

# Problems of University Education in Lithuania: Student Point of View

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## Abstract

The problems of university education though retain a complex character still become more and more pressing issues for a number of reasons. Labour market dynamics and a changing society require flexible, innovative and creative possibilities of lifelong learning. Higher education institutions are not limited to primary professional training of students. Therefore, it is necessary to search for the new possibilities of improving the skills of specialists and professionals changing personal specializations, developing individual abilities and acquiring high level professional competences. Continuing education at universities plays a fundamental role in choosing strategy priorities identified in the field of European education. Thus, it is necessary to strive for the highest standards of scientific activities, studies and obtained results acknowledged by the international community. On the other hand, a competition between universities becomes more intense at both the national and international level. Insufficient focus on a consumer (student) and offered services decreases the quality of studies and acquired education.

Solutions made to any problem require relevant and accurate information. Research on the students' opinions about the questions of university education has remained a serious matter. Moreover, this is how fairly objective primary information about the processes taking place in this sector can be obtained. Empiric research (N=544) carried out in January – February 2012 showed controversial student positions on university education. The students' opinions may vary depending on the sex and the year of studies. It has been discovered that female rather than male students more positively evaluate the majority of aspects of university education.

**Keywords:** survey, empiric research, factor analysis, university education

## 1. Introduction

### 1.1 International Context

Experience gained by the major part of countries shows that the development of economy and a rise in living standards directly depend on knowledge generation and the proper usage of information that help with educating society, creating new scientific products and improving technologies. The system of university education is one of the basic parts of education, culture, teaching, social welfare and economic development in every country (Zgaga, 2011; Kennett, Reed, Lam, 2011; Kanter, 2011). University education has been accepted as the foundation for public priority, economic prosperity and life quality. Public education is one of the main statistic indicators reflecting social development. The institutions of university education are capable of training an educated, intelligent and knowledgeable society and raising national intellectual and creative potential. University education provides studies based on broad academic education aimed at gaining professional qualification and comprehensive general education focused on teaching to critically and creatively evaluate all-round processes. Theoretical preparation and intelligence are the main personal qualities of those having university education. Striving for decent education and intellectual development are distinctive features of university students.

To develop national economic potential, to make the business companies of innovative higher technology functioning, to carry out research and increase scientific production, a certain level of population having university education is necessary. It is supposed, that by 2020, approx. 125 mln. students will have been studying at the institutions of university education. A growing demand for university education in the world increases

activities undertaken in the markets of such traditionally “educated” countries as the USA, Germany, Great Britain, France, Australia, etc. (Higher education internationality encouragement programme, 2011-2012).

Lately, a very clear global tendency - university education is continually acquiring a stronger international character – has been noticed. Tendencies towards the development of university education at the international level are best reflected by a constantly increasing demand for university education worldwide and therefore growing academic mobility (Mobility and lifelong learning instruments. Education & Training). A constant growth in the international development programmes of university education and an increase in funding for European and national programmes discloses that international relations are treated as one of the major priorities for developing university education (Higher education internationality encouragement programme, 2011-2012).

The European Union seeks for becoming competitive, dynamic, knowledgeable worldwide recognized economy so that to promote changes in the sector of university education that first was mentioned as a cooperation area of European countries in 1974. (Higher Education..., 2001). The first steps of creating the European Higher Education Area (EHEA) were taken after the Lisbon Convention (1997) and the aims formulated by the declarations issued in Sorbonne (1998) and Bologna (1999). The Sorbonne declaration emphasized the key role of universities developing European cultural dimensions. Creating the area of European higher education was considered to be the most important way to support the movement of citizens, the possibility of employment and the overall development of the European Union thus expanding its intellectual, cultural, social, scientific and technological potential facing the challenges of globalization. The Leuven communiqué of 2009 provides that quality should be accepted a key priority in the field of European higher education. The latter has to become the main element implementing such activities as lifelong education, social dimension, employment, international openness and mobility, relations between students, scientific research and innovations, etc.

