organizational culture profile of organizations in six Asian countries with the aim of bringing out regularities between organizational culture profiles and organizational performance. The findings demonstrated significant differences of organizational culture, and those

¹⁸ Here environmental characteristics should be understood in their broader meaning (social, political, economical characteristics).

¹⁹ National culture is often regarded as a synonym for ethnicity; however, sometimes these two concepts should be distinguished. Ethnicity refers to people's sense of belonging to a self-reproductive group (Westin, 2002). When a society is homogenous, ethnic culture and national culture could be approached as synonyms, but when different ethnic groups are represented in society the term national culture could be defined as the dominant mental program of the country (considering that different ethnic groups are represented in a particular culture).

differences were consistent with the countries' historical and cultural differences. Thus the results supported the idea of the national culture's impact on the organizational culture profile. However, when analyzing the influence of organizational culture on a company's performance, the study demonstrated that the impact was statistically identical across countries: internally focused cultures (Human Relations and Internal Processes types) detracted from performance, while externally focused or more open organizations (Open System and Results oriented types) performed better. These results were generally in line with the results from a similar study conducted on the sample of industrial countries (Deshpandé, Farley and Webster, 2000).

Based on the previous argument, the first proposition about the impact of contextual factors on organizational culture will be set as follows:

Proposition 2a:

Organizations that operate in the same national cultural context share similar patterns of organizational culture.

There are authors both for and against the idea that national culture affects organizational culture. Allaire and Firsirotu (1984) have argued that some other strong contingency factors may influence organizational culture, and in that case organizational values, beliefs and meaning systems may diverge substantially from those of the society. For example, in the case of multinational companies, the impact of national cultural values from the host country may be marginal compared to the values of the enacted environment of the parent company. Hofstede (1985) seems to take a different position arguing that the founders' national values appear in the organization even if it spreads all over the world: the subsidiary's culture might be a hybrid between the international organizational culture and the local national culture, but still, there are some values represented in the organizational culture that have been transmitted from the national culture of the mother company.

In the scope of present study, conclusions about the effect of some features of national culture on organizational culture could be made using the example of Estonian national culture, though the author admits that it may be complicated to expose clear connections, because of divergent and fragmented data about the national culture of Estonia. Moreover, getting a reliable picture of patterns of organizational culture that have arisen out from the national culture is not easy because the diversity of topics and methods applied in different studies about organizational culture in Estonia is remarkable. Andrijevskaja and Vadi (2003b: 282) have concluded that the papers published on organizational culture in Estonia "could be viewed as a springboard for future studies". Yet, some albeit hypothetical regularities could be brought out about the patterns of organizational culture in Estonian organizations.

The national culture of Estonia has been described as a culture of low power distance, medium uncertainty avoidance and high individualism and

masculinity²⁰ (Vadi and Meri, 2005). However, the results presented by Huettinger (2008) are somewhat different. According to his study, Estonia scored moderately in individualism and low in masculinity, but for example, Spector *et al* (2001) have reported moderate masculinity in Estonia. Lauristin and Vihalemm (1997b: 253) have argued that the mentality of Estonians is modernist and pragmatic, which means that they tend to be achievement-oriented, but at the same time conservatism and low autonomy could be pointed out as characteristic features of Estonians as well.

Uncertainty avoidance is assumed to be negatively connected to innovation initiative because a reliance on rules constrain opportunities to develop new solutions. Power distance is also believed to be negatively connected to creativity and the ability to innovate (Kaasa and Vadi, 2008; Ulijn and Weggeman, 2001). Low power distance as characteristic to Estonian culture on the one hand should facilitate innovation and the capability to change; but on the other hand, considering the moderate uncertainty avoidance in the national culture it could appear as a barrier to flexibility and ability to adapt at the organizational level. Elenurm and Oper (2008/2009) have reported that a risk-averse culture has been seen as quite an important obstacle to innovation among Estonian enterprises. Encouraging experimentation with new ideas and fostering an innovative culture that would reward honest failures has been considered important aspects by entrepreneurs (*Ibid.*). A similar tendency is also described by Vedina *et al* (2007) who have pointed out that while the general conditions in Estonia for innovation are favorable, the innovation performance indicators among Estonian organizations are not very high. Organizations seem to not be proactive and adaptive towards changes in the environment.

High levels of masculinity and individualism at the societal level may manifest in organizations in terms of high task and results orientation, while relationships, teamwork and cohesion (feminine values) might be less typical. Studies

²⁰ Hofstede (2001) defines cultural dimensions as follows. **Power distance** reveals to what extent power and hierarchical relations are considered essential in a culture; it also indicates the scope to which power is accepted in organizations. Fischer *et al* (2005) have argued that power distance is multidimensional and this also refers to paternalistic or mutual supporting relationships in society and organization. **Uncertainty avoidance** explains to what extent vague and tense situations are tolerated or avoided. In those societies where uncertainty avoidance is high, rules and regulations are created to diminish risks and avoid unexpected situations. The **individualism-collectivism** dimension makes it possible to clarify whether the interests of an individual or a group are considered to be more important – individualistic societies are characterized by weak relations between individuals, and it is assumed that everyone's responsibility is to take care of himself and his family while in collectivistic cultures on the contrary people are connected to each other through strong and cohesive groups and people are expected to be loyal to those groups. Last dimension – **masculinity-femininity** shows to what extent a culture is dominated by masculine values (e.g. orientation towards achievement and competition) versus feminine values like discretion, modesty, tolerance and solidarity.

that approach organizational culture through task and relationship orientation seem to support that position; however, not only does societal culture matter – rather it is ethnic background and the composition of organizations from that perspective that might count for orientations of organizational culture. Vadi *et al* (2002) have revealed that Estonians are more task oriented compared to Russians who scored higher on the relationship orientation scale²¹. Research conducted by Vedina *et al* (2006) in Russian-speaking minorities confirmed the dominance of relationship orientation in Russian samples. Thus, the extent to which relationship orientation is exhibited in the organization might be dependent on organizational composition in terms of ethnic background.

It has also been argued that in the Estonian cultural context, the most suitable organizational culture would be the *well-oiled machine* (Hofstede, 1983; Vadi and Meri, 2005). This is an organization characterized by bureaucracy and robust structure and in this kind of organization situations are solved according to rules and regulations (Vadi and Meri, 2005). Findings from another study support these ideas. Roots (2003) has argued that Estonian organizations could be characterized by high formalization and centralization; however, there is a tendency to become less centralized in the future.

The main postures of the previous discussion are presented in figure 12. The figure indicates the connections between dimensions of the national culture and the general features of organizational culture. No concrete types of organizational culture are brought out in the figure because this would limit the scope of studies that could be used to set the proposition.

As we can see in the figure, power distance and uncertainty avoidance at the societal level is believed to have an intervening effect on the development of innovational aspects of organizational culture, even though higher power distance will usually result in a hierarchical and rules based organizational culture. The other two dimensions of national culture – individualism and masculinity – seem to contribute mainly to task orientation at the organizational level and at the same time do not foster aspects of relationship orientation.

²¹ Here relationship orientation indicates belongingness and close interpersonal relationships in work-related situations. Task orientation reveals attitudes towards organizational tasks – it explains the extent to which organizational members are willing to support achieving organizational goals (Vadi *et al*, 2002).

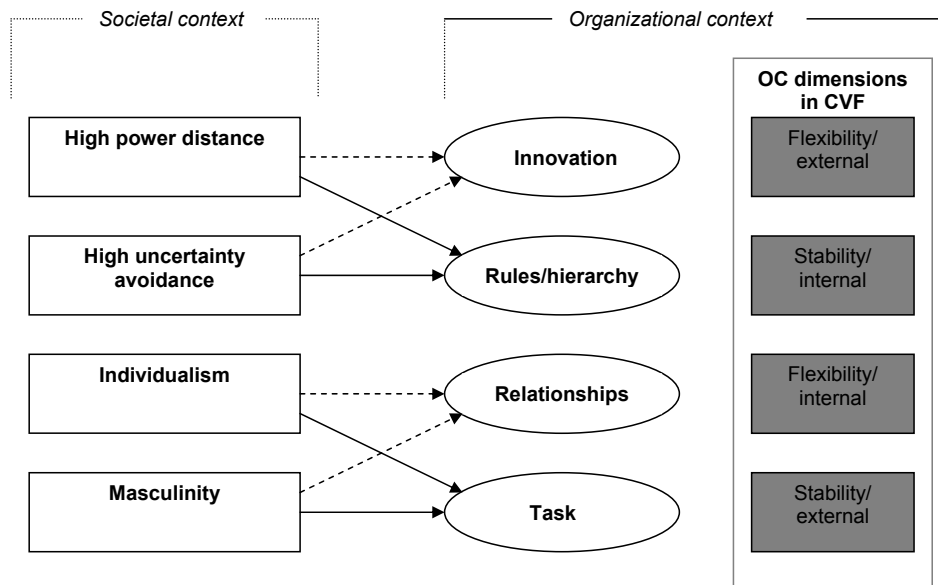


Figure 12. Connections between dimensions of national culture and dominant features of organizational culture based on studies of Estonian culture

Notes: dotted line shows negative and continuous line marks positive relationships between the variables. Relationships base on general theoretical and empirical grounds.

Source: compiled by the author on the basis of Huettinger (2008); Kaasa and Vadi (2008); Lauristin and Vihalemm (1997b); Spector *et al* (2001); Ulijn and Weggeman (2001); Vadi *et al* (2002); Vadi and Meri (2005); Vedina *et al* (2007).

Taken together the previously highlighted linkages between the dimensions of national culture and organizational culture, and considering the findings of the studies of the Estonian cultural context, proposition 2b will be formulated within the framework of the core dimensions of organizational culture discussed in chapter 1.1.3 as follows:

Proposition 2b:

The tendency towards stability and control dominates over flexibility in Estonian organizations.

The idea of national culture as the main influencer of organizational culture has been criticized for several reasons (see for example, Allaire and Firsirotu, 1984). The most serious criticisms arise from the pluralistic nature of society, which is particularly relevant nowadays – it is complicated to define the national culture because there is not a single set of basic societal values. Therefore, it is doubtful how one could detect the direct linkage between the two phenomena. This is not intended to diminish the impact of national culture

on the organizational setting and its culture, but rather to consider problematic issues in the field. Besides national culture, another contextual variable – the organization's field of activity – is also believed to contribute to the formation of organizational culture.

Industry as a determinant of organizational culture

Whilst the national culture has been proven to be an important factor in the formation of organizational culture, there are several researchers that have argued that field of activity (sector, and more specifically industry) plays an important role in the formation of organizational culture (see Boyne, 2002; Chatman and Jehn, 1994; Gordon, 1991; O'Reilly *et al*, 2002; Padaki, 2000). Deal and Kennedy (1982) have even claimed that the business environment (customers, competitors, technologies, government influences) is the single greatest influencer in shaping organizational culture. It has been proposed that national culture is a powerful facet explaining differences in organizational culture at the values level, while business sector values have an impact on the practices of the organization (see for example, Hofstede *et al*, 1990, Van Muijen and Koopman, 1994, Van Muijen *et al*, 1999).

Gordon (1991) argues that organizations are founded on industry-based assumptions about customers, competitors and society and from those assumptions (or industry ideologies as defined by Trice and Beyer (1993)) certain values are derived which serve as the basis for strategies, structures and processes needed for the survival of the organization. Therefore, organizations that belong to relatively homogeneous industries are similar because the specific environment prescribes what kind of structures organizations implement or what the orientation of the organization should be; also, regulatory demands of the industry shape organizational culture to a great extent (O'Reilly *et al*, 1991). Gordon (1991) has brought two illustrative examples – the first one is about an electricity utility, where sector-based assumptions expect a continuous and uninterrupted service, and therefore, high value has been placed on reliability and stability in organizations; and the second example, from the financial services industry, which is traditionally known as a rather stable and conservative business sector, but deregulation of the sector has made the environment more competitive, and therefore, adaptability rather than stability is expected from organizations. Thus, in order to maintain legitimacy, survive and develop, the organizations must be in accordance with their institutional environment (Christensen and Gordon, 1999).

It could be argued, that the boundary is not settled between specific industries, but rather between private enterprises and public agencies (see for example, Boyne, 2002). Meta-analysis of empirical studies indicates that public and private organizations differ in the following aspects: *environment* (public organizations are more open to environmental influences); *organizational goals*, which are more vague for public entities; *structures* (there is more red tape in public organizations, there is more bureaucracy and less managerial autonomy

in public agencies) and *values* (managers in public organizations have less materialistic values, they have stronger public interest motives and weaker organizational commitment) (*Ibid*: 116). Nevertheless, most of the studies that have focused on the influence contextual factors have on organizational culture have not taken such broad analysis categories, but rather have compared organizational culture in different industries. Empirical studies on the effect of industry on organizational culture range from studies that focus on the comparison of a few sectors to analyses that also encompass aspects of national culture. However, the studies that can draw conclusions on the basis of wide-ranging comparisons at the industry level are not frequent, and therefore, most of the studies offer limited conclusions about industry effects on organizational culture.

Chatman and Jehn (1994) have demonstrated that industry accounts for variance in organizational culture patterns. Similar findings have been reported by Dastmalchian, Lee and Ng (2000), who 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 numerous studies that provide empirical evidence of features of organizational culture characteristic of particular industries. For instance, organizational cultures that combine the cultural dimensions external focus and stability tend to be most characteristic of manufacturing companies (Dastmalchian *et al*, 2000), but also some service organizations (Chatman and Jehn, 1991). Internal focus and stability has been found to be most common among organizations operating in the public sector (Parker and Bradley, 2000), utilities (Dastmalchian *et al*, 2000); healthcare (Dastmalchian *et al*, 2000; Lok and Crawford, 1999; Savič and Pagon, 2008), but also for prisons (Wright, 2005). However, in some sectors pointing out the dominant features of organizational culture is complicated – for instance education seems to be one of them. 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 organizational culture at all; rather universities should be interpreted as a set of subcultures (Silver, 2003). Ellström (1983: 231) summarized statements from different authors and characterizes 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) after analyzing the organizational culture of educational institutions. The goals of *academia* are often unclear, differentiated and fuzzy (Bartell, 2003). Though mainly holding the values of tradition, today higher education organizations experience pressure for organizational innovation (Obenchain *et al*, 2004), which certainly may have an impact on their culture.

To conclude, from the previous discussion it becomes evident that the field of activity of an organization plays an important role in patterns of organiza-

tional culture. However, not rejecting the cultural variances that may be found in organizations in the same industry, the proposition about the impact of the organization's field of activity on organizational culture will be constructed as follows:

Proposition 3:

Variation in organizational culture is greater across industries compared to differences within industries.

However, making generalizations at the industry level may be pursued with caution because technologies applied by organizations may vary within industries as well. For example, Chatman and Jehn (1991) propose that service sector organizations in industries with intensive technologies are more people oriented than outcome oriented, but service organizations in industries with long-linked technologies will be characterized by cultures that are more outcome oriented than people oriented. Moreover, the industry might not be the single influential factor that affects the formation of organizational culture, and therefore, other agencies should be considered.

Organizational culture from the perspective of organizational characteristics

In addition to contextual factors, organizational variables could be used to explain regularities in manifestations of organizational culture because the different characteristics of an organization play an important role in shaping its organizational culture (see Vadi and Alas, 2006). However, organizational variables such as the organization's age and size have received only little attention in the research into organizational culture. For example in May 2009, more than 6 000 peer reviewed articles from academic journals could be found using the subject term "organizational culture" in the Business and Economic databases at EBSCO. When adding the term "size" less than 40 articles could be found, and searching the terms organizational culture and organizational age brings less than 10 articles. Results like these indicate that empirical research concerning the impact of organizational variables on organizational culture is rather modest. The following sections will discuss organizational age and size as determinants of organizational culture, proposing how the age and size of the organization might influence patterns of organizational culture.

Organizational age

It has been argued that whilst anthropologists have difficulties studying the cultural origins of societies, it is much easier to reconstruct the past for organizations and analyze how the organization's past has been implied in the formation of organizational culture (Schein, 1991). The idea seems meaningful and reasonable, but in practice the reconstruction of the organization's past is not always so easily achievable, especially when one focuses on organizations

with long traditions. There are not many studies that consider organizational age as the influencing factor in the formation of organizational culture; however, it has been admitted that the history of an organization in the sense of its continuity and traditions may leave traces on its organizational culture.

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). For example, Goffee and Jones (1998) have proposed that organizational culture changes along with the organization's life-cycle. Moreover, a strong positive correlation between the organization's age and size usually exists (Barron *et al*, 1994). Goffee and Jones (1998) see the size, organizational age and external environment as the main pressures behind the development of organizational culture, arguing that organizations usually start small and the presence of organization's founders and owners develop a communal culture that could be described by high sociability and high solidarity²². Because of changes in the environment and in the organization itself, it moves to other types of culture balancing between levels of sociability and solidarity.

Cameron and Quinn (1999) have argued that changes in organizational culture occur mainly due to internal pressures – the size and age of the organization seem to be the main factors that push the organization to change from an adhocracy or open system of culture in the earliest stages of the organizational life-cycle to a clan culture. When the organization grows the need for rules and standard procedures occur, and therefore, a hierarchical culture will take shape, which because of dissatisfaction among organizational members in turn calls for a new reorientation. Cameron and Quinn (1999) propose that at that stage of the life-cycle, a hierarchical culture will be supplemented by a market culture. The logic of the development of organizational culture has also been explained by Greiner (1972), who argued that organizations grow through evolutionary stages that are followed by revolutionary stages. Periods of revolution are those where the organizational culture may change radically. While in recently established organizations, the development of organizational culture follows rather a similar pattern, changes in organizational culture in mature organizations are believed to be consciously managed and less predictable (see Cameron and Quinn, 1999).

However, the connection between organizational culture and the organization's age and size is not always ultimate. Considering recent transitional and former catch-up societies like Estonia, and taking into account their historical and socio-economic background, it would not be useful to apply the life-cycle model to analyze the effect of organizational age on the development of organizational culture for several reasons, but first of all – the traditional life-

²² While sociability is a measure of friendliness among organizational members, solidarity describes to what extent the relationships are based on common task, mutual interest and clearly understood shared goals.

cycle model hardly fits the context of radical changes and transformations. For example, Zahra and Hansen (2000) have argued that the privatization of enterprises may lead to significant changes in the organizational culture of those companies. It has been found that after privatization organizational culture has changed towards a greater emphasis on performance, people orientation and organizational integration (Cunha and Cooper, 2002).

Many organizations that operate today in Estonia were established under the command economic system, which essentially differed from a market economy. Vadi and Vedina (2007) have argued that fifty years of communist ideology and practice have had a significant effect on organizations and their members. 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, but at the same time they had to “grapple with the mentality and organizational culture that had been produced in the conditions of the command economy” (Vadi, 2003b: 31). On the other hand, there are lots of organizations that started from zero at the beginning of 1990s, and also had the opportunity to develop an organizational culture from zero. In that sense, it is interesting to analyze whether the organizational culture is different in the two groups of organizations – the old and new organizations. The terms “old” and “new” are subjective categories, often taken for granted and no explanation is provided about the basis for considering an organization “old”. Here organizations that were established before 1991 are considered old, and organizations founded after 1991 new.

It has been argued that organizations with a long history usually have rooted cultures and organizational members perceive their organization in more homogeneous manner (Kekäle and Kekäle, 1995; Wiener, 1988). The reasoning here could be found from the essence of organizational culture. Organizational culture has been understood as the knowledge that is learned and shared by organizational members over time (Jaskyte and Dressler, 2004), and therefore, the longer the history of a particular organization, the more complete and similar an understanding of its culture would exist among its organizational members.

It has been proved that a greater sharing of the organizational culture among organizational members is associated with lower innovativeness, while greater diversity of beliefs and values within the organization leads to higher innovativeness (Jaskyte and Dressler, 2004). Besides, it has been proposed that older organizations tend to be more stability oriented because of inertia (Tsui *et al*, 2006; Van Wijk *et al*, 2007). It has been also argued that older organizations “suffer from ossification of their routines, non-learning processes, blindness, and conservatism, which cause poor performance and decline” (Durand and Coeurderoy, 2001: 473). Alas (2004) has demonstrated using the example of Estonian companies that success in implementing change and progress in creating a learning organization varied with regard to the age of the organization: older companies were less successful in adjusting to change. The

previous arguments provide the basis for constructing the following propositions:

Proposition 4a:

Organizational culture is perceived in more a homogeneous manner in older organizations.

Proposition 4b:

Older organizations are more stability and less flexibility oriented than new organizations.

Size of organizations

Another organizational characteristic often regarded, but empirically seldom investigated, as a variable that influences organizational culture is organizational size. In the scope of the present dissertation, organizational size is defined using the number of organizational members; however, the author is aware of different approaches to measuring organizational size.²³ From the perspective of organizational culture, the number of organizational members²⁴ 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). 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”.²⁵

Several researchers have argued that organizational size has an effect on internal aspects of organizational culture (internal processes, intra-organiza-

²³ Measures of organizational size applied include, for example, physical capacity, measures concerning input and output, financial resources (see for instance, Evers *et al*, 1976; Price, 1997; Camison-Zornoza *et al*, 2004).

²⁴ Traditionally only employees are considered under the term *organizational members*, but this is too limited an approach, because there are different types of employees (part-time, supernumerary and temporary employees are only a few examples). In this dissertation 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 (*Ibid*).

²⁵ However, studies in the field of organizational size have revealed that organizational size is often a matter of subjective perception (e.g. Adrat, 2007) for reasons of statistical analysis clear categories are needed. According to EUROSTAT, organizations could be classified by the number of employees as follows: micro-enterprise (1–9 persons employed); small enterprise (10–49 employees); medium-sized (50–249 employees) and large enterprise (more than 250 employees).

tional relationships and structures). Astley (1985) has pointed out that growth in organizational size will cause changes in structure and result in a higher level of bureaucracy. Dastmalchian *et al* (2000) have also found a positive correlation between organizational size and the Internal Processes type of organizational culture. 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). The negative impact of organizational size on the development of the Human Relations type of organizational culture has been demonstrated, for example, in the study by Dastmalchian *et al* (2000). Taking together the discussion about the impact of organizational size on intra-organizational relationships in terms of organizational formalization and interpersonal relations it can be suggested that:

Proposition 5a:

Larger organizations foster the values that aim to assure integration by means of formalization and centralization, while in smaller organizations cohesion, trust and close relationships between organizational members are more prevalent in patterns of organizational culture.

Organizational size is believed to have an impact on the relationships between the organization and its environment. It has been argued that the size of the organization has an impact on the organization's ability to respond to changes in the environment, and the main reason here has been seen in the more complex structure of larger organizations (Hannan and Freeman, 1984). By analyzing the implementation of change, Alas (2004) has found that small and large organizations were more successful in implementing transformational change, whereas middle-sized companies were the least successful. Moreover, compared to the estimates of the public sector, managers in the private sector found the changes to be more successful (*Ibid*: 52).

There is vivid discussion in the management literature about the influence of organizational size on the innovativeness of the organization. It is believed that larger organizations tend to be more bureaucratic and less entrepreneurial (Sørensen and Stuart, 2000), and therefore less flexible towards changes in the external environment. Innovation²⁶ is a critical factor for organizational survival because of the rapidly changing and increasingly competitive environment (Flynn and Chatman, 2001). Principles of bureaucracy tend to be in sharp contrast to the values needed for innovation in an organization. However, the

²⁶ Here innovation is defined as a combination of the creativity (i.e. generation of new ideas) and the actual introduction of change (i.e. implementation) (Flynn and Chatman, 2001: 265).

conclusion that larger organizations are more bureaucratic and rigid, and therefore, are not able facilitate innovation may be premature.

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 in 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 (*Ibid.*), 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. Although organizational size is often discussed in the context of the innovativeness of the organization, innovation *per se* is not the focus of the present dissertation. Innovativeness may be an attending outcome of the organization being flexible and opened to change.²⁷

Therefore, the proposition about the relationships between organizational size and organizational culture will be formulated in terms of flexibility and openness as follows:

Proposition 5b:

Smaller organizations are more flexible and open to change than larger organizations.

Studies tackling this area have not managed to prove that an organization's size has any impact on results orientation, and therefore the following proposition could be set:

Proposition 5a:

The results orientation of an organization is unaffected by its size.

Based on theoretical arguments and the results of empirical studies, several propositions were formulated concerning patterns of organizational culture and the factors that facilitate the regularities in manifestations of organizational culture (see figure 13).

²⁷ Here changes are interpreted as intended or unintended reactions to pressures from the internal or external environment.

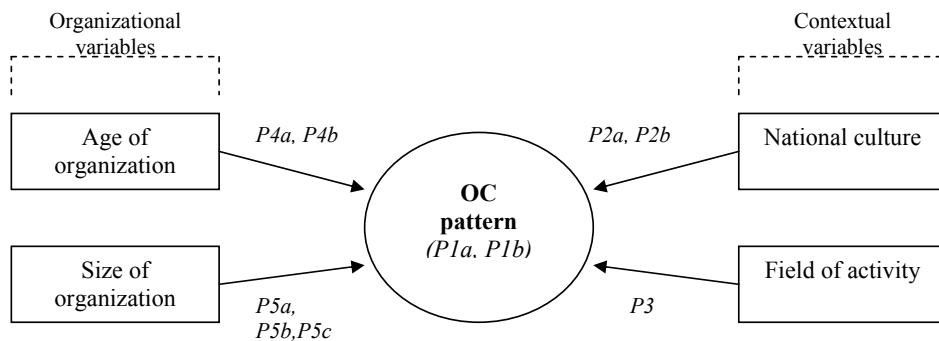


Figure 13. General logic of research propositions

Source: Compiled by the author.

The propositions formulated in the theoretical part of the dissertation are summarized in table 6.

Table 6. Propositions set up for empirical analysis

Category	Keywords	Proposition
Organizational culture pattern	Connections between types of organizational culture	Proposition 1a: <i>Types of organizational culture are complementary to each other, but there are differences in the strengths of relationships between the different types of culture.</i>
		Proposition 1b: <i>Stronger connections exist between those types of organizational culture that share common values (adjacent quadrants) compared to the connections between the types of organizational culture from opposite quadrants.</i>
Contextual variables	National culture	Proposition 2a: <i>Organizations that operate in the same national cultural context share similar patterns of organizational culture.</i>
		Proposition 2b: <i>The tendency towards stability and control dominates over flexibility in Estonian organizations</i>
	Industry	Proposition 3: <i>Variation in organizational culture is greater across industries compared to differences within industries.</i>

Table 6. Continued

Category	Keywords	Proposition
Organizational variables	Age	Proposition 4a: <i>Organizational culture is perceived in a more homogeneous manner in older organizations.</i>
		Proposition 4b: <i>Older organizations are more stability and less flexibility oriented than new organizations.</i>
	Size	Proposition 5a: <i>Larger organizations foster the values that aim to assure integration by means of formalization and centralization, while in smaller organizations cohesion, trust and close relationships between organizational members are more prevalent in patterns of organizational culture.</i>
		Proposition 5b: <i>Smaller organizations are more flexible and open to change than larger organizations.</i>
		Proposition 5c: <i>The results orientation of an organization is unaffected by its size.</i>

As manifested on the illustrative figure 13 and in table 6, the first group of propositions explores what kinds of connections exist between types of organizational culture (Propositions 1a and 1b). The other propositions explain connections between organizational culture and contextual and organizational variables. More precisely:

- How national culture influences patterns of organizational culture (Propositions 2a and 2b);
- To what extent the field of activity influences the formation of organizational culture (Proposition 3);
- What relationships exist between an organization's age and patterns of organizational culture (Propositions 4a and 4b);
- How an organization's size influences patterns of organizational culture (Propositions 5a, 5b and 5c).

1.2.4. Theoretical foundations of the methodological approaches in research into organizational culture

While the previous subchapters discussed multiple notions of the phenomenon of organizational culture, discussions of the methodological basis for research into organizational culture are also vivid. The terrain of research into organizational culture from the methodological point of view is rich, and the diversity of studies is wide ranging from ethnographic studies to pure quantitative surveys. Different paradigms like positivism, interpretivism and critical theory (post-modernism)²⁸ exist in management research (Gephart, 1999) and while analyzing studies conducted in the field of organizational culture, positivism and interpretivism seem to dominate.

For example, Schein (1991) distinguishes three approaches to the study of organizational culture. Firstly, the *survey research approach* that categorizes cultures according to distinct dimensions and measures organizational culture in light of those dimensions (e.g. Hofstede, Kilman). The second approach is the *analytical descriptive* approach, which breaks organizational culture down analytically into components that are empirically more tractable, and studies those components aiming to describe and measure the cultures via manifestations of deeper levels of culture such as rites, rituals, stories and symbolic manifestations (e.g. Trice and Beyer; Martin and Siehl). Thirdly, *ethnographic studies* (e.g. Alvesson, Kunda) practice intensive and extensive observations with supplementary interview data with the aim of highlighting the uniqueness and complexity of cultural phenomena. The results of such studies are often called “thick descriptions” (Schein, 1991: 244).

Measuring “elusive, intangible phenomena derived from multiple, evolving theories” is a challenge that social science researchers have to face (DeVellis, 2003: 7). Sackmann (1997: 4) believes that the concept of cultural complexity actually goes beyond existing conceptualizations and “Western *either-or* logic” should be replaced with “*both-and*” logic. This notion would be useful to remind every researcher making studies in the field – moving between different paradigms and not being limited to only one approach would probably give the most relevant results. Still, awareness of the limitations should force a critical approach to the research.

Denison and Spreitzer (1991: 7) have pointed out that there is little agreement among researchers concerning appropriate methods for studying organizational culture. Methodological issues of researching organizational

²⁸ For the main postulates of each paradigm see Appendix 3. Paradigm: the concept introduced by Thomas Kuhn in the early 1960s could be defined as “conceptual worldviews that consist of formal theories, classic experiments, and trusted methods”. (Kuhn, 2009) Thus, a paradigm represents people’s values judgments, norms, standards, frames of reference, perspectives, ideologies, myths, theories and approved procedures that govern their thinking and action (Gummesson, 2000: 18)

culture vary along with the schools of thought and the differences in interpreting organizational cultural phenomenon as discussed in subchapter 1.1.1. While the symbolic school of thought represents ethnographic studies of the field of organizational culture, the socio-cultural school of thought has more diversity in terms of methodological approach. Those researchers that handle organizational culture as a whole tend to support the survey research approach, but other authors who understand organizational culture as a set of behavioral and cognitive components follow the tradition of the analytical descriptive studies. Previous subchapters have mainly introduced the studies that could be classified as survey research and analytical descriptive studies, but even in these fields the variety of measurement tools is remarkable (see the overview of studies in subchapter 1.1.3, appendices 1 and 2). The choice between methodological approaches, methods and measurement tools should be made first of all in accordance with the purpose of the research because there is no single best method for studying organizational culture.

Traditionally, a distinction is made between two types of analysis – qualitative (i.e. interviews, case studies, content analysis, observations etc) and quantitative (i.e. different types of questionnaires);²⁹ however, as pointed out by Davey and Symon (2001: 124–125), this kind of distinction has given rise to discussions because it is complicated to make clear-cut differences between qualitative and quantitative research methods. Van Maanen (1998: xii) has argued that “quantitative research is not the evil twin of qualitative research”, but it is rather a matter of methodological discourse as mentioned before. The purpose of this subchapter is to analyze the strengths and shortcomings of different types of analysis in the field of research in organizational culture.

Qualitative methods in research into organizational culture

Proponents of using qualitative methods in research into organizational culture mainly conduct studies in the interpretivist paradigm; however, this is not absolute – qualitative analysis is also applied in studies that follow the ideas of positivism. The difficulties of measuring and analyzing organizational culture are admitted by several researchers (e.g. Alvesson, 1993; Gummesson, 2000; Lund, 2003 and others). Alvesson (1993) has argued that cultural concepts like

²⁹ Here qualitative research is defined as a research strategy that usually “emphasizes words rather than quantification in the collection and analysis of data” and that predominately emphasizes an inductive approach to the relationship between theory and research, in which emphasis is placed on the generation of theories. Qualitative studies reject the practices and norms of positivism and emphasis is put on the ways in which individuals interpret their social world, moreover social reality is approached as a “constantly shifting emergent property of individuals’ creation” (Bryman and Bell, 2003: 25). Quantitative research emphasizes quantification in the collection and analysis of data which entails a deductive approach focusing on the testing of theories. Quantitative research follows the ideas of positivism and embodies a view of social reality as an external and objective reality. (*Ibid*: 25).

values, rites, rituals and so on, do not lend themselves to quantification and to strict variable thinking. Gummesson (2000: 35) agrees with the remarks by Alvesson and advocates the use of qualitative methods in research into management and organizations, using the metaphor of an iceberg: only 10–15% of an iceberg's mass is above the water's surface and the same could be said about organizations – using quantitative methods gives some overview of an organization, but to understand the processes or the core of the organization, a closer look is required. The primary strength of the qualitative approach in research into organizational culture is its ability to investigate and understand underlying values, beliefs and assumptions (Yauch and Steudel, 2003). Qualitative methods like in-depth interviews or case studies provide an opportunity to get a holistic view as they enable us to get a rich description of phenomena and make meaningful explanations.

The tool that is often used in analyses of organizational culture is metaphor³⁰, which is believed to be an important organizing device in thinking and talking about complex phenomena (Alvesson, 1993: 9). However, Alvesson (1993) stresses that a complex understanding of social phenomena could be derived from the synthesis of different metaphors and relying on some particular metaphor is problematic. Thus, metaphors may be effective auxiliaries for mapping organizational culture, but there is also the danger of using superficial metaphors that will not give a true picture of organizational culture.

However, there are also limitations to using the qualitative research approach in analyses of organizational culture. A substantial limitation concerns making comparisons and generalizations because qualitative research focuses more on specific cases and exceptions than on abstractions and generalizations. It has been argued that qualitative research sidesteps the hypothetical-deductive research model in favor of an inductive, interpretive approach (Van Maanen, 1998: xi), providing the deep, detailed and “rich” descriptions of the culture in a particular organizational setting (Bryman, 1988: 143). However qualitative analysis aims to give a reasoned interpretation of why the specific conduct is common or not (Van Maanen, 1998: xi–xii) the question remains, whether and to what extent the qualitative research provides a sense of the typicality and generality of the events described. It has been argued that controlling the validity and reliability of qualitative research is problematic (Flick, 2003; Silverman, 2001). Compared to quantitative research the criteria for the validity in qualitative research are different indeed; however, the criteria exist. For example, several criteria and a framework for understanding validity in qualitative research have been proposed by Cho and Trent (2006).

³⁰ A metaphor allows an object to be perceived and understood from the viewpoint of another object, because a metaphor is created when a term is transferred from one system or level of meaning to another, illuminating central aspects of the latter and shadowing others (Alvesson, 1993).

Qualitative research allows participants to raise issues that matter most to them, which eventually could be seen as a strength, but also a weakness of the research method because when participants have significant control over the process there is the possibility that important issues could be overlooked (Yauch and Steudel, 2003). From the procedural perspective, qualitative research is usually more time consuming than quantitative research (*Ibid.*).

Quantitative methods in research into organizational culture

Originating from Schein's approach to organizational culture, quantitative measurements of culture should be rejected because when using the questionnaires it is difficult to capture the deepest bases of culture (Lundberg, 1985, Schein, 1997); however, quantitative methods are applicable for researching the instrumental level of culture (e.g. values, which are more conscious or the surface layer of organizational culture and artifacts), which is a part of culture indeed. Hofstede *et al* (1990) have argued that cultural research should move further from ethnographic studies so that propositions for analysis could be set up. In that sense, quantitative research is an appropriate approach because it is most interested in making general statements in a form of defensible propositions about analytic classes and abstracted properties of social life (Van Maanen, 1998: xii). Quantitative research methods are considered useful in the field of research into organizational culture and values because they make it possible to compare the values and cultures of different organizations on similar grounds; moreover, quantitative research methods also provide the opportunity to quantify the relationships between different factors. Besides quantitative research methods are less time consuming than qualitative methods (Yauch and Steudel, 2003). However, the advantages pointed out here are not final, because in the scope of quantitative research two rather different measurement techniques applied in organizational culture research exist.

Self-reported questionnaires are often applied in the quantitative research of organizational culture, which allows respondents to express their opinion about organizational culture in terms proposed by the researcher. Several scholars (e.g. Miao *et al*, 1996; Meglino and Ravlin, 1998; Ovadia, 2004 and others) have raised the issue of appropriate measurement techniques in the scope of quantitative research of organizational culture (and more precisely values). Some researchers approach organizational values as independent of each other, and *normative* techniques based on rating a set of items and statements describing a value or set of values have been used by these authors. However, *ipsative* techniques, which ask respondents to either rank a set of values or to choose one value or value statement at the expense of another in a forced choice format (Meglino and Ravlin, 1998: 359) have also been used in research into organizational culture (e.g. Chatman and Jehn, 1991; Meglino *et al*, 1989; O'Reilly *et al*, 1991; Vanderberghe and Peiró, 1999 and others). In the discussion about the pros and cons of using rating and ranking techniques in values research, Ovadia (2004: 406) makes the conclusion that the issue could be

considered as unresolved or even unresolvable: neither method is without methodological and statistical imperfections, and therefore, neither ranking nor rating could be clearly superior.

The previous discussion focused mainly on values analysis techniques, and though values are a pivotal concept for defining organizational culture, it is also important to consider other layers of organizational culture (for instance, artifacts and practices). In that sense, applying ipsative techniques is somewhat problematic because the diversity of practices and artifacts defining the culture of particular organization may be notable and ranking may become impossible. Although there are examples of using ranking techniques when analyzing organizational culture (e.g. Competing Values Questionnaire by Quinn, 1988; Organizational Culture Profile developed by O'Reilly *et al*, 1991), normative techniques (e.g. instruments developed and used by Hofstede *et al* (1990), the Focus instrument by Van Muijen *et al* (1999) and others) seem to prevail over ipsative techniques.

Although the applicability of quantitative research methods in analysis of organizational culture has been admitted, those methods have also been criticized. Criticisms of quantitative research address several problems. The first argument that has been raised is the scope of analysis – Denison and Spreitzer (1991) have argued that quantitative research examines the questions that are of interest to the researcher, rather than analyze those concepts that organizational members use to describe themselves and their organizations. Therefore, it may become questionable whether the context of a particular organization has been captured in the research (Schein, 2004). Another problem often referred to is superficiality (Denison and Spreitzer, 1991) – the survey instrument cannot get at the deeper shared tacit assumptions that define the essence of the cultures (Schein, 2004) partly because of the researcher's limited capability to define underlying dimensions of organizational culture, but also because of the tacit nature of cultural assumptions individual respondents will be not able to answer survey questions reliably (*Ibid*: 206). Sackmann (2001) has stressed that the data collected from individuals using different methods needs to be critically examined to find out if they represent only individual opinions or the cultural knowledge of a group or an organization as a whole, and therefore, an assessment of how much intensity and consensus there is among the organizational members about the organizational values is needed.

Though quantitative research analyzes and tests relationships between different phenomena (and this is especially true in the case of normative techniques) the meaning of the connections studied may remain undiscovered. It has also been argued that statements included in a questionnaire may be interpreted in a different manner by respondents (Yauch and Steudel, 2003). To avoid being overly superficial, it has been suggested that the results be fed back to the members of the organization for discussion because in that case the outsider and insider perspectives are combined and the result will be more accurate.

The characteristics of qualitative and quantitative research are summarized in table 7. The author does not judge in terms of the pros and cons of using either qualitative or quantitative methods in research into organizational culture, because the author believes that the advantages and disadvantages may be dependent on the content and agenda of the research.

Table 7. Comparison of qualitative and quantitative research methods

Category	Feature	Quantitative research	Qualitative research
<i>Fundamental grounds</i>	orientation towards the theory	deductive; testing of theory	inductive; generation of theory
	paradigm	positivism	interpretivism
	ontological orientation	objectivism	constructivism
<i>Implementation</i>	assessment tools	standardized assessment tools	standardized methods not available; no established norms
	level of researcher involvement	low to medium	high
	level of subject involvement	minimal (e.g. secondary data analysis) to maximal (e.g. action research, statistical quality control)	minimal (ethnography including participant observation, content analysis) to maximal (clinical research, organizational development)
	amount of time spent	low	high
<i>Interpretation</i>	analysis of data	statistical treatment of data available	statistical analysis of data not available
	contextual information	little	broad
	level of generalizations and comparability	medium to high	low

Source: compiled by the author based on Bryman (1988); Bryman and Bell (2003); Denison and Spreitzer (1991); De Witte and Van Muijen (1999); Flick (2003); Ovadia (2004); Schein (2004); Silverman (2001); Van Maanen (1998); Yauch and Steudel (2003).

As seen from table 7, quantitative and qualitative research could be distinguished on fundamental grounds, but differences also exist in the research implementation and results interpretation phases. As stated before, there are no clear-cut choices based on the advantages and disadvantages of particular research strategies, because both methodological approaches must be handled as having limitations.

Sackmann (1991: 3) is critical of organizational cultural studies, claiming that generally “most academicians and practitioners agree on the importance of culture...but the major questions remain unanswered”. This criticism and skepticism

ticism partly proceeds from methodological issues. Combining qualitative and quantitative research methods has lately gained more attention (Creswell, 2003) and this kind of approach may facilitate a better understanding of organizational culture. Triangulation is a method in which multiple observers, theoretical perspectives, sources of data and methodologies are combined (Bryman, 1988: 131). By approaching the research problem using the different angles offered by different methodologies, the researcher or data make it possible to validate the conclusions to a greater extent, and it is suggested that qualitative research may facilitate the interpretation of relationships between variables (*Ibid*: 145) and in that sense fill the gaps between collected and analyzed statistical data and the meaning of the data.

In organizational culture studies, qualitative methods are very often used as a starting point in an investigation as they may help develop conceptual frameworks. Content analysis, focus group discussions, in-depth interviews, critical incident technique and mapping value systems are but a few of the methods used in the first phase of research to clarify the range of organizational values relevant to the study. However, qualitative research methods could be applied also in the final stage of the study and in that case qualitative research methods could be used to interpret the results gained from the qualitative analysis. To sum up – the product of qualitative research is clearly different to that of quantitative research, and judgments on the scale of better-worse could not be made here (Van Maanen, 1998).

In Estonia both, quantitative and qualitative methods, have been used in organizational culture studies; however, the quantitative approach has prevailed. The Questionnaire of Organizational Culture (QOC) developed by Vadi *et al* (2002) is most applied tool in academic research in the Estonian context (see for example Aidla, 2009; Alas and Vadi, 2003; Hämmal and Vadi, 2006; Jaakson *et al*, 2009). This is a Likert-type questionnaire that enables to distinguish two orientations of organizational culture: task orientation and relationship orientation (Vadi *et al*, 2002). While task orientation reflects the extent to which organizational members are willing to support their organization and its goals, relationship orientation emphasizes the importance of interpersonal relationships in the organization. Both, the task and the relationship factor consist of eight features.

Also, Harrison's questionnaire adjusted by Roots and firstly implemented by Haage (2002) and Kütt (2002) has been used in studies of organizational culture in Estonia. This research tool makes it possible to characterize organizational culture in terms of formalization and centralization. However, not many studies, which have applied the organizational culture measurement tool developed by Roots, have been published (e.g. Roots 2003; Vadi and Roots 2006). The questionnaire comprises 15 statements with four answering options. Studies that have applied Harrison's questionnaire in Estonia differed from the present research because in those studies individuals as representatives of a certain organization were required to offer their estimations of the existing culture in

their organization and their preferred or ideal pattern of organizational culture (Roots, 2003). Thus, only one single person represented each organization, which raises the issue of subjectivity. Organizational culture is a collective phenomenon, and the author believes that opinions of at least a small group of individuals should be collected from organizations in order to be able to make conclusions about the organizational culture of that particular organization.

The combination of qualitative and quantitative research methods is used, for example, in studies by Jaakson, Reino and Vadi (2008/2009) and by Hämmal and Vadi (2006). In the first study, the authors combine critical incidents method and apply statistical analysis in order to find out the factors that cause organizational practices to diverge from organizational values. The study by Hämmal and Vadi (2006) has used metaphors as a tool for analyzing organizational culture – the authors seek to link the metaphors used to describe organizational culture with members' perceptions about task and relationship orientations of organizational culture. The author believes that combining qualitative methods with quantitative is important because it enables comparisons, and hence, more solid conclusions and generalizations about organizational culture are possible. Using only qualitative methods often provides “thick descriptions”, but the level of generalization remains poor. As mentioned before, only a few quantitative analysis methods for research into organizational culture are available and validated by research in Estonia; developing a new measurement instrument could be considered necessary because a variety of measurement tools makes it possible to capture a more profound view of organizational phenomena. Therefore, in the scope of the present dissertation another measurement tool for organizational culture analysis will be developed by the author.

2. EMPIRICAL STUDY OF MANIFESTATIONS OF ORGANIZATIONAL CULTURE IN ESTONIAN ORGANIZATIONS

2.1. The research outline and methodology for exploring the organizational culture of Estonian organizations

2.1.1. Stages of the research and methodological considerations

This empirical study will analyze patterns of organizational culture and the factors that influence the manifestation of organizational culture in Estonian organizations. To analyze the organizational culture of Estonian organizations and test the propositions set in subchapters 1.2.1 and 1.2.3 an instrument for measuring organizational culture was required. The development of such an instrument was one part of the empirical study. The development of the questionnaire started in November 2003, and the study in the organizations was carried out in the period 2004–2009.

In terms of research stages and statistical analytical methodology, the analysis of data will be carried out in four phases. From the methodological perspective, several methods were used in the empirical research – figure 14 presents the stages of the empirical research and the analytical methodology applied in the subsequent subchapters of the dissertation.

The first phase of the empirical research consisted of developing the item pool and questionnaire. The development of the questionnaire will be introduced in subchapter 2.1.2. **Secondly**, after compiling the questionnaire, the sampling process started (an overview of the sampling procedure and sample composition is given in subchapter 2.1.3) and a pilot study was carried out. The aim of the pilot study was to test whether the items included in the questionnaire make it possible to differentiate between organizations on the basis of their organizational culture. **Thirdly**, after the analysis of the results from the pilot study, subscales were construed for further data analysis (see 2.1.4 for details). The author has given feedback to 15 organizations belonging to the sample in the form of focus group discussions, because this made it possible for the author to validate the results. **The fourth phase** of the research included testing the propositions (subchapters 2.2.1–2.2.3) and summarizing the impact of organizational and contextual variables on organizational culture (subchapter 2.2.4).

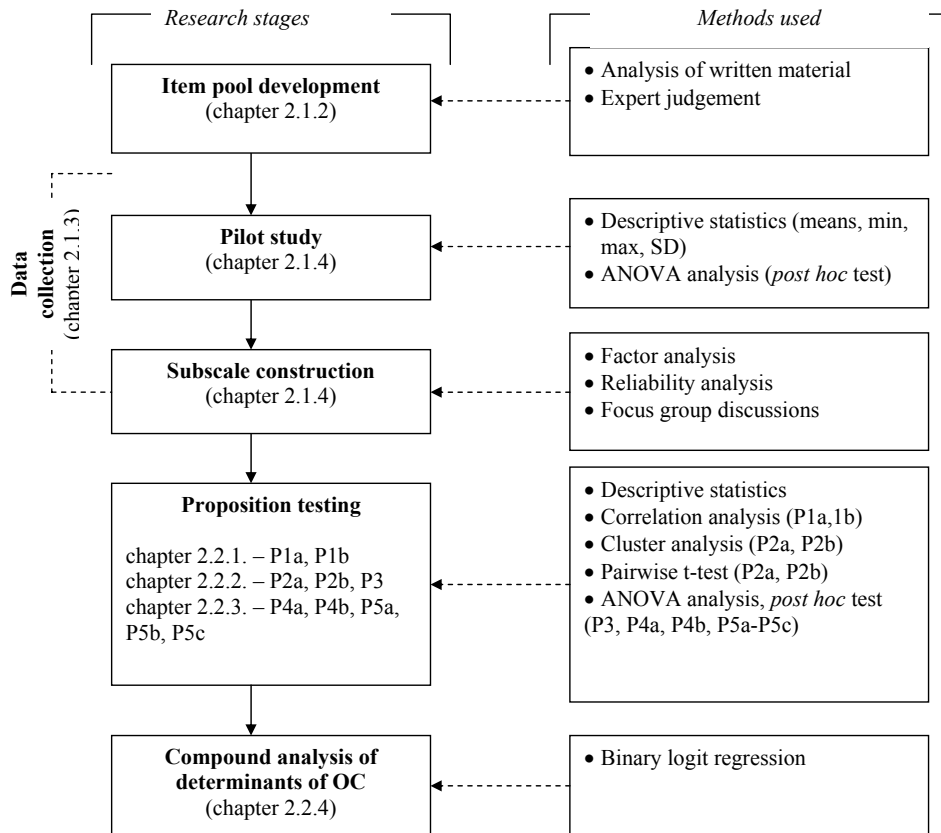


Figure 14. The stages of the empirical research and components of the research methodology

Source: compiled by the author

In the item pool development phase, systematization, analysis and a synthesis of the literature were used. **Experts**³¹ were engaged for several reasons in the development of the measurement tool. Firstly, they could contribute by estimating the relevance of the items; secondly, the experts could evaluate the clarity and conciseness of the items, and lastly, they could point out phenomena that have been not included in the item pool (De Vellis, 2003: 86). To analyze the experts' estimations and suggestions, a content analysis was applied. Moreover, descriptive statistics (mean value and median) and a measure of

³¹ Experts could be people who have knowledge in the content area, but also people who have no knowledge in the field, but who can contribute to the process in terms of feedback about the clarity and comprehensibility of the formulated items.

inter-rater reliability³² were applied. A detailed description of the process of developing the measurement instrument will follow in subchapter 2.1.2.

For statistical analysis, a factor analysis, mean comparison methods (t-test and Analysis of Variances (ANOVA)), correlation analysis, regression analysis and cluster analysis were used (see figure 14). The basic assumptions of the parametric tests are as follows:

- interval data;
- independence of different participants;
- normally distributed data;
- homogeneity of variance.

