1.2. EXPLORING UNIVERSITY CORE VALUES WITH THE CRITICAL INCIDENT TECHNIQUE: AN EXAMPLE OF STUDENTS' PERCEPTIONS AT THE UNIVERSITY OF TARTU

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Introduction

The last decade has witnessed doubling of the number of university students (hereinafter, students) in Estonia. If in 1993/1994 there were approximately 25,000 students, then by 2002/2003 their number had skyrocketed to over 62,000 (Üliõpilaste…, 2003). However, this increase has been possible on account of tuition-fee-charging education, because the number of state-financed places has been relatively stable over the years. Public universities, therefore, compete on two frontlines: on the one hand, attracting most promising students to state-funded places, and on the other, trying to find the market among students who can pay for tuition themselves. Almost half of all students nowadays pay for tuition and the proportion is only slightly smaller if we restrict ourselves to public universities alone (*Ibid*.). Together with the emergence of private universities these developments mean that public universities are facing a completely new situation. They have become competitors for both getting funding from the government and attracting students who can afford to pay their

fees. The abovementioned trends are coupled with the discouraging demographic situation: due to a low birth-rate, the number of Estonian students will soon start decreasing gradually, even though a university degree has become a standard level of education. It must be noted that the described trend has been global rather than specific to Estonia: Lueddeke (1999, p. 235) refers to an international study that identified the following challenges for universities in the 21st century: greater competition for funds and students who are more specialized and demanding, more efficient management, possibly fewer institutions and closer integration and networking among the survivors.

The nature of competition in education differs from the standard market solution. Even though we now have price tags to the education offered by different universities, there seems to occur no price-competition. Education resembles "experience good" rather than "search good", and the quality of the service offered cannot be directly observed before consumption. Moreover, the lack of repeat purchase and warranties sets limits to quality control. In such a situation, prices may or may not reflect the quality[1]. This makes comparing universities extremely difficult, or practically impossible. Scholars and governmental agencies have come up with numerous methods and indicators for estimating the "quality" of universities, but in all of the attempts one has to bear in mind the purpose and possible personal biases of report-writers. One could simply rely on official accreditations, which correspond to international standards, and leave the issue of quality-aside.

[1] For example, the price for a master's degree in the communications faculty of Academia Nord, which has no state accreditation as of June 2005, is 17,500 Estonian kroons per semester. Almost the same "product" with full accreditation in Tallinn University of Technology costs the same amount if not less (sources: university home-pages). Information on accreditation was obtained from the public electronic database of the Ministry of Education and Research.

Given that there are several accredited alternatives on the market, a potential student might base his or her decision on aspects other than the course content or price. Here, much depends on personal characteristics or preferences and often the choice is made according to the image of the university – the impression developed by word-of-mouth advertising or media (Patton, 2000). This is why universities should care about their organizational values: people are claimed to be attracted to organizations that share their core values (Schneider, Goldstein, Smith**,** 1995); organizations where they can express more of themselves (Dutton, Dukerich, Harquail, 1994). Hence, it is important for a university to acknowledge its values in order to attract "appropriate" students and employees. But not only are the new members at stake; the values appreciated by the existing members also affect an organization's everyday functioning and viability in the long-term.

Firstly, when the members identify themselves with the organization (i.e. share the values of the organization), attachment to an organization continues even after leaving the organization (Rousseau, 1998, p. 229). For a university, retaining loyal alumni is essential, for it enables access to organizations (for research), professionals (for guest of honor lectures), word-of-mouth advertising, supplementary financing, etc. It has been found that graduates hold this kind of attachment to their college if they perceive their university as distinctive in attitudes, values and practices (Dutton *et al*., 1994, p. 246).

Secondly, shared organizational values increase cooperation inside the organization, but also increase competition with non-members (*Ibid*., p. 254). While the cooperation part is no doubt a desirable consequence, the sense of competition might prove dangerous in a network-oriented educational world. This might be the area where the content of values matters.

Lastly, clear values would enable a more focused signaling to and communication with the outside world. Messages sent by a university are come across with greater understanding and accep-

tance if the content of the message is in line with the principles associated with the organization. On the other end of communication, clear values help the organization to formulate policies and provide arguments for particular decisions.

Given that organizational values might embed a great potential for universities, the article will next give an overview of previous literature on university culture and values and thereafter will examine one possible method, the critical incident technique, for uncovering organizational values. Empirical results from the University of Tartu (hereinafter, UT) are presented in Chapter 3. The UT as an exemplary case was chosen because it is the biggest and oldest university in Estonia, it produces the largest number of Estonia's masters/doctors per year, and it also employs most PhD holders as scholars (Ministry of Education and Research, 2004). For these reasons, the term "university" was automatically associated with the UT in Estonians' minds for many decades. The situation has now changed, and suggestions how to strengthen the UT's values in the eyes of its stakeholders are presented in the discussion chapter below.

Literature overview

Organizational values are discussed in the literature mainly because of their presumably positive effect on organizational performance (Peters, Watermann, 1982; Schein, 1992; Collins, Porras, 1994). There is no reason to assume that universities are exceptional in their capacity to absorb the potential of well-functioning values and, as noted before, there are remarkable benefits involved if values are shared among organizational members. Padaki (2000), Chatman, Jehn (1994) and O'Reilly, Chatman, Caldwell (1991) have pointed out that an industry itself dictates certain values and indeed, universities too are claimed to have a special culture (Bartell, 2003, p. 54). For instance, Pei (2002,

pp. 2–3) suggested that the shapers of university culture are the following four values:

a) Toleration and diversity, multiple consciousness;
b) Skepticism and examination, repeated questioning and arguing, unconventional innovative behavior;
c) Sense of individualism;
d) Non-utilitarian, intentionally distant pursuit of truth.