University education is a crucial part of modern society. Therefore, strategic aims and tasks of university education are determined by the structure of society itself and changes inside it. Research on university education conducted in Lithuania as well as in other Member States of the EU has disclosed important aspects looking at coordinating the established requirements with national political, economic, social and cultural conditions and characteristics rather than at mechanically merging into the European higher education area (EHEA). The recent field of research on university education has spread and been divided into different subjects such as the place of university education in society, social interaction in university education, occupation and university education, university education for mass and elite society, access to university education, criteria for choosing, evaluating and qualifying studies, etc.

### *1.2 Problems of University Education in Lithuania*

The picture of Lithuanian university education is displayed in a book by A. Samalavičius (2003). With the help of combining different scientific perspectives, the book analyses the idea of university development, examines the conceptions of aims and models for university education, highlights some specificities and internal contradictions of recent university education and discusses the main points of how to reform the system of Lithuanian higher education to make universities one of the most important educational institutions responsible for creating future society. The author underlines that these days Lithuanian universities encounter plenty of problems: they are pressed by the burden of totalitarian experience, forced hastily to adapt for market demands and incited to concentrate on modern western models, which, however, are not always good enough.

The research conducted by V. Leonavičius and A. Rutkienė (2010) takes an important place in the area of university education, as it entirely focuses on access to higher education, a sociological interpretation of motivation for choosing and evaluating appropriate studies and student expectations related to the studies primarily and extracurricular activities.

The problems of Lithuanian university education are usually approached analysing the areas of educology and management. A number of investigations showing educational competence of university teachers have been carried out (Raišienė, 2004; Kanopienė, Tureikytė, 2002; Čėsnaite, 2002). The performed studies have revealed a gap in the process of improving university education – no effective teacher training system for the staff working at universities has been found. M. Barkauskaitė, V. Gribniakas, L. Kanapeckienė (2007) carried out presumption analysis considering a demand of the young people for studying at universities. The research discussed student motivation for the studies at a university and student expectations after finishing their studies. In some cases, attention was paid to student expectations and coordination of the acquired competences (Žemguliene, Makarskaitė-Petkevičienė, 2006), the quality of studies (Baranauskienė, Bukauskienė, Valatkienė, 2011), career opportunities and questions of professional engagement (Braslauskienė, Petrošienė, Saveljeva, 2011). Several researches relate to preparing primary school teachers (Lamanauskas, 2001), foreign language teachers

(Kriaučiūnienė, 2011), technology teachers (Žigaitienė, 2011), music teachers (Tavoras, 2011; Grigienė, 2010; Lasauskienė, Grigienė, Barisas, Tavoras, 2007), mathematics and informatics teachers (Valavičius, Jadzgevičienė, 2009; Leonavičius, Leonavičienė, 2007), art teachers (Kondrotienė, 2004), etc. The conducted studies deal with students' opinion about the quality of the content of studies and the problems of preparing future specialists. Investigations were performed to find out students' attitude towards active learning methods (Petružienė, Ruzgienė, 2003), independent studies (Gudžinskienė, Šmitienė, 2003), obstacles to professional training (Navaitienė, 2004), the quality of implementing the programme of studies (Sirtautienė, 2006). More researches were aimed at establishing students' motivation for learning (Paliukaitė, 2007; Ratkevičienė, 2005) and possibilities of applying information technologies for the purposes of studying and distance teaching (Pečeliūnaitė, 2006; Mickus, Vidžiūnas, 2009). Scientific researches on the quality of studies examine the methodological and practical aspects evaluating and maintaining the process of studies, introduce an internal system for ensuring and assessing the quality of studies, suggest perspectives on the system of quality management (Galiniene, Martinavičius, 2011), point out the projects on the content of distance teaching, consider factors in quality evaluation and develop learning strategies (Laužackas, Teresevičienė, Volungevičienė, 2009). Lately, an interest in evaluating achievements in both formal and informal studies at the university level has been maintained (Šliogerienė, 2009; Burkšaitienė, Šliogerienė, 2007).