The first two assumptions are fulfilled in the data used in the dissertation. To test the normal distribution, the QQ plot and histogram were used, and to test the homogeneity of variances Levene's test was used. Levene's test checks the hypothesis that the variances in the groups are equal, which means that if Levene's test is significant at 0.05, the null hypothesis should be rejected, which means that the variances are significantly different. If Levene's test is not significant, then the variances are roughly equal and the assumption is valid.

If these assumptions of normal distribution and the homogeneity of variance are violated, using nonparametric tests should be considered. In the case of the data used in the empirical part of the dissertation, the assumption of normality was violated in the case of some models (i.e. organizational culture types). This was a rather expected outcome because the estimate of the organizational culture type is calculated as a mean of the item scores. Nunnally and Bernstein (1994: 168) have argued that real test scores based on the sums of items are rarely normally distributed, even if the number of items is large because real test items are positively correlated, but not independent.

Using nonparametric tests (e.g. Kruskal-Wallis H and Mann-Whitney U tests) is often considered inconvenient because such tests are typically less powerful and less flexible in terms of the types of conclusions that they can provide (Are all test statistics..., 2009). Even if the assumptions are violated, normal distribution-based tests could still be used if the sample size is large enough because in the case of large samples the distribution of means differs from the normal distribution so little that it could be ignored while solving practical problems (Parring, Vähi and Käärik, 1997: 71). It has also been proven

³² Inter-rater reliability is the degree of agreement over the coding or rating of items by raters (Bryman and Bell, 2003). Usually, Cohen's *kappa* is used as a measure of inter-rater reliability; however, this measure could only be used in the case of two raters – when several raters have been involved, other measures should be used (e.g. Fleiss' *kappa* or multirater $kappa_{free}$) (Randolf, 2005). The online Multirater Kappa Calculator (Randolph, 2008) was used to calculate the inter-rater reliabilities of different items. A rule of thumb is that a *kappa* of .65 or above indicates adequate inter-rater agreement (Bryman and Bell, 2003).

that the consequences of violations of assumptions are less severe than previously thought (How do we know..., 2009).

The author of the dissertation has made calculations³³ using the data to test whether using parametric and nonparametric tests will give different results, and found that the results did not differ significantly. Therefore, considering the previous discussion and following the research tradition in organizational culture studies, the author decided to use parametric tests for the data analysis.

Factor analysis is used to construct subscales with the purpose of clarifying the structure of the items in terms of the relationships between the items and latent variables (i.e. types of organizational culture) included in the item pool. There are several assumptions that should be fulfilled in order to perform the factor analysis. Firstly, the factor analysis is designed for interval and ordinal data; no categorical data should be included. Secondly, the data should be normally distributed for each pair of variables. The third assumption is that the variables used in the factor analysis should be linearly related to each other. Moreover, in order to extract factors on the basis of the variables, the variables must be at least moderately correlated to each other (otherwise conducting the factor analysis would be pointless). Another assumption of the factor analysis is that the sample is large enough – the larger the number of items used for factoring, the more subjects should be included in the analysis.³⁴

An oblique rotation method of principal component analysis for items with varimax rotation³⁵ using Kaiser Normalization is performed for the Organizational Values Questionnaire (OVQ). In the present study, the purpose of the factor analysis is to extract the pattern of items describing four types of organizational culture, and therefore, the number of factors is chosen according to *a priori hypothesis*.

The loading for the items over |0.40| was selected in order to be sufficient for representing each subscale. The stability of the factor solution was analyzed using the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO). The KMO statistic varies between 0 and 1, where values of 0 indicate that the sum of partial correlations is large relative to the sum of the correlations – indicating that it is not an appropriate method. A value close to 1 indicates that patterns of correlations are relatively compact, and the factor analysis should yield distinct and reliable factors. It has been recommended that the KMO should be greater

³³ Data are available from the author on request.

³⁴ There is no clear criteria about the sample size, but for example, Tinsley and Tinsley (1987) have suggested that a ratio of 5 to 10 subjects per item up to 300 subjects is enough, or as argued by Comrey (1973), a sample of 100 is poor, 200 is fair, 300 is good, 500 is very good and 1000 or more is an excellent sample for factor analysis (cf De Vellis, 2003: 137).

³⁵ Factor rotation is used to increase the interpretability of factors because it makes it possible to identify clusters of variables that can be characterized predominately in terms of a single latent variable (items will have a strong association with the same factor) (De Vellis, 2003: 116).

than 0.5 for a satisfactory factor analysis to proceed; a KMO over 0.80 is considered very good adequacy for using a factor analysis (Hair *et al*, 1998).

The reliability of the scales constructed from the factor analysis is measured using Cronbach's alpha, demonstrating whether the scale reflects the construct it is measuring. A value of reliability higher than 0.7 is considered acceptable in the social sciences (De Vellis, 2003; Nunnally, 1978 cf Hulland, 1999) and an alpha between 0.8 and 0.9 is considered very good (De Vellis, 2003).

The paired-samples t-test was used to identify differences in the mean estimations of types of organizational culture in the total sample (proposition P2a). This test makes it possible to compare the means of two variables for a single group, computing the differences between the values of the two variables for each case, and tests whether the average differs from zero. Dependent t-tests (paired-samples t-test included) assume that the data are from normally distributed populations and that the data are measured at least at interval data.

The one-way analysis of variance (ANOVA) makes it possible to identify the differences in the means of two groups using a single independent variable. An ANOVA analysis is used in the pilot study to identify the differences between organizations on the basis of their organizational culture, and this will also be applied in the proposition-testing phase. Firstly, an ANOVA test will be used to identify organizational culture differences within and across industries (Proposition 3), and then an ANOVA analysis will be applied to evaluate the differences between the groups of organizations formed on the basis of organizational age (Propositions 4a and 4 b) and size (Propositions 5a, 5b and 5c).

The ANOVA analysis technique is an extension of the two-sample t-test. As the analysis of variance is used to test the hypothesis that several means are equal, the null hypothesis is set as follows:

$$H_0: \mu_1 = \mu_2 = \dots = \mu_i,$$

where μ_i is the mean of group i.

The F statistic for the comparison is constructed as the ratio of variation among the sample means to the variation within the samples, and if the means of the samples differ from each other to a great extent, the F statistic becomes large and the null hypothesis is rejected. The confidence level of 0.95 is applied in the ANOVA analysis.

In the case of more than two comparison groups, the *post hoc* tests (Least significant differences or LSD test) of the ANOVA analysis will be applied, because these tests allow multiple comparisons between groups. The LSD test is based on a pair-wise comparison, and the results of the LSD test make it possible to identify the difference between each pair of compared means (within the confidence interval set for the difference and on the significance level).

A cluster analysis encompasses a number of different algorithms and methods for grouping objects of a similar kind into respective categories, and

will be used here to group the organizations on the basis of organizational culture. A cluster analysis is an exploratory data analysis tool, which aims to sort different objects into groups in a way that the degree of association between two objects is maximal if they belong to the same group and minimal otherwise (Cluster Analysis, 2009). No strong statistical assumptions exist for cluster analysis – applying a K-cluster analysis assumes quantitative interval or ratio variables using a similar scaling for each variable. A K-cluster analysis, where k different clusters of greatest possible distinction can be produced will be used in order to extract the patterns of organizational culture for identifying which kinds of patterns of organizational culture exist within the sample of the study (proposition 2a and 2b).

A correlation analysis is used to find whether there are relationships between types of organizational culture, which kinds of relationships these are (positive or negative) and how strong the relationships are (Propositions 1a and 1b). The Pearson product-moment correlation coefficient will be used, which describes the pair-wise associations for a set of variables. A scatter plot was used in order to test the assumption of linearity, and a two-tailed test will be used because the nature of the relationship between types of organizational culture cannot be predicted. The criteria for interpreting the correlation's size are arbitrary and conventional, and therefore, should not be observed too strictly – the interpretation of a correlation coefficient often depends on the context and purpose. In this dissertation, following criteria will be applied for interpreting the value of the correlation coefficient: $|r| \leq 0.3$ is a weak correlation; $0.3 \leq |r| \leq 0.7$ is a medium correlation and $|r| \geq 0.7$ is a strong correlation between variables (Parring, Vähä and Käärik, 1997: 190).

A binary logistic regression analysis is a method that makes it possible to determine what kinds of independent variables influence the dependent variable. Moreover, it makes it possible to discover whether the impact of independent variables is positive or negative and to estimate the size of the impact of independent variables on the dependent variable. The logistic regression will be applied in the dissertation in order to find out how independent variables (industry, age and size of organization) influence estimations of types of organizational culture (dependent variables).

The dependent variables will be coded as dichotomous variables, consisting of the categories 0 and 1. The advantage of a logistic regression is first of all its robustness, which means that no normal distribution nor linearity between independent and dependent variables are assumed. In order to find if the logistic model fits the data, a Pseudo R^2 could be used³⁶, and the higher the Pseudo R^2 value the better the model fits the data. A small ratio of log likelihoods (always falling between 0 and 1) indicates that the full model is a better fit than the intercept model.

³⁶ McFadden's Pseudo R^2 is used in Stata.

In some organizations, a **focus group method** was used to validate the results from the empirical research³⁷. The focus group method is a form of group interview, where several participants are involved and the emphasis is on questions on a defined topic. Stress in the focus group is placed upon interaction within the group and the joint construction of meaning, offering the opportunity to study how individuals collectively make sense of a phenomenon and construct meanings around it (Bryman and Bell, 2003). In the present research, the focus group discussions were used to obtain feedback from organizations about whether the results of the study reflect how the organizational members perceive their organizational culture, and the participants were also asked for their interpretation of the results.

The statistical analysis in this dissertation is carried out using the statistical software SPSS 16.0 and Stata 9.2.

2.1.2. Construction of questionnaire items

The development of a measurement scale³⁸ for studying organizational culture started in November 2003, and the process consisted of six stages. Figure 15 illustrates the item pool development process.

In the *first stage*, theoretical matters about the nature of organizational culture and methodological issues were analyzed and a basic choice for methodology development was made. Studying several approaches to organizational culture, the author of the dissertation decided to build up a primarily quantitative study. The quantitative approach makes it possible to distinguish and compare patterns of organizational culture and make generalizations about the regularity of manifestations of culture in organizations.

The concept of organizational culture defined by Schein (2004) and the Competing Values Approach launched by Quinn and Rohrbaugh (1983) were taken as a basis for working out an instrument for measuring organizational culture. By analyzing the original approach taken by Quinn and his colleagues, the author of the dissertation decided to depart from the initial approach and use a Likert-type scale in the questionnaire, which is widely used in measuring opinions, beliefs and attitudes (De Vellis, 2003: 79).

The initial methodology of the Competing Values Approach is based on a scenario approach with the aim of highlighting the polarities of organizational culture using an ipsative rating scale. Namely, there were six aspects of organizational culture with four alternative scenarios (brief descriptions), and

³⁷ Focus group discussion as a feedback method was offered to all organizations and many organizations were interested in it.

³⁸ By scale here is meant measurement instrument that is collections of items that are combined into a composite score and is intended to reveal levels of theoretical variables that are not readily observable by direct means (De Vellis, 2003: 9).

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). That means – a high score in one quadrant implies a low score in other quadrants. Problems with these assessments may arise when several alternatives (which according to the author are not always mutually exclusive alternatives) are characteristic of the organization – 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 bring out 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 culture types.

Furthermore, the scenarios contain several aspects, and therefore, it could be difficult to assess that particular scenario. This is what is referred to as *double barreled*, 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). The Likert scale, where items are composed in the form of declarative sentences and the respondent is asked to indicate the degree of agreement with the statement, overcomes several of the shortcomings of the other types of scales.

The second stage of developing the instrument consisted of forming items in Estonian for the item pool on the assumption of the selected framework. The author analyzed the core essence of the dimensions of culture (stability *versus* flexibility and internal *versus* external focus) and the four types of organizational culture (Human Relations, Open System, Rational Goal and Internal Processes) and based on different sources (Cameron and Quinn, 1999; Dastmalchian et al 2000; Quinn, 1988; Parker and Bradley, 2000), 21 keywords were developed to reflect the above-mentioned dimensions and types of organizational culture. The keywords were for example as follows: initiative, freedom and willingness to take risks for the Open System type (Model 1); procedures, stability and formality for the Internal Processes type of organizational culture (Model 2); traditions, care for employee and cohesiveness for the Human Relations type (Model 3) and competition, commitment to goals and rationality for the Rational Goal type (Model 4) (see figure 4 on page 56). Then 79 assertions were construed with each of them reflecting a certain keyword (several items were construed for each keyword).

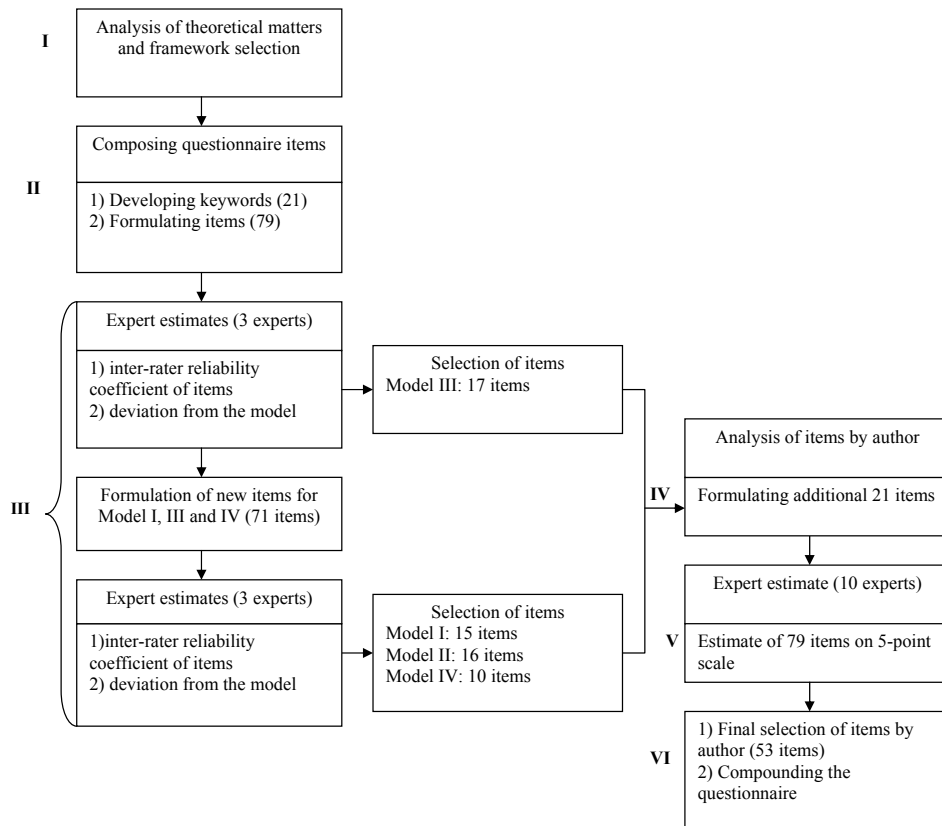


Figure 15. The process of developing the item pool

Source: compiled by the author

In *stage three*, three independent experts³⁹ were asked to participate in an assessment task in order to judge the quality of the items. 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 (see appendix 4). The participants were not provided with a description of the models of organizational culture. They were also encouraged to express their opinions about the comprehensibility and clarity of the formulation of the items. By analyzing the considerations of the expert group and the author's opinion, the inter-rater reliability coefficient for each item was calculated. In addition, whether those estimations fitted the author's initial idea about the models of

³⁹ The experts have university degrees, whereby two of them had no previous theoretical knowledge of organizational culture topic and one had MA degree in organizational behavior.

organizational culture (i.e. deviation from the original model) was also analyzed. One criterion set up by the author 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 culture compared to the author's 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 amount of items, author decided to include some supplementary items in the questionnaire. The new questionnaire consisted of 79 items.

In the *fifth stage* of the methodology development, another expert group was involved. The item pool and a brief description of the models of organizational culture (see appendix 5) 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 to that 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 and median and also an inter-rater reliability coefficient was calculated for each item. Higher estimates and higher inter-rater reliability 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 it was also based on the analysis of the essence of each of the items by the author.

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 culture. A 10-point Likert-type scale was used, where “1” means that the item is not distinctive for the organization and “10” that the item is highly characteristic of the organization. The 10-point scale was used with the aim of highlighting the variety of organizational culture in the very best way.

The questionnaire also consisted of some additional questions that were modified by the author in the research process. Additional questions were included in the questionnaire by the request of the organizations participating in the survey, but also because of the need to obtain further information. The questions that were added to the questionnaire included:

- Please, describe the most positive experience you have had in relation to your organization. When did this experience (or event) take place?
- Please describe some situation or event that has raised discussion in your organization.
- What is considered to be important in your organization? (please give 2–3 keywords)
- Brief descriptions were also given about different types of organizational culture and the respondents was asked to answer which type of organizational culture is characteristic of their organization and which type would be the most ideal type.

Through these open-ended questions, additional information about the organizational culture of the particular organization was obtained. These questions were not asked in every organization because of the reluctance of some organizations (the organizational culture survey was usually conducted with an employee job satisfaction survey and therefore answering the questionnaire was rather time-consuming). The information gathered using the open-ended questions will be not used in the dissertation, but it has partially been used in papers and proceedings published by the author⁴⁰.

In addition, questions about socio-demographic variables were included in the questionnaire, but this information also varied from organization to organization (see a more detailed overview in subchapter 2.1.3).

The initial item pool was designed in Estonian, and in 2005 the questionnaire was translated into Russian because several of the organizations where the research was planned were multicultural. Seven experts were engaged in the

⁴⁰ See for example Reino and Tolmats (2008); Reino, Tolmats and Mõtsmees (2006); Reino (2004).

process. A selection criterion of translators (translating from Estonian into Russian) was that the expert had to be a native Russian speaker, but also had to speak Estonian fluently. The versions of the questionnaire in Russian were then translated back into Estonian by three independent experts who were fluent in Estonian and Russian. The results of the different translators were compared to the original Estonian version, and in order to remove any cultural ambiguities, the ultimate choice amongst the items was made by consulting a person of Russian ethnicity that spoke Estonian fluently. Examples of the questionnaires are not included in the dissertation, but are available on request from the author.

2.1.3. Description of the sampling procedure and the sample

The study of organizational culture in Estonian organizations took place during the period 2004–2008. The data was gathered in three stages: in the first stage (2004) data was collected for the pilot study from three organizations (185 respondents). By the end of 2006 (stage II) data had been collected from 2 406 respondents from 25 organizations, which was sufficient for constructing the subscales. Finally, in the period 2007–2008, 580 respondents from four organizations were added to the sample. The process of data collection is presented in figure 16.

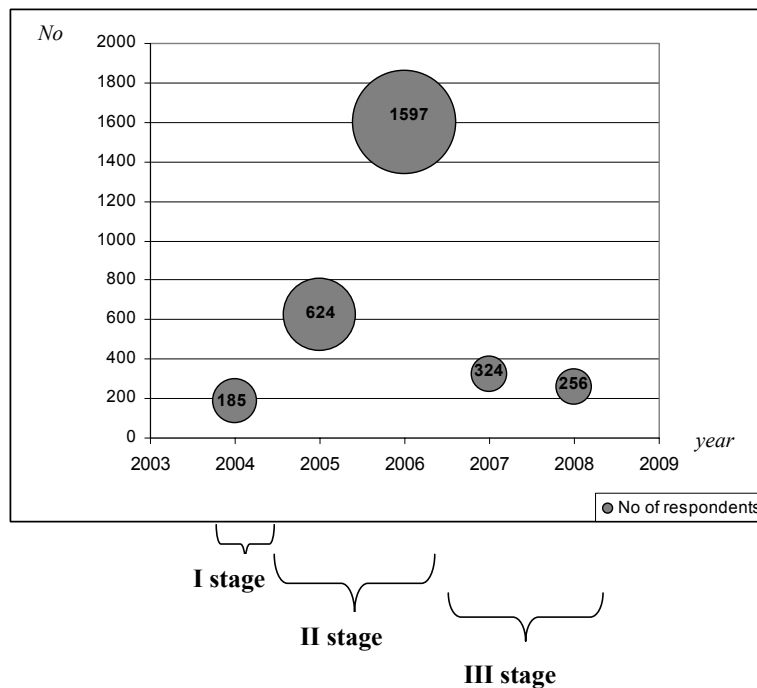


Figure 16. The process of data collection

In order to select organizations for the study, the author tried to follow the principle of providing diversity among the organizations, because it has been argued that the validity of organizational culture questionnaires can only be established on the basis of samples that include diverse organizations from various industries (Glick, 1985). Therefore, organizations from different industries, of different sizes and with a different historical background (age of organization) were included in the study. That kind of diversity was necessary in order to create a reliable organizational culture measurement instrument. But at the same time, one cannot study organizational culture if there is no access provided by the organization. Any unwillingness to cooperate from organizations sets limits when creating the sample. For example, small organizations are not included in the sample, and this could be considered one of the limitations of the current research. The results of the study could be interpreted first of all in the context of medium-sized and large organizations.

Different sampling methods were used in the data collection process:

1. *Convenience sampling* was used in four organizations (three educational organizations and one production organization). Respondents participating in different management courses and training programs were asked to participate in the survey and fill in the questionnaire.
2. *Systematic random sampling* was used in 7 higher education organizations. The required sample size was 10% of the population of members (students and employees). The sample size was proportional with respect to the entire population and also to the units (colleges, faculties and institutes). In cases where the representation of students from a particular unit remained too low, the sample size was increased up to 40 people. Alphabetic lists of students and employees were compiled for each organization and its subunits. Every *Nth* record was selected from a list of the population starting from the random record (for each organization the interval of selecting population members was different). Education technologists from universities were responsible for compiling the list of populations and samples. The data was collected via the internet using the eFormular tool (www.eformular.com). The respondents received a link with an internet address where they could complete the questionnaire. The data was stored in a database and sent to the author's e-mail address.
3. *The opportunity to participate in the survey was offered to all organizational members* in 18 organizations (8 service, 6 production, 2 legal protection, one educational and one health care organization). In the educational organization, the questionnaires were given to all employees, but students were excluded from the sample as a result of a decision by the school management. Otherwise the questionnaires were given to all organizational members, and respondents were asked to complete the questionnaires, put them into the envelopes provided and bring the closed

envelopes to the HR department or to post them in the mailbox. This procedure assured the anonymity of the respondents.

Altogether 29 organizations 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). There are 19 large and 10 medium-sized organizations in the sample⁴¹. Table 8 gives an overview of the samples in each industry comparison, and a detailed description of the sample along with the organizations is presented in appendix 6.

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). Some authors (for instance Quinn and Cameron, 1983) propose that there is a connection between an organization’s life cycle and organizational culture. In the present study the life cycle was not taken into account because it is complicated to assess the particular stage of development each organization is at. This would need in depth analysis and a case study approach, which is not in the scope of this dissertation. Therefore, the author of the dissertation decided to make a distinction between the organizations that existed before Estonian independence (in the conditions of the old economic system) and those that were founded after 1991. The author is aware of the fact that old organizations have been restructured several times, but still, considering the essence of the concept of organizational culture, where culture is historically determined and rooted in organizational members’ minds and mentalities, it is meaningful to distinguish between new and old organizations, and so there is a need to set a cut-off point. The organizations’ web pages were also analyzed by the author, and the additional criteria for distinguishing old versus new organizations was based on the information provided by the organizations themselves – after analyzing how organizations regard themselves from the perspective of organizational history.

⁴¹ The size of the organizations was defined as follows: micro 1-9 members; small 10–49; medium 50–249 and large over 250 members.

Table 8. Description of samples by the industries

Industry	Variable	Education	Services	Production	Legal protection	Health care
No of org		11	8	7	2	1
No of respondents (% of whole sample)		882 (29.5%)	990 (33.2%)	327 (11.0%)	331 (11.1%)	456 (15.3%)
Gender*	Male	280 (31.7%)	222 (22.4%)	241 (73.7%)	172 (52%)	30 (6.6%)
	Female	542 (61.5%)	580 (58.6%)	69 (21.1%)	155 (46.8%)	424 (93%)
	Missing	60 (6.8%)	188 (19%)	17 (5.2%)	4 (1.2%)	2 (0.4%)
Ethnicity	Est	246 (27.9%)	671 (67.8%)	17 (5.2%)	232 (70.1%)	N/A
	Rus	7 (0.8%)	118 (11.9%)	3 (0.9%)	90 (27.2%)	
	Other	6 (0.7%)	17 (1.7%)	–	4 (1.2%)	
	Missing	623 (70.6%)	184 (18.6%)	307 (93.9%)	5 (1.5%)	
Age	Mean	31.2	37.7	44.0	41.1	20–29 y: 89 (19.5%)
	SD	12.6	11.1	12.6	10.8	30–39 y: 109 (23.9%)
	n	811	691	94	290	40–49 y: 131 (28.7%)
						50–59 y: 95 (20.8%)
Education of respondents	Higher	358 (40.6%)	200 (20.2%)	29 (8.9%)	96 (29%)	N/A
	Sec/voc	408 (46.3%)	564 (57%)	75 (22.9%)	219 (66.2%)	
	Primary	–	26 (2.6%)	2 (0.6%)	11 (3.3%)	
	Other	11 (1.2%)	–	–	–	
	Missing	105 (11.9%)	200 (20.2%) miss	221 (67.7%)	5 (1.5%)	

Table 8. Continued

Industry	Variable	Education	Services	Production	Legal protection	Health care
Position	Managers	70 (7.9%)	154 (15.6%)	35 (10.7%)	21 (6.3%)	
	Specialists	172 (19.5%)	221 (22.3%)	107 (32.7%)	123 (37.2%)	309 (67.8%)
	Workers	9 (1.0%)	544 (54.9%)	112 (34.3%)	157 (47.4%)	147 (32.2%)
	Students	589 (66.8%)				
	Other	3 (0.3%)	12 (1.2%)	3 (0.9%)	12 (3.6%)	
Tenure	Missing	39 (4.4%)	59 (6%)	70 (21.4%)	18 (5.4%)	
	Mean	6.5	7.4	8.4	5.0	up to 1 y: 68 (14.9%)
Size of org.	SD	7.7	9	10.5	6.2	1–5 y: 131 (28.7%)
	n	447	841	93	308	6–10 y: 77 (16.9%)
						11–20 y: 111 (24.3%)
						21–30 y: 56 (12.3%)
						over 30 y: 11 (2.4%)
Age of org.						missing: 2 (0.5%)
						large
Age of org.						
						old

Notes: * percentages in the table indicate the percentage of respondents of the particular subsample; N/A – not asked in questionnaire; Est – Estonians; Rus – Russians; sev/voc – secondary or vocational education; SD – standard deviation, n – sample size; y – year

Source: compiled by the author

The study of organizational culture requires access and active participation from the organization, and hence, the questionnaires were mostly discussed and prepared in accord with the representatives of the particular organizations. Several organizations did not want to include socio-demographic variables in the questionnaire or avoided detailed questions about the respondent's background (see appendix 6). Therefore, socio-demographic variables are not available for all organizations or this information varies in the sense of its specification. For example, one of the most avoided variables was the organizational member's ethnic background. This is not an important limitation in the present study, but considering the use of the data in further studies it certainly may become a limitation.

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 seen from table 8, the percentage of female employees is greater in services, educational and health care organizations, whereas in production organizations the percentage of men among respondents was significantly higher. The percentage of men and women was almost equal in legal protection organizations.

The majority of respondents had secondary or vocational education (42.2% or 1 266 respondents). Those respondents with a higher education numbered 683 (22.9%), only 39 (1.3%) had primary education and 11 (0.4%) respondents had marked that they have another kind of educational background. This data is not available for 987 (33.1%) respondents. This kind of distribution is expected considering the composition of the sample in respect to the respondent's position.

Organizational members from all organizational levels were involved in the survey, and specialists and workers that had the greatest representativeness in the sample (932 or 31.2% specialists and 969 or 32.5% workers) most probably have secondary or vocational education. The number of managers participating in the study (280 or 9.4% of the sample) may be considered a good representativeness. The number of students participating in the study was 589 (19.7%), 30 (1%) respondents marked some other position and 186 (6.2%) respondents did not answer this question.

Average tenure of the respondents in the organization was 6.7 years ($SD=8.3$, $N=1689$).

There were 1 166 Estonians (39% of the sample) and 218 Russians (7.3%) in the survey. Information about the respondent's nationality was not available for 1 575 respondents or 52.7% of the sample.

2.1.4. Pilot study and subscales construction

The pilot study was carried out in 2004 with the aim of testing whether the statements included in the item pool make it possible to distinguish between organizations on the basis of their culture. The sample of the pilot study consisted of students and employees in three Estonian universities and higher education institutions. There was one large university with long traditions (referred to later as CLASEDU); one university college (COLLEDU) and an institution of applied higher education for national defense (DEFEDU) included in the sample of the pilot study. The selection of organizations was based on three criteria: firstly, organizations that operate in the same industry; secondly, organizations that have a different focus which may manifest in different organizational culture profiles, and thirdly, organizations that differ in respect to their age (CLASEDU had long traditions whereas COLLEDU and DEFEDU were new organizations). Hence, on the one hand, operating in the same industry generates a common basis for comparisons, but on the other hand, the different profiles of the organizations allow highlighting differences in their cultures and make it possible to validate the organizational culture measurement instrument.

The three educational institutions differ from each other in several respects:

1. *Organizational size.* CLASEDU is the largest institution, while the other organizations were smaller.
2. *Organizational age.* CLASEDU had long rooted traditions, but COLLEDU and DEFEDU were much younger organizations.
3. *Provided education.* CLASEDU was an institution that provides both state-commissioned education and non-state funded education on three levels (from bachelor to doctoral studies). COLLEDU and DEFEDU were institutions of applied higher education, and therefore, they offer a more specialized education. The relative importance of non-state funded education compared to state-commissioned education is higher at COLLEDU, which may also have an impact on organizational culture in terms of higher orientation to results. DEFEDU provides military education; the rules and regulations governing organizational life are quite similar to those in the defense forces.

From these considerations, a balanced and rooted culture could be expected at CLASEDU. A similar pattern could be also expected at COLLEDU because the college is a part of CLASEDU. However, being also quite independent from CLASEDU and considering the educational profile of the college, a greater emphasis on a Rational Goal type could be expected at COLLEDU. COLLEDU is smaller than CLASEDU, it was established quite recently, which means that it might be more flexible than CLASEDU (higher emphasis on an Open System type of organizational culture may be characteristic of COLLEDU). DEFEDU is expected to differ from CLASEDU and COLLEDU

in terms of a greater emphasis on an Internal Processes type of culture and less emphasis on a Rational Goal type.

A total of 185 respondents (81 from CLASEDU; 64 from COLLEDU and 40 from DEFEDU) participated in the pilot study. Appendix 7 gives an overview of the descriptive statistics for the variables (mean estimates and standard deviations for each variable in the item pool) in the different subsamples. Table 9 gives an overview of the mean estimates for the types of organizational culture of the organizations participating in the pilot study. The mean estimates of the types of organizational culture were calculated on the basis of a 53-item pool. Each item described some aspect of one particular organizational culture type – each item was expected to belong to the certain organizational culture type (see figure 15). At this stage of the study, a factor analysis was not performed to extract the best combinations of items for each organizational culture type.

Table 9. Organizational culture pattern for the three organizations participating in the pilot study

Organi- zation Or- ganiza- tional culture type	CLASEDU			COLLEDU			DEFEDU			ANOVA
	mean	SD	COV⁴² (%)	mean	SD	COV (%)	mean	SD	COV (%)	sig
Human Relations type	6.79	0.94	13.8	6.61	1.33	20.1	6.85	1.06	15.5	.592
Open System type	6.83	0.92	13.5	7.12	1.16	16.1	6.07	1.20	19.8	.000*
Rational Goal type	6.35	0.70	11.0	6.44	1.05	16.3	5.80	0.99	17.1	.003*
Internal Processes type	6.72	0.73	10.9	6.59	0.84	12.7	7.48	0.79	10.6	.000*

Notes: mean value on 10-point Likert-type scale, where “10” indicates that particular organizational culture type is very characteristic of the organization and “1” that the organizational culture type is not characteristic of the organization. SD = standard deviation; COV = coefficient of variation. *= difference in means between organizations is statistically significant at the 0.01 level.

Source: author’s calculations on the basis of research database.

⁴² COV= Coefficient of variation (COV=SD/m x 100%). COV is the ratio of the standard deviation to the mean. This particular statistic makes it possible to compare the degree of variation in one data series to another. A smaller COV indicates that a particular variable is less dispersed than a variable with a large COV. However, there are no clear guidelines for how to interpret this statistic in terms of a high or low level of COV.

The ANOVA analysis revealed that there are no significant differences between the organizations considering the estimates given for the Human Relations type of organizational culture, but differences exist between organizations for the other three types of organizational culture. An LSD *Post Hoc* test was conducted in order to determine the differences between the organizations in more detail (see table 10).

Table 10. Comparison of types of organizational culture according to organizations (ANOVA analysis, LSD test, sig.)

Organizational culture type	Organization	p-value	
		COLLEDU	DEFEDU
Human Relations type	CLASSEDU	.423	.798
	COLLEDU	...	.336
Open System type	CLASSEDU	.154	.001
	COLLEDU	...	.000
Rational Goal type	CLASSEDU	.616	.004
	COLLEDU	...	.002
Internal Processes type	CLASSEDU	.413	.000
	COLLEDU	...	.000

Source: author's calculations on the basis of research database.

The comparison of mean estimations of types of organizational culture in three organizations using an LSD test indicated several significant differences in the mean scores for types of organizational culture. DEFEDU scored lower than CLASSEDU and COLLEDU for Open System and Rational Goal types. Estimates given for the Internal Processes type were higher in DEFEDU compared to CLASSEDU and COLLEDU. No differences between organizations could be found in respect to the Human Relations type of organizational culture. From the analysis two conclusions could be made:

1. CLASSEDU and COLLEDU have quite a similar cultural pattern, which could be explained at least to some extent by the fact that COLLEDU is a subunit of CLASSEDU. The two organizations share more or less similar values.
2. DEFEDU differs from the other two organizations primarily in terms of a higher emphasis on Internal processes. The Rational Goals and Open System types of organizational culture are less characteristic of this particular organization compared to the university and its college.

The results were in accord with the author's position that DEFEDU should differ from CLASSEDU and COLLEDU in terms of organizational culture. The pilot study proved the differences, and therefore, the author believes that the study fulfilled the purpose of validating the item pool.

Subscales construction

In order to find a combination of questionnaire items that would be suitable for mapping organizational culture on the basis of four culture types, a factor analysis was applied. The number of factors to be extracted in the analysis is not always easy to determine. For example, in discussing the use of a scree plot technique for extracting the appropriate number of factors, Cattelli (1966) has stated that no test exists that is both mathematically and logically satisfying, but still one of the criteria to be relied on in the decision could be that “the break between substantives and rubble will be brought out sharply by a large and sudden descent to the scree“ (*Ibid*: 268). The graph of Eigen values (see figure 17) demonstrates that although the number of components with Eigen values over 1 is nine, there are three components that could be considered more important than the others.

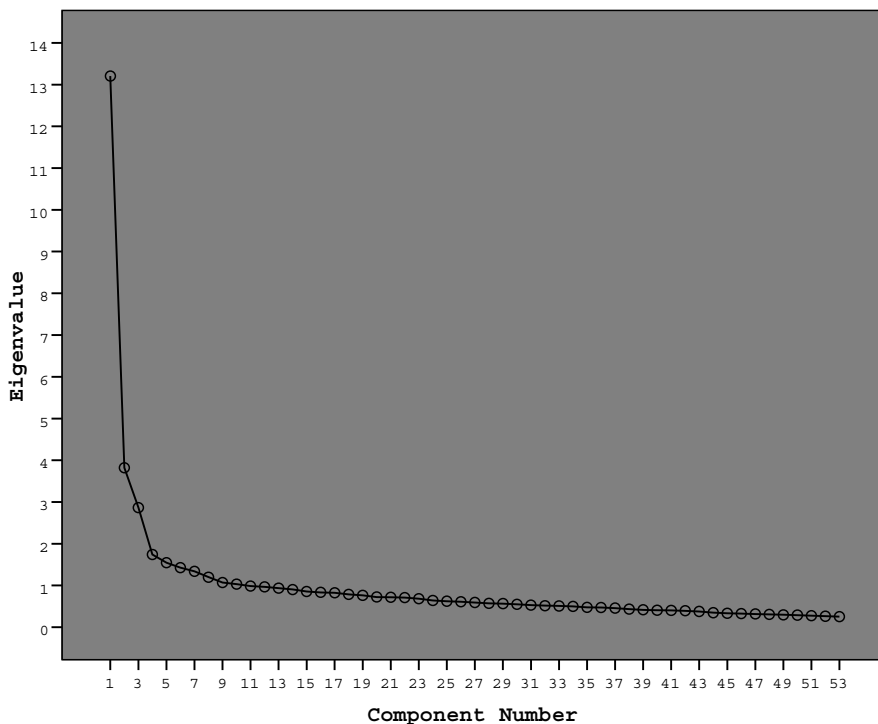


Figure 17. The scree plot of Eigen values for the Organizational Values Questionnaire

However, the purpose of the factor analysis was to extract the pattern of the items that would describe different types of organizational culture, and therefore, 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.⁴³ Finally, the factor analysis resulted in four subscales (i.e. types of organizational culture) labeled Human Relations, Open Systems, Rational Goal and Internal Processes types of organizational culture.

The parameters of the factor analysis given in table 11 and table 12 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 0.88, which demonstrates that the factor solution is stable. Bartlett's test of sphericity is significant⁴⁴ ($p=0.000$), which also confirms that the factor analysis is a relevant method for data analysis. The reliability of the constructed subscales (factors) measured using Cronbach's alpha is quite high (ranging from 0.78 to 0.80 – see table 11).

Table 11. Summary of the factor analysis

Parameters of the factor analysis	Organizational Values Questionnaire (OVQ)
Sample size	2986
No of items	53
No of factors extracted	4
Bartlett test of sphericity	$p=0.000$
Kaiser-Meyer-Olkin measure of sampling adequacy	0.896
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 ⁴⁵ for extracted factors	Factor 1: 0.79 (N=2715) Factor 2: 0.80 (N=2676) Factor 3: 0.78 (N=2734) Factor 4: 0.79 (N=2680)

Note: Cases with missing values were excluded from the analysis

Source: author's 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). Therefore, the factor analysis should not be performed only considering numerical indicators – in table 12, loadings higher than 0.4 are marked in boldface, but when items received high loadings

⁴³ Three-, five- and six-factor solutions did not give interpretable units of items.

⁴⁴ This means that the correlation matrix is not an identity matrix.

⁴⁵ Cronbach's coefficient alpha is a ratio of the sum of covariances among the components of the linear combinations (items), which estimates true variance, to the sum of all elements in the variance-covariance matrix of measures, which equals the observed variance (Nunnally and Bernstein, 1994: 212).

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

Table 12. The contents and loadings of factors in the Organizational Values Questionnaire (OVQ)

Item	Content of factors	Factors and loadings			
		F 1	F 2	F 3	F 4
	Open System type				
2	Our organization is innovation minded	.698	.152	.135	.156
7	Creative people with fresh ideas are highly valued in our organization	.695	.133	.261	.126
11	Our organization's compensation system takes into account the initiative and commitment of organizational members	.768	.066	.171	.018
12	Committed organizational members are the most valuable asset of our organization.	.612	.141	.276	.014
14	The management of our organization has a positive attitude towards the initiatives of organizational members.	.755	.044	.336	.052
	Internal Processes type				
31	There are lots of written rules in our organization	.074	.722	-.009	-.072
32	The organization insists that the employees should know and follow the rules	.119	.798	.039	.073
36	In our organization job descriptions are detailed	.219	.663	.184	-.023
45	Our management is very demanding towards organizational members.	.067	.641	-.105	.269
49	In our organization a strict reporting system is applied	.042	.681	.026	.210
	Human Relations type				
20	The attitude that "to err is human" and nobody is protected from making mistakes exists in our organization	.159	-.092	.669	.080
23	Members of our organization take part in joint events with pleasure	.213	.141	.615	.051
26	The management has trusting and confidential relationships with organizational members.	.434	.048	.692	.012
27	Our organization is like a big family	.425	.145	.683	.057
28	The members of our organization talk with pleasure about private issues	.134	-.047	.722	.108

Table 12. Continued

Item	Content of factors	Factors and loadings			
		F 1	F 2	F 3	F 4
	Rational Goal type				
46	The aim of our organization is to gain possibly a bigger market share	.168	.070	.090	.799
50	Our organization always tries to outpace its competitors	.274	.200	-.019	.692
51	The result is most important for our management	-.075	.329	.027	.674
53	The aim of our organization is profit maximization	-.027	-.131	.212	.800
	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: author's calculations on the basis of research database.

As a result of the factor analysis from the initial questionnaire containing 53 items, a four-factor structure of 19 items was found to be good enough to form four organizational culture subscales. The subscales could be defined as follows:

- *Open system type (factor 1)* could be characterized in terms of flexibility and external focus. More precisely, organizations that score high on this subscale are those that are innovation-minded valuing employees being creative and coming up with innovative and fresh ideas. The core value of that kind of organization – adaptability, openness to changes and innovativeness could also be found in the management's attitudes and organizational procedures (e.g. in compensation systems). Namely, in that type of organization the management encourages employee initiative and commitment.
- *Internal processes type (factor 2)* could be considered to be contrary to the first type. This is an organization where performance is highly regulated by written rules, where detailed job descriptions have been worked out and a strict reporting system is applied. Moreover, the management demands a lot from the employees; primarily following orders and rules is expected of the organizational members. Stability and focus on internal matters sets the framework for this type of organizational culture.
- *Human Relations type (factor 3)* is the type that from the theoretical perspective incorporates aspects of flexibility and internal focus – an organization that fosters this particular organizational culture type believes that success could be gained through building trust and close relationships among people belonging to the organization.

- *Rational Goal type (factor 4)* focuses on external matters with the aim of gaining control over them. This type is more focused than others on the results defined through market share and profit maximization.

Although, the Organizational Values Questionnaire (OVQ) developed by the author of the dissertation and the Competing Values Framework (CVF) described in subchapter 1.2.1, share a common framework for analyzing organizational culture, the items and scales used in these measurement tools are different in several respects. Firstly, CVF has developed a clear internal structure of types of organizational culture, which means that every organizational culture type is characterized by six categories (dominant characteristics, organizational leadership, management of employees, organizational glue, strategic emphasis and criteria of success). OVQ aimed to follow similar principles and to cover certain aspects from different perspectives, but the factor analysis did not confirm such a clear internal structure of types of organizational culture. Therefore, OVQ does not make it possible to plot and compare subcategories of types of organizational culture, but rather the type of organizational culture represents dominant features of the particular type. Secondly, the original assessment instrument of CVF applies an ipsative rating scale and a scenario approach, which makes it possible to highlight the polarities of organizational culture. The fact that the scenarios included in the questionnaire contain several aspects is problematic, and this allows different interpretations. The author believes that the Likert-type scale, which uses items in the form of declarative sentences, is more appropriate for the quantification of organizational culture. The authors of the CVF see the greater differentiation in ratings as the main advantage of the ipsative scale; however, they also admit that ipsative response scales do not produce independent responses (Cameron and Quinn, 1999: 144). The following section will analyze the relationships between types of organizational culture in Estonian organizations and compare the findings with previous studies applying the Competing Values Framework.

The questionnaire compiled and subscales developed by the author will be used to test the propositions set up in the theoretical chapters of the dissertation. Firstly, the general pattern of organizational culture in Estonian organizations will be analyzed, and then the influence of different factors on organizational culture will be examined.

2.2. Research results on organizational culture in Estonian organizations

2.2.1. Analysis of the general pattern of organizational culture

The aim of the present chapter is to analyze general patterns of organizational culture in terms of the relationships between the four types of organizational culture (P1a). The chapter also specifies the strength of the correlations that exist between the types of organizational culture (P1b). Firstly, on the basis of factors extracted from the factor analysis described in subchapter 2.1.3. (see table 12), mean estimations of the types of organizational culture will be calculated for each respondent in the sample. Secondly, in order to analyze the connections between types of organizational culture, the correlations between types of organizational culture in the overall sample will be found. The results of the correlation analysis are presented in table 13.

Table 13. Correlations between types of organizational culture (entire sample)

Organizational culture type	Statistics	Open System type	Internal Processes type	Human Relations type	Rational Goal type
Open System type	r	1			
	Sig (2-tailed)				
	N	2706			
Internal Processes type	r	.329	1		
	Sig (2-tailed)	.000*			
	N	2530	2663		
Human Relations type	r	.611	.201	1	
	Sig (2-tailed)	.000*	.000*		
	N	2590	2552	2722	
Rational Goal type	r	.272	.434	.245	1
	Sig (2-tailed)	.000*	.000*	.000*	
	N	2539	2524	2555	2663

Notes: r = Pearson correlation coefficient; * = correlations are significant at 0.01 (2-tailed); N = sample size; correlations $|r| > .30$ are in boldface.

Source: author's calculations on the basis of research database.

As can be seen in the table, statistically significant ($p \leq .001$) positive correlations exist between all types of organizational culture; however, the correlations are not very strong – ranging from .201 to .611.⁴⁶ A correlation analysis will also be performed in the subsamples formed on the basis of industry, size and organizational age. This is necessary to test whether there is some particular variable that influences the general pattern of organizational culture (see results in appendix 8 and 9). The analysis of the correlations between types of organizational culture on the basis of industry, organizational age and size shows that types of organizational culture are significantly related to each other and correlation coefficients remain between .11 and .66 depending on the industry where the organizations operate. Correlations between types of organizational culture range from .14 to .61 for old and new organizations and from .19 to .63 for medium-sized and large organizations.

Hence, the analysis demonstrated that there are no negative correlations; neither are there zero correlations between the different types of organizational culture. This demonstrates that the organizational culture types are not independent variables and organizational culture should be approached as a set of different, mutually complementary types.

Proposition 1a, which specified that types of organizational culture are complementary to each other, but that there are differences in the strengths of relationships between the different types of culture, has been confirmed.

Proposition 1b proposed that stronger connections exist between those types of organizational culture that share common values (adjacent quadrants) compared to the connections between the types of organizational culture from opposite quadrants. While the analysis showed that no strong correlations in absolute terms exist between organizational types, the relative strength of correlations will be estimated here.

Correlations between types of organizational culture in a sample are depicted in figure 18. As can be seen in the figure, relatively higher correlations could be found between two pairs of adjacent quadrants that represent particular types of organizational culture. Relatively stronger correlations exist between the Human Relations and Open System types of organizational culture ($r = .61$), which share the common value, flexibility.

The correlation between the Internal Processes and Rational Goal types was also relatively higher than between other types of organizational culture ($r = .43$). These types of organizational culture share stability as a common value. However, along the other dimensions in the organizational culture framework – the external and internal focus of the organization – contrary to the proposition, no strong correlations could be found between types of organizational culture

⁴⁶ Interpretation of correlation coefficient: $|r| < .30$ weak correlation; $.30 < |r| < .70$ moderate correlation; $|r| > .70$ strong correlation.

from adjacent quadrants. Both, correlations between the Human Relations and Internal Processes types, and the Open System and Rational Goal types are weak (.20 and .27 respectively). One possible explanation of these kinds of findings is that the flexibility/stability dimension, which has been used in the framework for mapping organizational culture, distinguishes types of organizational culture more distinctly than the dimension of internal/external focus.

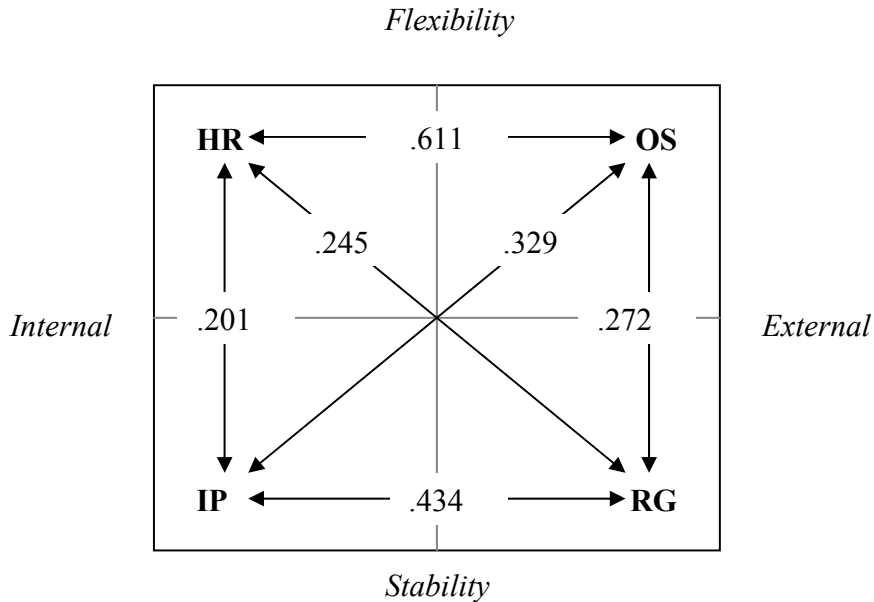


Figure 18. Relationships between types of organizational culture in the total sample

Notes: Numbers on the figure indicate Pearson correlation coefficients between types of organizational culture. Abbreviations used in the figure: HR = Human Relations type, OS = Open System type, RG = Rational Goal type, IP = Internal Processes type.

Source: compiled by the author on the basis of research database

Though, proposition 1b stated that correlations between adjacent quadrants should be stronger than between types of organizational culture in opposite quadrants, the analysis showed that a medium correlation exists between the Internal Processes type and the Open System type of organizational culture ($r = .33$), which is higher than some correlations presented before. The correlation between the Human Relations type and the Rational Goal type is weak ($r = .25$).

Moreover, after analyzing connections between types of organizational culture in different subsamples formed based on industry, organizational size and age, no clear evidence is gained to support proposition 1b (see results in appendices 8 and 9). **Thus, Proposition 1b, which specified that stronger**

connections exist between those types of organizational culture that share common values (adjacent quadrants) compared to connections between types of organizational culture from opposite quadrants found only partial conformation.