However, reality might differ from these ideals. Wilshire (1987, pp. 254–255), for example, was very critical of the last value-set in practice, while maintaining that this value should be the ultimate driving force in academia. Much of the literature deals with values indirectly, under the label of university culture, and the results are generalized across several universities. For example, Bergquist identifies four culture types on the basis of the research of 300 colleges and universities: collegial, managerial, developmental, and negotiating; McNay labels the cultures as collegium, bureaucracy, enterprise and corporation (Lueddeke, 1999, p. 237). Further, Silver (2003, pp. 160–162) examined 15 universities in various parts of the United Kingdom and discovered that university culture can be characterized as the "culture of research" (as opposed to the "culture of teaching"), the "culture of tension and conflict" and the "culture of change". Given the extreme fragmentation of universities and the existence of rival sub-cultures in academic organizations, he stated that universities did not have a culture (*Ibid*., p. 167). Froman (1999) concluded something similar: he analyzed the culture of universities in the framework of a "learning organization" and the result was that universities were characterized by fragmentation, bureaucracy and individualism (pp. 186–187) rather than learning culture. Yet, he also showed that successful universities in the long term would embed values like openness, dialogue, support, external orientation, empowerment and risk-tolerance. Cameron and Freeman (1991) gave rise to optimism not only theoretically, but also empirically. They tested organizational effectiveness and culture type in 334 US

colleges and universities and found that higher effectiveness was associated with adhocracy culture – i.e., organizations that are externally oriented, dynamic, aimed at growth and influencing the future. This culture is largely based on the values proposed by Froman: entrepreneurship, flexibility, creative experimentation, risk and external positioning. Adhocracy culture prevailed also in the study conducted among Estonian universities and university colleges (Reino, 2004, p. 6).

In addition to the values that tell us what a (good) university is like, every organization is guided by some values that solely characterize that organization in its internal and external dealings. These values may be inherited from different aspects of organizational life, such as the age of the organization, the leader's personality, the ownership structure, etc. According to Lencioni (2002), such values are different from the so-called permission-to-play values, i.e., the minimum behavioral and social standards required of any employee in a particular field, e.g., education; these values should help distinguish one organization from its competitors (p. 114). Lencioni called them "core values".

University core values are by definition organization-specific and perhaps for this very reason – that the topic is less publishable due to little general interest – the literature is rather limited. Kramer and Berman (1998) studied a large U.S. mid-western research university and brought out six value-categories with no attempt to generalize them to all universities: traditions, student subculture, clash of cultures, conflict over espoused values, unifying values and fragmentation values. According to the author's best knowledge, university core values in Estonia have not been studied before. Nor are there empirical works on the factors that might affect the perception of values at the university. However, some guidelines from general organizational studies are available.

Firstly, there is some evidence that women are more inclined to identify themselves with the organization and attach positive characteristics to it. Specifically, they are found to be more satis-

fied with their jobs, although they are paid less than men (Hakim, 1991). It is also found that men and women perceive organizational procedures in terms of justice differently. Thus, in this report, male and female students will be analyzed separately. Secondly, the length of service in the organization is positively related to organizational commitment (O'Reilly, Chatman, 1986; Dutton *et al*., 1994), which indicates that "older" members give more appreciation to the values of the organization. In this study, a distinction is made between students in their first and second year (as a shorter tenure group), and those in their third or further years (as a longer tenure group). There is a third aspect that might be important in the university context: the financial relationship with the organization. One can imagine three kinds of relationships: state-financed students who are not employed by the university, students who also have some paid duties in the university, and thirdly, students who pay for their studies. In the current study, only two types are identified: state-financed and fees-paying students. Presumably, the proportion of employed students among undergraduates is negligible. Finally, it is sometimes suggested that the so-called core workers – employees' whose knowledge and responsibilities are absolutely paramount to the organization's success – are more likely to identify themselves with the organization they work for (Roussseau, 1998, pp. 224–225). Among students, it is difficult to identify "core"-groups. In the UT, such students might perhaps be those who get a unique qualification in Estonia – medical doctors, for instance –, but this would be a speculation and no such variable has currently been included.

It can therefore be said that even though university culture and values do not appear to be a clear-cut issue, the existence of particular values in a particular cultural context is still suggested by the majority of authors. In addition, some socio-demographic characteristics may influence the perception of values and how they are followed. The current study is aimed at discovering the core values of the UT. To ensure going beneath the publicly

espoused values and discuss the values that are (or at least are expected to be) incorporated in everyday practice, the values-related critical incidents will be analyzed.

The critical incidents technique and organizational values

In the current paper, the critical incidents technique (CIT) is applied in order to develop ideas about university core values. The definition of a critical incident is "a situation where the purpose or intent of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effects" (Flanagan, 1954). The method has been used to analyze a variety of phenomena, including personal and organizational competencies, training needs, communication, acculturation, etc. Organizational values have been studied through critical incidents by Jaakson *et al*. (2004) and Martin, Powers (1991), for instance. In the university context, critical incidents have very often been used to analyze teachers' work, but only a few studies (e. g., Kramer, Berman, 1998 and 2001) also relate the results to university culture. In all the studies, the respondents describing incidents in the organization are either observers (used by Victor, Cullen, 1988) or active participants. An important feature is that the respondents are not necessarily asked to report on their own behavior but rather on the practices and procedures that they perceive to exist in their university in the light of the university values. In the next two subsections the promises and setbacks of the method considering the context of the current research will be discussed. In doing so the author will mainly rely on the works by Flanagan (1954), Fountain (1999) and Bycio, Allen (2004).

Merits of the method

Schein (1992, p. 17) shows that even the espoused values of an organization are not always directly observable, let alone the basic underlying assumptions – the ultimate source of values. Therefore, values often remain hidden until they are challenged. Critical incidents are exactly those events that make values become visible. At the first glance, only dramatic internal changes in the organization or strongly affective external ones make up critical incidents. Yet, it is the regular and often-encountered situations that shape organizational members' understanding of organizational values rather than rare events. Emotions may lose their intensity as the situation becomes a part of routine, but they might also cumulate over time and become obtrusive at some point. In both circumstances the situation is critical for the person involved.

Critical incidents have a potential to reveal the possible gap between what is said to be believed about how the organization functions, i.e., the "espoused" beliefs, and what the actual actions convey to the members of the organization.