Recent discussions on university education in Lithuania have revealed two controversial tendencies. One of those display there are too many universities in Lithuania, and therefore they must be joined to decrease the number of state-funded students so that to avoid the massification of university education. The other position focuses on the idea that alike in the E.U. 40 percent of Lithuanian inhabitants having university education is the purpose to be achieved. Lithuania does not possess major natural resources, and therefore, in this case, close attention is given to human resources - an educated nation - full of creativity, innovations and intellectual activities. The strategy for the modernization of university education worked out by the European Commission strives for the goal (Higher education reform strategies....., 2011) that by 2020, at least 40 percent of 30-40 year old population of the European Union will have been acquired university education. Although the number of students increases every year, however, it is not a sufficient figure. It is supposed that at the end of this decade, 35 percent of all work places will be offered to university graduates, whereas at the moment, only 26 percent of employees have university education. Scandinavian countries, Germany and Japan have set a target aimed for the figure reaching 70-80 percent of population having university education.

### *1.3 Research Problems and Aims*

Despite quite a few empirical researches, their shortage remains obvious. Constant observation, research and assessment are particularly important points of seeking to perceive the condition and changes of university education. The practice of making incomplete changes with no assessment of the faced situation still remains a burning issue. It can be claimed that empiric research is a promising way to improve the functions of university education. On the other hand, referring to theoretical or/and empiric researches carried out in other countries only is a wrong point. Therefore, it is necessary to evaluate the context of a certain country and to perform representative researches in Lithuanian universities. The object of this study is the attitude of Lithuanian students to the problems of university education. The goal of research is to establish and examine students' position on the current condition of university education thus evaluating possible perspectives on system development. The key questions of the conducted research are as follows:

- Are the students interested in the problems of university education in Lithuania and/or other European countries?
- Are the students satisfied with the quality of studies?
- What reasons determined a choice of university studies and had an impact on a decision to study at university?
- How do the students evaluate university education on a general basis considering future perspectives?

## **2. Research Methodology**

### *2.1 General Research Characteristics*

Research "*The Problems of University Education*" is based on a positive quantitative approach. The authors agree that measuring causative links between variables is very important. The opinions of the respondents and positions on the investigated object certainly help with revealing important links between variables. Research was carried out in January - March 2012. The initial results are presented in the article.

## 2.2 Research Instrument

For research purposes, a questionnaire made of open and closed questions was prepared by the authors of the article. The respondents were asked to evaluate the quality of university studies, to consider the factors that possibly had an impact on choosing a certain area of studies and to judge 28 statements related to university education. Also, 4 open questions were included in the questionnaire. The statements were evaluated with reference to the ranking scale: agree, partly agree, do not agree. The questionnaire also contained a demographical part of the respondents (sex, year and programme of studies).

## 2.3 Research Sample

BA students from two universities (Siauliai University – SU and Lithuanian University of Educational Sciences – LEU) participated in the conducted research. 600 questionnaires were prepared. On the whole, 544 questionnaires were acknowledged acceptable. The distribution of the respondents according to the universities and sex is presented in Table 1.

Table 1. Information about the respondents

	University				Total	
	SU		LEU		N	%
	N	%	N	%		
Male	79	19.1	8	6.2	87	16.0
Female	335	80.9	122	93.8	457	84.0
Total	414	100.0	130	100.0	544	100.0

The distribution of the respondents according to the year of studies is presented in Table 2.

Table 2. The distribution of the respondents according to the year of studies

Year of studies	N	%
1 <sup>st</sup>	180	33.1
2 <sup>nd</sup>	141	25.9
3 <sup>rd</sup>	70	12.9
4 <sup>th</sup>	153	28.1
Total	544	100.0

To make a sample, the consecutive 'bunch' method has been applied. Research sample has been considered sufficiently representative.

## 2.4 Statistical Data Analysis

To analyse research data, the measures of descriptive statistics (absolute and relative frequencies) have been applied. To identify differences between variables, non parametric criterion chi-square ( $\chi^2$ ) and the t-test of independent variables (Independent Samples Test t-test for Equality of Means) have been used. To establish links between variables, correlation analysis has been carried out (Spearman's rank correlation coefficient  $\rho$ -rho). For comparing a few independent samples, Factor Analysis (ANOVA) (One –Way Anova) has been employed.