2.2.2. The effect of contextual variables on patterns of organizational culture

While the previous subchapter analyzed patterns of organizational culture in terms of relationships between types of organizational culture, the present subchapter continues with an analysis of the impact of contextual variables on organizational culture. It was assumed that organizations that operate in the same national cultural context share similar patterns of organizational culture (P2a), and furthermore, considering that Estonian organizational values like stability and control were expected to dominate over flexibility and dynamics (P2b).

To test the propositions, a mean score for types of organizational culture for each organization are computed on the basis of the respondents' estimations using the factors extracted from the factor analysis described in subchapter 2.1.3 (table 12). Table 14 gives an overview of the mean estimations of types of organizational culture at the organizational level for the entire sample (for more detailed descriptions see appendix 10).

Table 14. Descriptive statistics of types of organizational culture (mean of organizations' average estimations)

	Open System type	Internal Processes type	Human Relations type	Rational Goal type
mean	6.31	7.06	5.95	7.16
min	4.52	4.29	4.64	4.60
max	8.23	9.26	7.08	9.02
SD	0.83	1.20	0.68	1.49

Notes: mean= mean estimation of types of organizational culture for the whole sample. Here the organization is taken as a unit of analysis (N=29): means of types of organizational culture for each organization are summarized and then divided by 29; min and max= the lowest and highest estimate for an organizational culture type. Estimations are given on a 10-point scale (1 is the lowest rating and 10 is the highest rating); SD= standard deviation.

Source: author's calculations on the basis of research database.

From the table it can be seen that relatively higher estimations are given for the Internal Processes and Rational Goal types of organizational culture, which means that these types of organizational culture are more characteristic of the organizations in the sample compared to the other two types of organizational culture (Open System and Human Relations types of organizational culture).

The paired-samples t-test will be used to discover significant differences between the mean estimations of types of organizational culture. The results of the t-test are presented in table 15.

Table 15. Comparison of mean estimations of types of organizational culture in the entire sample (pair-wise t-test, sig.)

Pair	Types of organizational culture compared	mean	SE	t-statistics	Sig (2-tailed)	Sign. difference
Pair 1	Open System type	6.31	0.16	-4.239	.000**	OS<IP
	Internal Processes type	7.06	0.22			
Pair 2	Open System type	6.31	0.16	2.855	.008**	OS>HR
	Human Relations type	5.95	0.13			
Pair 3	Open System type	6.31	0.16	-3.841	.001**	OS<RG
	Rational Goal type	7.15	0.28			
Pair 4	Internal Processes type	7.06	0.23	5.103	.000**	IP>HR
	Human Relations type	5.95	0.13			
Pair 5	Internal Processes	7.06	0.23	-0.362	.720	N/S
	Rational goal type	7.15	0.28			
Pair 6	Human Relations type	5.95	0.13	-5.610	.000**	HR<RG
	Rational Goal type	7.15	0.28			

Notes: SE= Standard Error mean; df= 28; **= differences in means are significant at 0.05 level.
Source: author's calculations on the basis of research database.

As seen from table 15, the mean estimates of the Internal Processes type are not significantly different from the estimations of the Rational Goal type of organizational culture. These two types of organizational culture are most characteristic of organizations in the sample because the estimations are significantly higher compared to the mean estimations of the Open System and Human Relations types of organizational culture. The comparison of the mean estimations of the Open System and Rational Goal types demonstrates that compared to the Rational Goal type, the Open System type is less characteristic of the organizations in the sample. On average, for organizations participating in the research, the values of the Human Relations type of culture is also less characteristic than the features of the Rational Goal type of culture.

Mean estimations given for the Open System type of organizational culture are significantly lower than estimations for the Internal Processes type. Moreover, the Internal Processes type of culture is more dominant in the cultural pattern in organizations compared to the Human Relations type. As

mentioned above, the Open System and Human Relations seem to be less dominant types of organizational culture in Estonian organizations, but when comparing the mean estimations given to these two types of organizational culture it becomes evident that these types of culture are not equally represented in the cultural pattern of organizations. More precisely, the Open System type is more characteristic of organizations compared to the Human Relations type.

To sum up, the organizations in the sample show a dominant orientation towards stability and control, which is represented by the Rational Goal and Internal Processes types, over flexibility and dynamism. From appendix 10, it is clear that the majority of organizations share a similar cultural pattern: either the Rational Goal or Internal Processes type has gained higher estimations compared to the Open System and Human Relations types of organizational culture. Although this kind of pattern was dominant among organizations, there are also organizations in the sample whose pattern of organizational culture is different, which means that the general cultural context is not a single factor that has an impact on the formation of organizational culture and patterns of organizational culture .

In order to perform a more detailed analysis of the patterns of organizational culture, a cluster analysis is conducted. The cluster analysis makes it possible to identify relatively homogeneous groups of cases based on certain characteristics, and here the cluster analysis is used for identifying existing patterns of organizational culture in the sample of 29 organizations. The K-Means cluster (quick cluster) analysis assigns cases to a fixed number of clusters, and therefore, analysis should be repeated several times to find the best solution in terms of cluster composition⁴⁷. The analysis showed that it is reasonable to classify organizations belonging to the sample into three clusters (cluster membership is shown in the last column of the table in appendix 10).

Seventeen organizations that belong to Cluster 1 represent the service and production industry, but two organizations from the education sector (COLLEDU and HEALTHEDU) also belong into this cluster. Cluster 2 includes eight organizations from the education sector and altogether four organizations belong into Cluster 3. Two organizations representing the field of legal protection, one organization from health care and one educational institution (PROTEDU) belong to Cluster 3. An overview of the cluster characteristics is given in table 16. An F-test is used here for descriptive purposes to indicate which variables contribute the most to the cluster solution. Table 16 shows that two types of organizational culture – the Rational Goal type ($F=81.39$) and the Internal Processes type ($F=37.12$) – have a larger impact on differentiation between the clusters.

⁴⁷ Here best solution means finding the clusters that are externally similar – similarity of cases belonging to certain cluster is based firstly, on the mean values of cases in each cluster and secondly, on distance from the cluster centres.

Table 16. Characteristics of clusters (centroids, cluster membership, F-statistic)

	Open System type	Internal Processes type	Human Relations type	Rational Goal type	No of organizations
	<i>centroids</i>	<i>centroids</i>	<i>centroids</i>	<i>centroids</i>	
Cluster 1	6.76	7.52	6.35	8.28	17
Cluster 2	5.48	5.47	5.37	5.31	8
Cluster 3	6.08	8.31	5.39	6.01	4
F statistic	11.511	37.124	14.197	81.386	

Source: author's calculations on the basis of research database.

The cluster analysis demonstrates that three patterns of organizational culture could be found in the sample of the present study (patterns of organizational culture are presented in figure 19). Concerning the three clusters of organizations, intersections of cultural patterns could be noticed. For example, clusters 2 and 3 are comparable in respect to the Human Relations type, and three clusters of organizations may be considered similar in terms of the Open System type of organizational culture. However, when analyzing patterns of organizational culture in terms of the dominant features of organizational culture and the balance between types of organizational culture, differences could be found between the clusters.

Those organizations that belong to Cluster 1 show a higher emphasis on the Rational Goal type, but also on the Internal Processes type of culture. The Open System and Human Relations types of culture are less characteristic of those organizations. The T-test revealed that the means for the Open System and Human Relations types of organizational culture are not significantly different ($p=0.06$). Cluster 1 includes business organizations from production and service industries, with one exception – one university college also belongs in this cluster. Educational organizations mostly belong to Cluster 2. These organizations have a balanced culture and all four types of organizational culture have gained moderate estimates; furthermore, no significant differences were found when comparing their mean scores. Cluster 3 represents organizations that have greater emphasis on the Internal Processes type followed by the Open System type of organizational culture. The mean estimate given to the Rational Goal type of organizational culture is not significantly different to estimates given to the Open System and Human Relations types of organizational culture ($p>0.05$). Organizations that belong to this cluster all operate in the public sector – health care and legal protection, but also an educational organization providing defense education.

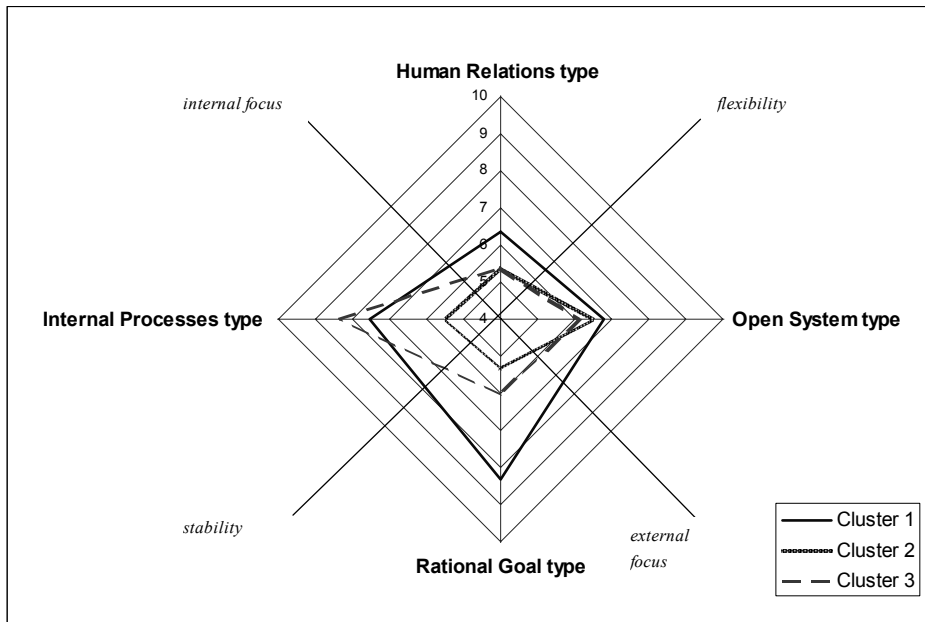


Figure 19. Organizational culture based clusters of organizations

Source: compiled by the author on the basis of research database.

The results of the analysis indicate that although organizations share similar patterns of organizational culture to a certain extent, variety could also be found in terms of patterns of organizational culture. The current research has provided mixed results and **Proposition 2a, which specifies that organizations that operate in the same national cultural context share similar patterns of organizational culture, was partially supported.** The dominance of types of organizational culture where stability and control are underlying values is notable compared to those types of culture that consider flexibility as a core value. Rational Goal and Internal Processes types of organizational culture dominate in organizations belonging to cluster 1, and a dominance of the Internal Processes type is the most distinctive feature for cluster 3. Hence, **Proposition 2b which indicated that the tendency towards stability and control dominates over flexibility in Estonian organizations found partial support.** This proposition was fully supported for cluster 1, and only partly supported for organizations belonging to cluster 3. No single dominant type of organizational culture could be found in the pattern of organizational culture represented by cluster 2.

The results of the analysis of organizational culture from the perspective of national culture indicate that organizational culture and its formation are complex phenomena and different influencing factors must be considered. The

main focus of the following section is to find out the impact of industry on patterns of organizational culture, or more precisely, whether more differences in organizational culture could be found across industries compared to differences in the organizational culture of organizations from the same field.

A one-way ANOVA test with *post hoc* multiple comparisons is used to compare the variance in means. Firstly, the comparison is performed between organizations grouped by industry (5 industries), and then secondly, an industry-level comparison is conducted (organizations are grouped by industry). The F-statistic is used as a measure of variance in means explained on the basis of organizations and sectors. Table 17 provides the results of the analysis of differences of organizational culture between organizations and industries.

Table 17 indicates that differences exist between organizations in respect to the organizational culture within the industry. On the basis of the F-statistic, conclusions could be made about which type of organizational culture differentiates between organizations the most. Organizations from the education sector have significant differences in all types of organizational culture, but the differences appear to be largest in the Internal Processes ($F=26.56$) and Open System types ($F=16.02$) of organizational culture. Organizations in the service industry also diverge in terms of organizational culture, but here differences are largest in the Internal Processes type ($F=18.80$) and Rational Goal type ($F=14.30$). However, the differences between these organizations seem to be smaller than for educational organizations. The differences between organizations are even less remarkable for production companies, which do not differ from each other in the Rational Goal type ($F=1.50$, $p=0.17$). The type of organizational culture that makes it possible to differentiate between production organizations the most is the Open System type ($F=6.30$). A comparison of two legal protection organizations indicate that these organizations are similar in respect to the Rational Goal and Open System types of organizational culture; however, significant differences are manifested in the Internal Processes ($F=14.55$) and Human Relations types ($F=7.48$) of organizational culture.

When comparing all 29 organizations in the sample, the most significant differences could be found in how characteristic the Rational Goal type of organizational culture is for organizations ($F(28,2634)=66.95$, $p=0.00$). Yet, the Internal Processes type seems to be another powerful feature of organizational culture that discerns between organizations ($F(28,2634)=38.07$, $p=0.00$). In summary, the analysis shows that organizational level is important in explaining variances in organizational culture.

To analyze whether there are more differences in organizational culture between organizations compared to differences across industries, the next step in the analysis uses industry as the criterion in an ANOVA analysis. The mean estimates of types of organizational culture in respect to industry are provided in table 17 and also depicted in figure 20.

Table 17. The results of the ANOVA test for differences in organizational culture on the basis of organizations and industries

Industry	Statistics	Types of organizational culture			
		Open System type	Internal Processes type	Human Relations type	Rational Goal type
Education	mean	6.11	6.12	5.72	5.60
	n	730	717	736	698
	SD	1.86	2.00	1.65	1.92
	F-statistic p-value	F(10,719)=16.02 .000**	F(10,706)=26.56 .000**	F(10,725)=4.43 .000**	F(10,687)=8.79 .000**
Service	mean	6.65	7.76	6.29	8.53
	n	868	844	863	855
	SD	1.87	1.58	1.76	1.37
	F-statistic p-value	F(7,860)=13.25 .000**	F(7,836)=18.80 .000**	F(7,855)=6.02 .000**	F(7,847)=14.30 .000**
Production	mean	6.57	7.34	6.32	8.42
	n	381	377	385	387
	SD	1.87	1.64	1.76	1.39
	F-statistic p-value	F(6,374)=6.30 .000**	F(6,370)=5.55 .000**	F(6,378)=5.65 .000**	F(6,380)=1.50 .178
Legal protection	mean	5.67	8.12	5.03	6.19
	n	305	301	307	305
	SD	2.10	1.50	1.95	1.84
	F-statistic p-value	F(1,303)=3.54 .061	F(1,299)=14.55 .000**	F(1,305)=7.48 .007**	F(1,303)=0.18 .671

Table 17. Continued

Industry	Statistics	Types of organizational culture			
		Open System type	Internal Processes type	Human Relations type	Rational Goal type
Health care*	mean	6.27	7.61	5.71	6.44
	n	426	428	435	423
	SD	1.94	1.49	1.98	1.90
Cross-organizational comparison of means	F-statistic p-value	F(28,2677)=12.82 .000**	F(28,2634)=38.07 .000**	F(28,2693)=9.94 .000**	F(28,2634)=66.95 .000**
Cross-industry comparison of means	F-statistic p-value	F(4,2701)=20.23 .000**	F(4,2658)=122.78 .000**	F(4,2717)=38.78 .000**	F(4,2658)=399.25 .000**

Notes: **= differences in means are significant at 0.05 level; * = only one organization from the health care sector participated in the study, and therefore, the F-statistic and p value could not be presented.

Source: author's calculations on the basis of research database.

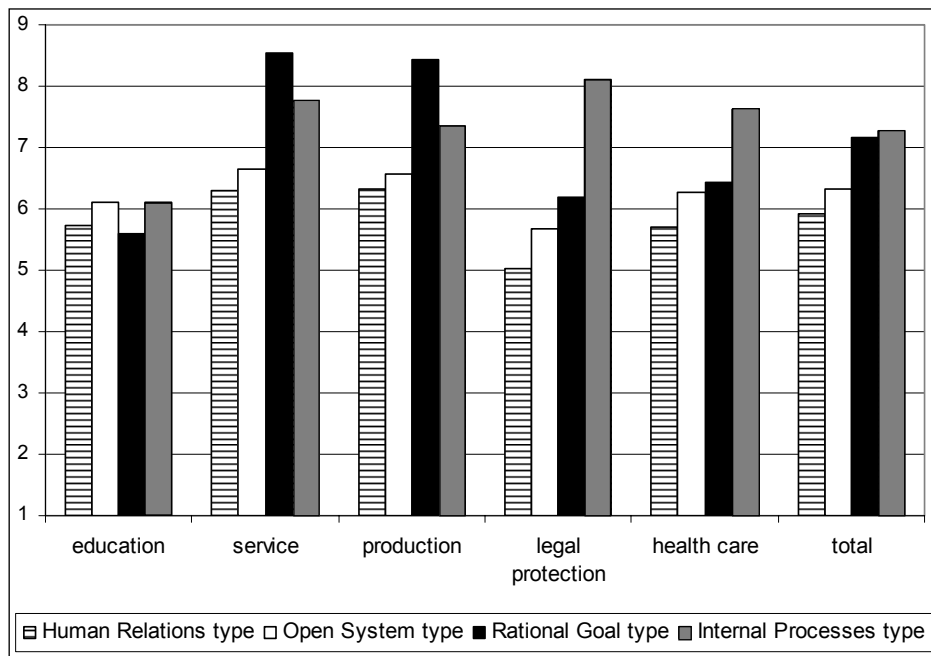


Figure 20. Mean values of types of organizational culture on the basis of industry

Notes: Organizational culture estimates on the vertical axis were given on a scale from 1 (the lowest rating or least characteristic type) to 10 (the highest rating).

Source: Compiled by the author on the basis of research database.

The figure demonstrates that the largest gap between industries could be found in estimates given for the Rational Goal type of organizational culture (the gap between the highest and lowest sector-based mean is 2.93 scale-points). Services and production organizations score higher in this type compared to educational, legal protection and health care organizations (see figure 20). The Internal Processes type differentiates between industries to a great extent as well. Here legal protection organizations score the highest and again organizations from the education sector perceive the Internal Processes type of organizational culture as the least characteristic (the gap between the highest and lowest scores is 2.00 scale-points). There is less diversity in the two other types of organizational culture, which means that industry counts less for differences in Human Relations and Open System types of organizational culture. Thus, there are many differences in types of organizational culture between industries (results of LSD test demonstrating differences between industries in more detail are provided in appendix 11.)

When comparing differences in organizational culture between organizations within the same industry, and cultural differences across industries on the basis of the F-statistic (from the ANOVA analysis), it becomes evident that industry explains more variance in organizational culture than organization. This means

that organizational culture is to a great extent determined by industry. **Thus, proposition 3, which specifies that variation in organizational culture is greater across industries compared to differences within industries has been confirmed.**

To conclude, the analysis of the impact of contextual determinants on patterns of organizational culture in Estonian organizations demonstrates the impact of national culture on the underlying values of organizational culture because it was demonstrated that organizations share similar patterns of organizational culture at least to some extent. Organizations belonging to the sample have developed an organizational culture profile where the orientation towards stability and control dominate over that towards flexibility and dynamics. However, no robust conclusions could be made in this respect because the research also demonstrated that the industry organizations operate in also seems to exert a notable impact.

2.2.3. The effect of organizational characteristics on the patterns of organizational culture

The previous subchapter (2.2.2) showed that contextual variables are important to consider when studying the regularities of manifestations of organizational culture. It became clear that national culture determines organizational culture to a certain extent, but the field of activity (i.e. industry) has an even greater influence on the cultural pattern of organizations. In the literature, the impact of different organizational characteristics on organizational culture is also often discussed, and the theoretical part of the dissertation set forth five propositions about the impact of two organizational variables – the organization's age and size – and in the present chapter these propositions will be tested.

This subchapter will be divided into two parts. The first part of the subchapter examines the impact of organizational age on organizational culture (Propositions 4a and 4b). Proposition 4a stated that compared to new organizations organizational culture is perceived more homogeneously in older organizations. Homogeneity of organizational culture could be understood as the extent to which organizational members perceive organizational culture similarly despite differences in experience in the organization (tenure) and differences in the tasks they perform (position in the organization). To confirm proposition 4a, the perception of organizational culture by organizational members of different tenure and employees working in different positions will firstly be compared in new and in old organizations, and secondly, a similar analysis will be carried out on the basis of industry. According to Proposition 4b, older organizations are more stability and less flexibility oriented than new organizations. To test this proposition, organizational culture will be analyzed in two groups of organizations formed according to organizational age.

The second part of the subchapter analyzes different aspects of organizational culture in respect to the organization's size (Propositions 5a, 5b and 5c). One-way ANOVA analysis and *post hoc* tests will be performed in order to find differences in patterns of organizational culture in organizations with different size (i.e. medium-sized and large organizations).

The effects of organizational age on organizational culture

To obtain evidence to support proposition 4a, an analysis of organizational culture as perceived by different occupational groups and by different tenure groups in old and new organizations will be performed. Three occupational groups will be distinguished:

- managers (N=280, 9.4% of the valid data);
- specialists (N=932, 31.2%);
- blue-collar workers (in educational organizations students are included⁴⁸; N=1558; 52.2%)

A total of 216 respondents did not answer the question about their position in the organization, and they will be left out of the analysis. To analyze the perception of organizational culture by different tenure groups, four groups will be formed on the basis of tenure:⁴⁹

- up to 1 year (N=391; 23.1% of the valid data);
- 1–3 years (N=436; 25.8%);
- 3–10 years (N=546; 32.3%);
- more than 10 years (N=316; 18.7%).

The main results of the ANOVA analysis are presented in figures 21 and 22. Appendix 12 provides summary statistics for the organizational culture estimations in respect to the respondent's position and tenure in new and old organizations.

The ANOVA test shows that respondents' positions in old organizations do not differentiate the perception of culture in terms of the Human Relations ($F(2,1751)=0.56$; $p=0.57$) and Internal Processes types of organizational culture ($F(2,1723)=2.09$; $p=0.12$): those aspects of culture are perceived similarly on different organizational levels. Estimations given by respondents from different organizational levels seem to vary to a great extent for the Open System ($F(2,1736)=4.39$; $p=0.01$) and Rational Goal types of organizational culture ($F(2,1706)=5.56$; $p=0.00$). More precisely, compared to blue-collars, managers

⁴⁸ Here blue-collars will be interpreted in the broader sense, so those organizational members who are immediate performers will be referred to as blue-collars.

⁴⁹ Three organizations are left out of the analysis because interval measures of tenure were used in the questionnaires in those organizations, and therefore, it was not possible to combine this information with the rest of the data. For that reason the figure for the missing data is quite high (N=1297, i.e. 43.4% of the sample).

give higher estimates to the Open System type of organizational culture; and in the case of the Rational Goal type, the estimations given by managers and blue-collars differ from estimations by specialists (figure 21).

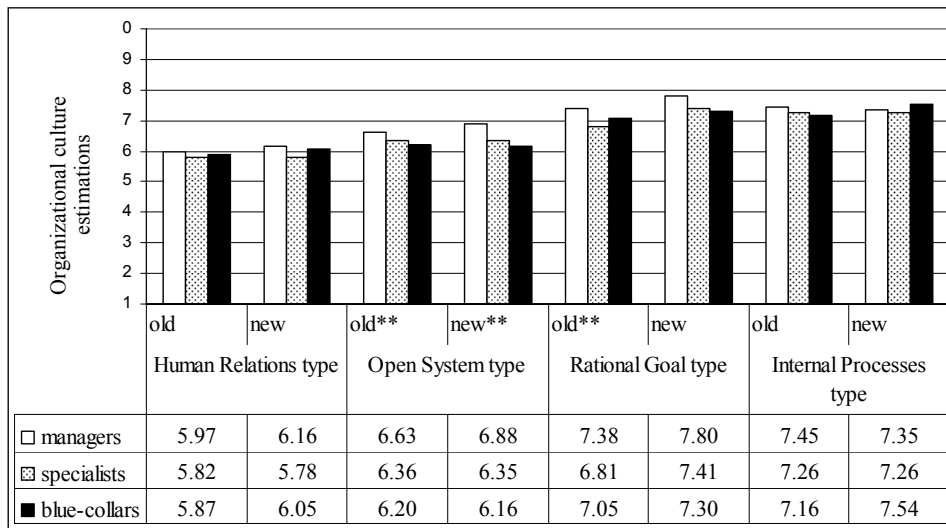


Figure 21. Estimations of types of organizational culture on the basis of different occupational groups in old and new organizations

Notes: Table in the figure demonstrates the mean estimation of types of organizational culture perceived by different occupational groups; estimations are given on a 10-point scale, where 1 means that the type of organizational culture is not characteristic of the organization and 10 means that the type of organizational culture is very characteristic of the organization; **= estimations are significantly different at the 0.05 level.

Source: compiled by the author on the basis of the research database.

In new organizations the only significant difference can be found in estimations given to the Open System type of organizational culture ($F(2,781)=5.26$; $p=0.01$). Estimations by managers are significantly higher compared to those by specialists and blue-collars (appendix 12). In respect to the other cultural types no significant differences exist between the occupational groups. Thus, the analysis of organizational culture in respect to position in the organization indicates that less diversity exists in the perception of organizational culture in a group of new organizations.

Since position in the organizational hierarchy is not the only factor that may influence the understanding of organizational culture, it is reasonable to check the perception of organizational culture in respect to tenure as well. Again an ANOVA analysis is conducted to compare variances in mean estimations according to different tenure groups in new organizations compared to old ones. The results of the ANOVA test demonstrate that there are several significant differences in estimations of organizational culture according to respondent

groups formed on the basis of tenure, and the diversity of estimations seems to be higher in new organizations (see figure 22 and appendix 12).

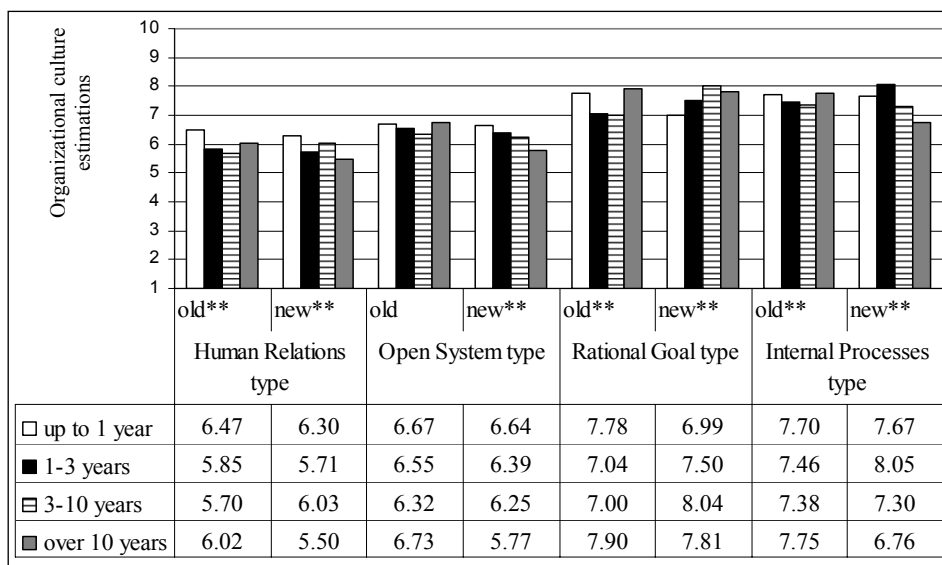


Figure 22. Estimations of types of organizational culture according to different tenure groups in old and new organizations

Notes: The table in the figure demonstrates the mean estimation of types of organizational culture perceived by different tenure groups; **= significant differences at 0.05 level; estimations are given on a 10-point scale, where 1 means that the type of organizational culture is not characteristic of the organization and 10 means that the type of organizational culture is very characteristic of the organization.

Source: author's figure on the basis of the research database.

The Open System type of organizational culture is the only type of organizational culture perceived similarly by employees of a different tenure. Although this is true for old organizations, the diversity is not so extensive in new organizations ($F(3,669)=3.32$; $p=0.019$). There seems to be negative relationship between tenure and estimations of the Open System type in new organizations – employees who have worked longer for the organization tend to give lower estimates of the Open System type of culture (figure 22).

Analysis of the mean estimates of other types of organizational culture provides insights into several significant differences in organizational culture estimations in the comparison of tenure groups (see details in appendix 12), which indicates that tenure seems to be an important factor that influences the perception of organizational culture.

The largest differences can be found in the Rational Goal type, both for new ($F(3,665)=11.20$; $p=0.000$) and old organizations ($F(3,903)=12.21$; $p=0.000$). Estimations of the Internal Processes type are less homogeneous in new organi-

zations ($F(3,654)=11.10$; $p=0.000$), where five significant pairs of comparisons between tenure groups can be found (see appendix 12). Concerning the Internal Processes type of organizational culture, differences are less notable in old organizations ($F(3,910)=2.74$; $p=0.04$), where only a single significant difference can be found between respondents with a 3–10 year tenure and organizational members with more than 10 years. Statistically significant differences can also be found in the Human Relations type, but for this type it is hard to conclude whether the old organizations are more homogeneous in terms of estimations – in the group of old organizations the F-statistic is 6.55 ($p=0.000$) and the same indicator for new organizations is 4.67 ($p=0.000$).

In summary, the analysis above indicates that differences exist in perceptions of organizational culture both in new and old organizations. The analysis demonstrates that while position in the organizational hierarchy determines the respondent's understanding of organizational culture to some extent, more differences could be found in perceptions of organizational culture when comparing the estimations on the basis of tenure in organization. The latter points to the fact that organizational culture is a social phenomenon, and an understanding of organizational culture develops over time. Some evidence for this can be found when comparing the tenure groups – the group of respondents who have worked for the organization less than one year differs the most from the other tenure groups. Thus, tenure, but also position seem to be meaningful variables that at least explain discrepancies in estimations of organizational culture in organizations to some extent. From the perspective of similarity in the estimations by different occupational groups, there seems to be greater resemblance of perceptions in new organizations, which is the reverse of the statement in proposition 4a. However, when trying to make conclusions about the congruity of perceptions of organizational culture on the basis of the opinions of different tenure groups, many differences can be found both in new and old organizations. **Therefore, within the present sample it is difficult to find support for proposition 4a, which assumes that organizational culture is perceived in a more homogeneous manner in older organizations compared to new ones.**

The next proposition (P4b) was about the impact of organizational age on the pattern of organizational culture. Table 18 provides summary statistics for testing proposition 4b.

A comparison of two groups of organizations formed according to age demonstrate that there are no significant differences in the Human Relations and Open System types of organizational culture; however, significant differences could be found in estimations given for the Rational Goal and Internal Processes types of organizational culture. More precisely, the analysis demonstrates that the Rational Goal type of organizational culture is more characteristic of new organizations compared to old ones ($F(1,2661)=22.99$; $p=.000$), and the same is true for the Internal Processes type of organizational culture ($F(1,2661)=4.77$; $p=.029$).

Table 18. The results of the ANOVA test for differences in organizational culture on the basis of organizational age

Organizational type	Statistics	Open System type	Internal Processes type	Human Relations type	Rational Goal type
old	mean	6.32	7.22	5.86	7.01
	SD	1.92	1.84	1.83	2.15
	n	1807	1793	1825	1771
new	mean	6.32	7.38	5.98	7.42
	SD	1.93	1.83	1.84	2.01
	n	899	870	897	892
ANOVA test	F-statistic	0.004	4.768	2.33	22.99
	p-value	.951	.029**	.127	.000**
	Sig.diff.	N/S	$IP_N > IP_O$	N/S	$RG_N > RG_O$

Notes: n= sample size; SD= standard deviation; Estimations are given on a 10-point scale, where 1 means that the type of organizational culture is not characteristic of the organization and 10 means that the type of organizational culture is very characteristic of the organization, **= differences in means are significant at 0.05 level; N/S= no significant difference in means. RG_N , RG_O = score of Rational Goal type in new and old organizations respectively. IP_N , IP_O = score of Internal Processes type in new and old organizations respectively.

Source: compiled by the author on the basis of the research database.

The results are unexpected to some extent because usually older organizations are believed to be more stability oriented, and therefore, a greater emphasis on the Internal Processes and Rational goal types could be expected in old organizations. But since the results of the analysis that was conducted in the previous subchapter demonstrated that the industry where the organization operates has a significant influence on the organization's culture, the impact of organizational age on organizational culture should also be analyzed considering the peculiarities of the industry. Therefore, in the next analysis, organizations from the same industry will be taken as analysis units, and then the pattern of organizational culture will be analyzed in respect to organizational age.

Considering organizational age, the sample consists of six new and five old educational organizations, six new and two old service industry organizations, two new and five old production industry organizations and one new and one old organization from the legal protection sector. Since the health care sector is represented by only one organization, it will be eliminated from the analysis.

The comparison between old and new organizations operating in different industries indicates that there is no coherent picture about manifestation of types of organizational culture (table 19).

Table 19. Comparison of organizational culture estimations depending on industry and organizational age (ANOVA, sig)

Org. culture type	Statistics	Service (SERV)		Production (PROD)		Education (EDU)		Legal protection (LEG)	
		new	old	new	old	new	old	new	old
Open System type	mean	6.41	7.02	6.98	6.48	6.08	6.12	5.95	5.49
	SD	1.87	1.80	1.72	1.89	2.03	1.80	1.99	2.15
	n	519	349	72	309	188	542	120	185
	F-statistic p-value sig.diff	F(1,866)=23.14; .000**		F(1,379)=4.30; .039**		F(1,728)=0.07; .790		F(1,303)=3.54; .061	
Internal Processes type	mean	SERV _N <SERV _O		PROD _N >PROD _O		N/S		N/S	
	mean	7.53		8.10		6.89		7.44	
	SD	1.59		1.52		1.60		1.63	
	n	503		341		67		310	
Human Relations type	F-statistic p-value sig.diff	F(1,842)=27.80; .000**		F(1,375)=6.35; .012**		F(1,715)=5.01; 0.026**		F(1,299)=14.56; .000**	
	mean	SERV _N <SERV _O		PROD _N <PROD _O		EDU _N >EDU _O		LEG _N >LEG _O	
	mean	6.31		6.27		5.64		4.65	
	SD	1.70		1.86		1.83		1.85	
Rational Goal type	n	514		349		314		120	
	F-statistic p-value sig.diff	F(1,861)=0.103; .749		F(1,383)=4.49; .035**		F(1,734)=0.62; .432		F(1,305)=7.48; .007**	
	mean	N/S		PROD _N >PROD _O		N/S		LEG _N <LEG _O	
	mean	8.27		8.46		5.63		6.25	
	SD	1.47		1.40		2.03		1.75	
	n	507		348		193		123	
	F-statistic p-value sig.diff	F(1,853)=47.43; .000*		F(1,385)=1.14; .287		F(1,696)=0.051; .822		F(1,303)=0.18; 0.671	
		SERV _N <SERV _O		N/S		N/S		N/S	

Notes: Estimations are given on a 10-point scale, where 1 means that the type of organizational culture is not characteristic of the organization and 10 means that the type of organizational culture is very characteristic of the organization; ** = differences in means are significant at 0.05 level; N/S = no significant difference in means. SERV_N, SERV_O = new and old organizations from the service sector (and respectively from other sectors while other abbreviations used). > or < means bigger or lower value.

Source: author's calculations on the basis of the research database.

The analysis highlights nine significant comparisons between old and new organizations and different types of organizational culture, where the Rational Goal type seems to depend on organizational age the least. The ANOVA test demonstrates that old service organizations score significantly higher for the Rational Goal type of organizational culture compared to new service organizations, and this is the only significant comparison for the Rational Goal type.

When comparing the mean estimations for the Open System type for old and new organizations, contrary results may be seen. While in the service industry, a lower score for the Open System type can be found among new organizations, the production industry shows the opposite: new organizations score higher for the Open System type compared to old production organizations.

The comparison of old and new organizations in respect to the Human Relations type of organizational culture demonstrates that no differences can be found in service and educational organizations. When considering production and legal protection organizations, differences can be seen on the basis of organizational age. Again, the results differ between industries – in production organizations new organizations score higher in the Human Relations type compared to old organizations, but in legal protection new organizations score lower than old organizations.

When analyzing the differences for the Internal Processes type of organizational culture, service and production organizations are similar to each other (new organizations score significantly lower in the Internal Processes type compared to old organizations), but the findings for legal protection and educational organizations are the other way around – the Internal Processes type is more characteristic of new organizations from these industries.

In summary, the analysis of the effects of organizational age on patterns of organizational culture gives two results. On the one hand, it demonstrates that organizational age certainly has an impact on patterns of organizational culture, but on the other hand, the influence seems to differ from that brought out in the literature. Organizational age has a significant impact on the Rational Goal and Internal Processes types of organizational culture, which means that age differentiates between organizations on the flexibility and stability scale, but contrary to theoretical considerations of the sample of Estonian organizations, new organizations scored higher for these types of organizational culture. When going into more detail in the analysis, it becomes clear that industry mediates the impact of organizational age on patterns of organizational culture. Considerations formulated in Proposition 4b found evidence in service organizations and partly in production organizations, but could not be confirmed in the other industries. **Thus, on the basis of this analysis it is difficult to make exhaustive generalizations about the impact of organizational age on the stability/flexibility dimension of organizational culture (Proposition 4b).**

The influence of organizational size on organizational culture

In order to analyze the impact of organizational size on patterns of organizational culture, the means of types of organizational culture will firstly be calculated for medium-sized and large organizations in the total sample and then an ANOVA test will be conducted to make a comparison between medium-sized and large organizations on the basis of culture. Moreover, the same procedure will be repeated with service and production industry organizations. Other industries will not be analyzed in detail, because it is not possible to compare organizations on the basis of size because of the homogeneous composition of the sample (only large organizations represent education and legal protection industries, and there is only one organization representing the health care sector). Appendix 13 provides summary statistics of the ANOVA test performed in order to make conclusions about organizational size as a determinant of patterns of organizational culture (Proposition 5a–5c). Table 20 shows the main results of the ANOVA analysis.

Table 20. Comparison of estimations of organizational culture for medium-sized and large organizations (ANOVA, sig)

sample	statistics	Organizational culture type			
		Human Relations type	Open System type	Rational Goal type	Internal Processes type
Total sample	F-stat:	71.56	0.193	251.4	1.86
	p-value:	.000**	.661	.000**	.173
	Sig.diff:	HR _M >HR _L	N/S	RG _M >RG _L	N/S
Service industry	F-stat:	0.87	41.21	70.99	10.68
	p-value:	0.350	.000**	.000**	.001**
	Sig.diff:	N/S	SERV _M <SERV _L	SERV _M <SERV _L	SERV _M <SERV _L
Production industry	F-stat:	21.54	0.01	3.04	17.35
	p-value:	.000**	.912	0.080	.000**
	Sig.diff:	PROD _M >PROD _L	N/S	N/S	PROD _M <PROD _L

Notes: Estimations are given on a 10-point scale, where 1 means that the type of organizational culture is not characteristic of the organization and 10 means that the type of organizational culture is very characteristic of the organization; **= differences in means are significant at 0.05 level; N/S = no significant difference between middle-sized and large organizations. HR_M = Human Relations type in middle-sized organizations; HR_L = Human Relations type in large organizations; RG_M = Rational Goal type in middle-sized organizations; RG_L = Rational Goal type in large organizations; SERV_M = middle-sized service organizations; SERV_L = large service organizations; PROD_M = middle-sized production organizations; PROD_L = large production organizations.

Source: author's calculations on the basis of the research database.

According to proposition 5a, large organizations tend to foster the Internal Processes type of organizational culture, while smaller (in our case medium-sized) organizations should score higher in the Human Relations type of culture. The first part of the proposition is confirmed by the analysis because regarding

the Internal Processes type of organizational culture, both medium-sized service and production organizations score significantly lower in this type of organizational culture compared to large organizations. Considering the Human Relations type of organizational culture there is no significant difference in estimations in respect to organizational size in the service industry. In manufacturing, large organizations scored significantly lower in the Human Relations type of culture than medium sized organizations ($F=21.54$, $p=0.000$).

The comparison of the mean estimations given for the Open System type of organizational culture by large and medium-size organizations indicate significant differences in service organizations, while in production organizations no significant differences can be seen. For service organizations, large organizations seem to be more flexible and open to changes than medium-sized organizations ($F=41.21$, $p=0.000$). This result is the reverse of the statement made in proposition 5b.

Proposition 5c specified that the organization's size does not have a significant effect on the results orientation of the organization. Within the framework of the present study, results orientation of an organization is expressed in terms of the Rational Goal type of organizational culture, and the core values of this particular organizational culture are outpacing the competitors and being focused on results like market share and profit. Considering these values, the higher influence of industry rather than organizational size on the organization's results orientation may be expected.

The analysis shows that mean estimations of the Rational Goal type are significantly higher in medium-sized organizations compared to large organizations. On the 10-point scale the mean estimation was 8.28 in medium-sized organizations and 6.82 in large organizations. Here the composition of the sample may influence the results. The sample consists of 10 medium-sized organizations (4 from services and 6 from manufacturing) and 19 large organizations, where educational, legal protection and health care industries are only represented by large organizations. The industry-based comparison of organizational culture in subchapter 2.2.2 (see table 17) demonstrated that the Rational Goal type is less characteristic of educational, legal protection and health care organizations compared to services and production organizations. Therefore, it is misleading making conclusions about the whole sample, and the following analysis will focus only on organizations from services and production industries.

The comparison of mean estimations of the Rational Goal type reveals significant differences between large and medium-sized organizations in the services industry. The analysis indicates that large service organizations are significantly more results oriented than medium-sized service organizations (see table 20). The impact of organizational size on the Rational Goal type of organizational culture is not evident for production organizations – no significant differences can be found between mean estimations when comparing large and medium-sized production organizations.

To sum up the analysis about the impact of organizational size on organizational culture, the following conclusions can be made. Firstly, according to **proposition 5a, larger organizations foster values that aim to assure integration by means of formalization and centralization, while cohesion, trust and close relationships between organizational members are more prevalent in patterns of organizational culture in smaller organizations.** Medium-sized service and production organizations were found to score significantly lower in the Internal Processes type compared to large organizations. While no significant differences were found in the estimations for the Human Relations type of culture among large and medium-sized organizations in respect to organizational size in the services industry, in the manufacturing industry large organizations scored significantly lower for this type of culture than medium-sized organizations. **Hence, proposition 5a has been partially confirmed.**

Proposition 5b, which stated that smaller organizations are more flexible and open to change compared to larger ones was not supported because no difference was found in estimations of the Open System type of culture in production organizations. Moreover, analysis indicated that in the services industry large organizations were more flexible and open to changes than medium-sized organizations. Thus, the results are not in line with proposition 5b.

The last proposition (P5c), which suggested that the results orientation of an organization is unaffected by its size, was only partially supported. It was found that estimations of the Rational Goal type differed in the group of medium-sized and large organizations for the total sample and for the subsample of services organizations, but for production organizations, organizational size did not result in different estimations of the Rational Goal type.

To sum up the findings of this section one can conclude that at least to some extent organizational culture is influenced by an organization's age and size, but the results of the analysis did not indicate very clear patterns of influence. Although the influence of organizational size on organizational culture seems to be more definite than the impact of its age, the author assumes that the impact of industry is crucial on the pattern of organizational culture. In order to get a more reliable picture of the determinants of organizational culture, an extended analysis should be conducted. The next chapter of the dissertation seeks to reveal the impact of several variables on organizational culture.

2.2.4. Compound analysis of the determinants of organizational culture

The previous subchapters demonstrated that contextual and organizational variables explain differences in patterns of organizational culture. Although analyzing the impact of each selected variable on organizational culture separately makes it possible to discover the effect of the particular variable on organizational culture, it is still quite difficult to make meaningful conclusions about the relevant importance of each variable's impact on organizational culture. In order to test the determinants of contextual and organizational variables on organizational culture, a binary logit regression analysis is used.

Four binary logit models will be constructed, where types of organizational culture will be used as dependent variables. When applying the logistic regression analysis, data must be transformed into dummy variables. To code the dependent variables, the mean estimation given to each type of organizational culture is set as the reference point: estimations above the mean will be considered above-average estimations of the particular type of organizational culture and will be coded 1, while estimations below the average will be coded 0. Three independent variables will be 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 will be coded 1 and medium-sized organizations 0);
3. organizational age (1 for new organizations and 0 for old).⁵⁰

The coding of dependent and independent variables is explained in figure 23.

Specific organizational effects were not checked for in the model (the organization as an independent variable was not included) because there is quite a small number of organizations in the sample. Therefore, no organizations could be included in some groups (e.g. there is only one organization from the health care sector and no analysis could be conducted on the basis of organizational age and size; two legal protection organizations represent large organizations and no medium-sized organizations from legal protection exist in the sample etc), and so those variables are left out of the model. Concerning individual characteristics, missing data exists for several organizations (see sample description in appendix 6) because the organizations refused to report this, and therefore, variables reflecting individual characteristics were also left out of the model.

⁵⁰ No interactions of predictors were included in the analysis because the number of observations would have become too low in different groups.

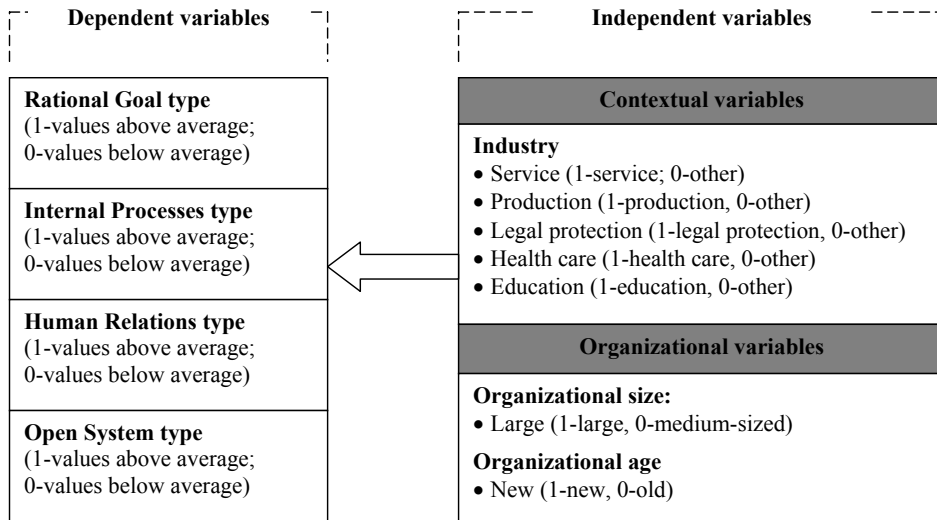


Figure 23. Coding of dependent and independent variables for the binary logistic regression

The impact of the explanatory variables on the probability of high estimations for types of organizational culture is expressed as marginal effects. In the case of the industry variable, educational organizations are taken as the reference group because, as seen from the previous analysis, educational organizations have the most balanced pattern of organizational culture – all four types of organizational culture have scores around estimations of 5 and 6 (see table 17 and figure 20 in chapter 2.2.2). The models will take into account possible heteroscedasticity (robustness). Table 21 summarizes the significant determinants of types of organizational culture. A more detailed overview of the results of the binary logit regression analysis will be provided in appendices 14–17.

As seen in table 21, models for the types of organizational culture contain several significant variables, whereas the estimations depend mostly on industry. The size of the organization is also a significant determinant of organizational culture. The age of the organization was left out of the models because it was not significant for all types of organizational culture. A more detailed presentation of the findings will follow.

Table 21. Summary of independent variables influencing estimations of organizational culture

Dependent variables Independent variables	Types of organizational culture			
	Rational Goal type	Internal Processes type	Human Relations type	Open System type
Service	x	x	x	x
Production	x	x	x	—
Legal protection	x	x	x	x
Health care	x	—	—	—
Size of organization	x	x	x	x

Notes: Educational organizations have been taken as the basis of comparisons; x= the impact of the particular independent variable on the type of organizational culture is statistically significant; — = the impact of the independent variable on the type of organizational culture is not statistically significant. .

Source: compiled by the author on the basis of the research database.

The logit model for the Rational Goal type of organizational culture displays a significant fit with the data ($\text{Chi}^2\text{-test } p = .000$), and the level of the description of the overall variation is 26.4%. Among the dummies, only the variable depicting the age of the organization is not significant, but all other variables are significant predictors of the Rational Goal type of organizational culture (see appendix 14). It can be seen that industry increases the probability of having above-average estimations for the Rational Goal type. More precisely, the probability of having an above-average score for the Rational Goal type of organizational culture in services organizations is 60.5%, in the production industry 50.9% and in health care 16.8% 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 9.9% compared to the education sector. Being a large organization increases the probability of above-average estimations of the Rational Goal type of organizational culture by 16.5% compared to medium-sized organizations.

The model for the Internal Processes type of organizational culture is significant with the level of the description of the overall variation at approximately 9% (see appendix 15). Above-average estimations of the Internal Processes type are predicted by affiliation with the services industry (the probability of high estimations is 38.7% higher than for educational organizations), the production industry (34.6% higher probability than in education) and legal protection (37.2% higher than in education). The health care sector does not predict different estimations to Internal Processes type. In respect to organizational size, the probability of having an above-average score for the Internal Processes type is 14.6% higher in large organizations.

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 culture. 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. To sum up, the probability of an above-average score for the Open System type of organizational culture in services organizations is 16.1% higher, in production 24.2% higher and for legal protection organizations 12.5% lower than in educational organizations. Organizational size (i.e. being a large organization) increases the probability of above-average estimations of the Open System type by about 18% (see appendix 16).

Although the model for the Open System type of organizational culture is significant, the level of description remains rather modest. The same is true for the model explaining the Human Relations type of organizational culture as well. The results show that for the Open System and Human Relations types of organizational culture, the predictors included in the models are significant, but there must be other variables that are important to explain the differences in the manifestation of these particular types of culture.

The last model constructed for the Human Relations type of organizational culture gives different results compared to the other types of culture. Although some industries predict higher estimations for the Human Relations type compared to educational organizations (more precisely, for services organizations, the probability of higher estimations for the Human Relations type of organizational culture is 2.7% higher and in legal protection 3.4% higher than in educational organizations), the marginal effects are quite small. It also became clear that in large organizations the probability of high estimations for the Human Relations type of culture is lower than in medium-sized organizations. Organizational age is once again an insignificant variable for explaining the estimations of the Human Relations type of organizational culture (see appendix 17).