Continuing with the virtues of the method, one has to note that the CIT is inexpensive and provides rich information. It escapes the limits of ready-made questionnaires and rating procedures, which are typically used in analyzing organizational culture and values. Compared to the latter, the CIT may provide additional or even different results. In a way, the CIT is a multiple case study, with the research question addressed several times. One implication of such an interpretation is that conclusions should be applied to theory rather than to the whole population. As such, the CIT does not require that the units of analysis should make up a representative sample of the whole population.

The technique is likely to reveal the aspects that immediately come to mind about the respondent's organization, i.e., how the organization is perceived by the individual. In the context of organizational culture, this is a true advantage because we are in-

terested in characterizing an organization via its members' emotional perceptions rather than "objectively". By definition, values cannot exist outside people's minds.

Lastly, the data from critical incidents can be analyzed both qualitatively and quantitatively. Qualitative analysis is useful with more complicated incidents, where several and possibly conflicting driving forces are at work. Aspects of organizational culture are indeed often highlighted by controversial stories (Schein, 1992; Martin, Powers, 1991; Lencioni, 2002) and in this context critical incidents might serve as both the essence and an illustration of a culture. The technique is excellent for exploratory studies, because it enables the categories to be determined in the progress of the work and not necessarily prior data collection. Organizational values and culture form a field that has many underlying concepts (Handy's archetypes, Quinn and Cameron's competing values framework, Hofstede's cultural dimensions, the university-specific approaches discussed above, etc.) and limiting oneself to a particular theory may not be an appropriate restriction for an organization analyzed.

Caveats to the method

There are some clear drawbacks to the technique. The flexibility of the method also implies potential errors that both the researcher and reader should be aware of. Fundamentally, the concerns are of two sorts: those related to the respondents and those related to the analytical procedures.

The first problem comes from the type of the reported incidents. The CIT will rely on events being remembered by respondents. But are the remembered incidents the ones we are looking for? Based on the argument above (i.e. what is immediately remembered is the authentic perception of the organization), they are. Many critical incidents may be forgotten or distorted by the events – this is the fact of life –, but from the perspective of the current research, the related values are of less importance.

The CIT is sensitive to accurate and truthful reporting of incidents. True, it is not at all certain that critical incidents when gathered anonymously and without further examination are true reflections of reality. In the current study, the incidents that seemed to be representing real-life situations, were included in the database, however, it was not possible to crosscheck them. But again, in the context of organizational culture it is less relevant whether the events are factual representations of reality; a person's perception is not assumed to be the "truth", but merely his or her belief about the distinctive attributes of the organization (Dutton *et al*., 1994, p. 244). And it is the latter that counts.

In addition to the above, it is sometimes feared that the technique will emphasize only rare events, and more commonplace incidents will be missed, even though critical does not mean peculiar or unusual events. As noted before, the values are shaped via "ordinary" rather than dramatic situations; hence, this may distort the results. In this report the bias is not so much towards rare events as towards recent events. As an example, several incidents reported in 2005 and related to *traditions* discussed the campaign to issue the ring of the University of Tartu to all its current and former members. In 2004, there was no such one-off event that would exemplify traditions and therefore they were characterized in more general terms.

With regard to the reliability of the results, the CIT may suffer from sensitivity to the data collection method. Questionnaires versus interviews may provide different types of incidents reported. In this study, all data were gathered through identical instructions, but the author admits that the general emotional predisposition and level of fatigue varied by student groups and this may have had an impact on the results.

Turning to the analysis procedure, serious consideration should be given to the validity of the results obtained by the CIT. The raw data should always be classified into a specific and relatively small number of categories in order to reach meaningful conclu-

sions. If the categories are not defined before obtaining the data, as in this article, the interpretation of incidents may suffer from face validity of the categories and their construct validity. In case computer-aided content analysis is applied with in-built dictionaries, the problem is easily overcome since coding rules are applied in the same way. However, computer categorization ignores context-sensitive events, which was often at the core of the current exercise. The following example will help clarify the idea: one critical incident started with the discussion of the traditions in the university and described many students' "normal" behavior of cheating during exams. The story revealed its author's contempt and disappointment about this widespread tradition. It is clear that this incident is not about *traditions* being violated; rather it is about *honesty* let down by students and equally by professors who allow it. Of course, the amount of data largely dictates whether computer help is needed. Fountain (1999) proposes that even 600 incidents should be worked with at a raw level; the current analysis involved 271 incidents. When manual categorization is conducted (as in the current study), the problem of validity is usually addressed by inter-judging a sample of the data by several experts and comparing the results. The current report did not make use of this technique due to time constraints.

Regardless of computer-aided or manual classification, the decision should be made whether a unit of analysis (one respondent or one incident) is allowed to have single or multiple coding. In the current study, every student was asked to provide one incident. However, some chose to report several incidents related to different values. It then accounted for multiple coding. Also, some incidents were complex sets of issues involving more than one value (e.g., incidents 1 and 4 in Appendix 2), it then also got multiple coding.

Finally, there is no good benchmark for the correct number of incidents: how many of them are needed to uncover all the important categories of behavior? It is suggested that in the simplest

analysis, the number of incidents should be between fifty and a hundred. The current study exceeds even the conservative requirement more than twofold. The data were collected and analyzed step by step and the saturation point for the main categories to emerge was around 20 incidents.

As a wrap-up of the above discussion, it is maintained that the CIT is an appropriate method for analyzing organizational values for its potential to provide insightful information, but caution should be exercised both in the process of research and in drawing conclusions.

Data

The data on university values were gathered in spring 2004 and 2005. The sample was 237 undergraduate UT students. The faculties involved were from all over the university: philosophy, social sciences, mathematics, law, physics-chemistry, economics, etc. As there are approximately 10,000 students in the UT (subsidiaries in other cities excluded), the study engaged nearly 2.4% of all students. The description of the respondents is given in Table 1.

Table 1. Description of the respondents

	Gender		**Number of years attached to UT**			**Financing**	
	Male	**Female**	**1–2**	**3 or more**	**Not specified**	**State-funded**	**Self-funded**
No of students	75	162	95	141	1	186	69
%	31.6	68.4	40.1	59.5	0.4	78.5	21.5

Groups of three to five students were formed at the seminar of "Organizational behavior" course to discuss three most distinctive values of the UT. After that every student was asked to individually describe one critical incident in his or her university-life related to one of the values. The incident could be either in line with the value or violating it (in the previous literature referred to as "good" or "effective" and "bad"/"ineffective" incidents). In some instances, the students provided more than one incident or the incident was related to several values – all these were included in the critical incidents database, 271 altogether.