28 statements on university education have been analyzed. The popularity (significance) index ( $0 \leq PI \leq 1$ ) has been calculated considering every statement. The closer is PI value to 1, the more important and significant is the statement to the respondent, i.e. the respondent more willingly accepts it. In addition, factor analysis the main aim of which is to reduce the number of variables has been carried out. The results obtained with reference to the sample are entirely suitable to carry out factor analysis. Two methods, including Bartlett's Test of Sphericity and

Kaiser-Meyer-Olkin (KMO) test have been applied in order to evaluate whether the data set is appropriate for factor analysis. The results of sample suitability for factor analysis are presented in Table 3.

Table 3. The results of KMO and Bartlett's test.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.824
Bartlett's Test of Sphericity	Approx. chi-square 2227.497
	df 378
	Sig. 0.000

Table 2 indicates that all values are rather high (Rivera, Ganaden, 2001; Nasledov, 2005). The value of the KMO test is 0.824. Bartlett's Test of Sphericity examines the null hypothesis suggesting that a correlation matrix is an identity matrix. In this case, chi-square value is close to 2227.497 and  $p < 0.000$ . These results clearly show that data can be used for factor analysis. Loading 0.40 for an item to define a factor was applied based on recommendations (Ferguson, Cox, 1993). The SPSS statistics batch is used as an instrument for data processing.

### 3. Research Results

#### 3.1 General Results

The results of analysis whether the students are generally satisfied with the quality of university studies are presented in the below table.

Table 4. Students' position on the quality of studies

Evaluation level	Sex					
	Male		Female		Total	
	N	%	N	%	N	%
Satisfied	42	48.3	178	38.9	220	40.4
Not entirely satisfied	43	49.4	270	59.1	313	57.5
Dissatisfied	2	2.3	9	2.0	11	2.0
Total	87	100.0	457	100.0	544	100.0

Table 4 indicates that a great majority of the respondents are satisfied with the current quality of studies. Considering the sex of the respondents, statistically significant deviations have not been established ( $\chi^2=2.79$ ,  $df=2$ ,  $p>0.05$ ). One can claim that both males and females equally evaluate the quality of studies. However, the results based on the year of studies suggest statistically significant deviations. In this particular case, the first year students are mostly satisfied with the quality of studies (61%), whereas the graduates make only 28,1% ( $\chi^2=50.41$ ,  $df=6$ ,  $p<0.000$ ).

The other question included in the questionnaire examines whether the respondents are generally interested in the problems of Lithuanian and/or European university education. The obtained results are displayed in Table 5.

Table 5. The respondents' interest in the problems of Lithuanian and/or European university education

	Level of interest	Sex					
		Male		Female		Total	
		N	%	N	%	N	%
Lithuanian education	university Yes	30	34.5	205	44.9	235	43.2
	To some extent	42	48.3	209	45.7	251	46.1
	No	15	17.2	43	9.4	58	10.7
European education	university Yes	11	12.6	63	13.8	74	13.6
	To some extent	35	40.2	196	42.9	231	42.5
	No	41	47.1	198	43.3	239	43.9
	Total	87	100.0	457	100.0	544	100.0

Table 5 shows that 43.2% of the respondents deal with problems of Lithuanian university education. The results concerning the problems of European university education are much poorer and make only 13.6%. Statistically significant deviations according to the sex of the respondents have not been found. In both cases,  $p > 0.05$ . However, these variables directly correlate with each other. Spearman's rank correlation coefficient is 0.36 ( $p < 0.01$ ).

The factors having an impact on choosing university studies have been further analysed. The received results are presented in Table 6.

Table 6. The factors having an impact on choosing university studies

Factors	Sex					
	Male		Female		Total	
	N	%	N	%	N	%
Stronger career possibilities	38	43.7	236	51.6	274	50.4
Private initiative	17	19.5	88	19.3	105	19.3
Parents advice	18	20.7	81	17.7	99	18.2
High prestige	5	5.7	18	3.9	23	4.2
Teacher advice	4	4.6	16	3.5	20	3.7
Friend advice	3	3.4	9	2.0	12	2.2
Family tradition	2	2.3	9	2.0	11	2.0
Total	87	100.0	457	100.0	544	100.0

Table 6 reveals that a half of the respondents link university studies with stronger possibilities. The obtained result is quite logical, having in mind the current situation in the labour market. Both family and teachers do not make a real impact on such choice. Only a minor part of the respondents (4.2%) see connections between university studies and high prestige. A pragmatic attitude to studies is obviously prevailing. Statistically significant deviations according to the sex of the respondents have not been established ( $p > 0.05$ ).