In summary, the binary logit models demonstrate that industry is a significant predictor of organizational culture. Moreover, organizational size also contributes significantly to the development of patterns of organizational culture. Considering the theoretical arguments, the finding that organizational age is not a significant predictor of types of organizational culture is quite an unexpected result, which will be discussed in subchapter 2.3.2. It could also be noticed that although all models are significant, the level of the description of the overall variation (pseudo R^2)⁵¹ is different for each of the four models. The model constructed to explain the Rational Goal type of culture describes 26.4% of the overall variation, which is considered a satisfactory level in the context of social phenomena. It has been pointed out that the pseudo R^2 is usually not very high (Tooding, 2007), which is true for the present models as well. In the case of the model constructed for the Internal processes type of organizational

⁵¹ It has been argued that although the pseudo R^2 can be used for model evaluation, it should be used with caution (see for example Hagle and Mitchell, 1992).

culture, the Pseudo R^2 is 0.085 (the model describes nearly 9% of the overall variation), but for the Open System type and Human Relations type, the indicator is 0.023 and 0.028 respectively. The results indicate that in the case of some types of organizational culture, besides contextual and organizational variables, there might be other predictor variables that contribute significantly to explaining the particular type of organizational culture. The findings of the logistic regression analysis will be discussed in the next chapter.

2.3. Synthesis and discussion of the research results

2.3.1. Connections between types of organizational culture in Estonian organizations

In the conceptual part of the dissertation, the framework for the empirical research carried out in Part 2 was set up on the basis of theoretical and empirical knowledge about the concept of organizational culture (see figure 11). The focus of the present dissertation was twofold: from the methodological point of view it aimed to develop a measurement tool for analyzing organizational culture, and then the measurement instrument was applied to examine the relationships between types of organizational culture and the factors that influence patterns of organizational culture in Estonian organizations. The validity of propositions P1a and P1b formulated in chapter 1.2.1 aiming to analyze the connections between types of organizational culture (P1a and P1b) was tested in subchapter 2.2.1.

In the scope of the present research, organizational culture was approached through typology, which makes it possible to carry out comparisons between organizations on the basis of their culture and analyze influencing factors on similar grounds. Organizational culture develops over time as a result of interaction between the organization, its members and the environment, meaning that the organizational culture which takes shape, is influenced by the expectations of the external environment, but also by the solutions the organization provides itself in order to be sustainable and fulfill its tasks. Organizational culture is an organic whole, and research of organizational culture is therefore complicated. In subchapter 1.2.4 of the dissertation, two organizational culture measurement instruments validated in the Estonian context were pointed out. It was also argued that in order to unfold and get a more reliable understanding of organizational culture in Estonian organizations, using several methods is necessary. When one intends to compare the findings from studies using different measurement tools, similarities and differences between instruments should be taken into account because common aspects of different tools make it possible to make comparisons and generalizations from the findings.

Although the scales used in the Questionnaire of Organizational Culture (QOC) developed by Vadi et al (2002) and the Organizational Values Question-

naire (OVQ) developed by the author of the dissertation are not identical indeed, the *relationship orientation* in QOC have similarities with the *Human Relations type* of organizational culture in OVQ. The other scales in QOC, *task orientation* captures several ideas, and therefore, drawing parallels with OVQ is more complicated. The task orientation scale in QOC has some ideas common to the Rational Goal, Open System and Internal Processes types in OVQ. Harrison's questionnaire, which has been translated into Estonian by Roots (2003), analyzes organizations in terms of formalization and centralization, which has common elements with the Internal Processes type in OVQ.

Thus, the findings of previous studies conducted in Estonia, but also other academic research in the field of organizational culture make it possible compare the results from the current research, and in that way validate the measurement instrument developed by the author. Validation of the method also took place in focus group discussions in some of the organizations in the sample. An overview of the relationships between types of organizational culture based on the current research is presented in table 22.

Table 22. Comparison of relationships between types of organizational culture in different industries

Comparison pairs of organizational culture types	Common value*	Industry				
		Service	Pro-duction	Education	Legal protection	Health care
HR–OS	flexibility	moderate	moderate	moderate	moderate	moderate
IP – RG	stability	moderate	moderate	moderate	moderate	moderate
HR– IP	Internal focus	weak	weak	weak	Weak	Weak
OS–RG	External focus	weak	weak	moderate	Weak	Weak
HR–RG	No common value	N/S	weak	moderate	Weak	Weak
OS– IP	No common value	moderate	moderate	moderate	weak	weak

Notes: HR= Human Relations type; OS= Open System type; RG= Rational Goal type; IP= Internal Processes type of organizational culture; * denotes the value that is common for particular types of organizational culture in the Competing Values Framework; all correlation coefficients are positive; N/S= not significant correlation.

Source: compiled by the author on the basis of the research database.

The sample for the present study demonstrated that positive relationships exist between all types of organizational culture, indicating that organizational culture should be approached as an organic whole and it is not possible to

change some aspects of organizational culture without affecting changes in other aspects of the culture. This finding is in line with previous studies, which have also demonstrated that types of organizational culture that may conceptually be considered adversarial often coexist in the organization (see, for example, Buenger *et al*, 1996; Kalliath *et al*, 1999). These kinds of findings could be explained from two perspectives. Firstly, it seems to support Svyantek's (1997) idea about organizational culture having two components – a self-sustaining component and an adaptive component (cf. Kwan and Walker, 2004); and secondly, it demonstrates that no pure types of organizational culture exist in real life and organizations develop their culture as a mix of different types of organizational culture.

In the current study stronger relationships were found between those types of organizational culture that share the values of flexibility on the one hand, and stability on the other. Moderate correlations exist between the Human Relations and Open System types of culture, but also between the Internal Processes and Rational Goal types of culture. Correlations between the types of organizational culture representing other pairs of adjacent quadrants in the organizational culture framework remained lower than the abovementioned. This finding demonstrates that in Estonian organizations flexibility/stability differentiate between organizations the most.

Regarding Propositions 1a and 1b set in the present study, it could be concluded that Proposition 1a was supported because the research revealed that the types of organizational culture are complementary; however, relationships of different strengths exist between the types of organizational culture. At the same time, Proposition 1b was supported only partially because even if stronger connections were found between two pairs of adjacent quadrants in the framework, there were also weak correlations between some adjacent quadrants. Therefore, it was not possible to confirm the idea that connections between the types of organizational culture belonging to adjacent quadrants are stronger than between those belonging to opposite quadrants (see details in table 23).

It became evident that in those organizations where the Human Relations type of organizational culture is valued highly, high estimates were also given to the Open System type of organizational culture (and *vice versa*). This correlation is a two-sided phenomenon, which does not reflect causality, and therefore, any interpretation of the results by the author may be subjective. Trust, close relationships and team spirit could be defined as core values of the Human Relations type of organizational culture. The Open System type of culture reflects values like innovativeness, initiative and commitment to the organization. The findings of the research tend to support the idea that in order to be able to generate fresh and innovative ideas there should be trust between organizational members, and people belonging to the organization must feel that they are safe even when making mistakes. But it may be interpreted the other way around as well – when organizational members are open to change and they want to share their ideas and come up with innovative thoughts it may

create a positive atmosphere in organizations and facilitate good relationships between organizational members. However, the author believes that the Human Relations type of organizational culture could be seen as a precondition for developing the Open System type of culture. Flynn and Chatman (2001) have argued that cohesion and harmony is important for implementing creative ideas in an organization. The findings from research conducted by Alas (2004), which demonstrated that involvement increases organizational members' willingness to develop initiatives, seem to support this view.

Table 23. Validity of Propositions 1a and 1b and summary of the main research results

Propositions	Validity	Results
Proposition 1a Types of organizational culture are complementary to each other, but there are differences in the strengths of relationships between the different types of culture.	supported	<ul style="list-style-type: none"> • Statistically significant positive correlations exist between four types of organizational culture, therefore, types of organizational culture are not exclusive or competing, but complementary to each other. • <i>Weak correlations</i> exist between Human Relations and Internal Processes types, and Human Relations and Rational Goal types. • <i>Medium-sized</i> correlations were found between Open System and Internal Processes types, Open System and Rational goal types, but also between Internal Processes and Rational Goal types of organizational culture. • <i>A relatively stronger</i> correlation was found between Open System and Human Relation types of organizational culture.
Proposition 1b Stronger connections exist between those types of organizational culture that share common values (adjacent quadrants) compared to the connections between the types of organizational culture from opposite quadrants.	Partially supported	<ul style="list-style-type: none"> • <i>Relatively stronger, but still moderate</i> correlations exist between two pairs of adjacent quadrants that represent particular types of organizational culture: $r=.61$ between Human Relations and Open System types; $r=.43$ between Internal Processes and Rational Goal types. • No strong correlations exist between types of organizational culture from other adjacent quadrants: $r=.20$ between Human Relations and Internal Processes types, and $r=.27$ between Open System and Rational Goal types. Similar patterns exist in the subsamples from different industries. • <i>Medium-sized</i> correlations exist between the types of organizational culture from opposite quadrants: $r=.33$ between Internal Processes and Open System types. • <i>Weak correlation</i> ($r=.25$) exists between Human Relations and Rational Goal types.

Source: compiled by the author

Unlike other studies, the results of the present research demonstrated that a positive correlation of moderate magnitude exists between the Rational Goal and Internal Processes types of organizational culture, which means that those organizations that have strong task orientation also obtain high estimations for the Internal Processes type, which characterizes organizations in terms of formalization and centralization. Presuming that results orientation is important for most of the organizations, this finding may be interpreted as a reflection of the belief that in order to be competitive, internal integration and formalization is needed. The positive correlation between the Rational Goal and Internal Processes types found in the current research is different from studies conducted in other countries, which underlines the importance of a broader approach to the cultural context in the field of organizational studies. It could be assumed that quite strong positive relationships between the Rational Goal and Internal Processes types may be a culture-specific phenomenon, illustrating basic assumptions that are inherent to specific cultural contexts – Estonia in the present case.

The dominance of results orientation and formalization in Estonian organizations has been reported by Hofstede (1983), Vadi and Meri (2005) and Roots (2003). In this vein the results of the present study are similar to those obtained earlier, supporting the idea that Estonian organizations tend to follow the principles of a well-oiled machine. At the same time, the greater emphasis on results and relying on formalization may also be connected to the transitional era. If under the Soviet regime organizations had to fulfill the plan, but the pay was guaranteed even for poor performance or for merely being present at the workplace (Vadi and Roots, 2006: 195), socio-economic change brought along the need for change in the mentality of the people. Therefore, one could argue that the transition period forced organizations to become more results oriented.

Several reasons could be found for the emphasis on the Internal Processes type in organizations as well – when new ways of operating are expected from employees, new standards and procedures must be defined in organizations, and therefore, the level of formalization may become high. Moreover, formalization makes it possible to avoid unpredictable results, which are very likely to occur in turbulent environments. Hence, the combined influence of the national culture's core characteristics and society's developmental paths on organizational culture could be noticed in the case of Estonian organizations.

The results presented in tables 22 and 23 indicate that different samples may differ in terms of underlying assumptions about appropriate cultural patterns; moreover, different external factors may contribute to a great extent to the formation of cultures. Analysis of the pattern of the intercorrelations provides a "helicopter view", but does not explain why these kinds of patterns exist. In order to avoid a bias from the composition of the sample, the relationships were also analyzed in subsamples formed on the basis of industry. It became evident that the general pattern of relationships between types of organizational culture is quite similar in different industries, except for educational organizations. The

only weak correlation in educational organizations could be found between the Human Relations and Internal Processes types of organizational culture – the other connections were moderate.

The analysis of the internal structure of patterns of organizational culture in the services and production industry showed that the connection deviates from the general pattern. More precisely, in services and production organizations, a moderate connection could be found between the Internal Processes and Open System types of organizational culture. This may indicate that in services and production organizations flexibility, innovativeness and adaptability is believed to be attainable by means of internal integrative mechanisms such as regulations and formalization. This finding is similar to that of McDermott and Stock (1999), who conducted their research in a sample of manufacturing organizations. These similar findings demonstrate that patterns of organizational culture may not only be specific to the cultural context, but also to industry. Moreover, the idea of an industry ideology (Trice and Beyer, 1993) and mindset (Phillips, 1994) seems to be relevant here. Therefore, in order to make conclusions about the regularities in manifestations of patterns of organizational culture, similarities and differences in the patterns of organizational culture should be analyzed in more detail considering different contextual and organizational factors.

2.3.2. Discussion of contextual and organizational determinants of organizational culture

Both, theoretical and empirical research on the determinants of organizational culture demonstrate that a whole range of individual characteristics (organizational members' values, socio-demographic characteristics), organizational factors (organization's ownership, organization's age, size, historical background of organization) and contextual variables (location of organization in terms of national cultural context, industry) have an impact on organizational culture. Although organizational culture is a multifaceted phenomenon influenced by several factors, the present research focused only on some contextual and organizational level determinants of organizational culture because, unlike individual characteristics, these variables are not systematically analyzed in the Estonian context. The present subchapter collects and discusses not only the findings from subchapters 2.2.2.–2.2.4, but also aims to reflect and interpret these findings in the broader context (see figure 24).

Factors that were not focused on in the study, but seem to be relevant on theoretical grounds, and also in light of present research particularly considering the Estonian context will be discussed while interpreting the research findings. In discussing the results of the present study, the author will also compare findings from other studies discussed in the theoretical part of the dissertation.

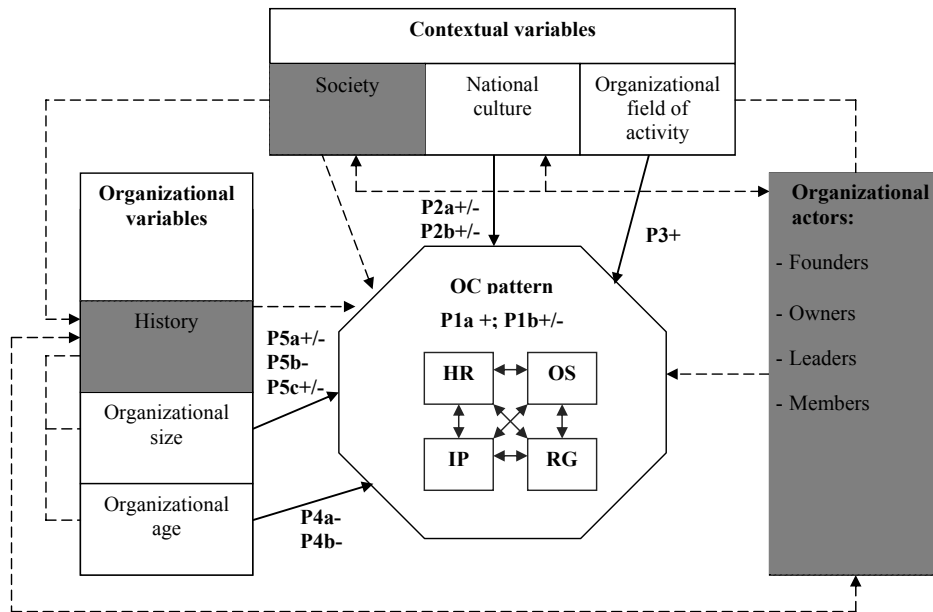


Figure 24. Relationships found in the study and hypothesized impact of other variables on organizational culture

Notes: OC – organizational culture, HR – Human Relations type of OC; OS – Open System type of OC, RG – Rational Goal type of OC, IP – Internal processes type of OC. Shaded boxes present the variables that were not analyzed in the scope of the empirical research. Continuous lines mark the relationships tested in the research, dotted lines mark hypothetical relationships between variables. Confirmed propositions are given a “+” sign, unconfirmed propositions are marked with a “-” sign, partially confirmed propositions are marked with “+/-”.

Source: compiled by the author.

Contextual determinants of organizational culture (P2a, P2b and P3)

Based on the literature on organizational culture, one can conclude that values that have been adopted by organizations and taken as guidelines for organizing their performance reflect the values of the society (e.g. Allaire and Firsirotu, 1984; Erez and Earley, 1993) and industry (e.g. Padaki, 2000) they operate in (see discussion in subchapter 1.2.3). Different arguments have been brought about the impact of national culture and industry on organizational culture, and empirical research seems to prove the impact of both factors.

When considering the impact of industry on organizational culture, it has been argued that belonging to a particular industry mainly differentiates between organizations in terms of practices, but the values level of organizational culture is influenced by national culture (e.g. Hofstede *et al*, 1990; Van Muijen *et al*, 1999). But there are also researchers that argue that industry has an impact on all layers of organizational culture (see for example Chatman and Jehn, 1994; Deal and Kennedy, 1982; Gordon, 1991; Padaki, 2000). Industry

ideologies (Trice and Beyer, 1993) or mindsets of industries (Phillips, 1994) are believed to have a large impact on organizations, and therefore, it has been argued that organizations operating in the same industry are more similar in terms of their organizational culture compared to organizations from other industries (e.g. Chatman and Jehn, 1994; Dastmalchian *et al*, 2000).

The present research analyzed the influence of contextual variables – national culture and industry – on organizational culture. Table 24 collects the results of the research concerning the impact of contextual factors on organizational culture.

The results from the current survey indicated similarities of organizations on the grounds of organizational culture, but differences between organizations also became evident. Because of the absence of a comparison group (i.e. a sample of an organization from another cultural context), it is difficult to make adequate conclusions about the impact of national culture on Estonian organizations. Organizations participating in the research share some similar traits, but when going into the details the differences cannot be overlooked.

The dominance of values in the organizational culture supporting stability was found to be characteristic of the organizations participating in the current research. More precisely, it was found that organizations put a great emphasis on results orientation, which is supported by formalization and bureaucracy. This finding is quite similar to that reported by Eamets, Haldma, Kaldaru *et al* (2008: 32). In turn, these findings are contrary to the recent study by Übius and Alas (2009), who found that a Clan culture dominates in Estonian organizations, and a Hierarchy culture is least characteristic of Estonian organizations. Unfortunately, the data in that survey is presented in such a way that makes it complicated to discuss and compare findings (e.g. the sample description is incomplete and it is not evident what types of organizations the data has been collected from; the differences between the mean estimations of types of organizational culture are quite small, but no proof via statistical analysis is provided to estimate the differences of the means in terms of statistical significance). Therefore, it is complicated to make meaningful comparisons and generalizations on the basis of that study, although the theoretical background would provide similar grounds for making generalizations about patterns of organizational culture in Estonian organizations.

As discussed in chapter 1.2.2, organizational culture develops over time as part of the learning process, and national culture, which is quite stable and resistant to change, is believed to influence the deepest level of organizational culture. National culture influences organizational culture through “organizational actors” – leaders, organizational members and also founders and owners. Individuals are socialized in the society’s cultural context from early childhood and in that way the values held generally in the particular cultural context become that person’s inheritance. The sets of values held by the individuals are brought into the organization, where they become the cornerstone of the organizational culture.

Table 24. Validity of propositions considering the effect of contextual variables on organizational culture (P2a, P2b and P3) and a summary of the main research results

Propositions	Validity	Results
Proposition 2a Organizations that operate in the same national cultural context share similar patterns of organizational culture.	Partially supported	<ul style="list-style-type: none"> • Analysis brought out similarities in patterns of organizational culture in Estonian organizations (dominance of Rational Goal type and Internal Processes type) • Going into more detail, several differences can be found between organizational culture estimations in different organizations. A cluster analysis differentiated between three groups of organizations, and cluster membership demonstrated that industry determines patterns of organizational culture quite a lot. • National culture is important, but not the only determinant of organizational culture.
Proposition 2b The tendency towards stability and control dominates over flexibility in Estonian organizations.	Partially supported	<ul style="list-style-type: none"> • In the whole sample relatively higher estimations were given to the Rational Goal type and Internal Processes type of organizational culture, which both have stability as a distinctive value. • A T-test showed that mean estimates of the Internal Processes type were not significantly different from estimations given for the Rational Goal type of organizational culture, whereas the estimations were significantly higher compared to estimations of the Open System and Human Relations types of organizational culture. • When analyzing clusters of organizations it could be noticed that stability oriented types of organizational culture dominate in organizations belonging to cluster 1; moreover, the dominance of the Internal Processes type is also the most distinctive feature for cluster 3. Cluster 2 organizations have a balanced culture and no dominant organizational culture type can be exemplified.
Proposition 3 Variation in organizational culture is greater across industries compared to differences within industries.	supported	<ul style="list-style-type: none"> • Organizational culture differences exist both within and across industries. • Diversity of organizational culture is larger in educational and service industries. • Discrepancy between organizations is the largest in respect to the Rational Goal and Internal Processes types of organizational culture. • The Rational Goal and Internal Processes types of organizational culture are also the most important cultural types for explaining organizational culture across industries. • Analysis showed that industry explains more variance in organizational culture than organizational level, which means that organizations belonging to the same industry are more similar in terms of their culture compared to organizations from other industries.

Source: compiled by the author.

Although values are believed to be relatively stable over time (Bardi and Schwartz, 2003; Hofstede, 2001), drastic changes in societies may have an impact on individual values. For example, while Schwartz and Sagie (2000) have argued that socio-economic development in the Baltic countries has not brought along any change in basic values, the research conducted by Vedina, Vadi and Tolmats (2006) shows that changes have occurred in the importance of some terminal values of people living in Estonia. When individual values are in the process of change due to changes in society, shifts in organizational culture could be expected as well, and even if the changes on the deepest grounds are not significant, changes on more explicit levels of culture may be noticed. The impact of society could certainly not be underestimated in this process because organizational culture is a subject of different internal and external forces. Because of the extensive changes in Estonia, it is difficult to underestimate the impact of contextual variables on organizations and their cultures.

Vadi and Vedina (2007: 91) have stated that 1991 was the beginning of “large-scale transition at the cultural, individual, institutional and societal levels in Soviet-bloc countries”. It has also been argued that the foundation for changes in Estonian society started in 1988, when the first changes in the political arena took place (Lauristin and Vihalemm, 1997a). From the economic perspective, the period from 1988 to 1991 was a time of decline and hyperinflation. Lauristin and Vihalemm (1997a: 82) have argued that the period 1991–1994 was when the foundations of the Estonian state were established and radical economic reforms took place (currency reform, privatization, rebirth of banking, first bankruptcies, turn to the West in foreign trade etc); the stabilization period started from 1994, when the economy stabilized, inflation decreased, the financial market and real estate market emerged and so on. By now, Estonia, among other former Eastern-bloc countries, has been in a process of change for almost two decades.

The author of the dissertation believes that although the national culture influences individuals, it has less impact on the organizational level, especially in times of rapid transition, when the influence of several forces is concentrated. Under new circumstances there is a need for different organizational practices and values in order to be competitive in the open market, and therefore, organizations may turn to entirely different values and practices. Retrospective analysis of the organizational environment and developments in entrepreneurship in Estonia by Vadi (2003b) demonstrate that development has passed through three stages – the variation, selection and retention phases – each of these phases exerting different pressures, but also providing several opportunities for organizations (see also Vadi and Vedina, 2007). For example, the transition from the command economy to the market economy in Estonia resulted in new sectors of the economy (i.e. banking, IT and others), but also fundamental changes in traditional fields (i.e. education sector). Due to extensive reforms and the implementation of a system of charging tuition fees in education, the

number of students in Estonia has increased more than twice over the last decade, which has put universities in a completely new situation, forcing them put more emphasis on their core values and organizational culture (Jaakson, 2006), something that has traditionally been more common for business organizations. Hence, societal changes have had a direct impact on organizations due to pressures from the environment and changed expectations from society towards organizations.

In new sectors like IT, the growth in the number of IT companies has been extensive – in 1991 only a small number of IT companies operated in the Estonian market, and by 2006 there were as many as approximately 1600 (Reino, Kask and Vadi, 2007). Reino *et al* (2007) have highlighted that concerning developmental phases in the IT sector in general (Bullinger *et al*, 2000), development in the Estonian IT sector has been more rapid compared to the rest of the world. The same evidence can also be found for the banking sector in Estonia (Liuhto *et al*, 2007). The dynamics around organizations create challenges in organizations as well, pushing them to look for the most suitable organizational values and practices. Schein (1997: 371) has argued that in a complex and turbulent environment, relationships should be valued in order to achieve the level of trust and communication to make joint problem solving and the implementation of solutions possible. The results from the study of the relationships between organizational culture and academic performance seem to support this idea – the research demonstrated that the national examination results were higher in those large urban schools, where both task and relationship orientations of organizational culture were higher and the school administration exhibited the attitude that the school environment and leadership are important factors of school performance (Aidla, 2009). It has also been argued that in dynamic environments, organizations with loose designs perform better than organizations with tight structures (Nogueira and Raz, 2006). In this respect the findings of the present research demonstrate at least some mismatch between organizational culture and characteristics of the environment because stability and control orientation of organizational culture is quite dominant in the organizations belonging to the sample.

The present research also indicated that considering contextual variables other than national culture is important. In a sample of organizations, three clusters of organizations could be distinguished on a cultural basis, which demonstrates that using national culture as the only variable to explain patterns of organizational culture may be to a certain extent misleading. Although the national culture is an important factor that influences patterns of organizational culture, industry seems to mediate the impact of national culture.

Analysis shows that the borders between the clusters of organizations run roughly between industries (the first cluster included mostly organizations from production and service sectors; educational organizations belonged to the second cluster, and the third cluster combined legal protection, health care organizations, and also one educational organization providing military edu-

cation). The findings also indicated that industry is to a great extent important in organizational culture because although differences exist between organizations operating in the same industries, variation is significantly higher between different industries. The impact of industry was especially strong on the Rational Goal and Internal Processes types of organizational culture, whereas variation in the Open System and Human Relations types was explained less by industry. Thus, the conclusion could be made that although it is important to study patterns of organizational culture in the context of national culture, the empirical research tends to support the idea of the existence of an industry's ideology as a powerful cross-border determinant of organizational culture.

The present research indicated that educational organizations have the most balanced culture; all four types of organizational culture were represented almost equally in their organizational culture. Referring back to previous studies (e.g. Bartell, 2003; Ellström, 1983), which highlight that universities incorporate the principles of bureaucracies, hierarchies and coordination, but are at the same time ambiguous and loosely coupled systems with unclear, differentiated and fuzzy goals, the pattern of organizational culture found in educational organizations in the present study reflects the essence of *academia* quite well. Service and production organizations studied in the present research are mostly focused on Rational Goal and Internal Processes type, which have also been brought out by Chatman and Jehn (1991) and Dastmalchian *et al* (2000) as distinctive features of manufacturing and service companies. The last group of organizations consisting of health care and legal protection organizations, but also one school providing education for national defense with similarities to military organizations, demonstrated an organizational culture pattern where the Internal Processes type dominated over the other types of organizational culture. Again, this finding is in line with previous notions about organizational culture of similar kinds of organizations (see for example Boyne, 2002; Bradley, 2000; Dastmalchian *et al*, 2000; Lok and Crawford, 1999; Savič and Pagon, 2008; Wright, 2005).

Thus, the results of this study were generally in accordance with previous studies analyzing the organizational culture of organizations from different industries and making comparisons within and between the industries. The results indicate that Estonia does not provide an exceptional case in the sense that organizational culture seems to be quite an industry-specific phenomenon, especially concerning the Rational Goal and Internal Processes types of organizational culture. Unlike previous studies, this survey demonstrated that while industry explained manifestations of the Rational Goal and Internal Processes types of organizational culture, it was not very powerful for explaining the Human Relations and Open System types of organizational culture. This means that it is important to also consider other variables besides industry when explaining manifestations of organizational culture.

Organizational determinants of organizational culture (P4a, P4b, P5a–5c)

The following section collects and discusses the findings of this study concerning the impact of organizational factors on organizational culture. Referring back to the conceptual works (e.g. Cameron and Quinn, 1999; Schein, 1991; Schein, 2006; Wiener, 1988) and previous studies (e.g. Alas, 2004; Camison-Zornosa *et al*, 2004; Damanpour, 1992; Dastmalchian *et al*, 2000; Tsui *et al*, 2006; Vadi and Alas, 2006; Van Wijk *et al*, 2007), organizational age and size are believed to have a significant impact on the development of patterns of organizational culture in organizations (see chapter 1.2.3).

The current research empirically tested the impact of organizational age and size on patterns of organizational culture in Estonian organizations. Table 25 gives an overview of the main findings of the present study considering the impact of organizational age on organizational culture, and table 26 summarizes the findings about the impact of organizational size. The results from the present study gave rather mixed results: two propositions (P5a and P5b) out of three concerning the impact of organizational size on organizational culture were partially supported, but none of the propositions about the influence of organizational age on organizational culture pattern have been confirmed in the study.

Age of the organization is believed to be a significant influencing factor in the formation of organizational culture. Even if there is not much research focusing specifically on the impact of organizational age on organizational culture, arguments on theoretical grounds propose that culture is perceived more homogeneously by organizational members in older organizations because of the existence of more settled traditions and values. Moreover, because of this more rooted culture, older organizations are believed to be more stability oriented than new ones. Contrary to the propositions set up on the basis of the theoretical considerations, the current research gave results that are not in line with the theoretical arguments. Namely, the findings from the sample indicated that the diversity in perceptions of organizational culture was greater in old organizations and no clear pattern could be found in respect to the flexibility and stability orientations in the groups of new and old organizations.

In the case of old organizations, those aspects of organizational culture that focus on internal matters of organization (Human Relations and Internal Processes types of organizational culture) were perceived similarly by organizational members from different organizational levels, which means that organizational age favors attaining consensus between organizational members about intra-organizational relationships and regulations. The diversity in perceptions of results orientation and openness and flexibility may indicate that the reorientation the older organizations had to go through due to the transition in society, caused a disruption of some aspects of organizational culture.

Table 25. The validity of the propositions considering the effect of organizational age on organizational culture (P4a and P4b) and a summary of the main research results

Propositions	Validity	Results
Proposition 4a Organizational culture is perceived in a more homogeneous manner in older organizations.	Not supported	<p>The analysis of estimations of organizational culture in respect to the employee's position indicates that less diversity exists in perceptions of organizational culture in a group of new organizations, because:</p> <ul style="list-style-type: none"> • <i>In old organizations:</i> 1) the respondent's position does not differentiate estimations of the Human Relations and Internal Processes types of organizational culture. 2) Differences exist in estimations of the Open System type (managers' estimations are higher than blue-collar's estimations). In the case of the Rational Goal type of organizational culture, specialists' estimations are lower than estimates given by managers, and blue-collar's are significantly different within that position. • <i>In new organizations:</i> respondent's position in the organizational hierarchy highlights differences only in Open System type of organizational culture (managers' estimations are higher than estimates given by other positions). <p>The analysis of estimations of organizational culture in respect to the employee's tenure in the organization indicates that the diversity of estimations is higher in new organizations, because:</p> <ul style="list-style-type: none"> • <i>In old organizations:</i> 1) tenure does not differentiate estimations of the Open System type of organizational culture. 2) in respect to the other types of organizational culture, estimations vary significantly within the tenure groups. • <i>In new organizations:</i> significant differences exist in all types of organizational culture.
Proposition 4b Older organizations are more stability and less flexibility oriented than new organizations.	Not supported	<p>The comparison of organizations based on the analysis of variance gave the following results:</p> <ul style="list-style-type: none"> • Compared to old organizations estimations of the Rational Goal and Internal Processes type of organizational culture are higher in the group of new organizations. • No differences exist in estimations of the Open System and Human Relations types of organizational culture. • Industry mediates the impact of organizational age on patterns of organizational culture. <p>Logistic analysis showed that organizational age does not predict significantly any of the types of organizational culture.</p>

Source: compiled by the author

When considering the perception of organizational culture by employees with different tenure in the organization, both new and old organizations demonstrate a diversity of estimations in the basis of different tenure groups. This result clearly shows that organizational culture is a socially-construed phenomenon, and the socialization process and shared experiences are crucial in order for a shared culture to develop.

Because of traditions and shared values, old organizations are believed to be more stability oriented than new organizations, where organizational culture is not rooted yet. Rooted cultures are believed to be more rigid compared to those organizations that have no long traditions. However, these theoretical arguments were not supported by the current study. The research demonstrated that in respect to the Human Relations and Open System types of organizational culture, the groups of new and old organizations are similar. The estimations of these types of organizational culture were not statistically different in the case of old and new organizations; moreover, in both groups of organizations the Human Relations and Open System types of organizational culture were less characteristic of organizations compared to the Rational Goal and Internal Processes types of culture. This finding proves that similar patterns of organizational culture could be found in new and old organizations in Estonia. At the same time, in new organizations, the Rational Goal and Internal Processes types of organizational culture obtained significantly higher estimations than in old organizations, which means that new organizations are more task-oriented, but also more formalized and bureaucratic than old organizations.

These kinds of results could be interpreted in terms of the organizational life-cycle model (e.g. Greiner, 1972). As several new organizations in the sample operate in new industries (for example IT, entertainment, recycling) or in old industries where the ideology has to a great extent changed (for example some education organizations), during quite a short time frame, organizations have experienced rapid development involving different developmental stages. In newly established organizations, employees may perceive differences in organizational culture between the early stages of organizational development and the present organizational culture more clearly, and from this comparison some aspects of culture may become more emphasized. For example, a case study analyzing patterns of change in organizational culture in IT organizations over the period 1992–2005 demonstrated that the combination of internal and external factors induced changes in organizational culture (Reino *et al*, 2007); moreover, the organizational culture developmental path was broadly similar to that proposed by Quinn and Cameron (1983).

Although the comparison of mean estimations of types of organizational culture brought out some differences between old and new organizations, the regression analysis showed that organizational age alone does not predict estimations of any of the types of organizational culture in the case of Estonian organizations. This kind of result may be explained by considering the historical background of the organizations operating in Estonia today.

Figure 24 depicted a hypothetical connection between society and organizational variables, which means that processes in society influence organizational development and shape their historical background. It has also been argued that at the beginning of 1990s, when the environment in Estonia changed quickly, old organizations that had established their organizational culture during the communist period of stagnation were not ready for such quick changes, and conflicts in these organizations were not rare (Tampere, 2003: 24). But even if rapid changes were not possible, the transition from the command economy to the market economy encouraged organizations to adapt to the new conditions and reorganize their activities. Therefore, one can argue that in transition economies, it is too bold to make a distinction between old and new organizations because several transformations have occurred in organizations during quite short period.

It has been demonstrated that during the period of transition, the organizational landscape in Estonia was quite multifarious and four types of organizations could be distinguished (Üksvärav, 1995). Large enterprises and surviving departments that had been influenced by new tendencies, but at the same time kept something from the past, formed the first type of organizations. The second group of organizations were recently established small firms that were greatly influenced by the ideology of a single person. The third type included financial companies that introduced a new method of operation and used new technologies, and the fourth type involved foreign firms or companies with a foreign partnership, which brought the influence of other cultures into organizations and significantly shaped the organizational culture of those organizations (*Ibid.*). The case study by Reino *et al* (2006) has demonstrated how a new organization *de jure* (established in 2004) was restructured and reorganized several times, and that the history of the organization, which certainly influences its organizational culture today, goes back to the 1950s. This is not an exceptional case, many organizations like this can be found in Estonia. Hence, in transition economies like Estonia, distinguishing between old and new organizations is not always meaningful because it does not help explain organizational culture.

Another organizational variable that was considered in the scope of the current research was the size of the organization. Table 26 summarizes the main findings concerning patterns of organizational culture in respect to organizational size.

Table 26. The validity of propositions considering the effect of organizational size on organizational culture (P5a–5c) and a summary of the main research results

Propositions	Validity	Results
Proposition 5a Larger organizations foster values that aim to ensure integration by means of formalization and centralization, while cohesion, trust and close relationships between organizational members are more prevalent in patterns of organizational culture in smaller organizations.	Partially supported	<ul style="list-style-type: none"> • Compared to large organizations the Internal Processes type of organizational culture is less characteristic of medium-sized organizations. • Estimations of the Human Relations type in medium-sized organizations are higher than in large organizations. • No differences can be found in estimations of the Human Relations type in service organizations; in the case of production organizations large organizations scored significantly lower for the Human Relations type of organizational culture than medium sized organizations. • The binary logit analysis shows that organizational size predicts estimations of the Internal Processes type of organizational culture (large organizations have higher estimations for this organizational culture type) and the Human Relations type (large organizations have lower estimations of the Human Relations type compared to medium-sized organizations).
Proposition 5b Smaller organizations are more flexible and open to change than larger organizations.	Not supported	<ul style="list-style-type: none"> • Analysis of variance does not report significant differences in respect to the Open System type of organizational culture between medium-sized and large organizations. • No differences were found between large and medium-sized organizations from the production industry; • In the service industry the estimations of the Open System type of organizational culture are higher in large organizations. • The binary logit analysis predicts above-average estimations of the Open System type in large organizations
Proposition 5c The results orientation of an organization is unaffected by its size	Partially supported	<p>The comparison of organizations based on the analysis of variance demonstrates that:</p> <ul style="list-style-type: none"> • mean estimations of the Rational Goal type are significantly higher in medium-sized organizations compared to large organizations; • in the production industry no significant differences can be found between estimations by large and medium-sized organizations; • in the service industry large organizations are more results oriented than medium-sized organizations. <p>The binary logit analysis shows that organizational size predicts estimations of the Rational Goal type of organizational culture – more precisely, large organizations are expected to have higher results orientation compared to the medium-sized organizations.</p>

Source: compiled by the author

The findings of the research demonstrated that organizational size seems to have a certain impact on patterns of organizational culture, but organizational size alone predicts types of culture significantly less, for example, than industry. While the logistic regression predicted higher estimations of the Rational Goal type, the analysis of variance demonstrated that the Rational Goal type of organizational culture was more characteristic of medium-sized organizations. The ANOVA analysis made it possible to highlight differences in estimations of types of organizational culture on the basis of one single variable, but the logistic analysis also considers the impact of other variables. Based on the analysis, the author concludes that organizational size alone is not a suitable variable to explain patterns of organizational culture because focusing only on the effect of size and not taking into account other variables may result in misleading results.

A good example of this is that throughout the sample estimations of the Rational Goal type were higher in medium sized organizations, but contrary to this, higher estimations of the Rational Goal type were found in large service organizations. In the case of production organizations, size did not differentiate between estimations of types of organizational culture. Considering such incompatible results and the lack of evidence from the literature about the effect of organizational size on the results orientation of the organization, the author assumes that no grounds exist for sound conclusions about the existence of a relationship between organizational size and the Rational Goal type of organizational culture. The Rational Goal type of organizational culture seems to capture characteristics that are mostly determined by the field of activity the organization operates in. These results prove that it is important to consider the broader context of organizations prior to making any meaningful comparisons between the units of the analysis (i.e. organizations in our case).

Concerning the Internal Processes type of organizational culture, the findings here are in accordance with the results of studies that have proposed that large organizations tend to be more bureaucratic and foster internal mechanisms and formalization in order to ensure the smooth operation of the organization (see for example Astley, 1985; Dastmalchian *et al*, 2000). The findings of this study indicated that the Internal Processes type of organizational culture is more characteristic of large organizations, and the Human Relations type of organizational culture is by contrast more common in medium-size organizations. Again, the industry where the organization operates may propound different patterns, for example, in the service industry size did not differentiate between organizations on the basis of estimates of the Human Relations type, but size certainly differentiated between organizations from the production industry.

The Human Relations type incorporates those aspects of organizational culture that characterize relationships between organizational members. The author of the dissertation believes that the finding of the study, indicating the insignificant impact of organizational size on the Human Relations type in

service organizations is quite expected. The results from the regression analysis demonstrated that the level of the description of the overall variation in the model composed for the Human Relations type is quite low, which may demonstrate that for this type of organizational culture other variables like individual characteristics for example are significant and should be taken into account.

Tolmats and Reino (2006) have demonstrated that positive correlations exist between employees' emotional intelligence and estimations of the Human Relations type. Emotional intelligence is considered an important competence among employees, especially in those organizations that are focused on the customer and where direct contact with the client is possible. Service organizations certainly fit this case. Although not empirically tested in the scope of the present study, one could expect that because of the central role of the service provider's social skills in service organizations, the criteria applied in the recruitment of employees may be interpersonal skills. Empathy, communication skills, identifying with others and the successful management of emotions is important in the work-place setting because it is the basis for emotional flexibility and helps in dealing with difficult topics directly, listening actively to others and sharing information (Matthews *et al*, 2004). If organizational members hold values and skills that favor interpersonal relationships, this may be a good basis for developing the Human Relations type of organizational culture in the organization, and organizational size will not matter in such a case.

The Human Relations type of culture is based on leadership, which could be characterized by a sense of mutual trust and emotional connectedness, which has an influence on the moral behavior of organizational members (Tourigny and Dougan, 2004), or to put it differently – compared to the manufacturing sector, social control based on relationships is more important in service organizations (Vadi and Alas, 2006). The weaker role of interpersonal relationships in manufacturing organizations has also been pointed out by Harrison and Carroll (1991). Compared to service organizations, production organizations tend to be organized more along functional lines, and the larger the organization, the more boundaries can be found between different functional divisions. Therefore, creating interpersonal relationships may become more difficult, and they may be considered less significant. This may be why the Human Relations type of organizational culture is less characteristic of large production companies.

In the case of the Internal Processes type, the pattern was similar both in service and production industries – large organizations demonstrated higher estimations of the Internal Processes type of organizational culture. In the literature there are those for and against the argument that smaller organizations are more flexible, open to change and innovative compared to large organizations (see discussion in 1.2.3). Considering the arguments by Hannan and Freeman (1984) about organizational structures, evidence about bureaucracy as restricting innovativeness (Sørensen and Stuart, 2000) and the phenomenon of

organizational inertia (Schein, 2006), it was proposed that smaller organizations are more flexible and open to change compared to larger organizations. Nevertheless, the findings of this study indicate the opposite – above average estimations of the Open System type 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 patterns of organizational culture, 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, and a factor that also restricts the scope for making generalization from the results.

When analyzing the results of the regression analysis, interesting findings could be reported. Generally both, organizational and contextual variables count for estimations of types of organizational culture, but as mentioned before organizational age does not predict the score for any of the types of organizational culture. Organizational size is a significant predictor of all types of organizational culture, but as the results demonstrated, industry counts for patterns of organizational culture the most. Still, the organizational and contextual variables analyzed in the current research do not have equal power in explaining the scores for types of organizational culture. Organizational size, age and industry explain the Rational Goal and Internal Processes types more, but 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 empirical study are important, there are other factors and variables that should also be considered as determinants of organizational culture. It seems that in the case of developing the Human Relations and Open System types, individual-level characteristics may contribute more than other factors because industry and organizational size do not have a strong impact on those aspects of organizational culture.

CONCLUSION

Organizational culture has been considered a powerful force influencing organizational behavior and the overall performance of organizations. In stressing the importance of the concept of organizational culture, it has been argued that in order to understand the true essence of an organization, “soft issues” should be taken into account because it is difficult to understand an organization without understanding its culture. Despite the rather long traditions in the research of organizational culture, there are several topics that need to be discussed in more detail and this could be seen as the motivation behind the current dissertation. The dissertation has attempted to systematically analyze the nature of the concept of organizational culture and bring together the forces that influence the development of organizational culture; moreover, it also focused on methodological issues of the analysis of organizational culture.

Concerning the factors influencing the formation of organizational culture, an imbalance exists between the theoretical discussion of the topic and empirical research in the field, especially concerning the analysis of factors that determine organizational culture. While research into organizational culture in Western countries has quite a long history, no systematic overview and analysis of the topic has been made in Estonia. In the author’s opinion Estonia provides a good case for studying organizational culture, first of all in terms of the impact of contextual and organizational factors as determinants of organizational culture. Path dependency may be considered as a powerful force that shapes organizational culture, and therefore, specific patterns of organizational culture could be expected to occur in Estonian organizations. Therefore, the dissertation aimed to outline regularities and patterns in manifestations of organizational culture using the example of Estonian organizations. The analysis focused on contextual (national culture and industry) and organizational factors (organizational size and age). Individual characteristics of organizational members were left out of the study, partly because of imperfect data, but also because the connections between individual characteristics and organizational culture have already attracted considerable attention in previous research in Estonia.

The present dissertation consists of two major parts. The first chapter of the dissertation is theoretical and creates the theoretical and conceptual basis for formulating the propositions for the empirical research. The second part of the dissertation contains the empirical research, which analyzes the patterns of organizational culture and the determinants of patterns of organizational culture in Estonian organizations.

Theoretical background to the organizational culture concept and an overview of the determinants of organizational culture

Culture is a notion that is used to describe the way people live in the most general sense, and organizational culture makes it possible to decipher how people think and behave at the organizational level. Several approaches and paradigms exist in the field of organizational culture, which could be explained using the variety of understandings of the phenomenon of culture as such. On the one hand, several schools of thought can be identified that approach culture as an ideational system, while on the other hand, others approach culture as a socio-cultural system. These paradigms have given rise to two primary focuses in the research into organizational culture: firstly, the symbolic approaches to organizational culture, and secondly, the socio-cultural approaches. The present dissertation analyzes organizational culture from the perspective of the socio-cultural school of thought because in the author's opinion it provides more opportunities for identifying relationships between organizational culture and different variables, which in turn make comparisons between organizations possible.

The plethora of definitions and understandings of organizational culture in the socio-cultural school of thought is notable, and the analysis of the definitions of organizational culture proposed by different authors demonstrates that several concepts have been used to define the phenomenon. Because of the need to systematize the concept of organizational culture, the author of the dissertation analyzed the entire range of definitions of organizational culture both on the conceptual and terminological level (e.g. Harrison, 1972; Trice and Beyer, 1993; Deal and Kennedy, 1982; Hofstede, 1998; Schein, 1983), and brought out two core dimensions – stability/flexibility and internal/external focus – which could be considered relevant when defining the phenomenon of organizational culture.

Organizational culture has been considered a multifaceted phenomenon, which consists of several elements. Some elements of organizational culture are tacit (e.g. basic assumptions, but partially also values and ideology) and cannot be observed as such, but which manifest themselves through explicit elements of organizational culture (e.g. cultural forms, symbols, rituals, traditions etc). Although organizational culture is believed to have a significant influence on organizational performance and behavior, the causality is not always easy to identify, first of all because of the complicated nature and multi-layered quality of the concept. Still, empirical studies have found evidence of relationships between organizational culture and organizational performance (return on investment and sales, assets and premium growth, quality of products and services, revenue etc) and work-related outcomes (organizational commitment, job satisfaction, turnover etc). These findings prove that it is important to

consider organizational culture as a core resource of the organization, which may contribute to organizational sustainability in the long run.

Empirical research (but also theoretical arguments) has demonstrated that it is useful to use typologies to decipher organizational culture, because typologies provide distinctive dimensions for analyzing organizational culture and helping to make sense and order out of the observed phenomena. Although typologies also have their limitations (e.g. typologies are not exhaustive and they are always abstractions), their main advantage is that they make comparisons between organizations on similar grounds possible. Several typologies that have been applied in analyses of organizational culture were discussed in the dissertation, and as a result the Competing Values Framework was selected as the frame of reference for the empirical research. In the author's opinion, the Competing Values Framework has several advantages compared to other typologies. First of all, the framework consists of the dimensions that several authors have considered most important for defining organizational culture. Moreover, the particular typology captures the dimensions that are relevant in transition societies.

Using types of organizational culture for the analysis means that organizational culture is described through attributes that are characteristic of certain types, and from this perspective the term patterns of organizational culture can be used. Patterns of organizational culture demonstrate the relative importance of types of organizational culture in a particular organization, and also denotes the relationships between the types of organizational culture.

Patterns of organizational culture are seen as the result of several simultaneously influential factors that have an effect on the organization. The formation of organizational culture has been approached as an "incremental process" (Gagliardi, 1986), where three sets of factors are involved: 1) contextual factors (national culture, society and the organization's field of activity); 2) organizational factors (organizational characteristics like the organization's history, age, size) and thirdly, the people connected to the organization (founders, owners, leaders and organizational members). All these factors may be crucial at the same time, but unfortunately the influence of particular variables have not been brought together into a single study and usually only a few of these factors are taken into account when carrying out research in the field.

Therefore, the originality of the current dissertation derives from the fact that it combines several contextual and organizational determinants. The present research aimed to highlight the influence of national culture on patterns of organizational culture, and also to analyze the differences in patterns of organizational culture determined by the industry the organization operates in. Moreover, organizational size and age was considered as determinants of the patterns of organizational culture.

The data and research methodology

The data was collected between 2004 and 2008 in three stages. In the first stage (2004), data was collected for the pilot study from three organizations (185 respondents). By the end of 2006 (stage II), data had been collected from 2 406 respondents, which was enough to construct subscales. Finally, during the years 2007–2008, 580 respondents from four organizations were added to the sample. The principle for choosing the organizations for the study was to provide diversity among the organizations in terms of industry, size and age of the organization. The diversity was necessary to create a reliable instrument for measuring organizational culture and also to test the propositions.

Altogether 29 organizations with 2 986 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). There were 19 large and 10 medium-sized organizations in the sample. Fifteen organizations were founded after Estonia regained its independence in 1991 (defined as “new” organizations) and 14 organizations existed before the 1991 (“old” organizations).

The empirical research for this dissertation involved two parts. The first part focused on the compilation of the Organizational Values Questionnaire (starting in 2003), and the second part involved testing the research propositions (in 2008). The methods used in the process of compiling the questionnaire included an analysis of the written material, expert judgments, factor analysis and reliability analysis. The statistical methods used to test the propositions included descriptive statistics, mean comparison methods (analysis of variances (ANOVA), t-test), correlation analysis, cluster analysis and regression analysis.

The Organizational Values Questionnaire compiled by the author was used in the study. The compilation of the questionnaire started with the analysis of the literature on organizational culture, but also the analysis of the typologies used in research into organizational culture. After selecting a framework, 79 questionnaire items were formulated by the author and experts were involved in the questionnaire development process. The author then formulated additional items after analyzing the expert assessments of the original 79 items, and once more the expert group assessed these additional items. Again the author analyzed the expert assessments and formulated additional items once more and another, larger group of experts were asked to analyze and estimate the items in the questionnaire. As a result of these phases a questionnaire containing 53 items was formed.