The critical incidents were classified according to the author's interpretation (see the next section for a detailed description) and since the database was not enormous in quantity, no computer-aided classification was used. Quantitative analysis was conducted in STATA-program in order to find statistically significant contributors to value-supporting incidents (probit analysis) and incidents related to certain categories.

Results

The values pattern of the UT

More than 40 different values (see Appendix 1) were presented by the groups of students. Initially, all the presented values were collected and listed by the author. For performing the categorization, the grounded theory approach was applied, i.e. there were no pre-determined categories for the analysis. Thus, firstly synonyms like *continuity* and *duration* or *scientific work* and *academically oriented* were grouped, then similar values by the meaning were centered around the synonyms. The aim was to form the categories self-sufficiently and with relatively frequent appearance. Naming the categories was the final stage of the categorization procedure and in doing so the author tried to reflect all the values

in that particular category. As a result, the values fell into five distinctive categories listed below and illustrated in Figure 1:

- ***Development and innovativeness*** of the university is brought out by the students. This category mainly reflects new initiatives, technical advancement, opening new faculties, introducing new methods for the teaching and administration of academic life (e-university, for example).
- Slightly contradictory to the previous category, the UT's ***traditions and continuity*** employ a distinct category. The stability of the organization, caring about its traditions, ceremonies and establishments formed the content of this category. The particular words denoting this value category vary least of all: in 80 percent of cases "traditions" were reported.
- Many of the values were associated with the ***academic community***, cultivated by professors, researchers and administrative personnel. In this category there were numerous values that stressed cooperation, teamwork, attachment to academia that enhances science and knowledge. This value resembles most of all the "pursuit of truth" discussed above.
- The value that employs the largest share of all values was related to the ***quality of education***. The students in the UT feel that the organization tries to provide studies that have a good reputation and credibility both internally and externally.
- Finally, the values that are related to ***concern for a student*** were presented. In this category, students' expectations for helpfulness, cooperation, support, fairness, etc. shown by the university were expressed.

Convincingly, the most important value as percentage of all values is related to the *quality of education*. Very often, this value was mentioned in the first order. *Quality* is a relative concept, and thus the category consists of several aspects that reflect the external view of the university. Following Dutton *et al.*'s (1994) approach to the organizational image, this category resembles the "member's beliefs about what outsiders think about the organization". Indeed, such values as *respect*, *credibility*, *competitiveness*

are formed on the basis of what peers, the public or future employers would associate the UT with.

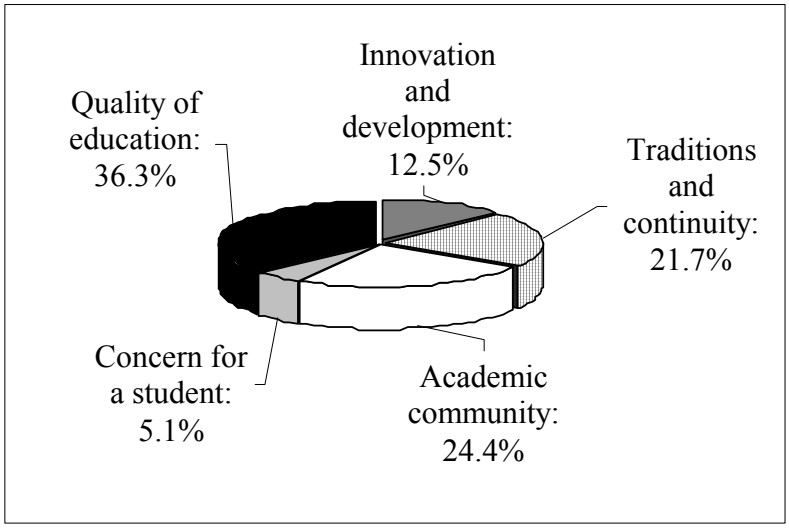

Figure 1. The values pattern of the UT (as percentages of all values).

The next value category is related to the *academic community*. It must be noted that it was sometimes unclear where to draw the line between this category and *quality of education*. Take *professionalism*, for example. No doubt professionalism is a precondition for quality, but the reason for classifying it as *academic community* is the internal connotation rather than the expression of an expectation by outsiders or the "image" of the UT. Also, critical incidents were often helpful: when *professionalism* was examined, the events dealt with admiration of a knowledgeable lecturer, who represented scientific qualities to the students (alternatively, instructors who demonstrated no such virtues), whereas concern for the quality of education was a secondary issue in this context. Most of the values in the category are quite straightforward, though: *unity*, *affiliation*, *teamwork*, *devotion*, *academic*

orientation, *spirit* etc. are adjectives that characterize the students' own experience gained from affiliation to the UT.

About every fifth of all the values belongs to the category of *traditions and continuity*. This is a notably high proportion, given the small variety of wording in the category; in fact, most students attached *traditions* as a core value of the UT. In the light of this, how should the next value category – *innovation and development* – be interpreted? Innovativeness, modern applications, novel solutions and multiple opportunities constitute 12.5 percent of the UT's values pattern. One might see the two categories as somewhat contradictory, if holding on to traditions entails avoiding innovation. The author does not support this idea, and neither did the students: the respondents could not be divided into innovation-students and tradition-students. On the contrary, those students who mentioned *traditions* also tended to express *innovation* in one way or other. Therefore, the apparent contradiction can be tackled as being traditional in some aspects of the university – such as active fraternities, traditional celebrations, referring to a solid history – and enhancing development in other facets – methods of teaching, adjustments of curricula, facilitating international contacts both on grass-roots and institutional levels, etc. However, it seems that the students of the UT perceive the values related to traditions more intensively.