### 3.2 Factor Analysis Results

The factor analysis of 28 statements on university education has been carried out. The factors have been identified with reference to their real values (eigenvalue statistics). Table 7 presents the communalities of the initial variables, i.e., pieces of variables explained using common factors.

Table 7. The main results of factor analysis: communalities

Statements	Initial	Extraction	Statements	Initial	Extraction
S1	1.000	0.350	S15	1.000	0.604
S2	1.000	0.513	S16	1.000	0.410
S3	1.000	0.546	S17	1.000	0.273
S4	1.000	0.377	S18	1.000	0.520
S5	1.000	0.279	S19	1.000	0.456
S6	1.000	0.428	S20	1.000	0.391
S7	1.000	0.430	S21	1.000	0.416
S8	1.000	0.525	S22	1.000	0.560
S9	1.000	0.312	S23	1.000	0.480
S10	1.000	0.494	S24	1.000	0.414
S11	1.000	0.543	S25	1.000	0.399
S12	1.000	0.408	S26	1.000	0.483
S13	1.000	0.592	S27	1.000	0.533
S14	1.000	0.420	S28	1.000	0.630

Extraction method: principal component analysis

Table 7 shows the selected principal components contain quite a sufficient amount of information about the variable due to the fact that all communalities make not less than 0.20.

Thus, 7 significant factors the real values of which are higher than 1 have been identified. The results are presented in Table 8.

Table 8. The number of factors depending on eigenvalue statistics and the percentage of the variance explained.

Component	Initial eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.706	16.809	16.809	4.706	16.809	16.809	3.585	12.803	12.803
2	1.710	6.107	22.916	1.710	6.107	22.916	1.752	6.256	19.059
3	1.510	5.391	28.307	1.510	5.391	28.307	1.608	5.742	24.800
4	1.339	4.783	33.090	1.339	4.783	33.090	1.587	5.669	30.470
5	1.246	4.448	37.539	1.246	4.448	37.539	1.536	5.487	35.957
6	1.150	4.106	41.645	1.150	4.106	41.645	1.365	4.875	40.831
7	1.125	4.017	45.662	1.125	4.017	45.662	1.353	4.831	45.662

Table 8 shows that all factors explain 45.66% of variance. An obvious point is that the first factor accounts for the biggest part of variance (12.80%). Table 9 presents the results of statement factorization taking into consideration university education.

Table 9. The results of factor analysis considering statements about university education (SI – significance index, SD – standard deviation).

<b>FACTOR 1</b> <i>Planning promising career</i>		<b>Factor loadings</b>	<b>SI and SD</b>
22	University studies display leadership skills	0.72	
23	University studies ensure decent education	0.66	
24	University studies encourage self-expression and demonstrate abilities	0.57	SI=0.50
6	Strong belief in the university as an institution preparing the best employees	0.54	
4	Universities "produce" a thinking and creative personality	0.51	SD= 0.18
25	Learning infrastructure at universities satisfies student demands	0.49	
26	University studies offer possibilities of getting employed abroad	0.49	
21	Due to general competencies acquired at university, the possibilities of finding a job become stronger	0.45	
17	Studying at Lithuanian universities is better than at similar institutions abroad	0.43	
19	University education forms good preconditions for making a successful career	0.45	
<b>Internal consistency</b>		Cronbach's Alpha	0.78
<b>FACTOR 2</b> <i>Demand for university education</i>		<b>Factor loadings</b>	<b>SI and SD</b>
28	An increase in university education is a positive tendency	0.75	SI=0.53
15	Increased university education is important for the positive development of society	0.55	SD=0.18
18	<i>There are too many universities in Lithuania</i>	-0.52	
27	University is an important cultural centre generating changes	0.48	