A factor analysis (an oblique rotation method of principal component analysis for items with varimax rotation and Kaiser Normalization) was conducted in order to form subscales for analyzing organizational culture. A four-factor structure of 19 items was found to be good enough to form four

subscales of organizational culture describing types of organizational culture. A short description of the types of organizational culture and subscales follows:

- 1) *The Open system type* (subscale contains five items, Cronbach alpha is 0.79) describes the organization in terms of flexibility and external focus. Organizations that score high on this subscale are those that are innovative, value employee creativity and innovative fresh ideas. The core values of this kind of organization – adaptability, openness to change and innovativeness – could also be found in managerial attitudes and organizational procedures (e.g. in compensation systems). In this type of organization the management encourages employee initiative and commitment.
- 2) *The Internal Processes type of organizational culture* (five items in the subscale with a Cronbach alpha of 0.80) is characteristic of organizations where performance is highly regulated by written rules where detailed job descriptions have been worked out and a strict reporting system is applied. The management demands much from the employees, and organizational members are expected to follow orders and rules. Stability and focus on internal matters set the framework for this type of organizational culture.
- 3) *The Human Relations type* (subscale is composed by five items, Cronbach alpha 0.78) incorporates aspects of flexibility and internal focus, meaning that the organization which fosters this particular type of organizational culture believes that success could be gained through building trust and close relationships among the people belonging to the organization.
- 4) *The Rational Goal type* (subscale includes four items with a Cronbach alpha of 0.79) focuses on external matters with the aim of gaining control over them. This type more than the others focuses on the results defined through market share and profit maximization, believing that the success of the organization depends on how successfully it can control the market.

Testing the propositions and their validity

Based on the theoretical discussion and previous empirical studies, ten propositions were formulated in the theoretical part of the dissertation. These propositions can be divided into three groups. The first group explores what kinds of connections exist between the types of organizational culture. The second set of propositions analyzes the impact of contextual variables on organizational culture, and the third group aims to explore the impact of organizational characteristics on organizational culture. Additional analysis of the effects of different variables on organizational culture was performed using a regression analysis. The propositions and the main results of the empirical analysis will be presented in the following paragraphs.

Propositions 1a and 1b were set to explore the relationships between types of organizational culture:

Proposition 1a:

Types of organizational culture are complementary to each other, but there are differences in the strengths of the relationships between the different types of culture.

Proposition 1b:

Stronger connections exist between those types of organizational culture that share common values (adjacent quadrants) compared to the connections between the types of organizational culture from opposite quadrants.

Proposition 1a was fully supported and Proposition 1b was partially supported by the analysis. The analysis demonstrated that four types of organizational culture are positively correlated to each other, which means that the types of organizational culture are complementary to each other. The study of the relationships indicated that connections of different strengths could be found between the types of organizational culture.

Relatively stronger, but still moderate correlations were found between two pairs of types of organizational culture from adjacent quadrants (between the Human Relations and Open System types; and between the Internal Processes and Rational Goal types of organizational culture), but no strong correlations could be found between types of organizational culture from other adjacent quadrants in other dimensions (between the Human Relations and Internal Processes types; and Open System and Rational Goal types of organizational culture). Concerning the relationships between types of organizational culture from opposite quadrants, medium-sized correlations were found between types of organizational culture.

The next propositions, Proposition 2a and 2b, aimed to analyze the impact of national culture on organizational culture. The propositions were as follows:

Proposition 2a:

Organizations that operate in the same national cultural context share similar patterns of organizational culture.

Proposition 2b:

The tendency towards stability and control dominates over flexibility in Estonian organizations.

These propositions were both partly supported because on the one hand, the analysis demonstrated similarities in patterns of organizational culture in Estonian organizations (more precisely the dominance of types of organizational culture that value stability and control), but on the other hand, more detailed analysis indicated several differences in estimations of organizational culture in different organizations.

Generally, organizations in the sample gave higher estimations to the Rational Goal and Internal Processes types of organizational culture, which both have stability as a distinctive value. These types of organizational culture may be considered dominant types of organizational culture in Estonian organizations. But a more detailed analysis demonstrated that it is possible to differentiate between three groups (clusters) of organizations on the basis of patterns of organizational culture, and the analysis of cluster membership showed that industry may have a significant effect on patterns of organizational culture because organizations from the same field of activity mostly belong to the same cluster.

Cluster 1 mainly includes service and production organizations, where the Rational Goal and Internal Processes types of organizational culture dominate over other types of culture. Legal protection and health care organizations and one institution for defense education belong to cluster 3, where the Internal Processes type of culture dominates in the pattern of organizational culture. Educational organizations mostly belong to Cluster 2, and these organizations could be characterized as organizations with the most balanced culture because no dominant organizational culture type could be distinguished.

Proposition 3:

Variation in organizational culture is greater across industries compared to differences within industries.

This proposition was fully confirmed by the analysis. It became evident that differences exist both within industries at the organizational level, but also across industries. When analyzing differences in organizational culture in different industries, it could be concluded that diversity of organizational culture is larger in education and service sectors. Differences between organizations are larger in respect to the Rational Goal and Internal Processes types of organizational culture, which means that estimations given to the Open System and Human Relations types of organizational culture vary less. This finding proves that Estonian organizations are quite similar in terms of these types of organizational culture, but results orientation, formalization and bureaucracy are the most important cultural characteristics explaining organizational culture across industries.

The analysis of patterns of organizational culture in respect to industry showed that sector explains more variance in organizational culture than the organizational level, which means that organizations belonging to the same sector are more similar in terms of their culture compared to organizations from other sectors.

The regression analysis showed that industry is the most important variable predicting estimations of the Rational Goal and Internal Processes types of organizational culture. Industry also predicts estimations of the Human Relations and Open System types of organizational culture, but the influence of industry on these types is not very strong.

The next propositions were specified in order to analyze the impact of organizational age on patterns of organizational culture.

Proposition 4a:

Organizational culture is perceived in a more homogeneous manner in older organizations.

Proposition 4b:

Older organizations are more stability and less flexibility oriented than new organizations.

These propositions were not confirmed by the empirical research. The homogeneity of perceptions of organizational culture was analyzed in two respects: firstly, the estimations of organizational culture given by organizational members from different levels of the organizational hierarchy were compared, and secondly, the homogeneity of perceptions of organizational culture by different tenure groups was analyzed. The analysis of perceptions of organizational culture according to different occupational groups indicated less diversity in new organizations, but at the same time, it became evident that when considering organizational culture estimations on the basis of different tenure groups, the diversity of organizational culture estimations is higher in new organizations. Thus, it is difficult to make clear conclusions about the homogeneity of organizational culture in respect to organizational age.

A comparison of patterns of organizational culture in new and old organizations also gave mixed results. The Rational Goal and Internal Processes types of organizational culture are more characteristic of new organizations, but no differences were found in estimations of the Open System and Human Relations types of organizational culture. The regression analysis showed that in general, organizational age alone does not significantly predict any of types of organizational culture, which means that due to the transition processes in society and considering the impact of those changes at the institutional level, it is not meaningful to distinguish between old and new organizations. Even if some differences could be found between organizations on the basis of their age, patterns of organizational culture do not follow a similar logic to that proposed on theoretical grounds or on the basis of the empirical evidence from other countries.

The next three propositions analyze patterns of organizational culture in respect to organizational size.

Proposition 5a:

Larger organizations foster values that aim to assure integration by means of formalization and centralization, while in smaller organizations cohesion, trust and close relationships between organizational members are more prevalent in patterns of organizational culture.

This proposition was partly supported by the analysis, which showed that compared to large organizations, the Internal Processes type of organizational culture, which could be characterized by formalization and centralization, is less characteristic of medium-sized organizations. It was also found that estimations of the Human Relations type are higher in medium-sized organizations. The regression analysis gave similar results, proving that organizational size predicts estimations of the Internal Processes type of organizational culture (large organizations have higher estimations of this type of organizational culture) and Human Relations type (large organizations have lower estimations of the Human Relations type compared to medium-sized organizations). Nevertheless, these findings seem to be industry-specific because, for example, no differences could be found in estimations of the Human Relations type in service sector organizations, but in the case of production organizations, large organizations scored significantly lower in the Human Relations type of organizational culture than medium sized organizations.

Proposition 5b:

Smaller organizations are more flexible and open to change than larger organizations.

This proposition did not find support from the empirical research because, contrary to the proposition, the regression analysis predicted above-average estimations of the Open System type in large organizations, but the analysis of variances did not bring out any significant differences between the estimations of the Open System type of organizational culture in the group of medium-sized and large organizations.

Proposition 5c:

The results orientation of an organization is unaffected by its size.

This proposition found partial support in the empirical analysis. The findings demonstrated that medium-sized organizations were generally more results oriented than large organizations, but for example, in the case of production organizations no significant differences could be found between the estimations by large and medium-sized organizations. Still, in the service sector, large organizations are more results oriented than medium-sized organizations. Thus, the results are rather mixed and no clear evidence could be found about the relationships between results orientation and organizational size. The regression analysis demonstrated that the results orientation of the organization depends to a great extent on the industry where the organization operates, but considering organizational size, it also showed that large organizations are expected to have greater results orientation compared to medium-sized organizations.

Generalizations of findings

In order to analyze the impact of contextual and organizational factors on patterns of organizational culture in Estonian organizations, a new tool for analyzing organizational culture was developed (Organizational Values Questionnaire). The questionnaire was compiled in Estonian and translated into Russian, which makes it possible to use it for the analysis of the often-multi-cultural organizations in Estonia. Compared to the questionnaires used for previous research into organizational culture in the Estonian context, the new questionnaire expands the scope of studies of organizational culture and also provides the basis for comparisons with international studies.

Applying the OVQ for the analysis of patterns of organizational culture in Estonian organizations showed that four types of organizational culture are related to each other, which means that organizational culture should be understood as a unitary phenomenon, meaning that changing some aspects of organizational culture brings changes in some other aspects. While most of the relationships between types of organizational culture remained weak, stronger relationships were found between the Human Relations and Open System types, but also between the Internal Processes and Rational Goal types of organizational culture.

The relationships that exist between types of organizational culture may demonstrate the basic assumptions held by people in and around the organization. For example, the current study indicated a moderate connection between the Rational Goal and Internal Processes types of organizational culture, a finding that is different from previous studies conducted in different cultural areas. Therefore, author believes that the finding may be interpreted as a reflection of cultural values in Estonian society, where it is believed that in order to be competitive, internal integration and formalization is needed. Moreover this result is quite similar to findings from research conducted in Estonia supporting the idea that Estonian organizations tend to follow the principles of a well-oiled machine. But the emphasis on the results and relying on formalization may also be connected to the transitional era in society. First of all, the period of transition forced organizations to become more results oriented, but it also put pressure on people's attitudes and behavioral patterns, where significant changes were expected. The new ways of operating expected from employees also often necessitated the need for new standards and procedures, which means that organizations going through important change processes became more formalized and bureaucratic.

The results of the study demonstrated that contextual and organizational factors are important forces and factors influencing patterns of organizational culture in organizations in many respects, but still these variables are not the only ones that could explain all variations in the patterns of organizational culture. It became evident that organizational and contextual variables analyzed in the current research do not have equal power in explaining patterns of

organizational culture in organizations. The present research indicated the essential role of industry in manifestations of organizational culture, demonstrating that industry explains more variance in organizational culture than organizational level factors, at least concerning the level of results orientation, formalization and bureaucratization in organizations. At the same time, it could be concluded that for example innovativeness, openness to change and interpersonal relationships do not depend on industry so much, but could probably be explained more using individual-level variables. Similar conclusions can also be made about the impact of organizational size and age on patterns of organizational culture. The size of organizations influences estimations of the Rational Goal and Internal Processes types, but the impact on the Open System and Human Relations types is quite modest. The analysis showed that organizational age does not predict patterns of organizational culture. The author considers this finding to be limited to the context of transitional countries, since it is quite complicated to distinguish between old and new organizations because old organizations have gone through radical transformations, which raise the issue of the content of the terms “old” and “new” in the case of organizations from transition societies.

The study highlighted several findings that could be useful for organizations that desire a better understanding of the organizational culture phenomenon and the regularities of the development of organizational culture. For managers, it is important to understand that because of mutual relationships between the types of organizational culture, the implementation of change in the organizational culture and fostering some aspects of organizational culture also causes change to other aspects of the culture.

The research proved the significant effect of the national culture on organizational culture. The research demonstrated that Estonian organizations tend to be more stability than flexibility oriented, which means that organizations believe in formalization and bureaucracy quite a lot, and formal rules and regulations are believed to ensure good results. Although this mentality may work for a certain period of time, the author of the dissertation suggests that managers should also look for other possibilities (e.g. using employee-centered management techniques) to achieve the aims of the organization. Understanding the general principles of how organizations work in certain cultural contexts is important for multinational companies, and therefore, the research provides a better understanding of the values held in Estonian organizations for those MNO-s operating in or entering the Estonian market, but also for expatriates recruited to manage Estonian organizations.

Although national culture has a significant impact on organizational culture, it also became evident that the industry mediates the influence of national culture at the organizational level. Industries prescribe several rules, expectations and so on for organizations, and therefore, the role of management in shaping and developing organizational culture may become even insignificant. This is particularly true in respect to the Rational Goal and

Internal Processes types of organizational culture, where the effect of industry was most significant. Still, the research showed that the Open System and Human Relations types of organizational culture are influenced less by industry, and here the organization has more potential for contributing to the development of these particular types of organizational culture.

Implications of the study

The contribution of this dissertation is twofold: the implications of the dissertation may be brought out from the perspective of the analysis of organizational culture, but also from the viewpoint of management practices providing several implications for organizations.

The theoretical implications have mainly been drawn from the relationships between types of organizational culture, and also between contextual and organizational characteristics and organizational culture. In terms of the theory and analysis of organizational culture, the current dissertation contributes in the following ways:

1. A new tool for analyzing organizational culture has been developed in the form of the Organizational Values Questionnaire. The questionnaire was compiled in Estonian and translated into Russian, so it can be used to analyze the often-multicultural organizations in Estonia. Compared to questionnaires that have already been used to research organizational culture in the Estonian context, the new questionnaire expands the scope of studies of organizational culture. Moreover, it also provides a basis for comparison with international studies.
2. The findings of the research proved that organizational culture should be approached as a continuum, because different types of organizational culture are related to each other, but the relationships between different types of organizational culture vary in terms of strength. This means that changing certain aspects of organizational culture also affects other features of organizational culture.
3. Relationships between types of organizational culture should be interpreted in the context of national culture because the research demonstrated that, to a certain extent, the organizations in the sample share similar patterns of organizational culture, and relationships between types of organizational culture may demonstrate the underlying assumptions characteristic of the broader cultural area.
4. The present research indicated the essential role of industry in manifestations of organizational culture, demonstrating that industry explains more variance in organizational culture than organizational level factors. Moreover, it became evident that industry contributes the most to the results orientation, formalization and bureaucratization of organizations, but innovativeness and relationships between organizational members do not depend

on industry so much. These aspects of organizational culture could probably be explained more using individual-level variables.

5. The results of the current research indicated that organizational age does not predict patterns of organizational culture. This finding may be limited to the context of transitional countries because it is rather complicated to distinguish between old and new organizations. Old organizations have gone through several radical transformations, and therefore, it is difficult to talk about the continuity of organizational culture even in organizations with a long (formal) history.
6. From the research, several connections between organizational size and patterns of organizational culture were found, which means that unlike organizational age, another organizational characteristic – the size of the organization – seems to have an impact on the pattern of organizational culture. The findings of the present study are mostly in line with conclusions from previous research. Large organizations tend to be more formalized and bureaucratized and less employee-oriented than smaller organizations. Contrary to some theoretical considerations and previous empirical studies, the current research indicated that large organizations are more flexible, open to change and they also value innovativeness more than medium-sized organizations. The comparison of production and service organizations demonstrated that the influence of organizational size on patterns of organizational culture may be industry-specific; more precisely, that in the production sector organizational size may influence some aspects of organizational culture more than in the service sector. This kind of result underlines the importance of considering several factors when studying organizational culture because it makes it possible to discover more regularities in manifestations of organizational culture.

There are implications for managers from the above-mentioned connections, which could be taken into account when planning managerial actions. The implications for managers from the present research are as follows:

1. The research indicated mutual relationships between types of organizational culture, which should be considered when planning or implementing changes in organizational culture. More precisely, it is not possible to foster some aspects of organizational culture without influencing other facets of the culture. For example, the research indicated quite strong relationships between the Open System and Human Relations types of organizational culture, which means that in order to increase the adaptability of the organization and promote innovativeness in the organization and among its members, it is necessary to turn attention to the relationships between employees. Creating and favoring close relationships and trust between organizational members encourages people to be more creative, innovative and open-minded, which may contribute to organizational development and sustainability.

2. The research demonstrated the impact of national culture on organizational culture, and the nature of relationships between types of organizational culture demonstrates the tenets held in Estonian organizations. Estonian organizations tend to be more stability than flexibility oriented, which means that organizations believe in formalization and bureaucracy quite a lot. It is believed that good results, but also flexibility, could be gained via formal rules and regulations. The author of the dissertation suggests that managers should also look for other ways of achieving the aims of the organization because relying on rules and regulations is not a sustainable way of managing the organization – greater emphasis should be put on employee-centered management techniques.
3. The research provides a better understanding of the values held in Estonian organizations and this can help multinational companies operating in or entering Estonia, but the findings may also be practical for expatriates recruited to manage Estonian organizations. Moreover, because national culture influences organizational culture quite a lot, it underlines the importance of cultural intelligence in the globalizing world.
4. The research pointed out the role of industry in manifestations of organizational culture, meaning that the industry the organization operates in may determine organizational culture to a great extent. This is especially true for the Rational Goal and Internal Processes types of culture, where the organization's potential for creating an entirely different culture than in other organizations from the same industry may be scant. Still, the Open System and Human Relations types of organizational culture are influenced less by industry, and therefore, in respect to these aspects of organizational culture, the organization has more opportunities to contribute to the development of these particular types of organizational culture.
5. The comparison of *new* and *old* organizations indicated that in terms of the unitary nature of organizational culture, no difference exists between the two groups of organizations. The results indicated that organizations consist of subcultures formed on the basis of employee tenure in the organization, and the employee's position determines a different understanding of organizational culture to a lesser extent. It is important for managers to understand that people who have worked for the organization during different periods may have diverse perceptions of its culture. Therefore, it is important to provide socialization programs for new employees in order to familiarize them with the organizational culture. Organizational culture is a social phenomenon and involving organizational members in the development of the organization contributes to a better understanding of organizational values and the principles of the organizational culture in that particular organization.
6. Applying the Organizational Values Questionnaire in the analysis of organizational culture at the organizational level makes it possible to map the culture of a particular organization in even more detail than has been

done in the scope of the current research. Analysis of organizational culture provides knowledge about how employees perceive the culture of their organization, and this also makes it possible to understand subcultures that may exist in the organization, for example, on the departmental level. The author has communicated the results of the research to 15 of the organizations that participated in the study, and discussion of the results has demonstrated the benefit of this information for these organizations. The organizations have obtained a better comprehension of the concept of organizational culture and of the characteristics of the culture in their organization. Some organizations have used that knowledge to take further steps in organizational development.

The limitations of the study and recommendations for future research

Limitations of the study

The paradigm of understanding organizational culture and the research methods selected for analyzing organizational culture could be considered as the main limitation of the present study. Using instrumental categories could be seen as an advantage of the socio-cultural approach to organizational culture, but at the same time it is quite difficult to create meaningful and unequivocal categories for analyzing and explaining organizational culture. The typologies approach makes it possible to map patterns of organizational culture and make comparisons, but still it discovers characteristics of organizational culture in one particular framework, and it is possible that important aspects that are distinctive for organizations remain undiscovered. Quantitative methods make it possible to better compare the results across organizations, but interpretations of the results may suffer from the subjectivity of the researcher. Triangulation of research methods would probably have allowed better interpretation of the results.

In the case of research into organizational culture, there is always the issue of whether the results gained from the study apply in all kinds of organizations, or whether the findings are specific to the particular sample. As the empirical findings from previous studies are quite fragmented, this issue is not easy to address, and the author believes that a degree of the generalizations from the results will always remain hypothetical. Although the number of organizations and respondents participating in the study was large enough, and the organizations represented five industries, the sample did not include for example small organizations, which also set certain limitations on generalizing the results.

Although the present dissertation analyzed the impact of contextual and organizational variables on manifestations of organizational culture, individual level variables could also be considered as significant factors that effect

organizational culture. Because socio-demographic variables were not available for all organizations, organizational culture was not analyzed in respect to those variables. Although this is not an important limitation, the author believes that including these variables in the study would have also provided a more compendious summary of the factors influencing manifestations of organizational culture.

Suggestions for future research

The author considers several options for further developments of the current study. In the author's opinion repeating the study including organizations from those industries that were less represented in the scope of the present research and also small organizations would be highly recommended. This would make it possible to validate the results of the current study or to find new connections between organizational culture and the factors under consideration. It would also be interesting to conduct a similar study using a comparable sample in another country because it would make it possible to present the influence of national culture on organizational culture more clearly. The author recommends using complementary research methods, more specifically qualitative methods (interviews and case studies), because this would contribute to a more content-rich interpretation of the results. Considering the Estonian context, it would be especially interesting to map organizational history and find associations between events in organizational history and the development of organizational culture. This kind of approach would make it possible to interpret the influence of events occurring at the societal level on organizations, and thus, fill the existing gap in organizational studies. Although the empirical part of the dissertation provided an overview of the studies that have analyzed the impact of organizational culture on organizational performance and work-related outcomes, the empirical research did not focus on those issues. Here, the author also sees the potential for further studies to analyze the impact of patterns of organizational culture on organizational performance because this information would be interesting both from the theoretical perspective, but also for organizations.

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APPENDICES

Appendix 1. Examples of studies analyzing the relationships between organizational culture and organizational performance in terms of economic indicators

Aspect under focus	Methodology/measures	Data (sample, respondents)	Main results	Studies
Return on investment and sales	Quantitative methods Survey of Organization (125-item instrument) Scales: organizational climate, work design, leadership, group functioning, and satisfaction. Performance: return on investment and sales	34 companies (43 747 resp. in 6 671 work groups); U.S.	– More positive employee perception of organization led to better performance of organization	Denison (1984)
Asset and premium growth	Quantitative methods Survey of Management Climate. Measures: (1) <i>culture strength</i> – computed on the basis of SD of individual responses; (2) <i>adaptability</i> – a combination of action orientation and innovation/risk taking scales; (3) <i>stability</i> –computed on the basis of integration/communication, development/promotion from within the organization and the fairness of reward. Performance: asset and premium growth	11 companies. Insurance. U.S. Managers	– Positive effect of strength of culture on short-term organizational performance – Adaptability is positively correlated to the short-term performance of company – Stability is negatively correlated to the performance indicators	Gordon, Di Tomaso (1992)
Profits, sales growth	Organizational culture: Competing Values Framework: competitive, entrepreneurial, bureaucratic, consensual culture (Quinn, 1988; Quinn, Rohrbaugh, 1983). Performance: self-reporting data about profit, sales growth.	Business to business companies. Japan, U.S., France, U.K., Germany	– Consensual culture decreases performance; – Competitive culture has positive effect on performance	Desphandé, Farley (2004)

Appendix 1. Continued

Sales growth, market share, sales volume	<p>Organizational Culture: Competing Values Framework: innovative, competitive, bureaucratic, community (Quinn, 1988, Desphande et al 1993). Performance: sales growth, market share, sales volume, customer satisfaction, competitive advantage.</p>	342 respondents. UK medium-sized and large multi-industry companies.	<p>– Positive impact of innovative and competitive types of organizational culture on performance.</p>	Ogbonna, Harris (2000)
Subjective and objective effectiveness	<p>Quantitative and qualitative study, case study. Organizational culture: Involvement and participation, Consistency (degree of normative integration); Adaptability (capacity for integral change) and Mission (long-term vision of organization). Performance – organizational effectiveness: 1) subjective effectiveness (organizational members' estimations about quality, company's performance, employee satisfaction etc) 2) objective effectiveness: sales growth and return on assets</p>	764 organizations (manufacturing, business services, finance, retail and wholesale); CEO; U.S.	<p>– Organizational culture and subjective effectiveness measures: The culture growth and profits, but stronger predictors of quality, employee satisfaction, and overall performance.</p> <p>– Organizational culture and objective effectiveness measures: cultural traits are related to different criteria of effectiveness (ROA is best predicted by the stability traits, mission and consistency; sales growth is best predicted by the flexibility traits, involvement and adaptability).</p> <p>– Four culture traits are slightly stronger predictors of ROA than of Sales Growth</p>	Denison, Mishra (1995)

Appendix 1. Continued

Revenue growth	Quantitative study. Organizational culture: 1) action orientation/aggressiveness; 2) innovation; 3) confrontation; 4) planning orientation; 5) results orientation; 6) people orientation; 7) team orientation; 8) communication Performance: revenue growth	11 780 respondents from 77 companies; 10 industries, managers and professionals (top 4–5 organizational levels); U.S.	<ul style="list-style-type: none"> Industries determine organizational culture profiles; Relationships between culture and performance differ across industries; Culture provides competitive advantage if it enables an organization to differentiate from other organizations in same business sector. 	Christensen, Gordon (1999)
Service quality	Critical Incident Technique; Structured questionnaires. Organizational culture – SERVMO: 1) customer orientation; 2) competitor orientation; 3) interfunctional orientation, 4) performance orientation, 5) long-term orientation, 6) employee orientation. Performance: service quality	558 university students; Malaysia;	<ul style="list-style-type: none"> Different SERVMO components have different effect on service quality Employee orientation is most important variable determining the service quality No connection was found between interfunctional orientation and service quality. 	Voon (2006)
Customer service orientation	Quantitative study Organizational culture: Organizational Culture Profile (O'Reilly et al 1999) Performance: customer service orientation, instrument developed by Ashill et al (2005)	20 hospitals (749 respondents), first-line personnel; Greece	<ul style="list-style-type: none"> Most orientations of organizational culture were positively correlated to customer service orientation The correlation between outcome orientation and customer service orientation was negative. 	Bellou (2007)

Appendix 2. Examples of studies analyzing relationships between organizational culture and work-related outcomes

Aspect under focus	Methodology	Data (sample, respondents)	Main results	Studies
Commitment, job satisfaction,	<p>Organizational Culture Profile (organizational cultureP), 54 values statements, organizational culture dimensions: 1) innovation, 2) stability, 3) respect for people, 4) outcome orientation, 5) attention to detail, 6) team orientation, 7) aggressiveness</p> <p>Person-organization fit: score calculated for each individual (correlation between the individual preference profile with the profile of the firm for which the person worked)</p> <p>Work-related outcomes: 1) organizational commitment (normative and instrumental commitment); 2) job satisfaction; 3) intent to leave, 4) turnover.</p>	395 accountants; 730 middle-managers, U.S.	<ul style="list-style-type: none"> – high person-organization fit was associated with high positive affect and a low intent to leave at time 2, a year later. – person-organization fit is a significant predictor of normative commitment, job satisfaction, and intentions to leave, indicating that person-organization fit positively predicts the probability of a person's staying with a firm. – person-culture fit is related to normative, value-based commitment, but not to instrumental, compliance based commitment. 	O'Reilly, Chatman, Jehn (1991)
	<p>Organizational values (taxonomy of McDonald and Gandz, 1992): humanity, convention, bottom-line, vision values</p> <p>Commitment (scale of Meyer et al 1993): 1) affective, 2) normative; 3) continuance commitment</p>	large petrochemical company, sample: 121 employees	<ul style="list-style-type: none"> – perception of organizational values determine individual's level of commitment – different value types predicted different commitment components: 	Finegan (2000)

Appendix 2. Continued

Commitment, leader behavior	<p>Organizational culture index (organizational culture I): 1) bureaucracy; 2) innovativeness; 3) supportiveness (Wallach, 1983)</p> <p>Leader behavior description questionnaire (LBDQ) (Stogdill, 1974): 2 leadership styles – Consideration and Initiating Structure.</p> <p>Job commitment survey (JCS) (Mowday <i>et al</i> 1979)</p>	251 nurses, 7 hospitals, Australia	<p>a) Positive and significant correlations were found between commitment and innovativeness and supportiveness dimensions of organizational culture; b) Correlation between commitment and bureaucratic organizational culture was not significant.</p> <ul style="list-style-type: none"> – Subcultures influence employees' work-related attitudes (innovative and supportive ward subcultures had significantly higher correlations with commitment than innovative and supportive hospital culture) – Positive correlation between consideration leadership and supportive ward culture; positive correlation existed between initiating structure leadership style and bureaucratic leadership ward culture. – Positive correlation between consideration leadership style and a supportive ward culture. Lower, but statistically significant correlation between an initiating structure leadership style and a bureaucratic ward culture. 	Lok <i>et al.</i> (2005)
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Appendix 2. Continued

Commitment, turnover intention	<p>Quantitative study. organizational culture preference: Competing Values Questionnaire (Quinn, 1988) Questionnaire of perceived culture supplies; commitment, turnover intentions Fit measures: 1) Person-Organization (P-O) fit comparison newcomer's culture preference with organizational culture supplies as perceived by recruiters; 2) Person-person (P-P) fit assessed by comparing newcomer's culture preference with recruiters' preferences. Commitment: Organizational Commitment Questionnaire (Mowday et al 1979) Turnover intention: 3 items derived from Ten Horn (1983)</p>	<p>154 newcomers; 104 peers, 101 supervisors from 68 organizations. Netherlands</p>	<p>– Newcomers-supervisors P–P fit concerning the dimension of organizational culture “concern for people” is positively related to newcomers’ commitment and negatively to turnover intentions. – P–P fit in dimension of organizational culture “concern for goal accomplishment” was less related to newcomers’ commitment and turnover intentions. Only when newcomer and peer preferences in this dimension were both high were newcomer turnover intentions low. P–O fit in “goal accomplishment” dimension did not predict newcomers’ affective outcomes. – Newcomers’ concern for people was mostly higher than that of recruiters’, but it did not impact commitment or intentions to leave. – Overall, the relatively high concern for people preferences in newcomers have to match supervisor preferences, but not necessarily supervisor perceptions of existing organizational culture.</p>	<p>Van Vianen (2000)</p>
Job satisfaction	<p>Qualitative and quantitative study (interviews, analysis of documents and self-administered questionnaires)</p>	<p>28 Japanese-owned companies; Japanese, Japanese-American and American employees; U.S.</p>	<p>– Match between organizational and societal culture leads to the higher job satisfaction of employees.</p>	<p>Lincoln <i>et al.</i> (1981)</p>

Appendix 3. Overview of main postulates and characteristics of management research paradigms

	Positivism	Interpretivism	Critical Theory/ Postmodernism (PM)
<i>Assump- tions</i>	Objective world which science can ‘mirror’ with privileged knowledge	Intersubjective world which science can represent with concepts of concepts of actors; social construction of reality	Material world of structured contradictions and/or exploitation which can be objectively known only by removing tacit ideological biases
<i>Key focus and ideas</i>	Search for contextual and organizational variables which cause organizational actions	Search for patterns of meaning	Search for disguised contradictions hidden by ideology; open spaces for previously silenced voices
<i>Goal of para- digm</i>	Uncover truth and facts as quantitatively specified relations among variables	Describe meanings, understand members’ definitions of the situation, examine how objective realities are produced	Uncover hidden interests; expose contradictions; enable more informed consciousness; displace ideology with scientific insights; change
<i>Key theories</i>	Contingency theory; systems theory; population ecology; transaction cost economics of organizing; dustbowl empiricism	Symbolic interaction; ethnomethodology; phenomenology; hermeneutics	Marxism; critical theory; ‘radical’ perspectives PM: poststructuralism; postmodernism; deconstructionism; semiotics
<i>Nature of know- ledge</i>	Verified hypotheses involving valid, reliable and precisely measured variables	Abstract descriptions of meanings and members= definitions of situations produced in natural contexts	Structural or historical insights revealing contradictions
<i>Unit of analysis</i>	The variable	Meaning; symbolic act	Contradictions, incidents of exploitation. PM: the sign
<i>Research methods, type of analysis</i>	Experiments; questionnaires; secondary data analysis; quantitatively coded documents. <u>Quantitative:</u> regression; Likert scaling; structural equation modeling. <u>Qualitative:</u> grounded theory testing	Ethnography; participant observation; interviews; conversational analysis; grounded theory development. Case studies; conversational and textual analysis; expansion analysis	Field research, historical analysis, dialectical analysis PM: deconstruction, textual analysis

Source: compiled by the author on the basis of Gephart (1999)

Appendix 4. Questionnaire for Expert Group No.1 (in Estonian)

Alljärgnevalt on tabelis toodud ära märksõnad ning tabelile järgneb väidete loetelu. Olge head ja proovige paigutada väited nende märksõnade juurde, kuhu nad Teie arvates kõige paremini sobiksid (milline väide peegeldab konkreetset märksõna).

Märkiga väidete numbrid tabeli lahtritesse. Kui Te ei oska paigutada mõnda väidet ühegi märksõna alla, siis märkige vastav väide küsimärgiga. Kui mõni väide sobib Teie arvates mitme märksõna juurde, siis asetage vastav number mitmesse lahtrisse. Kui Te leiute, et mõne väite sõnastus on ebaõnnestunud, siis pakkuge palun välja parem sõnastus.

Täna abi eest!

MÄRKSSÕNA	SOBIVAD VÄITED (märgi numbrid)
töötaja areng	
meeskond	
pühendumine	
kohehiivsus	
traditsioonid	
tarbijakesksus	
jagamissoov	
dünaamilisus	
riskivalmidus	
vabadus	
kasv	
unikaalsus, erakordsus	
eesmärgile pühendumine	
saavutus	
ratsionaalsus	
tõhusus	
formaliseeritus, tegevuse standardiseeritus	
struktuur	
hierarhia	
stabiilsus	
reeglid	

VÄITED

1. Meie organisatsiooni liikmed ei räägi võõrastele organisatsioonist halba
2. Meie organisatsioonis on palju rituaale ja traditsioone
3. Kõige tähtsamaks peetakse pühendumist tööle, muu elu võib jääda tahaplaanile
4. Meie organisatsioonis abistatakse üksteist tööalastes probleemides
5. Tähtsad uudised antakse meil edasi kirjalikult
6. Meie organisatsioonis teatakse üksteise harrastustest ja töövälisest tegevusest
7. Inimeste eraelu on nende oma asi
8. Meie juhtkond suunab töötajaid heatahtlikult
9. Meie organisatsiooni liikmed suhtlevad omavahel ka väljaspool tööaega

11. Meie organisatsioonis on kõigil suur tegutsemisvabadus
12. Meie juhtkonnal on töötajatega usalduslikud suhted
13. Meie organisatsioonis mõtlevad inimesed rohkem organisatsiooni eesmärkidele
14. Meie organisatsioonis vahetuvad töötajad harva
15. Meie organisatsioonis on rasketes olukordades tugev ühtekuuluvustunne
16. Meie organisatsioon hoolib oma liikmetest
17. Meile on kõige tähtsam kliendi rahulolu
18. Inimesed töötavad meie organisatsioonis nagu üks meeskond
19. Meie töötajatelt oodatakse sõbralikkust üksteise vastu
20. Meie organisatsiooni liikmed osalevad meelsasti organisatsioonisisestel ühisüritustel
21. Meie organisatsioonis on palju kirjalikke reegleid
22. Meie organisatsiooni juhtkond talub hästi kriitikat
23. Meie organisatsioonis toetatakse edasipüüdlikkust ja õppimist
24. Loovad inimesed on meie organisatsioonis väga hinnatud
25. Meie organisatsioon pöörab suurt tähelepanu töötajate koolitamisele
26. Töötaja edu ei sõltu sellest, kui hästi ta ülemusega läbi saab
27. Meie organisatsiooni liikmete jaoks on tähtsad sõbralikud suhted üksteisega
28. Meie organisatsiooni liikmed teavad üksteise isiklikust elust
29. Meie organisatsioonis toimuvad pidevalt positiivsed muutused
30. Meie organisatsioon on ainulaadne ja eristub konkurentidest
31. Meie organisatsioon on uuendusmeelne
32. Meie organisatsioonis on palju allüksusi
33. Meie organisatsioonis oodatakse töötajatelt ettepanekuid
34. Meie organisatsioonil on traditsioonidega ajalugu
35. Meie organisatsiooni juhtkond suhtub positiivselt töötajate poolsetesse algatustesse
36. Vajadusel asetavad töötajad organisatsiooni huvid isiklikest huvidest ettepoole
37. Meie organisatsioonis arvestatakse töötajate ettepanekutega
38. Meie organisatsioonis antakse töötajatele palju otsustamisvabadust
39. Meie organisatsioon on nagu suur perekond
40. Meie organisatsioonis valitseb loominguline õhkkond
41. Meie organisatsiooni liikmed on uhked selle üle, et nad sellesse organisatsiooni kuuluvad
42. Meie organisatsiooni liikmed on loovad
43. Meie organisatsioon on kaasaegne
44. Meie organisatsioonis ei karda inimesed eksida
45. Meie organisatsioon on alati valmis uusi ideid rakendama
46. Meie organisatsiooni eesmärgiks on olla konkurentidest parem
47. Meie organisatsiooni eesmärgiks on areneda ja kasvada
48. Meie organisatsioon püüab konkurentidest erineda
49. Meie organisatsioon rõhutab oma eripära
50. Meie organisatsioon käib ajaga kaasas
51. Meie organisatsioonis on täpsed töökirjeldused
52. Meie organisatsioon püüab alati rakendada uusi ideid
53. Meie töötajad tunnetavad, et nad tegutsevad ühise eesmärgi nimel
54. Meie organisatsioonis selgitatakse ülesandeid täpselt
55. Meie organisatsioonis on otsustamine aeganõudev protsess.
56. Meie organisatsiooni juhtkonna jutule on keeruline pääseda

Appendix 4. Continued

57. Meie töötajad räägivad töökaaslastele meelsasti oma isiklikust elust
58. Meie organisatsioonis on alluvussuhted väga täpselt paigas.
59. Meie organisatsioonis on traditsioonidel suur tähtsus
60. Meie organisatsioonis suhtutakse mõistvalt töötajate eksimustesse
61. Töötajatelt oodatakse käskudele allumist
62. Meie organisatsioonis rõhutatakse alluvate ja ülemuste erinevusi
63. Meie organisatsiooni eesmärgiks on saada suurt kasumit
64. Meie organisatsioonis on kohvi- ja lõunapausid kindlatel kellaaegadel
65. Juhtkond kontrollib töötajaid tihti
66. Meie organisatsioonis on iga situatsiooni jaoks välja töötatud oma reeglid
67. Otsustest saavad töötajad teada kirjalikult
68. Reeglitest kõrvalekaldumist karistatakse alati
69. Ootamatud sündmused on negatiivsed, sest siis on vaja läbi viia muutusi.
70. Meie organisatsioonis peetakse kõige olulisemaks toote või teenuse pidevat arendamist
71. Meie organisatsioonis õhutatakse inimeste vahel konkurentsi
72. Töötasu sõltub sellest, kui hästi töötajad neile püstitatud eesmärgid täidavad
73. Meie organisatsiooni liikmed teavad, millised on organisatsiooni eesmärgid
74. Organisatsiooni liikmetele on tähtis, et organisatsioonil läheks hästi
75. Meie juhid on alluvate suhtes nõudlikud
76. Meie organisatsiooni eesmärgiks on saavutada võimalikult suur turuosa
77. Meie organisatsiooni eesmärgid on konkreetsed ja mõõdetavad
78. Meie organisatsioonis on palju aja jooksul välja kujunenud käitumistavasid
79. Koosolekutel arutatakse tihti organisatsiooni plaane ja eesmärgi

Appendix 5. Questionnaire for Expert Group No. 2 (in Estonian)

Head kolleegid,

Palun Teie abi organisatsiooni väärtuste mõõtmisinstrumendi väljatöötamisel. Instrument tugineb Competing Values Model'ile (Quinn & Cameron). Töötasin välja terve rea väiteid, mille kaudu saaks uurida organisatsiooni väärtusi. Esimene valik neist väidetest on tehtud, nüüd paluksin Teie eksperthinnangut kuivõrd hästi üks või teine väide iseloomustab konkreetset organisatsioonikultuuri tüüpi.

I Esmalt annan lühiülevaade igast organisatsioonikultuuri tüübist.

Quinn'i ja Cameron'i *Competing Values Model* kirjeldab organisatsioonikultuuri 4 võimalikku tüüpi. Iga organisatsioonikultuuri tüüp hõlmavad põhiväärtusi – mis on konkreetse organisatsiooni puhul sobilik ja õige ning millised on otsuste langetamise kriteeriumid. Järgnevalt kirjeldan lühidalt 4 organisatsioonikultuuri tüüpi:

1. Human Relations Model / Clan

Hoolivus, ühtekuuluvustunne, koostöö, lojaalsus, traditsioonid. Võib öelda, et antud organisatsioon on koht, kus on hea töötada, kus valitseb sõbralik meeleolu. Inimesed teavad üksteise isiklikust elust, huvialadest jne. Iseloomulik on pühendumissoov. Sellises organisatsioonis pööratakse suurt tähelepanu personali arendamisele. Tasustamise aluseks pole mitte individuaalsed tulemused, vaid hinnatakse kollektiivseid tulemusi. Otsused sünnivad sageli mitteformaalsete kontaktide abil. Edu aluseks peetakse kliendist (klient kui partner) ja töötajatest hoolimist. Juhid kui mentorid ja õpetajad.

2. Open System Model / The Adhocracy

Dünaamilisus, ettevõtlikkus, innovaatiline areng, muutustele avatus. Selline organisatsioon on töötamiseks loominguine paik. Organisatsiooni kooshoidvaks teguriks on pühendumine eksperimenteerimisele ja innovatsioonile. Rõhutatakse esirinnas olemist ja püsimist.

Tasustatakse isiklikku algatust, initsiatiivi. Soositakse vabadust.

Edu aluseks peetakse unikaalseid ja uudseid tooteid-teenuseid, valmistumist tulevikuks. Juhid kui visionäärid, innovaatorid ja riskeerijad, ootavad töötajatelt pühendumist, loovust ja aktiivsust.

3. Internal Process Model / The Hierarchy Culture

Formaliseeritus, struktureeritus, stabiilsus, respekt võimu vastu. Sellise organisatsiooni jaoks on olulised täpsed reeglid ja poliitikad. Organisatsiooni hoiavad koos reeglid ja poliitikad. Inimeste tegevus on korraldatud mitmesuguste protseduuridega.

Tasustamine vastavalt ametikohale.

Edu aluseks peetakse stabiilsust ja ladusat toimimist, säästlikkust. Juhid kui administraatorid, koordineerijad ja korraldajad, tõhususele orienteeritud.

4. Rational Goal Model / Market/results Oriented Culture

Toodangule orienteeritus, konkurents ja tulemuslikkus. Peamine mure, et töö saaks tehtud, inimesed on eesmärgile pühendunud ja võistlushimulised. Võidutahe hoiab organisatsiooni koos.

Organistsioon mureseb oma reputatsiooni ja edukuse pärast. Pikaajaline eesmärk on mõõdetavate eesmärkide ja sihtide saavutamine. Edukust mõõdetakse kasumlikkuse ja turuosa järgi. Juhid on nõudlikud, karmid, tootmisele orienteeritud.

II Palun hinnake 5 – pallisel skaalal, kuivõrd hästi iseloomustavad alljärgnevad väited konkreetset organisatsioonikultuuri tüüpi.

(5 – iseloomustab väga hästi; 4 – hästi; 3 – rahuldavalt; 2 – halvasti; 1 – ei iseloomusta üldse või ei oska öelda). Tähistage palun oma arvamus ringiga või märkige vastav number **rasvase kirjaga**. Võite väidet ka kommenteerida või pakkuda täpsemat sõnastust.

1. MUDEL: Human Relations Model / Clan

VÄIDE	HINNANG
Meie organisatsioonis toetatakse edasipüüdlikkust ja õppimist	5 – 4 – 3 – 2 – 1
Meie organisatsioon pöörab suurt tähelepanu töötajate koolitamisele	5 – 4 – 3 – 2 – 1
Meie organisatsioonis abistatakse üksteist tööalastes probleemides	5 – 4 – 3 – 2 – 1
Meie organisatsiooni liikmete jaoks on tähtsad sõbralikud suhted üksteisega	5 – 4 – 3 – 2 – 1
Meie organisatsiooni liikmed suhtlevad omavahel ka väljaspool tööaega	5 – 4 – 3 – 2 – 1
Meie juhtkonnal on töötajatega usalduslikud suhted	5 – 4 – 3 – 2 – 1
Inimesed töötavad meie organisatsioonis nagu üks meeskond	5 – 4 – 3 – 2 – 1
Meie töötajatelt oodatakse sõbralikkust üksteise vastu	5 – 4 – 3 – 2 – 1
Meie organisatsiooni liikmed osalevad meelsasti organisatsioonisisestel ühisüritustel	5 – 4 – 3 – 2 – 1
Meie organisatsioon on nagu suur perekond	5 – 4 – 3 – 2 – 1
Meie organisatsioonis mõtlevad inimesed rohkem organisatsiooni eesmärkidele kui enda	5 – 4 – 3 – 2 – 1
Kõige tähtsamaks peetakse pühendumist tööle, muu elu võib jääda tahaplaanile huvidele	5 – 4 – 3 – 2 – 1
Vajadusel asetavad töötajad organisatsiooni huvid isiklikest huvidest ettepoole	5 – 4 – 3 – 2 – 1
Meie organisatsiooni liikmed ei räägi võõrastele organisatsioonist halba	5 – 4 – 3 – 2 – 1
Meie organisatsiooni liikmed on uhked selle üle, et nad sellesse organisatsiooni kuuluvad	5 – 4 – 3 – 2 – 1
Meie organisatsioonis on traditsioonidel suur tähtsus	5 – 4 – 3 – 2 – 1
Meie organisatsioonil on traditsioonidega ajalugu	5 – 4 – 3 – 2 – 1

Meie organiatsioonis on palju aja jooksul välja kujunenud käitumistavasid	5 – 4 – 3 – 2 – 1
Meile on kõige tähtsam kliendi rahulolu	5 – 4 – 3 – 2 – 1
Meie organisatsioonis teatakse üksteise harrastustest ja töövälisest tegevusest	5 – 4 – 3 – 2 – 1
Ettepanek väidete lisamise osas:	

2. MUDEL: Open System Model / The Adhocracy

VÄIDE	HINNANG
Meie organisatsioon käib ajaga kaasas	5 – 4 – 3 – 2 – 1
Meie organisatsioon on kaasaegne	5 – 4 – 3 – 2 – 1
Meie organisatsioon on uuendusmeelne	5 – 4 – 3 – 2 – 1
Meie organisatsioonis toimuvad pidevalt positiivsed muutused	5 – 4 – 3 – 2 – 1
Meie juhtkond ei karda riskida	5 – 4 – 3 – 2 – 1
Meie organisatsioonis on kõigil suur tegutsemisvabadus	5 – 4 – 3 – 2 – 1
Meie organisatsioonis antakse töötajatele palju otsustamisvabadust	5 – 4 – 3 – 2 – 1
Meie organisatsiooni eesmärgiks on areneda ja kasvada	5 – 4 – 3 – 2 – 1
Meie organisatsioon rõhutab oma eripära	5 – 4 – 3 – 2 – 1
Meie organisatsioon on ainulaadne ja eristub konkurentidest	5 – 4 – 3 – 2 – 1
Meie organisatsioon püüab konkurentidest erineda	5 – 4 – 3 – 2 – 1
Meie organisatsioonis püütakse pidevalt tooteid ja teenuseid arendada	5 – 4 – 3 – 2 – 1
Meie organisatsioonis oodatakse töötajatelt ettepanekuid	5 – 4 – 3 – 2 – 1
Meie organisatsiooni juhtkond suhtub positiivselt töötajate poolsetesse algatustesse	5 – 4 – 3 – 2 – 1
Meie organisatsioonis valitseb loominguline õhkkond	5 – 4 – 3 – 2 – 1
Loovad inimesed on meie oganisatsioonis väga hinnatud	5 – 4 – 3 – 2 – 1
Meie organisatsiooni liikmed on loovad	5 – 4 – 3 – 2 – 1
Ettepanek väidete lisamise osas:	

3. MUDEL: Internal Processes Model / The Hierarchy Culture

VÄIDE	HINNANG
Meie organisatsioonis vastutab iga inimene oma kitsa tööloigu eest	5 – 4 – 3 – 2 – 1
Meie organisatsioonis rakendatakse bürokraatlikku aruandesüsteemi	5 – 4 – 3 – 2 – 1
Meie organisatsioonis rõhutatakse kulude kokkuhoidu	5 – 4 – 3 – 2 – 1
Meie organisatsiooni juhtkond on tegevuste koordineerija	5 – 4 – 3 – 2 – 1
Meie organisatsioonis on täpsed töökirjeldused	5 – 4 – 3 – 2 – 1
Meie organisatsioonis on otsustamine aeganõudev protsess	5 – 4 – 3 – 2 – 1
Meie organisatsioonis on palju allüksusi	5 – 4 – 3 – 2 – 1
Meie organisatsioonis on alluvussuhted väga täpselt paigas	5 – 4 – 3 – 2 – 1
Meie organisatsioonis rõhutatakse alluvate ja ülemuste erinevusi	5 – 4 – 3 – 2 – 1

Appendix 5. Continued

Meie organisatsiooni juhtkonna jutule on keeruline pääseda	5 – 4 – 3 – 2 – 1
Meie organisatsioonis kerkib harva esile ootamatuid olukordi	5 – 4 – 3 – 2 – 1
Ootamatud sündmused on negatiivsed, sest siis on vaja läbi viia muudatusi	5 – 4 – 3 – 2 – 1
Meie organisatsioonis on kohvi- ja lõunapausid kindlatel kellaaegadel	5 – 4 – 3 – 2 – 1
Reeglitest kõrvalekaldumist karistatakse alati	5 – 4 – 3 – 2 – 1
Reeglitest kinnipidamine on edutamise aluseks	5 – 4 – 3 – 2 – 1
Meie organisatsioonis nõutakse reeglite tundmist ja täitmist	5 – 4 – 3 – 2 – 1
Meie organisatsioonis on palju kirjalikke reegleid	5 – 4 – 3 – 2 – 1
Ettepanek väidete lisamise osas:	

4. MUDEL: Rational Goal Model / Market/Results Oriented Culture

VÄIDE	HINNANG
Meie organisatsiooni liikmed teavad, millised on organisatsiooni eesmärgid	5 – 4 – 3 – 2 – 1
Organisatsiooni liikmetele on tähtis, et organisatsioonil läheks hästi	5 – 4 – 3 – 2 – 1
Meie organisatsioonis õhutatakse inimeste vahel konkurentsi	5 – 4 – 3 – 2 – 1
Meie organisatsiooni eesmärgid on konkreetsed ja mõõdetavad	5 – 4 – 3 – 2 – 1
Meie töötajad püüavad kulusid kokku hoida	5 – 4 – 3 – 2 – 1
Meie organisatsioonis peetakse kõige olulisemaks toote või teenuse kvaliteeti	5 – 4 – 3 – 2 – 1
Organisatsiooni edu aluseks on kvaliteetne toode või teenus	5 – 4 – 3 – 2 – 1
Meie organisatsioon püüab konkurente alati edestada	5 – 4 – 3 – 2 – 1
Meie organisatsiooni eesmärgiks on saada suurt kasumit	5 – 4 – 3 – 2 – 1
Meie organisatsiooni eesmärgiks on saavutada võimalikult suur turuosa	5 – 4 – 3 – 2 – 1
Meie organisatsiooni eesmärgiks on olla konkurentidest parem /edestada konkurente	5 – 4 – 3 – 2 – 1
Ettepanek väidete lisamise osas:	

TÄNAN ABI EEST!