Finally, the category, which can be labeled as *concern for a student*, emerged. Its proportion is the smallest, but it is still a distinct set. Values like *fair treatment*, *equal opportunities*, and *helpfulness* in the administrative side of studies are examples of this category. It is interesting that literature does not suggest that serving students is or should be an explicit university-value. Empirical studies, on the other hand, reveal the students' individual preference for equity values (consideration, courtesy, fairness, social equality, moral integrity), whereas they see their universities emphasize those least of all (Lawrence, 2004, p. 5).

It is worth reminding that all of the above is the result of investigating only one group: students. It has been noted that university-culture is unique by its multiple stakeholders, who are all relevant. Apart from students, there are scholars and also administrative staff: they are part of and, simultaneously, creators of university culture.

Values and critical incidents

The values proposed by the students were illustrated by critical incidents, which either supported the given value or deviated from it. Some examples of critical incidents are given in Annex 2, but in general the critical incidents varied greatly both in terms of content and level of detail. They ranged from a particular professor's admirable devotion to his/her research or the helpfulness of a department's secretary to fix some bureaucratic problem to a change in university strategy or introducing new procedures (like computer-based registration to lectures and exams). The results of the critical incidents presented are given in Table 2.

Table 2. Values and critical incidents

Value categories	Critical incidents*	Of those supporting the value (%)	Of those violating the value (%)
Innovation and development	9.9	92.6	7.4
Traditions and continuity	21.3	98.1	1.9
Academic community	21.8	76.3	23.7
Quality of education	37.6	58.8	41.2
Concern for a student	11.4	51.6	48.4

Notes: * percentage of the overall number of presented incidents

A number of interesting observations can be made from Table 2. To begin with, the students present the critical incidents in accor-

dance with the values pattern presented earlier, i.e., the more often a value was mentioned the more critical incidents it received. This is where the reported incidents in a category (both positive and negative) are just another revelation of the espoused organizational values discussed above. But the analysis of the values "in action" requires splitting the reported incidents into value-enforcing and value-violating ones. This is done in the two last columns of the table.

The relationship with the "importance" of values, expressed by the number of incidents, and the proportion of value-aligning critical incidents is obscure. It does not seem to hold that more frequently reported incidents also get the highest share of negative assessments: *concern for a student* is an illuminating example here. Actually, this result is consistent with a previous study by Danielson (1998) on student satisfaction-dissatisfaction, which, using the CIT, revealed that when students express dissatisfaction in relation to the university, it has likely to do with their perceptions of unfair treatment and difficulties in maneuvering through bureaucratic academic systems. Thus, the result might be universal rather than specific to the UT.

The frequency and content of the presented critical incidents allow us to conclude that for UT students, *traditions and continuity*, *academic community* and *quality of education* demonstrate strong identifying qualities of the organization. *Innovation and development* and *concern for a student* come into picture, but far less prevailingly, mainly because of the small fraction of critical incidents that are associated with those values.

The impact of gender, students' study time at the university, and their financial relationship with the university on the type of critical incidents was analyzed. Correlation coefficients and tests of independence of the types of incidents and the mentioned variables are presented in Table 3.

Table 3. Relationship between the socio-demographic variables and the type of the reported incidents

Variables	Type of critical incident				
	Innovation and development	**Traditions and continuity**	**Academic community**	**Quality of education**	**Concern for a student**
Gender (0 – female, 1 – male)	ρ = –0.03 p = 0.64	ρ = 0.007 p = 0.90	ρ = 0.007 p = 0.91	ρ = 0.01 p = 0.89	ρ = –0.06 p = 0.35
Study time (0 – 1st and 2nd year; 1 – 3rd and 4th year)	ρ = –0.08 p = 0.19	ρ = 0.13 p = 0.03	ρ = –0.14 p = 0.02	ρ = 0.01 p = 0.81	ρ = 0.07 p = 0.27
Finance (0 – state-financed; 1 – fees-paying)	ρ = –0.06 p = 0.30	ρ = –0.04 p = 0.53	ρ = –0.04 p = 0.53	ρ = 0.13 p = 0.03	ρ = –0.01 p = 0.88

Notes: Results in bold show differences at 5% significance level

The table shows that there is no difference between male and female students in their preference towards picking a certain type of incident – in other words, the hypothesis that the type of incident is independent of gender cannot be rejected. Thus, no judgment can be made about female students' disposition for the *concern for a student*-value or about male students being emotionally more involved with *innovation and development* or any other value. Study time, however, shows some significance. At 5% significance level, the students who have been affiliated to the university for three or more years are less likely to report *academic community* (correlation coefficient is negative) and more likely to report incidents on *traditions and continuity*.

As far as the financial relationship with the university is concerned, the value where the correlation between a student's choice of incident and paying for the studies is significant is the *quality of education*. Hence, an argument that those who contribute financially to their studies also care more about the quality of the "purchase" can be made.

Value-enforcing critical incidents

Next, the issue of the content of critical incident will be analyzed. In order to find possible statistically significant relationships between the value-enforcing incidents and other variables – the type of incident, respondents' gender, tenure and financial relationship – the respective *probit*-models were tested. The results of the two models, all variables included and statistically insignificant variables removed, are presented in Appendix 3.

In general, it appears that study time and gender do not play a significant role in the students' assessment of critical incidents (see Model 1 in Appendix 3). Even if we look at those incidents where study time had some influence (*traditions and continuity*, and *academic atmosphere*) one cannot conclude that either group reports more positive incidents. In other words, although younger students report more such real-life examples that are related to *academic community*, the proportion of their positive incidents does not differ from that of their senior colleagues. The same is true in the case of *traditions and continuity* (the share of negative incidents in this category was marginal, too). Thus, there is no confirmation for the hypothesis that longer attachment to the UT is accompanied by reporting more positive examples of values at work.

Similarly, the issue of gender enables only cautious interpretation, since the variable is insignificant ($p = 0.57$). However, it is tempting to note that the correlation coefficient between positive incidents and male respondents is negative ($\rho = -0.03$). If we look for a specific type of incident, significant gender differences can,

in fact, be traced (see Table 4). Particularly, the assessments of *innovation and development* are likely to be negative when the respondent is male: The correlation coefficient $\rho = -0.48$ ($p = 0.01$). This shows that even though male-students do not generally put more importance on the *development* value in the UT, they likely find this value violated once reported.