Appendix 6. Sample description

1. Description of the sample of educational organizations

Organi- zation charac- teristic	DEF EDU	COLLEDU	CLASEDU	HEAL- THEDU	ECON EDU	BUS EDU	AGR EDU	IT EDU	LEG EDU	TECH EDU	PED EDU
Time of survey	2004	2004	2004–2006	2006	2006	2006	2006	2006	2006	2006	2006
Sample size (% of resp).	40 (100%)	64 (42.7%)	374 (17.6%)	47 (45.2%)	28 (7.5%)	56 (19.7%)	39 (8.2%)	9 (12.9%)	25 (15.4%)	105 (7.6%)	95 (10.6%)
Gender											
Male	2 (5%)	10 (15.6%)	110 (29.4%)	1 (2.1%)	8 (28.6%)	19 (33.9%)	20 (51.3%)	6 (66.7%)	4 (16%)	49 (46.7%)	15 (15.8%)
Female	38 (95%)	53 (82.8%)	251 (67.1%)	45 (95.7%)	15 (53.6%)	26 (46.4%)	17 (43.6%)	1 (11.1%)	18 (72%)	43 (41%)	71 (74.8%)
Missing	–	1 (1.6%)	13 (3.5%)	1 (2.1%)	5 (17.9%)	11 (19.6%)	2 (5.1%)	2 (22.2%)	3 (12%)	13 (12.4%)	9 (9.5%)
Ethnicity					N/A	N/A	N/A	N/A	N/A	N/A	N/A
Estonian	37 (92.5%)	60 (93.8%)	104 (27.8%)	45 (95.7%)							
Russian	1 (2.5%)	–	5 (1.3%)	1 (2.1%)							
Other	2 (5.0%)	1 (1.6%)	3 (0.8%)	–							
Missing	–	3 (4.7%)	262 (70.1%)	1 (2.1%)							
Age											
Mean	21.3	27.2	27.4	41.2	39.5	32.1	35.8	37.4	40.1	36	36.9
SD	2.1	13.1	9.9	12.3	13.4	11.3	12.2	14.4	12.1	15.8	12
n	40	59	361	41	23	45	37	7	22	92	84

Appendix 6. Continued

Education	11 (17.2%)	120 (32.1%)	40 (85.1%)	14 (50%)	16 (28.6%)	31 (79.5%)	4 (44.4%)	11 (44%)	54 (514%)	57 (60%)
Higher	–	–	–	–	–	–	–	–	–	–
Sec/voc	37 (92.5%)	212 (56.7%)	12 (2.8%)	9 (32.1%)	29 (51.8%)	5 (12.8%)	3 (33.3%)	11 (44%)	35 (33.3%)	29 (30.5%)
Other	–	7 (1.9%)	–	–	–	1 (2.6%)	–	–	3 (2.9%)	–
Missing	3 (7.5%)	35 (9.4%)	1 (2.1%)	5 (17.9%)	11 (19.6%)	2 (5.1%)	2 (22.2%)	3 (12%)	13 (12.4%)	9 (9.5%)
Tenure										
Mean	0.9	2.3	5.3	9.2	8.4	13.1	13	9.2	14	7.5
SD	1	2.4	6.4	8.4	5.5	8.7	8.5	4.2	12.7	6.2
n	40	63	167	12	8	21	4	10	33	48
Positions										
Managers	1 (2.5%)	–	18 (4.8%)	–	–	11 (28.2%)	–	–	13 (12.4%)	19 (20.0%)
Specialists	–	13 (20.3%)	39 (10.4%)	10 (35.7%)	4 (7.1%)	10 (25.6%)	4 (44.4%)	8 (32%)	22 (21%)	30 (31.6%)
Students	37 (92.5%)	44 (68.8%)	311 (83.2%)	16 (57.1%)	44 (78.6%)	16 (41.0%)	5 (55.6%)	14 (56%)	63 (60%)	39 (41.1%)
Workers	–	–	–	–	–	–	–	–	–	–
Others	–	2 (3.1%)	–	–	–	–	–	–	–	–
Missing	2 (5%)	5 (7.8%)	6 (1.6%)	5 (10.6%)	4 (7.1%)	2 (5.1%)	–	1 (4%)	7 (6.7%)	7 (7.4%)
Size of organ.	L	L	L	L	L	L	L	L	L	L
Age of org.	N	O	O	N	N	O	N	N	O	O

Notes: SD – standard deviation, n – sample size; higher – higher education; sec/voc – secondary and vocational education; N/A – not asked in questionnaire.

2. Description of the sample of service organizations

Organi- zation charac- teristic	RECSERV_1	SHOP	COMP	STATION	INSUAR	ENTERT	RECSERV_2	STORE
Field of activities	Providing recycle services	Retail trade of household goods and food	Assembling and retail of computers, providing of computer services	Retail trade of fuel and other goods	Providing of insurance services	Providing entertainment services	Providing recycle services	Retail trade of household goods, clothes and food
Time of survey	2005	2005	2005	2005	2006	2006	2007	2008
Sample size (% of resp.)	63 (31.5%)	148 (65.8%)	61 (67.7%)	101 (78%)	66 (72%)	94 (77%)	161 (65.7%)	208 (83.2%)
Gender								
Male	39 (61.9%)	7 (4.7%)	42 (68.9%)	18 (17.8%)	26 (39.4%)	18 (19.1%)	N/A	21 (10.1%)
Female	21 (33.3%)	140(94.6%)	17 (27.9%)	81 (80.2%)	36 (54.5%)	67 (71.3%)		185 (88.9%)
Missing	3(4.8%)	1 (0.7%)	2 (3.3%)	2 (2.0%)	4 (6.1%)	9 (9.6%)		2 (1.0%)
Ethnicity								
Estonian	52 (82.5%)	142 (95.9%)	52 (85.2%)	92 (91.1%)	63 (95.5%)	37 (39.4%)	N/A	182 (87.5%)
Russian	2 (3.2%)	4 (2.7%)	5 (8.2%)	6 (5.9%)	—	57 (60.6%)		11 (5.3%)
Other	1 (1.6%)	—	—	1 (1.0%)	—	—		15 (7.2%)
Missing	8 (12.7%)	2 (1.4%)	4 (6.6%)	2 (2.0%)	3 (4.5%)	—		—

Appendix 6. Continued

Age	Mean	39.6	40.2	27.6	37.3	34.1	32.5	N/A	40.5
	SD	10.4	10.2	4.9	10.1	7.5	9.0		13
	n	56	140	55	84	32	69		176
Education									
Higher	12 (19.0%)	11 (7.4%)	16 (26.2%)	12 (11.9%)	30 (45.5%)	11 (11.7%)	11 (11.7%)	N/A	48 (23.1%)
Sec/voc	38 (60.3%)	129 (87.2%)	41 (67.2%)	86 (85.9%)	32 (48.5%)	68 (72.3%)	68 (72.3%)		148 (71.2%)
Primary	8 (12.7%)	7 (4.7%)	1 (1.6%)	1 (1.0%)	1 (1.5%)	1 (1.1%)	1 (1.1%)		5 (2.4%)
Missing	5 (7.9%)	1 (0.7%)	3 (4.9%)	2 (2.0%)	3 (4.5%)	14 (14.9%)	14 (14.9%)		7 (3.4%)
Tenure									
Mean	4.6	9.3	3.1	4.1	6.3	3.5	3.5	4.2	11.7
SD	6.5	9.7	2.1	3.2	3.2	3.7	3.7	3.8	12.8
N	47	146	52	86	48	69	69	133	176
Positions									
Managers	9 (14.3%)	31 (20.9%)	13 (21.3%)	9 (8.9%)	9 (13.6%)	6 (6.4%)	6 (6.4%)	18 (11.2%)	16 (7.7%)
Specialists	20 (31.7%)	14 (9.5%)	24 (39.3%)	8 (7.9%)	40 (60.6%)	3 (3.2%)	3 (3.2%)	42 (26.2%)	47 (22.6%)
Workers	26 (41.3%)	98 (66.2%)	19 (31.1%)	79 (78.2%)	–	77 (81.9%)	77 (81.9%)	96 (59.6%)	133 (63.9%)
Others	3 (4.8%)	4 (2.7%)	1 (1.6%)	–	1 (1.5%)	2 (2.1%)	2 (2.1%)	–	–
Missing	5 (7.9%)	1 (0.7%)	4 (6.6%)	5 (5.0%)	16 (24.2%)	6 (6.4%)	6 (6.4%)	5 (3.1%)	12 (5.8%)
Size of organ.	L	L	M	M	M	M	M	L	L
Age of org.	N	O	N	N	N	N	N	N	O

Notes: Tenure, Age in years; SD – standard deviation, n – sample size; higher – higher education; sec/voc – secondary and vocational education; N/A – not asked in questionnaire; L – large organization; M – middle-sized organization; N – new organization; O – old organization.

3. Description of the sample of production organizations

Organi- charac- zation teristic	ELDIST	ELENG	PACK	MINE	FOAM	BUILDMAT	CONSTR
Field of activities	distributing and selling of electricity	electrical engineering	producing of packaging materials	mining	producing of polyurethane foam	producing prefabricated concrete elements	management of design and construction work; general contracting
Time of survey	2005	2005	2006	2006	2006	2007	2008
Sample size; % of resp.	47 (76%)	45 (75%)	30 (30%)	58 (85.6%)	24 (52.2%)	163 (74.8%)	48 (96%)
Gender							
Male	24 (51.1%)	30 (66.7%)	14 (46.7%)	37 (63.8%)	14 (58.3%)	134 (82.2%)	39 (81.3%)
Female	21 (44.7%)	13 (28.9%)	14 (46.7%)	19 (32.8%)	5 (20.8%)	24 (14.7%)	6 (12.5%)
Missing	2 (4.3%)	2 (4.4%)	2 (6.7%)	2 (3.4%)	5 (20.8%)	5 (3.1%)	3 (6.3%)
Ethnicity	N/A	N/A				N/A	N/A
Estonian			27 (90%)	24 (41.1%)	17 (70.8%)		
Russian			1 (3.3%)	32 (55.2%)	3 (12.5%)		
Missing			2 (6.7%)	2 (3.4%)	4 (16.7%)		
Age							
Mean	43.9	45.6	36.7	39.1	40.4	Up to 24 years: 11 (6.7%)	N/A
SD	12	13.3	12.1	9.9	12.6	25–34 years: 48 (29.4%)	
n	40	37	26	54	17	35–50 years: 53 (32.5%)	
						Over 50 years: 45(27.6%)	
						Missing: 6 (3.7%)	

Appendix 6. Continued

Education	18 (38.3%) 27 (57.4%) – 2 (4.3%) miss	7 (15.6%) 33 (73.3%) 2 (4.4%) 3 (6.7%)	9 (30%) 17 (56.7%) 2 (6.7%) 2 (6.7%)	51 (87.9%) 5 (8.6%) 2 (3.4%) –	4 (16.7%) 15 (62.5%) 5 (20.8%) –	N/A	N/A
Tenure							
Mean	15.5	0.6	8.7	12.7	5.8	up to 1 year: 17 (10.4%) 1–3 years: 39 (23.9%) 4–5 years: 18 (11%) over 5 years: 80 (49.1%) missing: 9 (5.5%)	up to 3 years: 13 (27.1%) 4–10 years: 22 (45.8%) over 10 years: 12 (25%) Missing: 1 (2%)
SD	11.6	0.2	10.6	9.8	4.5		
N	42	32	26	52	19		
Positions							
Managers	10 (21.3%)	4 (8.9%)	2 (6.7%)	41 (70.7%)	4 (16.7%)	17 (10.4%)	N/A
Specialists	22 (46.8%)	38 (84.4%)	10 (33.3%)	13 (22.4%)	3 (12.5%)	44 (27%)	
Workers	9 (19.1%)	–	16 (53.3%)	–	11 (45.8%)	92 (56.4%)	
Other	2 (4.3%)	–	–	1 (1.7%)	1 (4.2%)	–	
Missing	4 (8.5%)	3 (6.7%)	2 (6.7%)	3 (5.2%)	5 (20.8%)	10 (6.1%)	
Size of organ.	M	M	M	L	M	M	M
Age of org.	O	O	O	O	N	O	N

Notes: Tenure, Age in years; SD – standard deviation, n – sample size; higher – higher education; sec/voc – secondary and vocational education; primary-primary education; N/A – not asked in questionnaire; L – large organization; M – middle-sized organization; N – new organization; O – old organization.

4. Description of the sample of legal protection and health care organizations

charac- teristic	Organi- zation	PROTNEW		PROTOLD		HEALTH	
		Legal protection	2005	Legal protection	2006	Providing health care services	2005–2006
Field of activities							
Time of survey			128 (38.8%)		203 (65.3%)		456 (50%)
Sample size; (% of respondents)							
Gender	Male		51 (39.8%)		121 (59.6%)		30 (6.6%)
	Female		74 (57.8%)		81 (39.9%)		424 (93%)
	Missine		3 (2.3%)		1 (0.5%)		2 (0.4%)
Ethnicity	Estonian		112 (96.9%)		120 (59.1%)		N/A
	Russian		8 (6.3%)		82 (40.4%)		
	Other		4 (3.1%)		—		
	Missing		4 (3.1%)		1 (0.5%)		
Age	Mean		35.3		44.8		20–29 years: 89 (19.5%); 30–39 years: 109(23.9%); 40–49 years: 131 (28.7%) 50–59 years: 95 (20.8%); over 60 years: 30 (6.6%); missing: 2 (0.4%)
	SD		9.5		10		
	n		112		178		

Appendix 6. Continued

Education	Higher Sec/voc Primary Missing	42 (32.8%) 81 (63.3%) 1 (0.8%) 4 (3.1%)	54 (26.6%) 138 (68%) 10 (4.9%) 1 (0.5%)	N/A
Tenure	Mean SD n	1.9 1 122	7.2 0.8 186	up to 1 year: 68 (14.9%); 1–5 years: 131 (28.7%); 6–10 years: 77 (16.9%); 11–20 years: 111 (24.3%); 21–30 years: 56 (12.3%); over 30 years: 11 (2.4%); Missing: 2 (0.5%)
Positions	Managers Specialists Workers Other Missing	9 (7%) 59 (46.1%) 50 (39.1%) 2 (1.6%) 8 (6.3%)	12 (5.9%) 64 (31.5%) 107 (52.7%) 10 (4.9%) 10 (4.9%)	– 309 (67.8%) 147 (32.2%) – –
Size of organ.	L	L	L	L
Age of org.	N	O	O	O

Notes: Tenure, Age in years; SD= standard deviation, n= sample size; higher= higher education; sec/voc= secondary and vocational education; primary= primary education; N/A= not asked in questionnaire; L= large organization; M= middle-sized organization; N= new organization; O= old organization.
Source: Author's calculations on the basis of the research database.

Appendix 7. Results of the pilot study

Variable	Predicted organizational culture type	Organization					
		CLASEDU		COLLEDU		DEFEDU	
		m	SD	m	SD	m	SD
Var1	HR	7.24	1.66	6.84	2.10	9.13	1.20
Var2	OS	7.25	1.71	7.81	1.79	7.49	2.34
Var3	HR	7.35	1.53	7.31	1.82	8.20	1.34
Var4	IP	6.58	2.17	6.59	2.19	6.79	2.78
Var5	RG	5.68	2.25	6.04	2.26	4.03	3.16
Var6	HR	5.94	2.34	7.21	2.15	5.26	3.23
Var7	OS	7.57	2.05	7.71	2.10	7.28	2.82
Var8	RG	7.38	2.10	7.44	2.15	8.03	2.29
Var9*	IP	5.94	2.57	6.48	2.31	1.50	1.45
Var10	HR	8.70	1.53	7.69	1.83	8.45	1.72
Var11	OS	6.27	2.23	6.48	2.06	3.62	2.53
Var12	HR	7.47	1.72	7.10	2.20	7.33	2.37
Var13	RG	7.36	1.67	7.47	1.99	7.33	2.39
Var14	OS	7.21	1.44	7.76	1.90	7.18	2.21
Var15*	IP	3.04	1.77	6.58	2.40	3.50	2.93
Var16	HR	5.68	1.85	5.88	2.08	7.58	2.75
Var17*	RG	3.68	2.13	4.29	2.87	2.35	1.99
Var18	HR	8.63	1.30	7.02	1.96	8.98	1.35
Var19	IP	7.24	1.71	6.80	2.25	9.59	1.02
Var20	OS	6.50	1.90	6.67	2.12	4.80	2.82
Var21	RG	8.20	1.95	7.23	2.33	6.98	3.04
Var22	OS	6.28	2.03	6.60	2.01	3.38	2.11
Var23	HR	6.95	1.90	6.48	2.59	7.25	2.06
Var24	HR	7.66	1.74	6.55	2.43	7.70	1.71
Var25	OS	6.35	1.89	6.48	2.13	4.30	2.60
Var26	HR	6.08	1.96	6.81	2.15	6.53	2.73
Var27	HR	6.36	2.43	6.20	2.57	6.95	2.58
Var28	HR	5.02	1.97	4.82	1.91	4.05	2.53
Var29	HR	5.36	1.93	5.40	2.05	3.83	2.95
Var30	HR	6.97	2.09	7.26	1.98	4.65	2.82
Var31	IP	7.62	1.98	6.40	2.14	9.75	0.59
Var32	IP	7.81	1.82	7.29	2.11	9.90	0.38
Var33	OS	7.93	1.64	8.43	1.74	9.10	1.62
Var34	RG	8.65	1.57	8.05	1.59	9.48	0.93
Var35	OS	7.21	1.89	7.36	1.77	4.98	2.42
Var36	IP	7.49	1.70	7.24	2.16	9.30	1.22
Var37	RG	6.87	2.14	7.05	2.04	6.30	2.20
Var38	OS	6.33	1.54	7.43	1.52	5.93	2.25
Var39	OS	7.81	2.01	7.05	2.27	7.95	1.95
Var40	IP	7.10	1.96	5.59	2.19	7.83	2.61
Var41	IP	7.64	1.81	7.32	2.05	9.73	0.60
Var42*	RG	4.44	2.36	4.23	2.56	2.83	2.62

Appendix 7. Continued

Var43	RG	5.83	2.67	4.79	2.77	3.93	2.80
Var44	OS	5.94	1.79	6.37	2.09	7.08	2.26
Var45	RG	6.91	1.71	6.49	1.82	9.00	1.24
Var46	RG	6.00	2.34	6.29	2.18	3.36	2.90
Var47	IP	7.71	1.84	7.09	1.74	8.46	2.76
Var48	IP	5.33	1.84	4.69	2.24	5.00	2.73
Var49	IP	6.55	2.26	6.31	1.75	8.36	2.03
Var50	RG	7.38	1.95	6.62	1.85	5.41	3.60
Var51	RG	7.10	1.78	7.42	1.62	8.82	1.37
Var52	OS	6.35	1.99	7.05	1.81	5.43	2.35
Var53	RG	3.76	2.51	6.27	2.59	3.48	3.05

Notes: VAR= item in the questionnaire; HR= Human Relations type, OS= Open System type, RG= Rational Goal type, IP= Internal Processes type; * reverse statements in questionnaire.

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

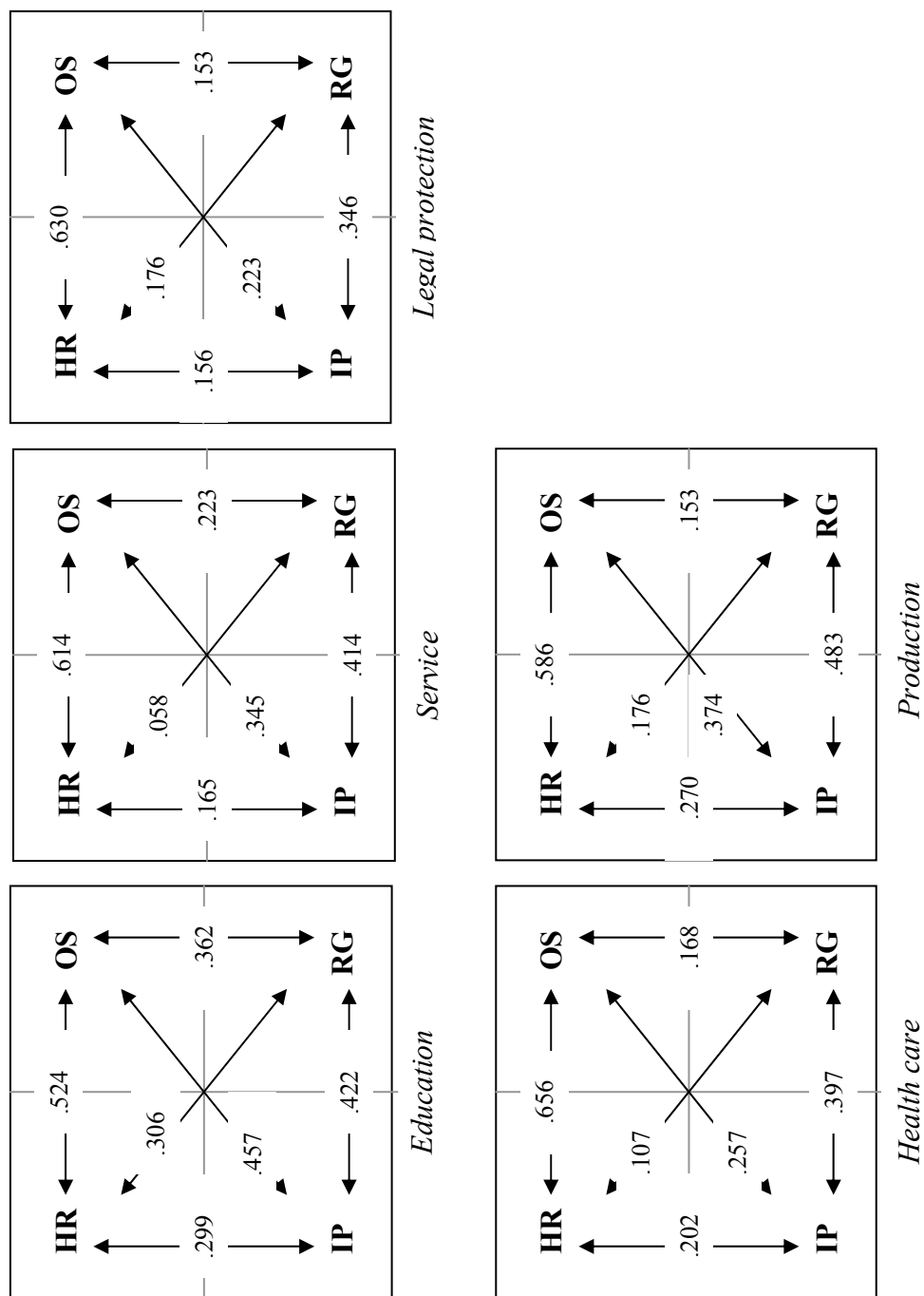
Appendix 8. Results of the correlation analysis

	Open System type	Internal Processes type	Human Relations type
INDUSTRY			
<i>Education</i>			
Internal Processes type	.457**		
Human Relations type	.524**	.299**	
Rational Goal type	.362**	.422**	.306**
<i>Service</i>			
Internal Processes type	.345**		
Human Relations type	.614**	.165**	
Rational Goal type	.223**	.414**	.058
<i>Production</i>			
Internal Processes type	.374**		
Human Relations type	.586**	.270**	
Rational Goal type	.256**	.483**	.289**
<i>Legal Protection</i>			
Internal Processes type	.223**		
Human Relations type	.630**	.156**	
Rational Goal type	.153**	.346**	.176**
<i>Health care</i>			
Internal Processes type	.257**		
Human Relations type	.656**	.202**	
Rational Goal type	.168**	.397**	.107*
ORGANIZATIONAL AGE			
<i>Old organizations</i>			
Internal Processes type	.341**		
Human Relations type	.614**	.231**	
Rational Goal type	.286**	.486**	.229**
<i>New organizations</i>			
Internal Processes type	.306**		
Human Relations type	.607**	.138**	
Rational Goal type	.250**	.326**	.278**
ORGANIZATIONAL SIZE			
<i>Medium</i>			
Internal Processes type	.334**		
Human Relations type	.572**	.240**	
Rational Goal type	.234**	.431**	.228**
<i>Large</i>			
Internal Processes type	.328**		
Human Relations type	.633**	.192**	
Rational Goal type	.301**	.459**	.213**

Notes: Pearson correlations; **= correlation is significant at the 0.01 level; *= correlation is significant at the .05 level; $|r| > .30$ are in boldface.

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

Appendix 9. Correlations between types of organizational culture in different industries



Appendix 10. Summary statistics for types of organizational culture (means, sample size, standard deviations)

Organization Type of organi- zational culture	Open System type			Internal Processes type			Human Relations type			Rational Goal type			Cluster member- ship
	m	n	SD	m	n	SD	m	n	SD	m	n	SD	
ELDIST	7.02	46	1.78	7.53	40	1.49	6.71	44	1.55	8.27	42	1.40	1
ELENG	6.71	32	1.95	7.77	42	1.67	7.03	39	1.51	8.79	42	1.39	1
SHOP	6.65	145	1.94	8.54	141	1.48	5.75	144	1.98	9.01	144	1.04	1
RECSERV_1	6.54	62	1.86	7.60	60	1.56	5.57	61	1.68	9.02	62	1.54	1
COMP	6.65	61	1.84	7.53	59	1.40	6.42	59	1.68	8.54	60	1.16	1
DEFEDU	6.58	38	1.42	9.26	39	0.67	5.92	40	1.67	5.19	37	1.89	3
COLLEDU	7.41	51	1.32	6.70	44	1.35	6.14	53	1.73	6.72	50	1.61	1
PROTNEW	5.95	120	1.99	8.51	121	1.29	4.65	120	1.85	6.25	123	1.75	3
STATION	6.70	99	1.78	8.53	97	1.14	6.43	99	1.69	7.95	96	1.47	1
MINE	6.60	57	1.70	8.16	57	1.26	5.34	56	1.67	8.13	57	1.27	1
PACK	7.44	29	1.85	7.57	28	1.56	6.17	29	1.99	8.73	29	1.46	1
PROTOLD	5.49	185	2.15	7.85	180	1.57	5.27	187	1.98	6.16	182	1.90	3
INSUAR	5.82	65	1.64	7.19	66	1.47	5.91	66	1.59	7.89	65	1.26	1
HEALTHEDU	8.23	47	1.24	8.07	45	1.32	6.71	47	1.44	7.44	44	1.94	1
HEALTH	6.27	426	1.94	7.61	428	1.49	5.71	435	1.98	6.44	423	1.90	3
FOAM	6.03	24	1.97	6.50	23	1.75	7.08	24	1.55	8.14	23	1.72	1
ENTERT	5.32	82	2.14	6.61	79	1.94	6.75	83	1.76	7.86	79	1.70	1
ECONEDU	5.21	25	2.27	4.29	23	2.46	4.90	22	2.20	4.60	25	1.93	2
BUSEDU	5.49	44	2.08	5.18	45	1.63	5.60	48	1.96	5.78	49	1.96	2
AGREDU	5.34	34	1.66	5.39	34	1.52	4.98	34	1.52	5.18	32	1.49	2
ITEDU	5.86	7	1.66	6.49	7	1.08	5.69	7	1.06	6.14	7	1.50	2

Appendix 10. Continued

LEGEDU	4.52	21	2.01	5.36	19	1.97	4.64	20	1.36	4.63	23	2.42	2
PEDEDU	5.57	83	1.79	5.50	84	1.71	5.69	80	1.63	5.48	74	1.52	2
TECHEDU	5.68	88	1.47	5.45	83	1.84	5.73	86	1.60	5.16	78	1.73	2
CLAS-SEDU	6.15	292	1.73	6.10	294	1.84	5.70	299	1.53	5.50	279	1.88	2
REC-SERV_2	6.96	153	1.64	7.54	146	1.44	6.56	152	1.73	8.51	151	1.36	1
CONSTR	7.46	48	1.37	7.09	44	1.50	6.54	47	1.62	8.32	46	1.14	1
BUILD-MAT	6.03	146	1.88	7.06	148	1.69	6.25	147	1.81	8.54	153	1.41	1
STORE	7.29	205	1.65	7.79	200	1.46	6.64	206	1.69	8.85	205	1.16	1

Notes: Estimates are given on a scale from 1 to 10, where “1” indicates that the particular type of organizational culture is not characteristic of the organization and “10” means, that the type of organizational culture is very characteristic of the organization. The mean of the type of organizational culture is calculated on the basis of respondent’s estimations (i.e. mean of the type of organizational culture is the mean the value of estimates given by respondents belonging to the particular organization).

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

Appendix 11. Comparison of means of types of organizational culture by industry (ANOVA analysis, LSD test)

Organizational culture type	F-statistic, p-value	Industry / p-value; significant differences			
		SERV	PROD	LEG	HC
Human Relations type	F(4,2717)=38.78; p=.000	ED	.000** ED<SERV	.000** ED<PROD	.000** LEG<ED
		SERV	...	.803 N/S	.000** LEG<SERV
		PROD	...	...	.000** LEG<PROD
		LEG	...	...	.000** LEG<HC
Open System type	F(4,2701)=20.23; p=.000	ED	.000** ED<SERV	.000** ED<PROD	.000** LEG<ED
		SERV	...	.488 N/S	.000** LEG<SERV
		PROD	...	...	.000** LEG<PROD
		LEG	...	...	.000** LEG<HC
Rational Goal type	F(4,2658)=399.25; p=.000	ED	.000** ED<SERV	.000** ED<PROD	.000** ED<LEG
		SERV	...	.275 N/S	.000 LEG<SERV
		PROD	...	...	.000** LEG<PROD
		LEG	...	...	.054 LEG<HC

Appendix 11. Continued

Internal Processes type	F(4,2658)=122.79 p=.000	ED	.000** ED<SERV	.000** ED<PROD	.000** ED<LEG	.000** ED<HC
		SERV000** PROD<SERV	.002** SERV<LEG	.117 N/S
		PROD000** PROD<LEG	.032** PROD<HC
		LEG000** HC<LEG

Notes: Estimations are given on 10-point scale; **= differences are significant at .05 level; N/S= no significant difference in means; ED= education, SERV= service, PROD= production, LEG= legal protection, HC= health care.
Source: Author's calculations on the basis of the research database.

Appendix 12. Comparison of means of types of organizational culture by groups defined in terms of employee position and tenure

Variable	Statistics	Human Relations type		Open System type		Rational Goal type		Internal Processes type	
		Old org.	New org.	Old org.	New org.	Old org.	New org.	Old org.	New org.
<i>position</i>									
managers	m	5.97	6.16	6.63	6.88	7.38	7.80	7.45	7.35
	N	189	84	193	85	185	86	191	84
SD		1.66	1.64	1.74	1.77	2.08	1.75	1.55	1.77
	m	5.82	5.78	6.36	6.35	6.81	7.41	7.26	7.26
specialists	N	652	228	645	230	649	230	653	228
	SD	1.86	1.75	1.90	1.82	2.11	1.84	1.70	1.70
blue-collars	m	5.87	6.05	6.20	6.16	7.05	7.30	7.16	7.54
	N	913	474	901	469	875	469	882	453
SD		1.85	1.97	1.96	2.00	2.20	2.19	1.95	1.96
	F-statistic	F(2,1751)= 0.56	F(2,783)= 2.07	F(2,1736)= 4.39	F(2,781)= 5.26	F(2,1706)= 5.56	F(2,782)= 2.19	F(2,1723)= 2.09	F(2,762)= 1.88
	p-value	.573	.128	.012**	.005**	.004**	.112	.124	.153
	sig diff	N/S	N/S	M>B	M>S	M>S	N/S	N/S	N/S
<i>tenure</i>									
Up to 1 year	m	6.47	6.30	6.67	6.64	7.78	6.99	7.70	7.67
	N	152	212	147	213	152	209	148	206
SD		1.63	1.77	1.99	1.87	1.93	2.04	1.52	1.69
	m	5.85	5.71	6.55	6.39	7.04	7.50	7.46	8.05
1-3 y.	N	207	210	205	209	205	210	203	206
	SD	1.78	1.92	1.90	1.83	2.07	1.84	1.66	1.44
3-10 y.	m	5.70	6.03	6.32	6.25	7.00	8.04	7.38	7.30
	N	311	206	318	206	302	205	313	201
SD		1.74	1.83	1.90	1.96	2.10	1.71	1.70	1.74

Appendix 12. Continued

over 10 y	m N SD	6.02 258 1.97	5.50 45 1.91	6.73 253 1.95	5.77 45 1.60	7.90 248 2.12	7.81 45 1.98	7.75 250 1.79	6.76 45 2.13
	F-statistic p-value	F(3,924)= 6.55 .000**	F(3,669)= 4.67 .003**	F(3,919)= 2.35 .071	F(3,669)= 3.32 .019**	F(3,903)= 12.21 .000**	F(3,665)= 11.20 .000**	F(3,910)= 2.74 .042**	F(3,654)= 11.10 .000**
	Sig.diff.	T ₁ >T ₂ T ₁ >T ₃ T ₁ >T ₄ T ₃ <T ₄	T ₁ >T ₂ T ₁ >T ₄	N/S	T ₁ >T ₃ T ₁ >T ₄ T ₂ >T ₄	T ₁ >T ₂ T ₁ >T ₃ T ₂ <T ₄ T ₃ <T ₄	T ₁ <T ₂ T ₁ <T ₃ T ₁ <T ₄ T ₁ <T ₃	T ₃ <T ₄	T ₁ <T ₂ T ₁ >T ₃ T ₁ >T ₄ T ₂ >T ₃ T ₂ >T ₄

Notes: Estimations are given on 10-point scale; **= significant at .05 level, N/S= no significant differences; M = managers, S = specialists; B = blue-collar;
T₁ = tenure up to 1 year; T₂ = tenure 1–3 years; T₃ = tenure 3–10 years; T₄ = tenure over 10 years.
Source: Author's calculations on the basis of the research database.

Appendix 13. Comparison of means of types of organizational culture between medium-sized and large organizations from service and production industries

Sample Org. size	Statistics	Human Relations type		Open System type		Rational Goal type		Internal Processes type	
		medium	large	medium	large	medium	large	medium	large
total sample									
	m	6.45	5.75	6.36	6.32	8.28	6.82	7.37	7.26
	SD	1.72	1.85	1.93	1.93	1.44	2.17	1.67	1.89
	n	637	2097	632	2083	635	2045	626	2050
	F-statistic	F(1,2732)=71.56; .000*		F(1,2713)=0.193; .661		F(1,2678)=251.4; .000**		F(1,2674)=1.86; .173	
	sig diff	HR _M > HR _L		N/S		RG _M > RG _L		N/S	
	service sector								
	m	6.37	6.25	6.11	6.94	8.01	8.81	7.52	7.89
	SD	1.68	1.81	1.93	1.76	1.45	1.25	1.67	1.52
	n	304	559	305	563	297	558	299	545
	F-statistic	F(1,861)=0.87; .352		F(1,866)=41.21; .000**		F(1,853)=70.99; .000*		F(1,842)=10.68; .001**	
	sig diff	N/S		SERV _M < SERV _L		RG _M < RG _L		IP _M < IP _L	
	production								
	m	6.49	5.34	6.57	6.60	8.47	8.13	7.20	8.16
	SD	1.73	1.67	1.70	1.70	1.40	1.27	1.66	1.26
	n	329	56	324	57	330	57	320	57
	F-statistic	F(1,383)=21.54; .000**		F(1,379)=0.01; .912		F(1,385)=3.04; .082		F(1,375)=17.35; .000**	
	sig diff	PROD _M > PROD _L		N/S		N/S		PROD _M < PROD _L	

Notes: Estimations are given on 10-point scale; **= significant at .05 level, N/S= no significant differences. HR_M= estimation of Human Relations type in middle-sized organization; HR_L =estimation of Human Relations type in large organization; RG_M = estimation of Rational Goal type in middle-sized organization; RG_L = estimation of Rational Goal type in large organization; IP_M= estimation of Internal Processes type in middle-sized organization; IP_L=estimation of Internal Processes type in large organization; PROD_M, PROD_L = middle-sized and large organizations from production industry; SERV_M, SERV_L= middle-sized and large organizations from service industry.
Source: Author's calculations on the basis of the research database.

Appendix 14. Determinants of the Rational Goal type of organizational culture: binary logit analysis

	Parameter estimate	z-statistic	Marginal effect
Service	3.335*	21.03	0.605
Production	3.551*	13.12	0.509
Legal protection	0.428*	2.74	0.099
Health care	0.739*	5.35	0.168
Large	0.669*	3.19	0.165
New	-0.156	-1.19	-0.038
Constant	-1.865*	-7.72	...
Log pseudolikelihood	-1348.38		
Pseudo R ²	0.264		
Chi ² -test prob.	0.000		
Number of observations	2663		

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

Appendix 15. Determinants of the Internal Processes type of organizational culture: binary logit analysis

	Parameter estimate	z-statistic	Marginal effect
Service	1.739*	14.14	0.387
Production	1.675*	9.03	0.346
Legal protection	1.910*	12.24	0.372
Health care	1.381	10.47	0.301
Large	0.589*	3.96	0.146
New	0.185	1.67	0.046
Constant	-1.531*	-4.11	...
Log pseudolikelihood	-1676.51		
Pseudo R ²	0.085		
Chi ² -test prob.	0.000		
Number of observations	2663		

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

Appendix 16. Determinants of the Open System type of organizational culture: binary logit analysis

	Parameter estimate	z-statistic	Marginal effect
Service	0.664*	5.81	0.161
Production	1.074*	5.66	0.242
Legal protection	-0.501*	-3.58	-0.125
Health care	0.101	0.81	0.025
Large	0.733*	4.92	0.181
New	0.053	0.53	0.013
Constant	-0.730*	-4.11	
Log pseudolikelihood	-1822.99		
Pseudo R ²	0.023		
Chi ² -test prob.	0.000		
Number of observations	2760		

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

Appendix 17. Determinants of the Human Relations type of organizational culture: binary logit analysis

	Parameter estimate	z-statistic	Marginal effect
Service	0.371*	3.33	0.027
Production	0.203	1.13	0.044
Legal protection	-0.592*	-4.14	0.034
Health care	0.020	0.16	0.031
Large	-0.435*	-2.99	-0.107
New	0.043	0.43	0.010
Constant	0.337*	-4.11	
Log pseudolikelihood	-1831.54		
Pseudo R ²	0.028		
Chi ² -test prob.	0.000		
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.

SUMMARY IN ESTONIAN

Organisatsioonikultuuri avaldumine Eesti organisatsioonide näitel

Töö aktuaalsus

Organisatsioonikultuur on tõusnud organisatsioonikäsitlustes esiplaanile, kuna on mõistetud organisatsiooni nn „pehme poole“ olulisust organisatsiooni kui terviku toimimisel. Mõned autorid (nt Wilson ja Rosenfeld, 1990) on rõhutanud, et need lähenemisviisid organisatsioonile, mis põhinevad ainult formaalse struktuuri kirjeldustele, ei suuda tegelikult selgitada organisatsiooni tõelist olemust ja tähendust kogu tema mitmekesisuses ning seetõttu tuleb organisatsiooni toimimise mõistmiseks pöörduda kultuuri kontseptsiooni poole. Seoses uute juhtimiskontseptsioonide väljatöötamisega (nt väärtuspõhine juhtimine) on organisatsioonikultuur kui nähtus saanud taas suurema tähelepanu osaliseks ning organisatsioonikultuuri on hakatud käsitlema ka näiteks strateegilise juhtimise vaatenurgast lähtudes (vt Dolan ja Garcia, 2002). Empiirilistest uuringutest saadud tulemused toovad ilmekalt esile organisatsioonikultuuri olulisuse organisatsiooni jaoks: tulemused näitavad, et organisatsioonikultuur on seotud sooritusega – üheltpoolt on võimalik leida seoseid organisatsioonikultuuri ja organisatsiooni/ettevõtte majandusnäitajate vahel, kuid teisalt on leitud, et organisatsioonikultuur mõjutab selliseid tööga seotud tulemusi nagu pühendumus, tööga rahulolu ja tööõnuelavus.

Teema on eriti aktuaalne kiiresti muutuvates ja etteprognoosimatutes majanduskeskkonna tingimustes, kus inimressurss või nn organisatsiooni „pehme pool“ võib osutuda organisatsiooni jaoks kriitilise tähtsusega teguriks. Näiteks Vadi (2003a: 13) on väitnud, et organisatsiooni sooritust takistavad sageli probleemid, mis tulenevad organisatsioonikultuurist. Selliste probleemide näideteks võivad olla organisatsiooni innovatsioonivõimekus, uute tehnoloogiate rakendamine, kliendikesksus, organisatsioonisisene, aga ka –väline koostöö jne. Autor leiab, et mõistmaks organisatsiooni toimimise sügavamaid allhoovusi, selleks et suunata ja mõtestada organisatsiooni protsesse ja arenguteid on vaja omada põhjalikke teadmisi ja arusaama organisatsioonikultuurist.

Kuigi suur hulk teadusartikleid keskendub küsimusele, milline on organisatsioonikultuuri mõju organisatsioonile, jätkub samal ajal ka elav diskussioon organisatsioonikultuuri olemuse üle. Siiani ei ole välja kujunenud ühtset seisukohta, kuidas organisatsioonikultuuri käsitleda ning kitsaskohad organisatsioonikultuuri kui nähtuse määratlemisel on organisatsiooni- ja juhtimiselases kirjanduses laialdaselt diskuteeritav teema. Üks organisatsiooniuringute klassikutest Edgar H. Schein on väljendanud skeptilisust, kas organisatsioonikultuur kui mõiste üldse suudab jääda ellu ning kas ta pakub midagi kasulikku organisatsiooniuringutesse, kuna raske või isegi võimatu on luua kontseptsiooni kui

ei ole ühist arusaama, kuidas nähtust defineerida, mõõta ja organisatsioonides rakendada (Schein, 1991: 243).

Doktoritöö aktuaalsus seisneb peamiselt kahes vaatepunktis: esiteks, kontseptuaalse selguse loomine ning teiseks, empiiriliste uuringute diapasoni avardamine uute analüüsitavate tegurite kaasamise näol. Teoreetilises plaanis analüüsib töö autor süsteemselt organisatsioonikultuuri olemust, selgitab teisi organisatsioonikultuuri mõistega seotud nähtusi ning analüüsib organisatsioonikultuuri käsitlemisega seotud metodoloogilisi probleeme. Organisatsioonikultuuri analüüsitakse sageli mõne konkreetse tüpoloogia raamistikus. Kuigi see lähenemisviis on pälvinud kriitikat, võib tuua esile ka vastuargumente tüpoloogiatega kasutamise poolt. Tüpoloogiad võimaldavad toime tulla mitmekesise informatsiooni töötlemise, tõlgendamise ja üldistamisega, kuna tüpoloogiatega kasutamisel määratletakse organisatsioonikultuuri tüübid teatud põhitunnuste alusel. Antud lähenemisviisi võib lugeda õigustatuks, kui eesmärgiks on analüüsida nt mitmesuguste tegurite mõju organisatsioonikultuurile ning võrrelda saadud tulemusi erinevate organisatsioonide lõikes.

Organisatsioonikultuur on mitmetahuline nähtus, milles erinevad tunnused on omavahel tervikuks põimunud, mistõttu on mõistetavamate kategooriate loomine organisatsioonikultuuri tüüpide näol põhjendatud. Organisatsioonid ei erine üksteisest mitte selle poolest, kas nad esindavad teatud organisatsioonikultuuri tüüpi või mitte, vaid pigem saab organisatsioone eristada selle alusel, mil määral üks või teine organisatsioonikultuuri tüüp on antud organisatsioonile iseloomulik. Doktoritöö autor on seisukohal, et organisatsioonikultuuri on mõttekas käsitleda kasutades organisatsioonikultuuri mustri mõistet. Antud töö raames defineeritakse organisatsioonikultuuri mustrit kui kultuuriprofiili, mis iseloomustab organisatsioonikultuuri kahest vaatenurgast: esiteks, näitab organisatsioonikultuuri muster organisatsioonikultuuri tüüpide suhtelist tähtsust antud organisatsioonis ja teiseks, määratleb muster seosed erinevate organisatsioonikultuuri tüüpide vahel.

Empiirilises osas analüüsib doktoritöö autor tegureid, mis mõjutavad organisatsioonikultuuri avaldumist panustades sellega organisatsioonikultuuri uurin-gute edendamisse. Autor leiab, et organisatsioonikultuuri kujunemist käsitleva teoreetilise analüüsi ning empiiriliste uuringute vahel esineb märgatav lõhe – kuigi teooria rõhutab mitmete kontekstuaalsete (nt rahvuskultuur, organisatsioonilise tegevusvaldkond, majandus- ja õiguslik keskkond jne) ja organisatsiooniliste tegurite (organisatsiooni suurus, vanus, ajalugu jmt) olulisust organisatsioonikultuuri kujunemisel ja avaldumisel, keskenduvad empiirilised uurin-gud eelpool loetletud teguritele küllaltki harva (rahvuskultuuri kui mõjutegurit võib pidada erandiks). Seega usub autor, et kuigi organisatsioonikultuur on olnud teadusuuringute keskmes juba mitu aastakümnet, võib siiski leida veel mitmeid aspekte, mida on vaja süsteemselt uurida.

Nii näiteks on organisatsioonikultuuri fenomenoloogia ja erinevad organisatsioonikultuuri kui nähtuse tõlgendused leidnud ainult põgusat käsitlemist, mis ei võimalda sügavamat arusaama sellest mitmetahulisest nähtusest. Eri-

nevad organisatsioonikultuuri tõlgendused toovad kaasa ka mitmetähenduslikkuse terminoloogilisel tasandil (näiteks ei ole ühtset kokkulepet organisatsioonikultuuri (*organizational culture*) ning ettevõttekultuuri (*corporate culture*) kasutamisel). Autor leiab, et kuigi kahel mõistel on osaline kattuvus, tuleb olla ka teadlik terminite erinevatest konnotatsioonidest. Käesoleva doktoritöö raames kasutatakse mõistet organisatsioonikultuur. Antud termin on kasutusel tähenduses, mis rõhutab samaaegselt toimivate mõjujõudude tulemusel organisatsioonis väljakujunenud kultuuri orgaanilisust ja dünaamilisust ning samas võtab arvesse piiranguid organisatsioonikultuuri otsesel juhtimisel ja kiirel ümberkujundamisel.

Schein (2000) toob esile teise laialdaselt levinud väärarusaama, mille kohaselt tähistavad terminid organisatsioonikultuur ja organisatsiooni kliima samu nähtusi. Kuigi kahe kontseptsiooni vahelised piirid on hägusad ning erinevusi on keeruline selgitada tuleb siiski aru saada, et tegemist ei ole samade nähtustega. Peamine erinevus, mida välja tuuakse, on see, et kultuur puudutab organisatsiooni sügavamat olemust (Denison, 1996), mis tähendab seda et kultuur on kinnistunud väärtustes, uskumustes ning baasilistes arusaamades ning organisatsioonikultuuri tähendus on kujunenud sotsialiseerumisprotsessi käigus.

Ka organisatsioonikultuuri kui nähtuse avamisel esineb erinevaid tõlgendusi nii kontseptuaalsel kui ka instrumentaalsel tasandil ning seda peamiselt seetõttu, et puudub ühtne arusaam sellest, millised komponendid organisatsioonikultuuri moodustavad ning millised on peamised organisatsioonikultuuri kujundavad mõjutegurid.

Samas kui teadusringkondades jätkuvad diskussioonid organisatsioonikultuuri olemuse ning sobivaima definitsiooni üle on praktikud enam huvitatud küsimusest, kuidas organisatsioonikultuuri juhtida ning kuidas kujundada organisatsiooni jaoks sobivaimat kultuuri. Näiteks praktikute ettekanded konverentsidel näitavad selgelt, et organisatsioonikultuuriga seotud probleemistik on organisatsioonide jaoks jätkuvalt aktuaalne. Ettekannetest ilmneb, et kuigi iga organisatsioon on omanäoline, võib ometi märgata ka sarnaseid arengutendentse ja organisatsioonikultuuri ühisjooni, mis omakorda tõstatab küsimuse organisatsioonikultuuri kujundavatest teguritest ja mõjujõududest.