Table 4. Relationship of gender and positive assessments to types of incidents

Variables	Positive assessments to type of critical incident				
	Innovation and development	**Traditions and continuity**	**Academic community**	**Quality of education**	**Concern for a student**
Gender (0 – female, 1 – male)	$\rho = -0.48$ $p = 0.01$	$\rho = 0.02$ $p = 0.86$	$\rho = -0.19$ $p = 0.17$	$\rho = -0.01$ $p = 0.92$	$\rho = -0.09$ $p = 0.61$

Notes: Results in bold show differences at 5% significance level

One clearly significant variable in Model 1 is whether the student's study is financed by the state or not. The coefficient is significant and positive, meaning that fees-paying students report more positive incidents. An interesting insight into this is provided by the scrutiny of specific types of critical incidents (see Table 5). The correlation coefficient is positive, $\rho = 0.19$, and marginally significant: $p = 0.06$ in case of the *quality of education*. But fees-paying students differ remarkably from their peers with respect to yet another type of critical incidents − *concern for a student* ($\rho = 0.42$, $p = 0.02$).

When it comes to the types of critical incidents' general potential to be assessed positively rather than negatively, the model adds little to Table 2. Model 1 shows that assessments of *concern for a student* do not significantly differ from assessments of the *quality of education*. In Model 2, where irrelevant variables are removed,

there is almost twofold likelihood that *traditions and continuity* will obtain positive assessments compared to the *quality of education* and *concern for a student.* The critical events, in turn, that dealt with the *academic community* have 58 percent higher probability of being value-aligning incidents. Also, the students who are not funded by the state are 56 percent more likely to report positive incidents than those who are.

Table 5. Relationship of a student's financing and positive assessments to types of incidents

Variables	Positive assessments of the types of critical incident				
	Innovation and development	**Traditions and continuity**	**Academic community**	**Quality of education**	**Concern for a student**
Finance (0 – state-financed; 1 – fees-paying)	ρ = 0.13 p = 0.50	ρ = 0.03 p = 0.82	ρ = 0.07 p = 0.61	ρ = 0.19 p = 0.06	ρ = 0.42 p = 0.02

Notes: Results in bold show differences at 5% significance level, the results in italics show marginal differences

It must be noted, though, that the model itself is not well described (see Model 2 in Appendix 3). The success of predicting positive incidents by means of the included variables is only 17.3 percent. Thus, there might be other factors that contribute to the students' perceptions of how values of the UT are followed in everyday situations – the likely variables include age, faculty, active involvement with the UT outside the compulsory curricula, etc.

Discussion

One might say that it takes no research to learn that the UT organizational values are related to *traditions* and the *academic community*. Indeed, what the core values of the UT mirror are exactly the university's solid history and institutions and traditions that have been preserved and cherished over several hundred years – the facts that can be obtained from "hard" data. A large proportion of UT students live in dormitories; most of their activities are centered around one campus. Intellectual concentration in Tartu is relatively high; the University plays an important role in the local community. When it comes to the *quality*, also hard data can be analyzed: the UT scholars publish more than their counterparts in other Estonian universities. Thus, the values do not seem to open any new knowledge about the university. Instead, they confirm what we claim to know already. Yet, if we ask a person directly about values, he or she is most likely unable to respond (Silver 2003, p. 161). This is because very often core values are the so-called "theories-in-use", which are unconscious, taken-for-granted, and not paid attention to. The concept of basic assumptions, suggested by Schein (1992) explains this phenomenon (pp. 21–26). This is where critical incidents serve as a useful tool, revealing the values or confirming earlier results.

It was also found that the students who had stayed with the university for at least three years brought out the *traditions and continuity* value, whereas those of a shorter tenure laid more stress on the *academic community*. This is a somewhat unexpected result. One explanation is perhaps that students become aware of university traditions as the time progresses and it is not this aspect of university culture they encounter during the first years of their studies. Instead, first and second-year students perceive academic values as they are expressed in their student life. Thus, if the UT is concerned about how to attract new students, aspects of the *academic community* seem to be the argument that fresh members pay attention to.

In addition, the study showed that fees-paying students differ significantly from their colleagues whose studies are funded by the state – they give more positive assessments to the *quality of education* and *concern for a student*. One explanation may come from the post-purchase rationalization concept or even decision justification theory (Connelly, Zeelenberg, 2002). Especially in case of high involvement goods people seek for information that would justify their expenditure and decrease the feeling of regret. However, the author believes it is not the case here, because the students' employers do much of the financing. As mentioned above, the *quality of education* is a view that students believe outsiders hold towards the UT – hence, the positive assessments of quality show that in the students' opinion, providers of their funding will get the expected quality for their money. Of course, it is in principle possible that education of better quality is provided to those who pay for their studies; yet, this conclusion is not viable in the UT because firstly, here students with different financing schemes intermingle in groups, and secondly, professors and curricula are identical regardless of who pays for the studies. With respect to the more positive view on *concern for a student*, the reason for the difference might, in fact, be special treatment by the university. In some faculties, self-financing students have a special program coordinator or contact administrator in place to help them with getting information, materials, etc. It seems that such help is appreciated by the target group and explains the difference. Consequently, it can be said that UT students outside the state-funded places are not *a priori* more demanding or critical about the *quality of education*. Conclusions about *concern for a student* should be more cautious because the circumstances might differ for fees-paying and state-funded students.

The current analysis found no significant difference between male and female students either in their choice or assessments of critical incidents. The only exception was the *innovation and development* value, where male students took a more critical approach. Although this value was not amongst the most important ones in

the UT, it is useful to know that novel solutions are appreciated by women, but taken-for-granted by men. Hence, delays and failures, even if incidental, catch the attention of male students.