Uurimuse eesmärk ja ülesanded

Doktoritöö eesmärgiks on Eesti organisatsioonide näitel tuua välja organisatsioonikultuuri avaldumise seaduspärasused ja mustrid. Eesmärgi saavutamiseks püstitatakse järgnevad uurimisülesanded:

1. Analüüsida organisatsioonikultuuri olemust erinevate kontseptuaalsete lähenemisviiside ja tüpoloogiate põhjal;
2. Uurida, millised tegurid mõjutavad organisatsioonikultuuri kujunemist;

3. Analüüsida organisatsioonikultuuri uurimise metodoloogilisi lähenemisviise ning töötada välja meetod Eesti organisatsioonide organisatsioonikultuuri kaardistamiseks;
4. Formuleerida uurimisväited organisatsioonikultuuri muustritest ning organisatsiooniliste ja kontekstuaalsete tegurite mõjust organisatsioonikultuurile;
5. Analüüsida erinevate tegurite mõju organisatsioonikultuuri muustritele Eesti organisatsioonides;
6. Tõlgendada uuringutulemusi kontekstuaalsete ja organisatsiooniliste tegurite mõjust organisatsioonikultuurile;
7. Uuringutulemuste põhjal tuua välja järeldused teooria ning organisatsioonide juhtimistegevuste jaoks.

Töö uudsus

Vaatamata sellele, et organisatsioonikultuur on olnud uuringute keskmes juba pikka aega, puudub siiski süsteemne valdkonna käsitus, millele viitab näiteks see, et sageli käsitletakse organisatsioonikultuuri väga kitsalt ja lihtsustatult ning ei pöörata piisavalt tähelepanu organisatsioonikultuuri kui nähtuse sügavamale tähendusele. Antud doktoritöö uudsus tuleneb mitmete, seni peamiselt teoreetiliselt, käsitletud tegurite kombineerimisest. Kuigi nii organisatsiooniliste (nt suurus, vanus, organisatsiooni ajalugu) kui ka kontekstuaalsete mõjutegurite (eelkõige rahvuskultuuri ja organisatsiooni tegevusvaldkonna) rolli organisatsioonikultuuri kujunemises on ka empiirilisel uuritud, pole autorile teadaolevalt nimetatud tegureid ühte uuringusse koondatud, vaid pigem on käsitletud ühe teguri mõju. Samas leiab autor, et mitmete mõjutegurite lülitamine uuringusse pakub võimalust jõuda sügavamate ja sisukamate järeldusteni.

Lääneriikides on organisatsioonikultuuri uuringutel pikad traditsioonid, kuid siirderiikides, sh Eestis ei ole toimunud antud valdkonna süsteemset käsitlust ja analüüsi. Antud valdkonna uuringud Eestis on küllaltki fragmentaarsed nii uuritud valimite kui ka kasutatud meetodite poolest. Nii näiteks on küllaltki põhjalikult uuritud indiviidi karakteristikute (sotsiaal-demograafilised tunnused, isiksuseomadused, väärtused jmt) mõju organisatsioonikultuuri tajumisele (vt näiteks prof Vadi poolt juhendatud uurimisgrupi uuringud), siis organisatsiooni tunnuste ja väliskeskkonna mõju organisatsioonikultuurile pole piisavalt uuringutega avatud. Seetõttu pidas autor oluliseks viia läbi ulatuslikum uuring, mis hõlmaks neid tegureid, mida pole veel siiani piisavalt uuritud ning mis analüüsiks tulemusi arvestades paikkonna eripärasid. Tänu ajaloolisele taustale ning siirdeprotsessile viimasel kahel aastakümnel pakub Eesti head võimalust keskkonna ning organisatsiooniliste tegurite mõju uurimiseks.

Lauristin ja Vihalemm (1997b) rõhutavad, et hoolimata peaaegu 50 aastat kestnud okupatsioonist ja stagnatsioonikogemusest erines Eesti siiski teistest Nõukogude impeeriumi riikidest kuna siin oli totalitaristliku süsteemi surve

nõrgem, suur osa eestlastest ei aktsepteerinud uut nõukogude identiteeti, sest mälestus iseseisvusaegadest kestis ning samuti oli oluline see, et Eesti oli avatud Lääneriikide ja Põhjamaade kultuurimõjudele. Peale iseseisvumist koges Eesti radikaalseid reforme ning kiiret arengut, mis asetaski organisatsioonid intrigeerivasse olukorda. Vadi (2003) on märkinud, et „keskkond kihutas tuhat-nelja ning organisatsioonid pidid arengutempoga sammu pidama“, mis ühelt-poolt andis võimaluse vastasutatud organisatsioonidel luua struktuure ja rakendada organisatsioonilisi vorme, mis sobiksid turbulentsesse ja dünaamilisse keskkonda, kuid teiselt poolt survestas see ka vanu organisatsioone muutusteks. Seetõttu pakub Eesti head võimalust uurimaks näiteks kas uute, peale Eesti iseseisvumist ja turumajanduse põhimõtete omaksvõttu asutatud organisatsioonide organisatsioonikultuur erineb vanade, nõukogude ajal asutatud organisatsioonide kultuurist. Selles valguses on huvitav analüüsida, kas organisatsioonikultuuri kohta teoorias esitatud väited, aga ka eelnevate uuringute tulemused on kehtivad Eesti organisatsioonides, st kuidas ja kas Eesti situatsioonis arengud ühiskonnas mõjutavad teatud organisatsioonikultuuri mustrite esilekerkimist.

Käesolev doktoritöö keskendub Eesti organisatsioonidele ja kuigi teised siirderiigid võivad olla kogenud samasugust arenguloogikat, tuleb siiski võtta arvesse piiranguid tulemuste üldistamisel organisatsioonikultuuri valdkonnas. Nagu eelpool mainitud, on organisatsioonikultuur mitmetahuline ning isegi „ähmane“ nähtus. Enamus organisatsioonikultuuri empiirilistest uuringutest on läbi viidud ühe riigi piires, kus organisatsioonikultuuri avaldumist võivad mõjutada riigispetsiifilised tegurid, mis muudab üldistuste tegemise keeruliseks. Siiski, iga uuring on oluline, kuna see võimaldab rikastada teadmust uuritava valdkonna kohta. Autori arvates panustab käesolev dissertatsioon järgnevatesse uurimustesse, kuna see koondab ühte uuringusse mitmed erinevad organisatsioonikultuuri mõjutegurid ning analüüsib, kuidas need tegurid mõjutavad organisatsioonikultuuri avaldumist teatud tingimuste olemasolu korral. Saadud tulemused rikastavad teadmust, mis võimaldab edaspidi erinevate uuringute sünteesi käigus luua põhjalikumat arusaama organisatsioonikultuuri avaldumise vormidest.

Käesoleva doktoritöö uudsus seisneb ka uue organisatsioonikultuuri mõõtmise instrumendi loomises. Kuigi Organisatsiooni väärtuste küsimustiku (*Organizational Values Questionnaire*) algidee põhineb Konkureerivate väärtuste raamistikul (*Competing Values Framework*), on küsimustiku näol siiski tegemist originaalse eesti- ja venekeelse organisatsioonikultuuri analüüsi instrumendiga. Eestis on vähe akadeemilistes uuringutes kasutatavaid organisatsioonikultuuri analüüsi vahendeid. Näiteks organisatsioonikultuuri mõõtmise vahendit (Roots, 2003), mis on töötatud välja Tallinna Ülikoolis, on kasutatud vaid vähestes magistritöödes. Teine instrument, organisatsioonikultuuri küsimustik, mis on välja töötatud Vadi *et al* (2002) poolt võimaldab analüüsida organisatsioonikultuuri ülesande ja suhete orientatsiooni. Viimati mainitud mõõtmisvahendit on kasutatud mitmetes uuringutes. Kuigi autor leiab, et

ülesande- ja suhteorientatsioon on sobilikud organisatsioonikultuuri analüüsimiseks, tuleb ometi tõdeda, et nähtuse põhjalikumaks avamiseks tasub kaaluda ka teiste aspektide analüüsimist.

Doktoritöö autori poolt loodud Organisatsiooni väärtuste küsimustik toob välja järgmised dimensioonid: paindlikkus/stabiilsus ning väljapoole/sisepoole suunatus. Neid dimensioone on pidanud organisatsioonikultuuri määratlemisel oluliseks mitmed uurijad (nt. Deal ja Kennedy, 1982; Hofstede, 1998; Harrison, 1972; Schein, 1983; Trice ja Beyer, 1993). Tänapäevases globaliseerunud ja ebastabiilses keskkonnas on paindlikkuse ja stabiilsuse dilemma aktuaalne paljude organisatsioonide jaoks. Samuti seisavad organisatsioonid silmitsi küsimusega, millised on organisatsiooni jaoks kõige olulisemad ressursid ning mil määral võimalus oma tegevust efektiivsemaks muuta peitub organisatsioonis endas või hoopiski väliskeskkonnas. Organisatsiooni väärtuste küsimustik võimaldab analüüsida organisatsioonikultuuri nende vaatenurkade alt, mida ei ole eelnevalt Eestis põhjalikult uuritud.

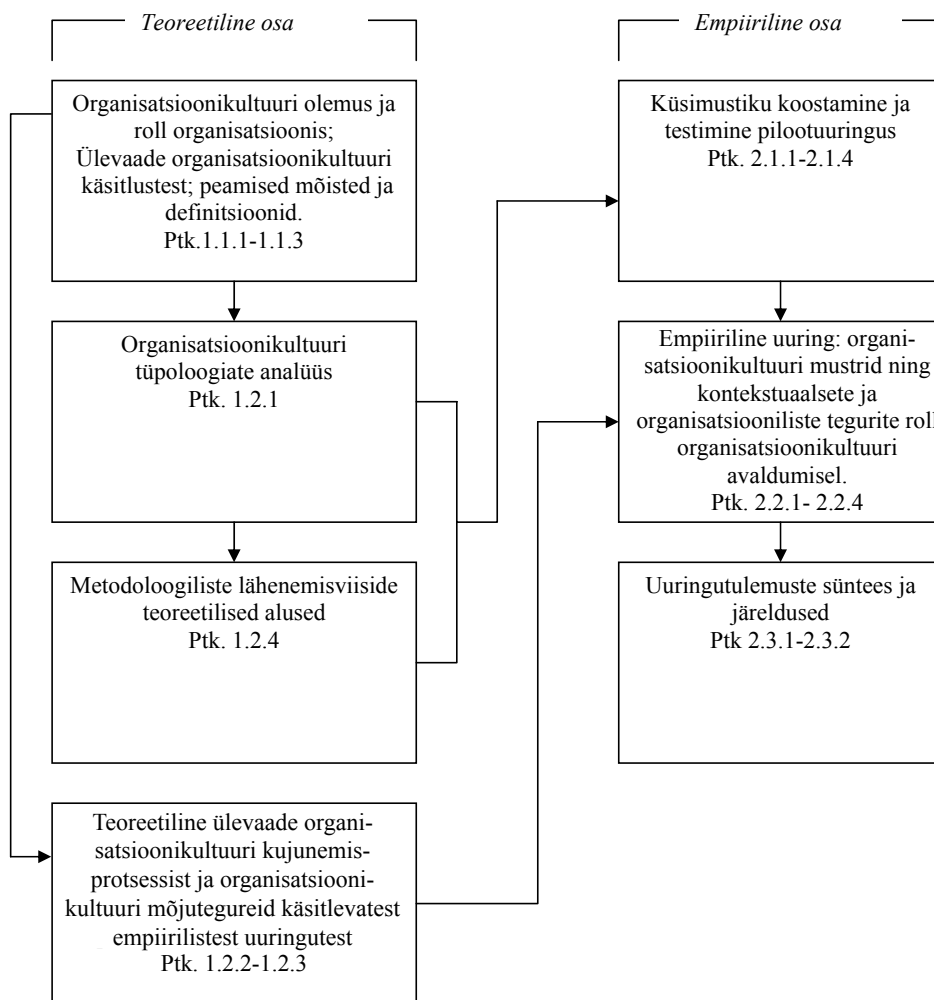
Töö ülesehitus ja teoreetiline tagapõhi

Käesolev doktoritöö koosneb kahest osast: esimene peatükk loob uurimuseks teoreetilise ja kontseptuaalse baasi ning teine peatükk sisaldab empiirilist analüüsi organisatsioonikultuuri avaldumist mõjutavatest teguritest Eesti organisatsioonides.

Doktoritöö teoreetilises osas analüüsiti organisatsioonikultuuri olemust ja rolli organisatsioonis, organisatsioonikultuuri avaldumist mõjutavaid tegureid, aga ka organisatsioonikultuuri käsitlemisvõimalusi tüpoloogiate rakendamise kaudu. Lisaks toodi välja erinevate metodoloogiliste lähenemisviiside teoreetilised alused ning rakendusvõimalused organisatsioonikultuuri analüüsil.

Alapunktis 1.1 käsitleti organisatsioonikultuuri kui nähtuse olemust ning analüüsiti erinevate koolkondade põhiseisukohti organisatsioonikultuuri kui nähtuse käsitlemisel. Organisatsioonikultuuri olemuse mõistmiseks on vaja pöörduda kultuuri mõiste juurde, sest organisatsioonikultuuri kontseptsioon tuleneb antropoloogias käsitletud kultuuri mõistest ning mõtteviiside paljususest, mida võib kohata organisatsioonikultuuri alases kirjanduses tuleneb otseselt sellest, et ei ole ühtsest arusaama ka kultuurist kui baasmõistest. Doktoritöö annab ülevaate kultuuri definitsioonide paljususest ning süstematiseerib erinevaid kultuurikäsitlusi. Organisatsioonikultuuri mõistmisel võib eristada kahte mõtteviisi – esiteks, sümbolistlikud käsitlused, mis mõistavad organisatsioonikultuuri ideede süsteemi ja sümbolite kogumina ning mis rõhutavad seda, et organisatsioonikultuuri mõistmise võtmeks on sümbolsete elementide interpretatsioon. Teise lähenemisviisi – sotsio-kultuuriliste käsitluste kohaselt on organisatsioonikultuur kahe komponendi kombinatsioon: ühelt poolt koosneb organisatsioonikultuur kultuursüsteemist, mis sisaldab organisatsiooni liikmete poolt omaksvõetud väärtusi, ideoloogiaid, müüte jne, ning teiselt poolt, sotsio-

kultuurilisest süsteemist, mis hõlmab struktuuri, strateegiaid, poliitika ja protsesse. Autor leiab, et kummalgi organisatsioonikultuuri lähenemisviisil on nii eeliseid kui ka puudusi ning selleks, et organisatsioonikultuuri nähtust avada, võivad mõlemad vaatenurgad osutada kasulikuks. Siiski, autori arvates lähtub enamus organisatsioonikultuuri olemuse üle toimuvaid debatte, aga ka suur osa empiirilistest uuringutest sotsio-kultuurilisest lähenemisviisist. Taolist tendentsi põhjendab autor sellega, et sotsio-kultuurilist lähenemisviisi võib võrreldes sümbolistlike käsitlustega pidada vähem abstraktseks, kuna organisatsioonikultuuri olemust püütakse siin avada instrumentaalseid kategooriaid kasutades ning see võimaldab avada organisatsioonikultuuri struktureeritud ning isegi kvantifitseeritaval moel.



Joonis 1. Doktoritöö ülesehitus

Käesolev doktoritöö lähtus organisatsioonikultuuri käsitlemisel sotsio-kultuurilisest käsitlusviisist ning analüüsis võrdlevalt antud koolkonda kuuluvate autorite poolt väljapakutud organisatsioonikultuuri käsitlusviise. Analüüs näitas, et organisatsioonikultuuri määratlusi on mitmeid ning autorid on defineerinud organisatsioonikultuuri erinevalt, kasutades nähtuse avamiseks mõisteid (nt väärtused), mille tähendus omakorda võib erinevate autorite käsitlustes varieeruda. Selleks, et tekiks selgem arusaam organisatsioonikultuuri olemusest, osutus vajalikuks organisatsioonikultuuri definitsioonide süstematiseerimine. Analüüsi tulemusel leidis autor, et enamus organisatsioonikultuuri definitsioone rõhutavad vähemalt üht kahest organisatsioonikultuuri põhidimensioonist: paindlikkus/stabiilsus (s.o. kas organisatsioonikultuur on ajas muutuv või pigem staatiline) ning sissepoole/väljapoole suunatus (s.t. kas organisatsioonikultuuri rolliks on organisatsiooniseste tegevuste integreerimine või pigem väliskeskonnaga ühildumisele kaasa aitamine). Kui enamasti domineerib erinevate autorite organisatsioonikultuuri käsitlustes üks nimetatud dimensioonidest, siis Schein (1983: 13) rõhutab mõlema aspekti olulisust, pakkudes välja organisatsioonikultuuri määratluse, mille kohaselt organisatsioonikultuur on jagatud baasiliste arusaamade muster, mille grupp on loonud, avastanud või arendanud õppimise protsessis, selleks et tulla toime välise kohandamise ja sisemise integratsiooni probleemidega. Scheini määratluse järgi kujunevad baasilised arusaamad välja aja jooksul ning neid antakse edasi uutele organisatsiooni liikmetele, õpetades, millised on sobivad reaktsioonid või lahendused organisatsiooni ees seisvate probleemide lahendamisel.

Eelpool toodud definitsioonist järeldub, et organisatsioon seisab silmitsi erinevate ülesannetega ning selleks, et nendega toime tulla peab organisatsioon suutma olla samal ajal paindlik ning stabiilne ja olles fokusseeritud sisemiste protsesside ja tegevuste koordineerimisele tuleb samal ajal olla avatud ka väliskeskkonnas toimuvale. Sellest tulenevalt võib organisatsioonikultuur põhineda väga erinevatel ning isegi vastuolulistel väärtustel ning seetõttu „pilt, mis uurijale organisatsioonist avaneb võib olla täis kontraste, kus võib leida harmooniat kõrvuti eristumisega, eriarvamusi ja kultuuriidentiteetide paljusust, mis võivad olla pidevas muutumises“ (Sackmann, 1997: 4). Kuna organisatsioonikultuuri võib käsitleda mitmetasandilise nähtusena, mis koosneb nii nähtavatest (nt käitumisviisid, sümbolid jne) kui nähtamatutest (nt väärtused) ja isegi osaliselt teadvustamata elementidest (nt baasilised arusaamad), siis pole organisatsioonikultuuri mõistmine ja analüüsimine kerge ülesanne. Samuti pole alati võimalik selgepiiriliselt välja tuua organisatsioonikultuuri mõju organisatsioonile (näiteks organisatsiooni kui terviku tulemuslikkusele või organisatsiooni liikmete tööga seotud tulemustele). Smircich (1983) on rõhutanud organisatsioonikultuuri rolli järgmistes aspektides: 1) organisatsioonikultuur loob organisatsiooni liikmetele identiteeditunde; 2) suurendab pühendumist organisatsioonile või selle üksusele; 3) tagab süsteemi stabiilsuse; ning 4) mõjutab organisatsiooni liikmete käitumismustreid. Lisaks on rõhutatud organisatsioonikultuuri rolli kohesiivsuse kujundamisel (Goffee ja Jones, 1998).

Samas, teine käsitluste suund on rõhutanud organisatsioonikultuuri mõju organisatsiooni sooritusele ja tulemuslikkusele. Nii näiteks on Cameron ja Quinn (1999) toonud välja tõsiasja, et edukad ettevõtted on loonud organisatsioonikultuuri, mis on nende jaoks muutunud konkurentsieeliseks. Alapunktis 1.1.3 käsitleti empiirilisi uuringuid, mis on püüdnud leida seoseid organisatsioonikultuuri ja organisatsiooni soorituse ning organisatsioonikultuuri ja tööga seotud väljundite vahel.

Mitmed käsitletud uuringutest tõestasid seose olemasolu organisatsioonikultuuri ja organisatsiooni soorituse vahel. Nii näiteks leidsid Gordon ja DiTomaso (1992), Kotter ja Heskett (1992) ning Mallak *et al* (2003), et tugeval, ühtselt tajutud kultuuril on tulemustele positiivne mõju. Samas näitasid teised uuringud, et teatud kultuuri tüüpidel on positiivne mõju organisatsiooni majandusnäitajatele (vt nt Deshpandé ja Farley, 2004; Ogbonna ja Harris, 2000; Bellou, 2007; Mayer *et al*, 1995 jt). Mitmed uuringud tõestasid, et organisatsioonikultuuri mõju organisatsiooni tulemuslikkusele pole universaalne, vaid mõni lisamuutuja mõjutab seose sisu. Nii näiteks võib välja tuua organisatsiooni suuruse (nt Denison ja Mishra, 1995) ja organisatsiooni tegevusvaldkonna (Gordon, 1985; Christensen ja Gordon, 1999) mõju organisatsioonikultuuri ja organisatsiooni tulemuste vahelistele seostele.

Organisatsioonikultuuri ja organisatsiooni tulemuslikkuse vahelisi seoseid käsitlevate uuringute ühisjooneks võib pidada seda, et nimetatud uuringud ei analüüsi uuritavat seost põhjustavaid või soodustavaid mehhanisme. Autor leiab, et tegelikult kõik, mis organisatsioonis juhtub, saab teoks tänu inimestele ning seetõttu on otstarbekas analüüsida seda, mismoodi organisatsioonikultuur mõjutab tööga seotud tulemusi. Empiirilised uuringud on toonud esile organisatsioonikultuuri mõju hoiakutele ja käitumisele organisatsioonis (nt Vanderberghe ja Peiró, 1999), tööga rahulolule (Moynihan ja Pandey, 2007; Lund, 2003; Tzeng *et al*, 2002); pühendumisele (Wells *et al*, 2007; Silverthorne, 2004; Ritchie, 2000; Van Vuuren *et al*, 2008 jt), tööjõu voolavusele (Amos ja Weathington, 2008; Sheridan, 1992). Samas on mitmed uuringud näidanud, et mitte üksi organisatsioonikultuur ei mõjuta eelpool loetletud tööga seotud tulemusi, vaid oluline on isiksuse ja organisatsiooni omavaheline sobivus (nt O'Reilly *et al*, 1991; Abbott *et al*, 2005).

Kokkuvõtvalt võib tõdeda, et ehkki organisatsioonikultuur näib omavat märkimisväärset mõju nii organisatsiooni tulemuslikkusele kui ka tööga seotud tulemustele, ei saa siiski välja tuua üldistavaid järeldusi organisatsioonikultuuri mõjust nimetatud aspektidele. Lisaks selgus uuringutest, et selgemate seoste väljatoomiseks on otstarbekas kasutada organisatsioonikultuuri analüüsimisel väiksemaid ja piiritletumaid analüüsiühikuid, näiteks tüüpe. Sarnased kategooriad võimaldavad välja tuua seoseid, võrrelda ja interpreteerida neid üle mitme uuringu, mis omakorda võimaldab välja tuua üldisemaid järeldusi nähtuste vaheliste seoste kohta. Doktoritöö alapunktis 1.2. käsitleti tüpoloogiate olemust ning kasutusvõimalusi organisatsioonikultuuri analüüsimisel ning lisaks käsitleti organisatsioonikultuuri kujunemisprotsessi, toodi välja

organisatsioonikultuuri peamised mõjutegurid ning loodi kontseptuaalne baas empiirilise uuringu läbiviimiseks.

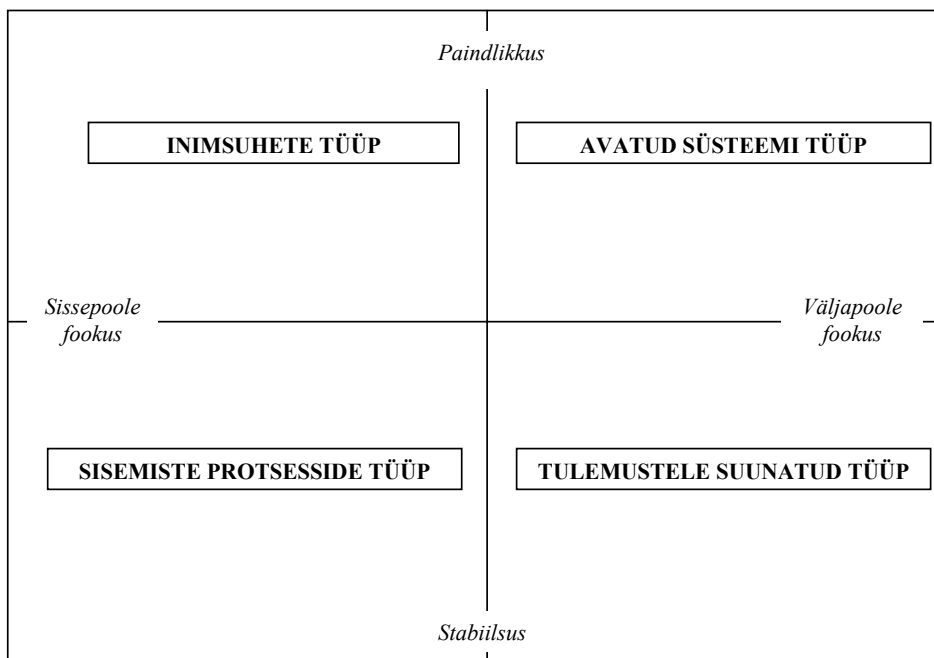
Autor käsitles seitset organisatsioonikultuuri analüüsis enamkasutatavad tüpoloogiat ning leidis, et kuigi erinevatel tüpoloogiatel on mitmeid kokkupuutepunkte alusdimensionide, organisatsioonikultuuri tüüpide sisu ja ka nimetuste osas, on siiski käsitletavat tüpoloogiad ka üksteisest mõnevõrra erinevad. See on autori arvates seotud tüpoloogia kui analüüsimeetodi omapäraga, kuna selleks, et tüpoloogia võimaldaks anda edasi nähtuse põhiolemust, tuleb nähtusega seotud aspektide paljusust taandada vaid vähestele dimensionidele. Seega ükski tüpoloogia ei suuda hõlmata kogu organisatsioonikultuuri oma mitmekesisuses ning paljuski on see uurija otsustada, millises raamistikus nähtust analüüsida. Nii nagu ka organisatsioonikultuuri olemuse määratlemise juures välja toodi, võib organisatsioonikultuuri kui nähtuse avamisel pidada oluliseks kahte mõõdet: paindlikkus/stabiilsus ning sissepoole/väljapoole suunatus. Tüpoloogiate analüüsist selgus, et ka erinevad organisatsioonikultuuri tüpoloogiad on taandatavad samadele alusdimensionidele.

Autor valis uurimisvaidete ning uurimismeetodi väljatöötamisel aluseks Konkureerivate väärtuste raamistiku (*Competing Values Framework*, Quinn ja Rohrbaugh, 1981). Valiku põhjuseid oli mitmeid: esiteks, nimetatud raamistik hõlmab mõlemat eelpool nimetatud mõõdet, mida on erinevad autorid pidanud oluliseks organisatsioonikultuuri määratlemisel, teiseks, doktoritöö autor usub, et need dimensionid on olulised ka siirdeühiskonna kontekstis (eriti paindlikkuse ja dünaamilisuse aspekt) ning kolmandaks, Konkureerivate Väärtuste Raamistik eristab nelja organisatsioonikultuuri tüüpi, mis on küllaltki kergesti hoomatav; seevastu suurem tüüpide arv muudaks tulemuste interpreteerimise keeruliseks. Konkureerivate väärtuste raamistik on esitatud joonisel 2.

Nagu eespool mainitud on antud käsitluses võetud üheks organisatsioonikultuuri tüüpide eristamise mõõtmeks organisatsiooni fookus. Kui sissepoole suunatus tähendab keskendumist organisatsioonisisesele integratsioonile, mis on vajalik organisatsiooni püsimiseks, siis väljapoole suunatus tähendab keskendumist konkurentidele, interaktsioonile ja kohandumisele väliskeskkonnaga. Teine dimension antud raamistikus on paindlikkuse ja stabiilsuse (ka kontrolli) mõõde. See dimension peegeldab organisatsiooni ees seisvat dilemmat efektiivsuse tagamisel: ühelt poolt on vaja olla kohanemisvõimeline, uuendusmeelne ning indiviidide initsiatiivikust väärtustav, kuid teisalt võib leida ka argumente selle poolt, et efektiivsust saab tagada struktuuri loomise, kontrolli ja võimu rakendamise abil. Nimetatud põhidimensionide alusel saab eristada nelja organisatsioonikultuuri tüüpi:

- 1) *Avatud süsteemi tüüp*, mida on peetud kõige sobilikumaks organisatsioonikultuuri tüübiks kiiresti muutuv keskkonnas, kuna see organisatsioonikultuuri tüüp väärtustab kohanemisvõimet, paindlikkust, innovatiivseid ideid, initsiatiivi ning orienteeritust kliendile. Antud tüüp rõhutab kiiret kasvu, ressursside (sh organisatsiooniväliste sidusgruppide toetus) omandamist väliskeskkonnast.

- 2) *Inimsuhete tüüpi* saab iseloomustada paindlikkuse ja sisepoole suunatuse kaudu. Antud tüüp väärtustab inimressursi arengut, mida püütakse saavutada kohesiivsuse, ühtekuuluvustunde, usalduse ja moraali abil.
- 3) *Tulemustele suunatud* organisatsioonikultuuri tüüp väärtustab planeerimist, eesmärkide püstitamist selleks et saavutada organisatsiooni tõhusus. Antud organisatsioonikultuuri tüübi põhiolemuseks on püüd kontrollida väliskeskkonda, organisatsiooni edukust määratletakse turuosa ning läbilöögivõime kaudu. Organisatsiooni sidusaineks võib pidada võitlusvaimu, mis on suunatud kasumi maksimeerimisele ja tulemuse saavutamisele.
- 4) *Sisemiste protsesside tüüp* keskendub organisatsioonisisestele küsimustele ning väärtustab stabiilsust ja kontrolli. Selle organisatsiooni-kultuuri tunnusjooneks on ka tsentraliseeritus, struktureeritus ja formaliseeritus, mis peavad tagama kogu organisatsiooni stabiilsuse.



Joonis 2. Konkureerivate väärtuste raamistik

Allikas: autori koostatud tuginedes originaallikale (Quinn ja Rohrbaugh, 1981).

Konkureerivate Väärtuste Raamistik põhineb ideel, et kontseptuaalsel tasandil on teatud organisatsioonikultuuri tüüpide vahel vastuolu, kuna nad kannavad endas konfliktseid väärtusi. Siiski ei ole see vastuolu absoluutne ja tegelikus elus eksisteerivad vastuolulised tüübid koos. Viimast väidet on kinnitanud mitmed Konkureerivate Väärtuste Mudelit valideerivad uuringud (nt Cameron ja Quinn, 1999; Kalliath *et al*, 1999; McDermott ja Stock, 1999).

Diskussioonid organisatsioonikultuuri kujunemise üle näitavad, et organisatsioonikultuur kujuneb nii sise- kui väliskeskkonna vahetus mõjus õppimisprotsessi kaudu (vt lähemalt alapunkt 1.2.2). Selles protsessis on oluline roll nii organisatsiooni liikmetel (mh ka näiteks organisatsiooni asutajatel) kui ka mitmetel organisatsioonilistel ja keskkonnateguritel, mistõttu võib järeldada, et organisatsioonikultuuri muster ei kujune päris juhuslikult. Alapunktis 1.2.3 käsitleti erinevate tegurite mõju organisatsioonikultuuri kujunemisele ning loodi uurimusküsimuste loomiseks vajalik raamistik. Kirjanduse analüüsist selgus, et organisatsioonikultuuri mõjutegurid võib tinglikult jaotada kolme kategooriasse: esiteks, *kontekstuaalsed tegurid*, mis on seotud eelkõige väliskeskkonnaga (rahvuskultuur, ühiskond ja selle areng, tööstusharu jmt); teiseks, *organisatsioonilised tegurid* (nt organisatsiooni ajalugu, organisatsiooni vanus, suurus jmt) ning kolmandaks, *inimesed* (organisatsiooni loojad, omanikud, liidrid, organisatsiooni liikmed). Käesolev doktoritöö keskendus mõningate kontekstuaalsete ja organisatsiooniliste tegurite mõju analüüsile, kuna nende tegurite mõju ei ole empiirilisel küllaldaselt analüüsitud.

Kontekstuaalsete tegurite hulgas on enim tähelepanu pälvinud rahvuskultuuri mõju organisatsioonikultuuri kujunemisele (nt Hofstede *et al*, 1990; Koopman *et al*, 1999; Mead, 1994; Van Muijen *et al*, 1999). Iga rahvuskultuur kätkeb endas oma väärtusi ning need väärtused kanduvad organisatsiooni liikmete tõekspidamiste kaudu ka organisatsiooni, mõjutades niimoodi organisatsioonikultuuri kujunemist. Siiski on leitud, et rahvuskultuuri mõju organisatsioonile ei pruugi olla otsene. Eriti ilmekalt tuleb see esile rahvusvaheliste ettevõtete puhul, kus asukohariigi mõju organisatsioonikultuurile võib olla sekundaarne emafirma asukoha riigi kultuuriga võrreldes (Allaire ja Firsirotu, 1984).

Analüüsides Eestile omast rahvuskultuuri senitehtud uuringute põhjal, jõudis autor järeldusele, et rahvuskultuuri ühene määratlemine on keeruline, kuna uuringud on fragmentaarsed, valimid küllaltki raskesti võrreldavad ning samuti võib märgata kasutatud uurimismeetodite mitmekesisust. Siiski püüdis autor välja tuua mõned hüpoteetilised seosed Eesti rahvuskultuuri ja organisatsioonikultuuri mustrite vahel. Vadi ja Meri (2005) on leidnud, et Eestile on omane madal võimudistants, keskmine ebamäärasuse vältimise määr, kõrge individualism ja maskuliinsus. Samas leidis näiteks Huettinger (2008), et Eestile on iseloomulik madal maskuliinsus ning keskmine individualismi määr. Seevastu Spector *et al* (2001) on Eestit iseloomustades välja toonud keskmise maskuliinsuse taseme. Lauristin ja Vihalemm (1997b) on väljendanud seisukohta, et eestlased on modernistlikud ja pragmaatilised, mis tähendab seda, et nad kalduvad olema saavutustele orienteeritud, olles samal ajal konservatiivsed ja vähe autonoomsed. Analüüsides rahvuskultuuri dimensioonide mõju organisatsioonile, on leitud, et ebamäärasuse vältimine on negatiivselt seotud innovatiivsusega organisatsioonis, kuna reeglitel põhinev organisatsioon piirab võimalusi uute lahendusviiside leidmisel. Samuti on leitud, et võimudistants on seotud negatiivselt loovusega ja innovatsiooniga. (Kaasa ja Vadi, 2008; Ulijn ja

Weggeman, 2001). Arvestades Eesti rahvuskultuuri omapära, tuleb tõdeda, et ühelt poolt peaks madal võimudistants soosima innovaativsusust ja muutumisvalmidust, kuid keskmine ebamäärasuse vältimise soov võib omakorda nimeetatud aspekte pärssida. Nii on ka Elenurm ja Oper (2008/2009) oma uuringus välja toonud, et Eesti ettevõtted peavad riskivältivat kultuuri üheks oluliseks innovatsiooni takistavaks teguriks.

Kõrge maskuliinsuse ja individualismi tase võivad avalduda organisatsiooni tasandil kõrge ülesandele ja tulemustele orienteeritusena, samas kui suhetele orienteeritus, meeskonnatöö ja kohesiivsus võivad olla vähemiseloomulikud. Uuringud on üldiselt nimetatud väidet ka kinnitanud, kuigi näitavad ka seda, et arvestada tuleb mitte ainult asukohamaa rahvuskultuuri, vaid ka organisatsiooni liikmete etnilist tausta (vt nt Vadi *et al*, 2002). Arvestades rahvuskultuuri mõjusid on leitud, et Eesti kultuuriruumis võib olla kõige sobilikumaks organisatsioonikultuuriks nn hästiõlitatud masinavärk (Hofstede, 1983; Vadi ja Meri, 2005), mida iseloomustab bürokraatia, kindel struktuur, formaliseeritus ja tsentraliseeritus.

Kuigi rahvuskultuuri mõju on peetud oluliseks, tuleb siiski arvesse võtta ka organisatsiooni tegevusvaldkonna mõju organisatsioonikultuurile. Igal tööstusharul ja tegevusvaldkonnal on oma toimimise loogika ning selle mõju ulatub organisatsioonini tööstusharu ideoloogia kaudu (Trice ja Beyer, 1993). O'Reilly *et al* (1991) on väitnud, et organisatsioonid, mis on tegevad sarnases tööstusharus sarnanevad omavahel ka organisatsioonikultuuri poolest, kuna spetsiifiline keskkond määrab küllaltki oluliselt ära organisatsiooni struktuuri, organisatsiooni orientatsiooni, regulatsioonid jne. Mitmed uuringud on empiiriliselt kinnitanud erinevate tööstusharude näitel tegevusvaldkonna olulist mõju organisatsioonikultuuri muustrite kujunemisele (vt nt Chatman ja Jehn, 1994; Gordon, 1991; Dastmalchian *et al*, 2000; Savič ja Pagon, 2008 jpt).

Tulles organisatsiooniliste tegurite juurde peatuti antud doktoritöös põhjalikumalt organisatsiooni vanuse ning suuruse mõjudel organisatsioonikultuurile. Kuigi organisatsiooni vanuse mõju organisatsioonikultuurile on püütud erinevate autorite poolt hinnata, pole selgelt välja toodud, mida peetakse silmas vana ja noore organisatsiooni all. Lisaks pole selge, kas vanust saab võtta objektiivse näitajana, kuna radikaalsed muutused, mis organisatsiooni elutsüklis on toimunud, võivad tuua kaasa järsu muutuse organisatsioonikultuuris ning seetõttu ei saa alati organisatsiooni vanust hinnata organisatsiooni asutamisaasta alusel (näiteks Zahra ja Hansen (2000) tõid oma uuringus välja, et ettevõtete privatisseerimine muutis oluliselt nende ettevõtete kultuuri). Paljud organisatsioonid, kes täna Eestis tegutsevad on loodud ajal, mil Eestis toimis plaanimajandus ning seega võib väita, et käsumajandus ja kommunistlik ideoloogia on oluliselt mõjutanud neid organisatsioone ja organisatsiooni liikmeid (Vadi ja Vedina, 2007). Üleminek turumajandusele võimaldas luua organisatsioone uutel alustel ning sundis vanu organisatsioone oma toimimispõhimõtteid ja väärtusi ümber hindama. Sellest lähtuvalt on huvipakkuv analüüsida, mil määral erineb nn vanade ja uute organisatsioonide organisatsioonikultuur. Kuigi „vana“ ja

„uus“ on subjektiivsed kategooriad, lähtuti antud doktoritöös sellest, et organisatsioonid, mis on asutatud enne 1991. aastat loetakse vanadeks ning pärast 1991. aastat loodud organisatsioonid käsitletakse uute organisatsioonidena.

On väidetud, et pika ajalooga organisatsioonidele on omane juurdunud organisatsioonikultuur, mis tähendab seda, et organisatsiooni liikmed tajuvad organisatsioonikultuuri sarnaselt (Kekäle ja Kekäle, 1988; Wiener, 1988). Kuigi üldiselt peetakse tugevat ja sarnaselt tajutud organisatsioonikultuuri positiivseks, on siiski leitud, et vanad organisatsioonid on inertsed (Tsui *et al*, 2006; Van Wijk *et al*, 2007) ja stabiilsusele orienteeritud, mistõttu võib organisatsiooni vanus osutada innovaatsuse pidurdajaks (Jaskyte ja Dressler, 2004). Durand ja Coeurderoy (2001) on välja toonud, et tänu kinnistunud rutiinidele, õppimisprotsesside pidurdumisele, „pimedusele“ ning konservatiivsusele on vanemate organisatsioonide tulemused sageli viletsamad kui nooremate organisatsioonide majandusnäitajad. Eesti organisatsioonide läbiviidud uuring demonstreeris, et vanemad ettevõtted olid muutuste rakendamisel vähem edukad kui noored organisatsioonid (Alas, 2004).

Organisatsiooni suuruse käsitlusi on erinevaid, kuid antud doktoritöö raames määratletakse organisatsiooni suurus organisatsiooni liikmete arvu alusel. Uurimused näitavad, et organisatsiooni suurus mõjutab organisatsioonisiseseid toimimispõhimõtteid ning näiteks organisatsiooni kasv toob kaasa muutused struktuuris ja tulemuseks on sageli suurem bürokrateeritus (Astley, 1985). Organisatsiooni kasv pidurdab ka organisatsiooni liikmete vahelisi suhteid, mistõttu organisatsioonikultuur võib muutuda killustunumaks (Dastmalchian *et al*, 2000). Kokkuvõtvalt võib öelda, et organisatsiooni suurus mõjutab vahendite valikut, mida organisatsioonis kasutatakse sisemise integratsiooni ja kooskõla loomiseks: kui väiksemates organisatsioonides loovad sidusust organisatsiooni liikmete omavahelised suhted ja kommunikatsioon, siis suurtes organisatsioonides püütakse sisemist korrastatust luua formaliseerituse kaudu.

Veel on välja toodud organisatsiooni suuruse mõju organisatsioonide muutumisvalmidusele ja -võimele (Hannan ja Freeman, 1984) ning innovatsiooni-võimekusele. Uurimused ei ole suutnud näidata selget ja ühesuunalist seost organisatsiooni suuruse ja innovaatsuse vahel. Nii näiteks on Sørensen ja Stuart (2000) väitnud, et suuremad organisatsioonid on bürokraatlikumad, vähem ettevõtlikud ning reageerivad aeglasemalt väliskeskkonna muutustele, mistõttu võib eeldada ka madalamat innovatiivsust. Samas on Schein (2006) välja toonud, et kuna suurtes organisatsioonides võib leida mitmekesisemaid oskusi, võimekusi ja ressursse, siis võivad nad olla isegi innovatiivsemad kui väikesed organisatsioonid. Damanpour (1992) ja Camison-Zornosa *et al* (2004) on omakorda väitnud, et seost organisatsiooni suuruse ja organisatsioonikultuuri vahel võib mõjutada organisatsiooni tegevusvaldkond. Seega võib kokkuvõtvalt tõdeda, et kuigi on leitud, et organisatsiooni suurus mõjutab organisatsioonikultuuri, vajab antud seos edasist analüüsi, antud valdkonda pole veel piisavalt uuritud ning lisaks on seni saadud tulemused vastuolulised.

Andmed ja uurimismetoodika

Empiiriline uurimus viidi läbi Eesti organisatsioonides aastatel 2004–2008. Valimisse püüti kaasata võimalikult erinevaid organisatsioone arvestades organisatsioonide tegevusvaldkonda, suurust ja vanust. Mitmekesisus oli vajalik usaldusväärse organisatsioonikultuuri mõõtmise instrumendi loomiseks.

Kokku osales uuringus 29 organisatsiooni 2986 vastajaga. Esindatud on järgmised tegevusvaldkonnad: haridus (11 organisatsiooni 882 vastajaga), teenindus (8 organisatsiooni 990 vastajaga), tootmine (7 organisatsiooni 327 vastajaga), õiguskaitse (2 organisatsiooni 331 vastajaga) ning tervishoid (1 organisatsioon 456 vastajaga). Valimisse kuulus 19 suurt ja 10 keskmise suurusega ettevõtet. 15 organisatsiooni on asutatud peale Eesti iseseisvumist 1991. aastal ning loetakse antud uurimuse raames uuteks organisatsioonideks. Vanu organisatsioone kuulus valimisse 14.

Valimisse kuulus 945 meest (31.6% valimist) ja 1770 naist (59.3%). Uuringus osales 1166 eestlast (39.0% valimist) ja 218 venelast (so 7.3% koguvaimist).⁵² Vastajate keskmine vanus oli 35.7 aastat (SD=12.6) ja keskmine tööstaaz antud organisatsioonis oli 6.7 aastat (SD=8.3). 1266 vastajat (42.4% valimist) omas kesk- või kesk-eriharidust, 683 vastajal (22.9%) oli kõrgharidus, 39 uuringus osalejal (1.3%) oli põhiharidus. Uuringusse kaasati organisatsiooni kõikide tasandite töötajaid. Kõige enam kuulus valmisse spetsialiste (932, ehk 31.2%) ja töölisi (969, so 32.5%). Juhte kuulus valimisse 280, mis moodustab 9.4% valimist. Haridusorganisatsioonides kaasati uuringusse ka tudengid, keda oli valimis 589 (19.7%).⁵³

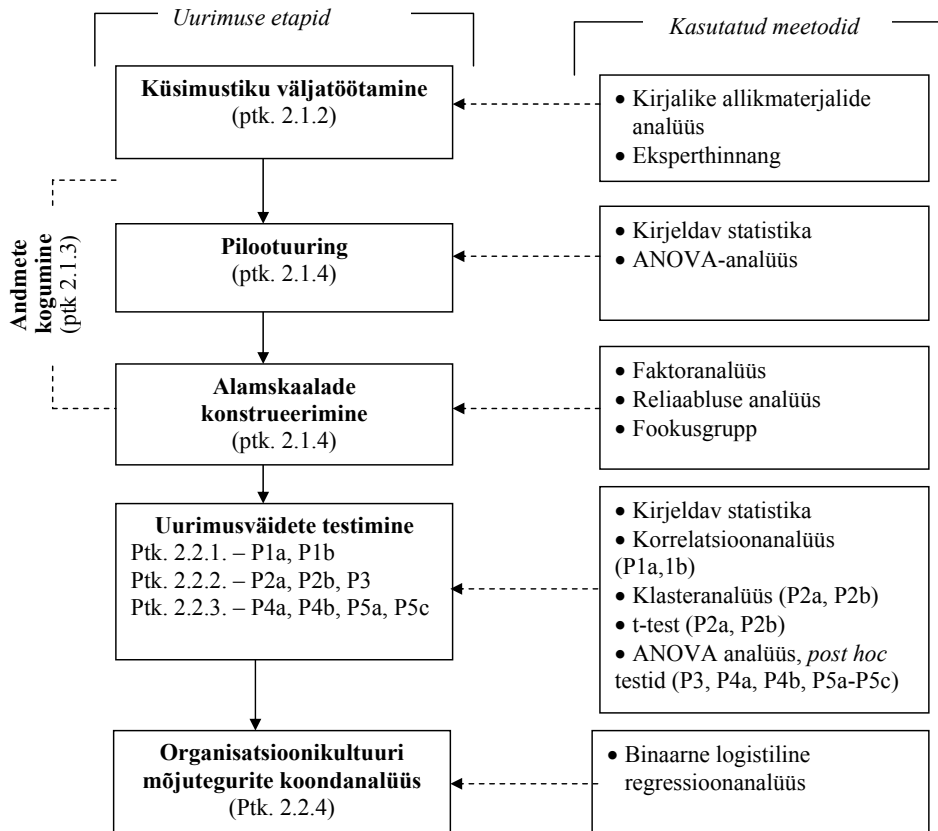
Antud doktoritöö empiiriline osa sisaldab kahte osa: esiteks, loodi antud töö käigus uus organisatsioonikultuuri mõõtmise küsimustik – Organisatsiooni väärtuste küsimustik ning teiseks, testiti uurimusväidete paikapidavust (vt joonis 3).

Organisatsiooni väärtuste küsimustiku väljatöötamine leidis aset 2003. aastal ning mõõtmisinstrumendi väljatöötamine toimus kuues etapis, hõlmates kirjalike materjalide analüüsi, esmaste väidete sõnastamist, ekspertgruppide hinnangute analüüsi ning faktoranalüüsi. Täpsem ülevaade instrumendi väljatöötamise protsessist on esitatud alapunktis 2.1.2. Lõpptulemusena koostati küsimustik, mis koosneb 53 väitest. Faktoranalüüs andis omakorda 19-väitelise lahenduse, mis eristab nelja alamskaalat (so organisatsioonikultuuri tüüpi): 1) *Avatud*

⁵² Mitmed organisatsioonid ei nõustunud sotsiaal-demograafilisi tunnuseid puudutavate küsimuste lülitamisega uuringuankeeti, mistõttu ei ole vastavad andmed kättesaadavad kõikide alamvalimite kohta (nt vastaja rahvus oli tunnus, mille kohta küsimuse esitamisega nõustuti kõige vähem). Siinkohal tähistavad protsendid vastava vastajagrupi osakaalu üldvalimist (vastamata jätnud inimeste hulka eraldi välja ei tooda). Kuigi lünklik andmestik ei ole antud uuringu kontekstis oluline piirang, võib see osutada piiravaks teguriks kogutud andmete kasutamisel järgnevate uuringute käigus.

⁵³ Hilisemas analüüsis käsitletakse tudengeid vahetute täitjatena ning nende hinnanguid analüüsitakse koos tööliste hinnangutega.

süsteemi tüüp, mida mõõdetakse viie väite abil (Cronbach alpha 0.79); 2) *Sisemiste protsesside tüüp* (5 väidet, Cronbach alpha 0.80); 3) *Inimsuhete tüüp* (skaala koosneb 5 väitest, Cronbachi alpha 0.78) ja 4) *Tulemustele suunatud organisatsioonikultuuri tüüp*, mida mõõdetakse nelja väite abil (Cronbach alpha 0.79).



Joonis 3. Empiirilise uuringu etapid ja andmeanalüüsil kasutatud meetodid.

Autori poolt väljatöötatud Organisatsiooni Väärtuste Küsimustikku rakendati organisatsioonikultuuri analüüsiks ning uurimüsväidete testimiseks alapunktides 2.2.1–2.2.4. Uurimüsväidete testimisel kasutati järgmisi statistilise analüüsi meetodeid: kirjeldav statistika (hinnangute keskmise ja standardhälbe arvutamine), korrelatsioonanalüüs, klasteranalüüs, ANOVA (ingl. k. *Analysis of Variances*), t-testi, LSD-testi (ingl. k. *Least Significant Difference*) ja regressioonanalüüsi.

Töös püstitatud uurimisväited, põhitulemused ja järeldused

Doktoritöös püstitati lähtuvalt teoreetilistest argumentidest ja varasematest empiirilistest uuringutest kümme uurimisväidet, mida saab jaotada kolme gruppi: 1) uurimisväited, mis analüüsivad organisatsioonikultuuri tüüpide omavahelisi seoseid; 2) uurimisväidete kogum analüüsib kontekstuaalsete tegurite mõju organisatsioonikultuuri avaldumisele ning 3) uurimisväited, mis analüüsivad organisatsiooniliste tegurite mõju organisatsioonikultuuri avaldumisele. Kasutades regressioonianalüüsi teostati lisaks täiendav analüüs iga teguri mõju hindamiseks. Järgnevalt esitatakse püstitatud uurimisväited ning peamised tulemused.

P1a: Organisatsioonikultuuri tüübid on üksteist täiendavad, kuid erinevate organisatsioonikultuuri tüüpide vahel leiduvate seoste tugevused varieeruvad.

P1b: Ühiseid väärtusi omavate organisatsioonikultuuri tüüpide vahel (kõrvutiasetsevad kvadrandid Konkureerivate Väärtuste Raamistikus) eksisteerivad tugevamad seosed kui vastandtüüpide vahel.

Uurimisväide 1a leidis analüüsi käigus täielikku ning uurimisväide 1b osalist kinnitust. Analüüs tõi välja positiivse korrelatsiooni nelja organisatsioonikultuuri tüübi vahel, mis näitab seda, et organisatsioonikultuuri tüübid on üksteist täiendavad, mitte välistavad. Analüüs näitas ka seda, et seoste tugevused organisatsioonikultuuri tüüpide vahel varieeruvad. Ilmnes, et kahe ühiseid väärtusi jagava organisatsioonikultuuri tüübi paari puhul eksisteerivad suhteliselt tugevamad, kuid siiski keskmised seosed (Inimsuhete ja Avatud süsteemi tüübi ning Sisemiste protsesside ja Tulemustele suunatud tüübi vahel). Samas ei leitud tugevaid seoseid ülejäänud kahe kõrvutiasetsevasse kvadranti kuuluva organisatsioonikultuuri tüüpide paaride puhul (Inimsuhete ja Sisemiste protsesside tüüp ning Avatud süsteemi ja Tulemustele suunatud süsteemi tüüp). Vastandtüüpide (Inimsuhete ja Tulemustele suunatud tüüp ning Avatud süsteemi ja Sisemiste protsesside tüüp) vahel ilmnesisid keskmise suurusega seosed.

P2a: Samas rahvuskultuuri mõjualas tegutsevatel organisatsioonidel on välja kujunenud sarnased organisatsioonikultuuri mustrid.

P2b: Eesti organisatsioonid on pigem stabiilsusele ja kontrollile, mitte aga paindlikkusele orienteeritud.

Mõlemad uurimisväited (P2a ja P2b) leidsid osalist kinnitust, sest ühelt poolt tõi analüüs esile sarnasused Eesti organisatsioonide organisatsioonikultuuri mustrites, kuid teiselt poolt osutas detailsem analüüs siiski mitmete erinevuste organisatsioonide vahel. Üldiselt selgus, et Eesti organisatsioonide organisatsioonikultuuri mustrites domineerisid need organisatsioonikultuuri tüübid,

mis väärtustava stabiilsust ja kontrolli (Tulemustele suunatud ja Sisemiste protsesside tüüp).

Detailsem analüüs eristas kolm organisatsioonide gruppi või klastrit, mis erinevad üksteisest organisatsioonikultuuri mustri poolest. Analüüsidest klastrite koosseisu selgus, et võib eeldada organisatsiooni tegevusvaldkonna olulist mõju organisatsioonikultuuri mustri kujunemisele, kuna enamasti kuulusid sama tegevusvaldkonna organisatsioonid ühte klastrisse.

Klaster 1, kus domineeris Tulemustele suunatud ja Sisemiste protsesside tüüp koondas peamiselt teenindus- ja tootmisorganisatsioone. Õiguskaitse, tervishoid ning sõjaväelist haridust pakkuv õppeasutus kuulusid klastrisse number 3 ning neid organisatsioone iseloomustavaks tunnuseks on organisatsioonikultuuri Sisemiste protsesside tüübi domineerimine teiste organisatsioonikultuuri tüüpidega võrreldes. Seevastu 2. klastrisse kuuluvaid organisatsioone saab iseloomustada kui balansseeritud kultuuriga organisatsioone, kuna nende organisatsioonide puhul on kõik organisatsioonikultuuri tüübid võrdselt esindatud ning ei saa tuua välja üht domineerivat organisatsioonikultuuri tüüpi.

P3: Tööstusharude vahelised erinevused organisatsioonikultuuris on suuremad kui tööstusharu sised erinevused.

See väide leidis kinnitust empiirilises analüüsis. Selgus, et organisatsioonikultuuri erinevused eksisteerivad nii tööstusharusiseselt kui tööstusharude vahel. Samas valdkonnas tegutsevate organisatsioonide organisatsioonikultuuri erinevuste analüüs näitas, et varieeruvus organisatsioonikultuuris on suurem haridusorganisatsioonide ning teenindusorganisatsioonide puhul. Võrreldes kõiki organisatsioone võib tõdeda, et hinnangute varieeruvus oli suurem Tulemustele suunatud ning Sisemiste protsesside tüübi puhul, mis tähendab, et Avatud süsteemi ja Inimsuhete tüübi lõikes on organisatsioonid üksteisele küllaltki sarnased. Seega võib öelda, et Eesti organisatsioonid sarnanevad üksteisele Avatud süsteemi ja Inimsuhete tüübile omaste väärtuste esinemismäära poolest, kuid tulemustele orienteeritus, formaliseeritus ning bürokratiseeritus on need kultuurijooned, mis võimaldavad tuua esile tegevusvaldkondade vahelisi erinevusi.

Organisatsioonikultuuri mustrite analüüs tööstusharude lõikes näitas, et tööstusharu selgitab organisatsioonikultuuri varieeruvust oluliselt rohkem kui organisatsiooni tasand, mis tähendab, et samas valdkonnas tegutsevad organisatsioonid on omavahel sarnasemad võrreldes organisatsioonidega mõnest teisest valdkonnas. Lisaks näitas regressioonanalüüs, et tööstusharu määrab oluliselt ära selle, mil määral on organisatsioonikultuuri mustris esindatud Tulemustele suunatud ja Sisemiste protsesside tüüp. Tööstusharu ennustab ka Inimsuhete ja Avatud süsteemi hinnanguid, kuid tööstusharu mõju nendele organisatsioonikultuuri tüüpidele pole siiski väga suur.

Organisatsiooni vanuse mõju analüüsimiseks sõnastati järgmised uurimisväited:

P4a: Vanemates organisatsioonis tajutakse organisatsioonikultuuri sarnasemalt kui uutes organisatsioonides.

P4b: Vanad organisatsioonid on rohkem stabiilsusele ja vähem dünaamilisusele orienteeritud kui uued organisatsioonid.

Need uurimisväited ei leidnud empiirilises analüüsis toetust. Organisatsiooni-kultuuri tajumise sarnasust analüüsi kahest vaatenurgast: esiteks, võrreldi erinevaid organisatsiooni tasandeid esindavate organisatsiooni liikmete hinnanguid (so vastaja positsiooni alusel), ja teiseks; hinnangute sarnasust võrreldi tööstaaži alusel moodustatud gruppide lõikes.

Analüüsides organisatsioonikultuuri tajumise ühtsust erinevate positsiooni-gruppide lõikes selgus, et hinnangute variatiivsus oli väiksem uutes organisatsioonides. Samas selgus, et tööstaaži alusel moodustatud gruppide võrdlus toob esile hinnangute suurema variatiivsuse uutes organisatsioonide. Seega on keeruline tuua välja selget järeldust organisatsioonikultuuri homogeensuse kohta sõltuvalt organisatsiooni vanusest.

Vanade ja uute organisatsioonide organisatsioonikultuuri mustrite võrdlus andis samuti vastuolulisi tulemusi. Leiti, et Tulemustele suunatud ja Sisemiste protsesside tüüp on iseloomulik uutele organisatsioonidele, kuid Avatud süsteemi ja Inimsuhete tüübi osas ei saa erinevusi välja tuua. Samas näitas regressioonanalüüs, et üldiselt ei ennusta organisatsiooni vanus olulisel määral ühegi organisatsioonikultuuri tüübi hinnangut, mis võib tähendada seda, et tänu siirdeühiskonnas toimunud muutustele ja arvestades nende muutuste mõju organisatsioonidele pole võimalik organisatsioone nende vanuse alusel selgepiiriliselt eristada. Isegi kui mõningaid erinevusi organisatsioonikultuuri mustrites on võimalik seostada organisatsiooni vanusega, ei ole leitud seosed sarnased teoreetiliste allikate põhjal väljapakutud seoste või ka teiste riikide kogemustel põhinevate tulemustega.

Organisatsiooni suuruse mõjust organisatsioonikultuurile püstitati kolm uurimisväidet:

P5a: Suurematele organisatsioonidele on iseloomulikud väärtused, mis tagavad sisemist integratsiooni formaliseerimise ja tsentraliseerimise abil, samal ajal kui väiksemate organisatsioonide organisatsioonikultuuri mustris on tähtsamal kohal kohesiivsus, usaldus ja organisatsiooni liikmete vahelised lähedased suhted.

See uurimisväide leidis analüüsis osalist kinnitust, kuna ilmnes, et keskmise suurusega organisatsioonidele on Sisemiste protsesside tüüp, mida saab iseloomustada formaliseerituse ja tsentraliseerituse kaudu, vähemiseloomulik kui suurtele organisatsioonidele. võrreldes suurte organisatsioonidega. Samuti leiti, et hinnangud Inimsuhete tüübile olid kõrgemad keskmise suurusega organisatsioonides. Regressioonanalüüs andis sarnase tulemuse, tõestades et organisatsiooni suurus ennustab organisatsioonikultuuri Sisemiste protsesside tüübile

(suurtes organisatsioonides anti nimetatud organisatsioonikultuuri tüübile kõrgemaid hinnanguid) ja Inimsuhete tüübile (suurte organisatsioonide hinnangud olid madalamad kui keskmise suurusega organisatsioonide hinnangud antud tüübile). Siiski näib, et need tulemused on tegevusharu spetsiifilised, kuna näiteks võrreldes suuri ja keskmise suurusega teenindusorganisatsioone ei ilmnenud erinevusi organisatsioonikultuuri tüüpidele antud hinnangutes, samas kui tööstusorganisatsioonide puhul oli Inimsuhete tüüp suurtele organisatsioonidele oluliselt vähemiseloomulik kui keskmise suurusega organisatsioonidele.

P5b: Väiksematele organisatsioonidele on paindlikkus ja muutustele avatus iseloomulikumad kui suurematele organisatsioonidele.

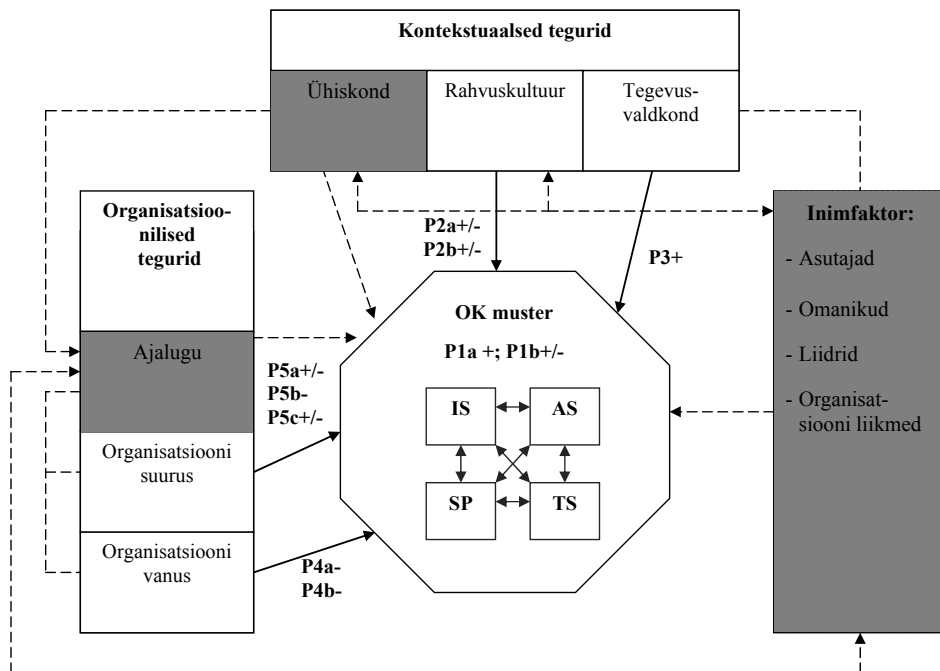
See uurimisväide ei leidnud empiirilise analüüsi käigus kinnitust, kuna vastupidiselt väidetule näitas regressioonanalüüs, et kõrgemad hinnangud Avatud süsteemi tüübile ilmnevad suurema tõenäosusega suurtes organisatsioonides. Samas aga ei toonud ANOVA analüüs keskmise suurusega ja suurte organisatsioonide võrdluses esile statistiliselt olulisi erinevusi Avatud süsteemi tüübi hinnangutes.

P5c: Organisatsiooni suurus ei avalda mõju organisatsiooni tulemustele orienteeritusele.

Viimane uurimisväide leidis osalist kinnitust. Tulemused näitasid, et üldiselt on keskmise suurusega organisatsioonid rohkem tulemustele orienteeritud kui suured organisatsioonid, kuid näiteks tootmisorganisatsioonide puhul ei leitud erinevusi suurte ja keskmise suurusega organisatsioonide organisatsioonikultuuris. Samas selgus, et teenindussektoris on keskmise suurusega organisatsioonid võrreldes suurte organisatsioonidega enam tulemustele orienteeritud. Seega on saadud tulemused küllaltki mitmekesised ning organisatsiooni suuruse ja tulemustele orienteerituse vahel ei suudetud selgeid seoseid leida. Regressioonanalüüs näitas, et tulemustele orienteeritus sõltub suurel määral organisatsiooni tegevusalast, kuid samuti selgus, et suured organisatsioonid peaksid olema enam tulemustele orienteeritud kui keskmise suurusega organisatsioonid.

Uuringu tulemused on kokkuvõtvalt esitatud joonisel 4. Lisaks on joonisel ära märgitud seosed, mida antud uuringus ei käsitletud, kuid mis võimaldavad saadud tulemusi interpreteerida ning mida avati doktoritöö diskussiooni alapunktis 2.3.2.

Nagu jooniselt näha, leidsid empiirilise uuringu käigus enamus uurimisväited vaid osalise ning vaid vähesed uurimisväited täieliku kinnituse. Taoline tulemus on seotud uurimisväidete püstitamise keerukusega organisatsioonikultuuri valdkonnas, kuna tegemist on küllaltki piiritlematu ja hoomamatu nähtusega seda nii uurija, aga tänu organisatsioonikultuuri subjektiivsele loomusele ka organisatsiooni liikmete enda seisukohast vaadates. Lisaks on organisatsioonikultuuri valdkonnas tehtud uuringud küllaltki fragmentaarsed ning



Joonis 4. Uuringus leitud seosed ning teiste tegurite hüpoteetiline mõju organisatsioonikultuurile.

Märkused: OK – organisatsioonikultuur, IS – Inimsuhete tüüp; AS – Avatud süsteemi tüüp; TS – Tulemustele suunatud tüüp; SP – Sisemiste protsesside tüüp. Varjutatud kastid tähistavad tegureid, mida antud uuringu käigus ei analüüsitud. Pidevad jooned märgivad uuringus testitud seoseid, katkendlikud jooned tähistavad võimalikke seoseid muutujate vahel. Uuringus kinnitust leidnud uurimisväited on tähistatud “+” märgiga; kinnitust mitteleidnud uurimisväited “-” märgiga ning osaliselt tõestust leidnud uurimisväited on märgitud “+/-” märgiga.

Allikas: autori koostatud

nende põhjal on suhteliselt keeruline teha üheseid järeldusi organisatsioonikultuuri mõjutavate tegurite ja nende mõju olemuse ning ulatuse kohta. Lisaks tuleb arvestada Eesti konteksti, mida võib pidada küllaltki intrigeerivaks, kuna siin puuduvad põhjalikud ja võrreldavad uuringud ning seniste uuringute tulemused (nt rahvuskultuuri määramisel) on vastuolulised. Võimalik, et uuringutulemuste vastuolulisus on loomulik ja uuringutesse juba sissekodeeritud, kuna Eesti ühiskonnas on toimunud pöördelised arengud, mis võibki luua olukorra, kus senised väärtused on muutusteprotsessis, kuid uued väärtused ei ole veel kinnistunud. Muutused ühiskonnas tervikuna võivad oluliselt mõjutada ka väärtusi ja toimimispõhimõtteid organisatsiooni tasandil. Kui Schwartz ja Sagie (2000) on väitnud, et Balti riikides toimunud sotsiaal-majanduslikud arengud ei ole mõjutanud inimeste põhiväärtusi, siis nt Vedina *et al* (2006) poolt läbi viidud uuring näitas, et mõningal määral on siiski indiviidi väärtused

muutunud (muutused puudutasid eelkõige instrumentaalseid väärtusi). Kui muutuvad inimeste arusaamad sellest, mis on oluline ja tähtis, siis võib see oluliselt mõjutada ka organisatsioonikultuuri, kuna organisatsiooni liikmed interpreteerivad sündmusi oma väärtusprisma kaudu. Seetõttu ei saa alahinnata ühiskonna mõju organisatsioonikultuurile.

Autor leiab, et rahvuskultuuril võib olla kiirete muutuste ajajärgul organisatsioonidele väiksem mõju, kuna organisatsioone mõjutavad mitmed jõud korraga. Uues olukorras võidakse vajada täiesti uudseid lahendusi, selleks et olla avatud turul konkurentsivõimeline, mistõttu organisatsioonid võivadki rakendada senisest kardinaalselt erinevaid väärtusi ja tegevuspraktikaid. Nii võivad muutunud situatsioon ning ühiskonna ootused sundida organisatsioone omaks võtma seni neile mitteomaseid väärtusi. Näiteks tänu laiapõhjalistele reformidele ja tasulise hariduse põhimõtete kehtestamisele on Eesti kõrgharidust pakkuvad õppeasutused asetunud täiesti uudsesse situatsiooni, kus nad lähtuvalt vähemalt osaliselt väärtustest, mis senini on olnud omased pigem äriorganisatsioonidele (vt Jaakson, 2006). Ühiskonna areng on toonud kaasa uute tegevusvaldkondade tekke (nt pangandus, infotehnoloogia jm), mille areng on olnud muu maailmaga võrreldes kiirem (vt nt Reino *et al*, 2007; Liuhto *et al*, 2007). Võib oletada, et vajadus jõuda järele konkurentidele on ilmselt mõjutanud ka organisatsiooni arengut, kus organisatsiooni elutsükli faasid on läbitud kiiremini (Reino *et al*, 2007). On väidetud, et kiiresti muutuv keskkonnas osutuvad edukamaks paindlikud (Nogueira ja Raz, 2006) ja muutustele avatud organisatsioonid. Siinkohal demonstreeris käesolev uuring teatud ebakõla Eesti organisatsioonide organisatsioonikultuuri ja keskkonna vahel, kuna stabiilsus, kontroll ja jäikus olid küllaltki domineerivad jooned valimisse kuulunud organisatsioonide kultuuris, samas kui keskkond, milles organisatsioonid on tegutsenud ja tegutsevad on pidevas muutumises. Tulemused näitavad seda, et keeruline on üheselt välja tuua rahvuskultuuri ja ühiskonna mõjusid organisatsioonikultuurile, kuna mõlemad tegurid on koosmõjus ja mõjutavad omakorda organisatsioonikultuuri.

Lisaks tuleb arvestada ka organisatsiooni tegevusvaldkonna (sektor, tööstusharu) mõju organisatsioonikultuurile, mis antud uuringutulemusi arvestades võib olla isegi tugevam kui näiteks rahvuskultuur. Kuigi selgemate järelduste tegemiseks oleks vaja viia läbi võrdlevaid uuringuid teiste riikide sarnastes organisatsioonides võib väita, et käesoleva uuringu tulemused tööstusharu mõju kohta organisatsioonikultuurile on suures osas kooskõlas varasemate uurinutega. Huvitavaks võib pidada tulemust, et organisatsiooni tegevusvaldkond mõjutab enamal määral teatud organisatsioonikultuuri tüüpide kujunemist (eelkõige Tulemustele suunatud ja Sisemiste protsesside tüüpi), kuid näiteks Inimsuhete ja Avatud süsteemi puhul ei saa rääkida tööstusharu tugevast mõjust. Seetõttu tuleb otsida teisi võimalikke mõjutegureid, mis antud tüüpide kujunemist mõjutavad. Autori arvates võivad nende organisatsioonikultuuri tüüpide kujunemist mõjutada indiviidi karakteristikud (nt organisatsiooni liikmete isiksuseomadused).

Autori arvates peegeldub ühiskonna mõju organisatsioonidele ka selles uuringu osas, kus analüüsi organisatsiooni vanuse mõju organisatsioonikultuuri avaldumisele. Selgus, et vastupidiselt teoreetilistele argumentidele ei mõjutanud antud uuringus organisatsiooni vanus organisatsioonikultuuri avaldumist. Siirderiikide kontekstis võib see tulemus olla suhteliselt ootuspärane, kuna uute ja vanade organisatsioonide eristamine võib olla komplitseeritud. Tänu radikaalsetele reformidele on nn vanadel organisatsioonidel tulnud rakendada uusi toimimispõhimõtteid ning ilmselt on valimisse kuulunud organisatsioonid muutustega toime tulnud, kuna olulisi erinevusi võrreldes uute organisatsioonidega ei leitud.

Doktoritöö panus, uuringu piirangud ja soovitusi edasisteks uuringuteks

Doktoritöö panus

Käesoleva doktoritöö panus on kahesugune: esiteks, panust saab vaadelda organisatsioonikultuuri analüüsi perspektiivist ning teiseks, doktoritöö panustab ka organisatsiooni juhtimisse pakkudes soovitusi juhtimispraktikate täiustamiseks. Doktoritöö panustab teooriasse järgmiselt:

1. Doktoritöö raames loodi uus organisatsioonikultuuri analüüsi vahend (Organisatsiooni Väärtuste Küsimustik). Küsimustik koostati eesti keeles ja kohandati seejärel ka vene keelde, mis võimaldab seda kasutada sageli multikultuursetes Eesti organisatsioonides. Võrreldes Eestis seni kasutatud organisatsioonikultuuri mõõtmisvahenditega avardab uus mõõtmisvahend tänu uute dimensioonide lisamisega organisatsioonikultuuri uuringute diapasooni. Lisaks võimaldab antud küsimustik teostada võrdlevat analüüsi rahvusvaheliste uuringutega.
2. Uuringu tulemused tõestasid, et organisatsioonikultuuri tuleks käsitleda kontiinumina, sest erinevad organisatsioonikultuuri tüübid on üksteisega seotud, kuigi need seosed erinevad tugevuse poolest. Organisatsioonikultuuri tüüpide omavaheline sidusus tähendab aga seda, et mõne kultuuriaspekti muutmine toob kaasa muutused teistes organisatsioonikultuuri tüüpides.
3. Seoseid organisatsioonikultuuri tüüpide vahel peaks interpreteerima rahvuskultuuri kontekstis, sest uuring näitas uuringus osalenud organisatsioonide organisatsioonikultuuri mustrite teatavat sarnasust, mistõttu seosed erinevate organisatsioonikultuuri tüüpide vahel võivad peegeldada antud kultuuri-ruumile iseloomulikke, mitte universaalseid baasilisi arusaamu.
4. Käesolev uuring tõi esile tööstusharu olulise rolli organisatsioonikultuuri avaldumise mõjurina, näidates et tööstusharu selgitab olulisemal määral organisatsioonikultuuri varieeruvust kui organisatsioonitasand (s.t. organisatsioonikultuuri mustrid on determineeritud suures osas tööstusharus valitseva ideoloogia poolt). Samuti selgus, et tööstusharu mõjutab suurimal määral

organisatsiooni tulemustele orienteeritust, formaliseeritust ja bürokratiseeritust, seevastu innovaativsuse ja organisatsioon liikmete vahelised suhted ei sõltu väga oluliselt tegevusharust. Viimased organisatsioonikultuuri aspekte saab ilmselt selgitada pigem indiviidi-tasandi muutujatega.

5. Antud uuringu tulemused ei toonud esile organisatsiooni vanuse kui organisatsioonikultuuri mõjuteguri rolli organisatsioonikultuuri avaldumisel. See tulemus võib olla eripärane siirderiikide jaoks, kuna tänu väliskeskkonna arengu eripäradele on keeruline sisuliselt eristada vanu ja uusi organisatsioone. Vanad organisatsioonid on läbinud ümberkujundamisprotsessi, mistõttu on isegi formaalselt pika ajalooga organisatsioonide puhul raske rääkida organisatsioonikultuuri pidevusest.
6. Uuringust ilmnesevad mitmed seosed organisatsiooni suuruse ja organisatsioonikultuuri vahel näidates, et organisatsiooni suurusel on teatud mõju organisatsioonikultuuri avaldumisele. Käesolevast uuringust saadud tulemused olid üldiselt sarnased varasemate uuringute tulemustega. Selgus, et suuremad organisatsioonid on rohkem formaliseeritud, seal esineb rohkem bürokraatiat, samas on nad väiksemate organisatsioonidega võrreldes vähem töötajatele orienteeritud. Samas vastupidiselt teoreetilistele argumentidele ja mõningatele empiirilistele uuringutele näitas käesolev uuring, et suured organisatsioonid on paindlikumad ja muutustele avatumad kui keskmise suurusega organisatsioonid. Samuti näitas käesolev uuring seda, et suuruse mõju organisatsioonikultuurile võib olla tööstusharuspetsiifiline. Taolised tulemused rõhutavad organisatsioonikultuuri analüüsil erinevate tegurite samaaegse kaasamise tähtsust, kuna see võimaldab välja tuua suuremal määral organisatsioonikultuuri avaldumise seaduspärasid.

Doktoritöö panus organisatsiooni juhtimispraktikasse tuleneb eelpool välja toodud seoste arvestamisest juhtimistegevuste planeerimisel:

1. Organisatsioonikultuuri tüüpide omavahelisi seoseid tuleks arvestada organisatsioonikultuuri muutuste planeerimisel ja rakendamisel. Nimelt, ei ole võimalik edendada mõnda organisatsioonikultuuri aspekti ilma teisi organisatsioonikultuuri tüüpi tunnusoone mõjutamata. Näiteks uuring tõi esile Avatud süsteemi ja Inimsuhete tüübi vahel esineva küllaltki tugeva seose, mis tähendab seda, et selleks, et suurendada organisatsiooni kohanemisvõimet ja edendada organisatsiooni liikmete innovaativsust tuleks tähelepanu pöörata organisatsiooni liikmete omavahelistele suhetele. Lähedaste suhete ja usalduse soosimine organisatsiooni liikmete vahel julgustab inimesi olema loovamad, innovaativsemad ja avatumad, mis võib omakorda panustada organisatsiooni arengusse ja jätkusuutlikkusse.
2. Uuring näitas, et rahvuskultuuril on teatud mõju organisatsioonikultuuri kujumisele ning organisatsioonikultuuri tüüpide vahel eksisteerivad seosed võivad demonstreerida Eesti organisatsioonidele omaseid tõekspidamisi organisatsiooni toimimise kohta. Eesti organisatsioonid on pigem stabiilsusele orienteeritud, mis tähendab seda, et küllaltki palju usutakse formali-

seerituse ja bürokraatia eelistesse. Tulemused peegeldavad, et organisatsioonides arvatakse, et tulemused, kuid samuti organisatsiooni paindlikkus on saavutatavad formaalsete reeglite ja regulatsioonide abil. Autor soovib juhtidel otsida ka teisi võimalusi organisatsiooni eesmärkide saavutamiseks, sest vaid reeglitel põhinevat juhtimist ei saa pidada jätkusuutlikuks – suuremat tähelepanu tuleks pöörata töötajakesksete juhtimistehnikate kasutusvõimalustele.

3. Käesolev uuring pakub Eestis tegutsevatele või siin tegevust alustavatele rahvusvahelistele ettevõtetele arusaama Eesti organisatsioonidele omastest väärtustest. Samuti võivad saadud tulemused olla kasulikud teistsuguse kultuuritaustaga juhtide jaoks, kes töötavad Eesti organisatsioonides. Kuna rahvuskultuur mõjutab organisatsioonikultuuri küllaltki olulisel määral, siis toob see globaliseerumise tingimustes selgemalt esile kultuurilise intelligent-suse olulisuse.
4. Doktoritöö tulemused rõhutasid tööstusharu olulist rolli organisatsioonikultuuri avaldumisel, näidates, et tööstusharu, milles organisatsioon tegutseb, määrab suures osas ära antud organisatsiooni organisatsioonikultuuri mustri. See peab eriti paika organisatsioonikultuuri Tulemustele suunatud ja Sisemiste protsesside tüübi puhul, kus organisatsiooni võimalus luua teistest samas tööstusharus tegutsevatest organisatsioonidest erinevat organisatsioonikultuuri võib olla piiratud. Siiski Avatud süsteemi ja Inimsuhete süsteemi puhul on tööstusharu mõju väiksem ja seetõttu saavad organisatsioonid panustada rohkem nende organisatsioonikultuuri tüüpide arendamisse.
5. Läbiviidud uuring näitas, et uued ja vanad organisatsioonid ei erine üksteisest organisatsioonikultuuri tajumise ühtsuse poolest. Tulemused näitasid, et organisatsioonis eksisteerivad subkultuurid, mis on moodustunud pigem tööstaazi ning vähemal määral organisatsiooni liikmete positsioonide alusel. Seega on juhtkonna jaoks oluline mõista, et inimesed, kes on töötanud organisatsioonis vähem aega võivad võrreldes vanemate kolleegidega omada erinevat arusaama organisatsiooni toimimisest ja tajuda kultuuri erinevalt. Seega on oluline pakkuda uutele töötajatele sotsialiseerimisprogramme selleks, et võimaldada neile organisatsioonikultuurist paremat arusaamist. Organisatsioonikultuur on sotsiaalne nähtus ning kaasates organisatsiooni liikmeid organisatsiooni arenguprotsessidesse tekitab neis paremat arusaamist antud organisatsiooni väärtustest ja -kultuurist.
6. Organisatsiooni väärtuste küsimustiku rakendamine organisatsioonikultuuri analüüsimiseks võimaldab kaardistada konkreetse organisatsiooni kultuuri detailsemalt kui seda tehti doktoritöös läbiviidud uuringu raames. Organisatsioonikultuuri analüüs annab arusaama sellest, millisena organisatsiooni liikmed oma organisatsiooni kultuuri tajuvad, samuti võimaldab see saada ettekujutuse võimalikest subkultuuridest antud organisatsioonis. Autori poolt 15 uuringus osalenud organisatsioonile antud tagasiside ja tulemuste arutelu demonstreeris uuringu tulemuste vajalikkust organisatsioonide jaoks. Organisatsioonid said parema ettekujutuse organisatsioonikultuuri kui

nähtuse olemusest ning ülevaate omaenese organisatsiooni organisatsioonikultuurist. Mõned organisatsioonid on kogutud informatsiooni kasutanud organisatsiooni edasiste arenguplaanide koostamisel.

Uuringuga seotud piirangud

Käesoleva uuringu peamiseks piiranguks võib lugeda organisatsioonikultuuri käsitlemise paradigma ja analüüsimeetodi valikut. Kuigi väiksemate ja selgemate analüüsikategooriate (so. kasutatud tüpoloogiast lähtuvate tüüpide) rakendamine organisatsioonikultuuri analüüsiks omab teatud eeliseid, kaasneb selle lähenemisviisiga mõttekate ja üheselt mõistetavate kategooriate loomise keerukus. Tüpoloogiateg kasutamine võimaldab määratleda organisatsioonikultuuri konkreetsetes raamistikus, kuid sellega seoses valitseb oht, et mõned konkreetse organisatsiooni jaoks olulised aspektid jäävad seetõttu vaatluse alt välja. Kvantitatiivsed analüüsimeetodid võimaldavad organisatsioone omavahel võrrelda, kuid tulemuste interpreteerimine võib kanda uurija subjektiivsuse pitserit. Analüüsimeetodite triangulatsioon võimaldanuks ilmselt tulemuste mitmekülgsemat interpreteerimist.

Organisatsioonikultuuri uuringute puhul tekib alati küsimus saadud tulemuste üldistustasemes. Kuna varasemad võrreldavad empiirilised uuringud on küllaltki fragmentaarsed, siis ei ole kerge teha järeldusi ka antud uuringu üldistatavuse kohta, kuna puudub sobilik referents ning autor leiab, et organisatsioonikultuuri valdkonnas tehtavate uuringute tulemuste üldistatavuse määr jääb alati hüpoteetiliseks või küsitavaks. Kuigi käesolevas uuringus osalenud organisatsioonide ning respondentide arv oli piisavalt suur, esindasid valimisse kuuluvad organisatsioonid viit tegevusharu, mis siiski seab teatud piirangud tulemuste üldistamisele. Käesolev uuring käsitles kontekstuaalsete ja organisatsiooniliste tegurite mõju organisatsioonikultuuri avaldumisele. Samas tuleb ka indiviidi tasandi muutujaid lugeda olulisteks teguriteks, mis ilmselt mõjutavad organisatsioonikultuuri kujunemist ja avaldumist. Kuna vastajate sotsiaaldemograafilised tunnused polnud kõikides uuritud organisatsioonide kättesaadavad, siis ei analüüsitud nimetatud muutujate mõju organisatsioonikultuurile. Kuigi see ei ole antud uuringu eesmärki silmas pidades oluline puudus, tõdeb autor siiski, et sotsiaal-demograafiliste tunnuste lülitamine uuringusse oleks võimaldanud saada ülevaatlikuma pildi organisatsioonikultuuri ja seda mõjutavate tegurite seostest.

Uuringu edasiarendamise võimalused

Autor näeb käesoleva uuringu edasiarendamisel mitut potentsiaalset suunda. Autori arvates võiks korrata analoogset uuringut, kaasates valimisse vähem esindatud tegevusharude organisatsioone ning lülitades valimisse ka väikseid organisatsioone. Kordusuuring võimaldaks valideerida käesoleva uuringu tulemusi või leida uusi seoseid käsitletud tegurite ja organisatsioonikultuuri vahel. Samuti oleks huvitav viia läbi analoogne uuring kasutades võrreldavat valimit

mõnes teises riigis, kuna see lubaks selgemalt tuua välja rahvuskultuuri mõju organisatsioonikultuurile. Autor soovib uuringu edasiarendamisel kasutada täiendavaid uurimismeetodeid, pidades silmas eelkõige kvalitatiivseid meetodeid (intervjuud, juhtumianalüüse), kuna see annab võimaluse tulemuste sisukamaks interpretatsiooniks. Arvestades Eesti konteksti, oleks eriti põnev kaardistada organisatsioonide ajalugu ning seostada organisatsiooni arenguloos toimunud sündmusi organisatsioonikultuuri arenguga. Taoline lähenemisviis võimaldaks ühtlasi tõlgendada ka ühiskonna tasandi sündmuste mõju organisatsioonidele ning täita tühimikku, mis organisatsioonialastes uuringutes valitseb. Kuigi käesoleva doktoritöö teoreetilises osas anti ülevaade uuringutest, mis käsitlesid organisatsioonikultuuri mõju organisatsiooni tulemuslikkusele ning vaadeldi ka organisatsioonikultuuri ja tööga seotud tulemuste seoseid, siis empiirilisel nimetatud seoseid ei analüüsitud. Siinkohal näeb autor töö ühe edasiarendamise võimalusena uurida, kuidas organisatsioonikultuur mõjutab organisatsiooni tulemusi, kuna saadud informatsioon võiks olla huvipakkuv nii teoreetilises plaanis kui ka organisatsioonide jaoks.

CURRICULUM VITAE

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2002–to date PhD Student, University of Tartu
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1990–1994 Diploma, Faculty of Economics and Business Administration, University of Tartu
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Foreign languages: English, Russian

Employment:
2009–to date Extraordinary researcher (0.5), Faculty of Economics and Business Administration, University of Tartu
2008–to date Lecturer (0.5), Faculty of Economics and Business Administration, University of Tartu
2006–2008 Extraordinary researcher (0.25), Faculty of Economics and Business Administration, University of Tartu
2005–2008 Extraordinary researcher (0.1), Faculty of Economics and Business Administration, University of Tartu,
2004–to date Research and consulting in private and public sector organizations
2003–2005 Tutor at WebCT-based courses, University of Tartu
1999–2001 Project manager, member of board; Taisto Reisid, Ltd
1998–2002 Performer of courses in Organizational Behaviour and Organizational Culture, University of Tartu
1996–1999 Project manager, Taisto, Ltd

Main research interests:
Organizational culture, organizational values, business ethics, innovation

Academic work:

1) Projects:

- 2009–to date Member of the research project “The Path Dependent Model of the Innovation System: Development and Implementation in the Case of a Small Country”, Estonian Ministry of Education and Research, project No SF0180037s08
- 2008–to date Participation in the Leonardo da Vinci project “Transfer of innovative teaching-learning experiential methods for management education”, No. LLP-LdV-TOI-2008-LT-0028
- 2007–to date Member of the research project “Service Organizations from the Perspective of Organizational Behavior: Some Influencing Factors and Trends” awarded by the Estonian Science Foundation, grant No 7018
- 2007–2008 Participation in the project “Entrepreneurship Education” (ENTEDU) Estonian Science Foundation, INNOVE, project No. 1.0101-06-0466.
- 2006–2007 Member of the research project “Organizational culture and e-learning in Estonian higher education”. E-University, REDEL project. Estonian Science Foundation.
- 2006 Member of organizing committee of the 10th International Conference *Work Values and Behavior (ISSWOV)*, Tallinn, 25.–29.06.2006.
- 2005–2006 Member of the research project “System of quality, efficiency and Sustainability of doctoral studies in Estonia”. Estonian Science Foundation, 1.1 EDS-2 project
- 2005 Participation in ProComDoc project. Improving Generic and Professional Communication of Doctoral Graduates Across Europe. Structuring the European Research Area Human Resources and Mobility. FP-2004-Mobility-13
- 2003–2006 Member of the research project “Organizational Culture in Estonia: National and International Aspects”. Estonian Science Foundation, grant No. 5527

2) Editing and reviewing:

- 2009 Reviewer of conference articles and chair of section on IV International Conference, Estonia, Tartu, 3–4 April 2009 “Management Theory and Practice: Synergy in Organizations”.
- 2007 Reviewer of conference articles of III International Conference, Estonia, Tartu, 3–4 April 2007 “Management Theory and Practice: Synergy in Organizations”.
- 2006 Editor and reviewer of compendium “National and international aspects of organizational culture”
- 2006–to date Supervision of student thesis (successfully defended):
- MBA level (2 students)
 - BA level (3 students)
- 2006–to date Reviewing:
- MBA level (4 students)
 - BA level (2 students)
- 2004 Reviewer of conference articles of II International Conference, Estonia, Tartu, 26–28 May 2004 “Management Theory and Practice: Synergy in Organizations”.

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|------|--|
| 2004 | Reviewer of articles of International conference “Töö- ja koostöö- kultuur koolis”, Estonia, Pärnu, 27 October 2004. |
| 2003 | Editor and reviewer of compendium “Organisational Culture in Estonia: Manifestations and Consequences” |

3) Teaching:

- | | |
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| 2009–to date | Practical Training (MBA level) |
| 2008–to date | Leadership and organizational culture (MBA level) |
| 2008–to date | Master seminar (MBA level) |
| 2008–to date | Motivation (MBA level) |
| 2007–to date | Basics of Business Ethics (BA level) |
| 2007–to date | Business Ethics (MBA level) |
| 2007–to date | Management (BA level) |
| 2006–to date | Organizational Behaviour and organizational Culture (MBA level) |
| 2006 | Strategic Thinking (MBA level) |
| 2005 | Organizational Behaviour and Leadership (MBA level) |
| 2003–to date | Organizational Behaviour (BA level) |
| 1998–2001 | Organizational Behaviour course (BA level) |
| 1998–2001 | Organizational Communication (BA level) |
| 1998 to date | Participating in defense committees (BA and MBA level) |

Continuing Education:

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| 11.2009 | ecch: Introduction to Case Teaching, Vilnius, Lithuania |
| 03.2009 | ecch: Introduction to Case Writing, Tartu, Estonia |
| 03.2009 | Navigator Consulting Group: Methods of Corporate Analysis, Tartu, Estonia |
| 2008 | Global Business Ethics Teaching Workshop, Bentley College USA. 18.–23.05.2008. |
| 2006 | Participating on opening conference of Responsible Business Forum, Tallinn, 12.06.2006. |
| 2006 | Participation on seminar “Business ethics – foundation of entrepreneur’s success”. Tallinn, 05.04.2006. |
| 09.2005 | Participating in PhD Summer School, Granada, Spain “Improving Generic and Professional Communication of Doctoral Graduates Across Europe”. |
| 2005 | Participating on interactive training course “Increasing the effectiveness of knowledge transfer”. KA Konsultatsioonid, Paide, 13.04.2005. |
| 09.–12.2003. | Participating in EU Socrates Gruntvig 1. program “Tutoring Adults Online-@duline”. |
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| 2007–2008 | Member of the faculty council |
| 09.–10.1996 | Coordinator of research program with University of Linköping |
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Training experience:

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| 2009 | Summer School, Open University, University of Tartu “Efficient communication in organization” (with Made Torokoff, PhD) |
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- 05.2009. Training course “Organizational culture and change management” for Rakvere City Council and Government, Rakvere (with PhD Student Elina Tolmats).
- 2008 Summer School, Open University, University of Tartu “Efficient communication in organization” (with PhD Student Krista Jaakson)
 Training course “Self regulation and management of relationships” for managers from Järvamaa County (with PhD Student Krista Jaakson and Made Torokoff, PhD.)
 Training course “Work Motivation” for National Audit Office of Estonia, 3rd department (with PhD Student Krista Jaakson)
- 05.2007 Training course “Work Motivation” for National Audit Office of Estonia, 5th department (with PhD Student Krista Jaakson)
- 02.–03. 2006 Training course “Development of employees and motivation” for Eesti Põlevkivi Ltd, Estonia.
02. 2006 Training course “Organizational values, organizational culture and emotional intelligence of employees” for Tartu Health care College (with PhD Students Krista Jaakson and Elina Tolmats)
 Summer School, Open University, University of Tartu “Motivation of employees” (with prof. Maaja Vadi, PhD Student Krista Jaakson)
- 2005–2007 Training, consulting and feedback to the organizations that participated in the research of organizational culture in the data collection process for the dissertation (15 organizations)

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2002– Tartu Ülikool, doktorant
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Peamised uurimisvaldkonnad:

Organisatsioonikultuur, organisatsiooni väärtused, ärietika, innovatsioon

Akadeemiline tegevus:

1) Projektid:

- 2009– Uurimisprojekti “Innovatsioonisüsteemi rajasõltuvust arvestava mudeli loomine ja rakendusmehhanismi väljatöötamine väikeriigi näitel”, liige, Eesti Haridus- ja Teadusministeerium, projekt Nr. SF0180037s08
- 2008– *Leonardo da Vinci* projekti in the “Transfer of innovative teaching-learning experiential methods for management education“ liige, projekti Nr. LLP-LdV-TOI-2008-LT-0028
- 2007– Uurimisprojekti “Teenindusorganisatsioonid organisatsioonikäitumise vaatenurgast: mõned tegurid ja arengusuunad” liige Eesti Teadusfondi grandid Nr. 7018 raames
- 2007–2008 Projekti “Ettevõtluspedagoogika õppearendus” (ENTEDU) liige, Eesti Teadusfond, INNOVE, projekt Nr. 1.0101-06-0466.
- 2006–2007 Projekti “Organisatsioonikultuur ja e-õpe Eesti kõrghariduses” liige. E-Ülikool, REDEL projekt, Eesti Teadusfond.
- 2006 X rahvusvahelise konverentsi “The 10th International Conference *Work Values and Behavior*” (ISSWOV) (toimus 25.–29.06.2006 Tallinnas) korraldustoimkonna liige.
- 2005–2006 Uurimisprojekti “Eesti doktoriõppe kvaliteedi, tulemuslikkuse ja jätkusuutlikkuse tagamise süsteem” liige. Eesti Teadusfond, 1.1 EDS-2 projekt
- 2005 ProComDoc projekti “Improving Generic and Professional Communication of Doctoral Graduates Across Europe” liige. Structuring the European Research Area Human Resources and Mobility. FP-2004-Mobility-13
- 2003–2006 Uurimisprojekti “Organisatsioonikultuur Eestis: rahvuslikud ja rahvusvahelised aspektid” liige Eesti Teadusfondi grandid Nr. 5527 raames

2) Toimetamine ja retsenseerimine:

- 2009 IV rahvusvahelise konverentsi “Management Theory and Practice: Synergy in Organizations” (toimus 3.–4. aprillil 2009 Tartus) artiklite retsensent ja sektsioonijuht
- 2007 III rahvusvahelise konverentsi “Management Theory and Practice: Synergy in Organizations” (toimus 3.–4. aprillil 2007 Tartus) artiklite retsensent
- 2006 Artiklite kogumiku “National and international aspects of organizational culture” toimetaja ja retsensent
- 2004 II rahvusvahelise konverentsi “Management Theory and Practice: Synergy in Organizations” (toimus 26.–28. mail 2004) artiklite retsensent.
- 2004 Rahvusvahelise konverentsi “Töö- ja koostöökultuur koolis” (toimus 27. oktoobril 2004 Pärnus) artiklite retsensent.
- 2003 Artiklite kogumiku “Organisational Culture in Estonia: Manifestations and Consequences” toimetaja ja retsensent
- 2006– Kaitsmiseni jõudnud üliõpilaste juhendamine:
- MBA tase (2 üliõpilast)
 - BA tase (3 üliõpilast)
- 2006– Retsenseerimine:
- MBA tase (4 üliõpilast)
 - BA tase (2 üliõpilast)

3) Õppetöö:

- 2009– Praktika (MBA tase)
- 2008– Eestvedamine ja organisatsioonikultuur (MBA tase)
- 2008– Magistriseminar (MBA tase)
- 2008– Motivatsioon ja motiveerimine (MBA tase)
- 2007– Ärietika alused (BA tase)
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- 2006 Strateegiline mõtlemine (MBA tase)
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- 2003– Organisatsioonikäitumine (BA tase)
- 1998–2001 Organisatsioonikäitumine (BA tase)
- 1998–2001 Ametisuhtlemine (BA tase)
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Täiendõpe:

- 11.2009 ecch: Sissejuhatus juhtumi õpetamisse, Vilnius, Lithuania
- 03.2009 ecch: Sissejuhatus juhtumi kirjutamisse, Tartu, Estonia
- 03.2009 Navigator Consulting Group: Ettevõtte analüüsi meetodid, Tartu, Estonia
- 2008 Osalemine workshop'il "Global Business Ethics Teaching Workshop", Bentley College USA. 18.–23.05.2008.
- 2006 Osalemine Vastutustundliku Ettevõtluse Foorumi avakonverentsil, Tallinn, 12.06.2006.
- 2006 Osalemine seminaril "Ärietika – iga ettevõtja edu alus!". Äripäev, Tallinn, 05.04.2006.
- 09.2005 Osalemine rahvusvahelises doktorantide suvekoolis "Improving Generic and Professional Communication of Doctoral Graduates Across Europe". Granada, Hispaania
- 2005 Osalemine interaktiivsel koolitusseminaril "Teadmiste edastamise efektiivsuse suurendamine", KA Konsultatsioonid, 13.04.2005.a. Paides
- 2003 Osalemine EU Socrates Grundtvig I programmis "Tutoring Adults Online – @duline", veebipõhine kursus, 29.09.–09.12.2003.
- 02.–06.1995 Kursus Scandinavian Management, Linköpingi Ülikool, Rootsi

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- 2007–2008 Majandusteaduskonna nõukogu liige
- 09.–10.1996 uurimisprojekti koordinaator, koostöö Linköpingi Ülikooliga
- 10.–11.1995 uurimisprojekti koordinaator, koostöö Linköpingi Ülikooliga

Koolitustegevus:

- 2009 Suvekool, Tartu Ülikooli Avatud Ülikool "Mõjus suhtlemine organisatsioonis" (2 päeva) (koostöös Made Torokoff'iga, PhD)
- 05.2009. Koolitusprogramm "Organisatsioonikultuur ja muutuste juhtimine" (2 päeva), Rakvere Linnavalitsus, Rakvere. (koostöös doktorant Elina Tolmatsiga)
- 2007 Suvekool, Tartu Ülikooli Avatud Ülikool "Mõjus suhtlemine organisatsioonis" (2 päeva) (koostöös doktorant Krista Jaaksoniga)

- 11.2007 Koolitusprogramm “Enese- ja suhete juhtimine”, Järvamaa juhid. (koostöös doktorant Krista Jaaksoniga ja Made Torokoff’iga (PhD))
- 10.2007 Koolituspäev “Töömotivatsioon”, Riigikontrolli 3. osakond (koostöös doktorant Krista Jaaksoniga)
- 05.2007 Koolituspäev “Töömotivatsioon”, Riigikontrolli 5. osakond (koostöös doktorant Krista Jaaksoniga)
- 02.–03. 2006 Koolitusprogramm “Töötajate arendamine ja motiveerimine”, 2 päeva, AS Eesti Põlevkivi.(koostöös doktorant Krista Jaaksoniga)
- 02. 2006 Koolituspäev “Organisatsiooni väärtused, organisatsioonikultuur ja töötajate emotsionaalne intelligentsus”, Tartu Tervishoiu Kõrgkool (koostöös doktorant Krista Jaaksoni ja Elina Tolmatsiga)
- 2007 – 2008 Suvekool, Tartu Ülikooli Avatud Ülikool “Töötajate motiveerimine” (koostöös prof. Maaja Vadi ja doktorant Krista Jaaksoniga)
- 2005–2007 Koolitus, konsultatsioon ja tagasiside organisatsioonidele, kes osalesid dissertatsiooni koostamise käigus läbiviidud organisatsioonikultuuri uuringus (15 organisatsiooni)

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2006. Kaitstud 29.03.2006.
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