There are some clear implications for the university's positioning in the educational market. Firstly, the university administration should analyze whether the core values presented in this report are the ones it wishes to be guiding the life of the academia. If not, serious consideration should be given to questions such as: what philosophies, policies and procedures are in place that enforce such values for students? How can they be changed to reflect the desired values? Is the administration's ideal realistic? etc. On the other hand, if the core values suggested in this article coincide with the administration's view, there are many alternatives for further positioning on the Estonian (and perhaps even international) educational market. The values should be enforced more explicitly in all the activities in the university, for example, exhibiting them in marketing campaigns (open doors days, websites, university brochures, press-conferences, etc.), taking them as the basis for formulating strategies, but also using them for operational work − making decisions and explaining them to the stakeholders. A distinguishable organizational identity is one of those few assets that are not subject to copying by competitors. In addition to better positioning of a university in the educational market, a strong identity would result in higher commitment by the employees and students even after the employment-term or graduation, and in more intense cooperation between the existing members.

The limitations of this study call for continuing research in the field of university values. It would be interesting to compare the values perceived by different stakeholders (administrative staff, scholars, students, alumni) and different universities: new versus old, public versus private, research versus teaching universities, etc.

Conclusions

Universities with similar faculties provide education that in many cases is equally competitive and qualified. Universities are looking for arguments in order to attract potential students (and scholars). The current study makes the case that education providers should lay more emphasis on their core values – the values that distinguish one organization from another and that make stakeholders (including students) hold and be proud of specific organizational characteristics. One possible method for uncovering organizational values was looked at in depth − the critical incident technique. It was found that the technique enables researchers to work with rich data, which is appropriate and relevant for organizational culture studies. However, vigorous standards should be enforced when analyzing the data. As an example, the current article analyzed the values and critical incidents reported by 237 undergraduate students of the UT and concluded the following.

The students of the UT name numerous values, which can be classified into five categories: *innovation and development*, *traditions and continuity*, the *academic community*, the *quality of education* and *concern for a student*. The frequency of the abovementioned values as well as the intensity of the presented critical incidents allows one to conclude that the distinct core values of the UT are the *quality of education, traditions and continuity*, and the *academic community.*

There are statistically significant differences between the students' socio-demographic characteristics and the importance they attach to values and the way they see the values enforced by the university. Particularly, students in their first and second year report more critical incidents related to the *academic community,* while senior students stress *traditions and continuity*. Male students are more critical of how the values *innovation and development* are pursued, whereas fees-paying students respond more

favorably to the values *the quality of education* and *concern for a student*.

Based on the results, it is suggested that the UT could more clearly emphasize its traditions and its members' belonging to a unique academic community in its communication policy and internal initiatives. It is also noteworthy that the image of the UT as a provider of high-quality education matters greatly to the students, even if they do not find this value always being held on- to during their studies.

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KOKKUVÕTE

Ülikooli põhiväärtuste uurimine kriitiliste juhtumite meetodil: Tartu Ülikooli tudengite näide

Krista Jaakson

Ajal, kus tudengitel pole valida mitte lihtsalt era- ja riiklike ülikoolide vahel Eestis, vaid era- ja riiklike ülikoolide vahel terves Euroopas, on ülikoolide konkurentsivõime omandanud uue tähenduse. Teema on seda aktuaalsem, et kuigi tudengite üldarv Eestis on viimase kümne aasta jooksul kaks ja pool korda suurenenud, on riiklikult finantseeritud kohtade arv samal ajal jäänud praktiliselt muutumatuks. Riiklikes ülikoolides, sh Tartu Ülikoolis (TÜ), moodustavad oma õpingute eest maksvad tudengid pea poole.

Antud artiklis on näidatud, et positsiooni haridusmaastikul aitaksid tugevdada TÜ põhiväärtused ning väärtuste analüüsimiseks sobib kriitiliste juhtumite meetod. Kriitiliste juhtumite meetodi eelisteks antud uurimisvaldkonnas on esmalt meetodi odavus, paindlikkus ja inforikas andmestik, mis sellega saadakse. Keskendutakse juhtumitele, mis vastajatel koheselt meenuvad ja mis on väärtuste seisukohalt olulised. Juhtumeid võib analüüsida nii kvalitatiivselt kui kvantitatiivselt ning seda võib teha ka kindla teoreetilise raamistikuta. Meetodi suurimaks puuduseks on võimalik valiidsuse kadu, kui juhtumite klassifitseerimiseks puudub kindel alus.

Töö autor palus 237-l TÜ tudengil kirjeldada oma ülikooli väärtuseid ja illustreerida üht neist kogetud kriitilise juhtumiga ülikoolielust e. tegelikult aset leidnud sündmuse või situatsiooniga. Tudengid kirjeldasid TÜ väärtuseid, mis jagunesid viide kategooriasse. Nendeks on: *traditsioonid ja järjepidevus*, *hariduse kvaliteet*, *akadeemiline kooslus*, *uuenduslikkus ja areng* ning *tudengikesksus*. Kriitiliste juhtumite meetod näitas, et TÜ põhiväärtusteks võib pidada eelkõige esimest kolme nimetatutest, sest tegevuspraktikast pärinevad näited (e. kriitilised juhtumid) puudutasid just neid. Artiklis analüüsiti ka erinevusi väärtuste tajumises, mis tulenesid tudengi ajalisest seotusest TÜ-ga ja osalemisest tasulises või riiklikult finantseeritavas õppes.

Järeldati, et võimalikke uusi tudengeid võiks TÜ juures võluda osa saamine unikaalsest akadeemilisest õhkkonnast, vanemad tudengid hindavad aga pigem TÜ traditsioone. Kõigile tudengeile on oluline, et TÜ-l oleks kvaliteetse hariduse pakkuja kuvand. Nn. tasulised tudengid on teistega võrreldes positiivsemalt meelestatud hariduse kvaliteedi ja tudengikesksuse osas. Kuigi viimane väärtus pole TÜ põhiväärtuste hulgas kõige olulisem, tasuks sellele panustada just tasulistele tudengitele õppe pakkumisel.

Antud uuring näitas, et TÜ-l on võimalik oma konkurentsieelise otsimisel ja sihtgruppidele teadvustamisel rõhuda oma põhiväärtustele ja nende kaudu end haridusmaastikul paremini positsioneerida. Tulemuseks on tugeva identiteediga organisatsioon, mille liikmed on pühendunumad ja koostööaltimad, mis on välistele huvigruppidele paremini mõistetav ning mille strateegia ja taktika on ideoloogiast tulenevalt lihtsamini kujundatav.

Käesoleval uuringul on ka mitmed piirangud ja ruumi edasiarendusteks. Metoodika poolel tuleks rakendada juhtumite klassifitseerimist mitme eksperdi poolt. Põhiväärtuste väljaselgitamisesse võiksid olla hõlmatud peale tudengite veel õppejõud ja administratiivne personal, usaldusväärsemate järelduste tegemiseks võiks uuringusse lülitada ka teisi ülikoole. Huvitavaid tulemusi annaks näiteks uute-vanade ja era-riiklike ülikoolide põhiväärtuste võrdlus.

Appendix 1. Values mentioned by the students of the UT

Value Category	Values	No of times mentioned	% of all values
Innovation and Development	Openness	5	12.5
	Innovativeness	39	
	Novelty	1	
	Modern, youthful	8	
	Plentiful opportunities	3	
	Diversification	1	
	Internationality	6	
	Development	23	
	Flexibility	8	
Traditions and Continuity	Continuity	23	21.7
	Stability	5	
	Traditions	131	
	Experience	1	
	Social responsibility	3	
	Duration	2	
Academic Community	Cooperation	23	24.4
	Teamwork	10	
	Attachment and Affiliation	2	
	Unity	19	
	Devotion	11	
	Professionalism	20	
	Knowledge-based	13	
	Honesty	7	
	Research	25	
	Academically oriented	32	
	Spirit	24	

Appendix 1 continued

Value Category	Values	No of times mentioned	% of all values
Quality of Education	Quality	171	36.3
	Reputation	36	
	Elite	2	
	(International) competitiveness	24	
	Respect	9	
	Visibility	1	
	Formalized (procedures)	9	
	Credibility	22	
	Goal-oriented	2	
Concern for a Student	Fairness	8	5.1
	Equal treatment	8	
	Consideration	12	
	Appreciation of students	8	
	Helpfulness	2	
	Equal opportunities	1	

Appendix 2. Examples of critical incidents

Incident 1

The incident is related to the *traditions* and the *academic community* (multiple coding). One particular chair of the University has established a tradition to hold an out-of-doors seminar every spring. The seminars are highly appreciated by students, mainly because several distinguished speakers are present and debates are organized on different topics. There are specific rituals in the seminar: one professor delivers his famous quiz, there is always one practitioner invited, etc. The seminar also promotes team spirit between scholars and students. The feelings of companionship and belongingness are developed: for instance, professors always address students as "colleagues".

Incident 2

The incident is related to the *academic community*. A student was chatting with her friend at the entrance to a university building, when suddenly a loud noise coming from an old and relatively unfit car disturbed their conversation. Who could possibly drive a car like that caught the student's attention. When she looked who the driver was, she recognized a highly esteemed university professor: an almost legendary scholar in the university. At that very moment the student realized that for a scientist who is so successful having an old car is very characteristic. Via that incident the student acknowledged the different merits of academic life, because "ordinary" successful people would be ashamed of possessing such a car.

Incident 3

The incident is related to the *quality of education*. A student was taking an exam and in his view, he knew the subject well. However, when the results were given, his grade was B instead of the expected A. He went to talk to the professor, who said that his test was good, but not outstanding in terms of showing extra knowledge, and he refused to revise the grade. The student was puzzled: in his prior experience A was given without any extra knowledge and this professor's approach seemed discriminative in this context. What this situation really revealed to the student, however, was that A had generally been devalued in the university; in most cases grade A did not demonstrate superior knowledge.

Appendix 2 continued

Incident 4

This incident is related to *innovation and development* and the *quality of education* (multiple coding). Several years ago the UT changed its internal regulations, stipulating that professors older than 65 should resign. This was a big change, which was supposed to attract young scholars to stay with the university and open better career prospects for them. After several years, the change was brought to a serious debate again: a most esteemed professor in turned 65 and had to give up the chair. Everybody seemed to agree that the course of events was not fostering the quality of education in that particular faculty, although the arrangement was probably necessary for the general development of the UT.

Appendix 3. Models to explain value-aligning incidents

Model 1. All defined explanatory variables included

Probit estimates — Number of obs = 270
LR chi2(7) = 57.02
Prob > chi2 = 0.0000
Log likelihood = –130.05335 — Pseudo R2 = 0.1798

Positive|	dF/dx	Std. Err.	z	P>|z|	x-bar	[95% C.I.]	
Acad* |	.1462327	.0483966	2.62	0.009	.218519	.051377	.241088
Innov*|	.2278126	.0383033	3.40	0.001	.096296	.15274	.302886
Tradit*|	.3255935	.0355214	4.48	0.000	.192593	.255973	.395214
Concern*|	–.0495668	.0832894	–0.62	0.533	.114815	–.212811	.113677
Male*|	–.0716746	.0600693	–1.23	0.218	.296296	–.189408	.046059
Tenure*|	.0532742	.0587474	0.92	0.358	.618519	–.061869	.168417
Finan*|	.1605928	.0493208	2.85	0.004	.27037	.063926	.25726
obs. P |	.7259259						
pred. P |	.7920485	(at x-bar)					

(*) dF/dx is for discrete change of dummy variable from 0 to 1
z and P>|z| are the test of the underlying coefficient being 0

Model 2. Statistically significant explanatory variables included

Probit estimates — Number of obs = 271
LR chi2(5) = 54.96
Prob > chi2 = 0.0000
Log likelihood = –131.40275 — Pseudo R2 = 0.1730

Positive |	Coef.	Std. Err.	z	P>|z|	x-bar	[95% C.I.]	
Acad |	.5869687	.2125948	2.76	0.006	.1702906	1.003647	
Innov |	1.372968	.3841078	3.57	0.000	.62013	2.125805	
Tradit |	1.993855	.4306472	4.63	0.000	1.149802	2.837909	
Finan |	.5679623	.2099164	2.71	0.007	.1565337	.9793909	
_cons |	.0061174	.1270364	0.05	0.962	–.2428694		
obs. P |	.7269373						
pred. P |	.7899582	(at x-bar)					