<b>Internal consistency</b>		Cronbach's Alpha	0.21
<b>FACTOR 3</b>		<b>Factor loadings</b>	<b>SI and SD</b>
<i>Importance of university education to the labour market</i>			
13	The reformation of Lithuanian university education makes a positive impact on the development of the whole system	0.58	SI=0.63
12	Employers find important that a potential worker should have a diploma awarded by Lithuanian universities	0.55	SD=0.30
16	Demand on specialists having university education is growing	0.49	
1	Positive employers' attitude to universities	0.45	
Internal conformity		Cronbach's Alpha	0.13
<b>FACTOR 4</b>		<b>Factor loadings</b>	<b>SI and SD</b>
<i>The image of university education in society</i>			
11	University prestige is an important factor in choosing studies	0.70	SI=0.58
7	A choice of graduates in the institutions of university education is based on the formed image	0.62	
10	University studies attract the youth due to a diploma only	0.46	SD=0.22
<b>Internal consistency</b>		Cronbach's Alpha	0.44
<b>FACTOR 5</b>		<b>Factor loadings</b>	<b>SI and SD</b>
<i>Demand for services provided by the university</i>			
10	<i>University studies attract the youth due to a diploma only</i>	-0.43	SI=0.73
8	Students have to choose a university and programme of studies following their own wishes and needs	0.62	
19	University education forms good preconditions for making a successful career	0.46	SD=0.13
20	Studies at Lithuanian universities form a possibility of proceeding with further studies in the universities abroad	0.45	
<b>Internal consistency</b>		Cronbach's Alpha	-0.12 <sup>2</sup>
<b>FACTOR 6</b>		<b>Factor loadings</b>	<b>SI and SD</b>
<i>University as a generation centre of changes</i>			
27	University is an important cultural centre generating changes	0.44	SI=0.62
2	University student should be independently involved into self-education	0.70	SD=0.23
<b>Internal consistency</b>		Cronbach's Alpha	0.21
<b>FACTOR 7</b>		<b>Factor loadings</b>	
<i>University importance for society</i>			
15	Increased university education is important for the positive development of society	0.42	SI=0.61
3	A real university mission calls for exploring and developing a specific academic area	0.70	SD=0.21
14	University students are greatly interested in the processes of university education both in Lithuania and Europe	0.44	
<b>Internal consistency</b>		Cronbach's Alpha	0.37

Extraction methods include principal component analysis, rotation method, Varimax with Kaiser Normalization. Rotation converged in 14 iterations.

1) The statements having the meaning opposite to the meaning of the factor are marked in italics.

2) The value is negative due to a negative average covariance among the items.

Table 9 shows that Factor 1 covers 10 statements, Factors 2, 3 and 5 - 4 statements, Factors 4 and 7 - 3 statements and Factor 6 - 2 statements. Factor 1 makes 12.80 %, Factor 2 - 6.25 %, Factor 3 - 5.74%, Factor 4 - 5.66 %, Factor 5 - 5.48 %, Factor 6 - 4.87% and Factor 7 - 4.83% of the total variance. Two statements have not been ascribed to any of the factors: 5 (*a graduate from the university has to be encouraged to pursue academic*



career) and 9 (students must choose an educational institution and a programme of studies taking into account the current situation in the labour market). The strongest agreement can be observed in Factor 1. Factor 5 *Demand for services provided by the university* is accepted as the most important and has the index (SI=0.73), whereas Factor 1 *Planning promising career* takes the last position with the index of (SI=0.50).

A statistically significant deviation regarding the sex has been obtained discussing Factors 5 and 7 (Table 10). Null hypothesis  $H_0$  about equal averages is rejected at the level of significance and makes  $p < 0.035$ ,  $p < 0.035$ .

Table 10. The indexes of factor significance regarding the sex.

	N		SI		SD	
	Female	Male	Female	Male	Female	Male
Factor 1	457	87	0.50	0.49	0.17	0.21
Factor 2	457	87	0.53	0.55	0.18	0.18
Factor 3	457	87	0.64	0.59	0.32	0.21
Factor 4	457	87	0.58	0.62	0.22	0.22
Factor 5	457	87	<b>0.74</b>	0.70	0.13	0.14
Factor 6	457	87	0.61	0.64	0.23	0.24
Factor 7	457	87	<b>0.62</b>	0.57	0.21	0.19

Table 10 shows that Factor 5 *Demand for services provided by the university* is more significant for female rather than for male respondents ( $t = -2.14$ ,  $df = 112.764$ ,  $p = 0.035$ , group dispersions encounter statistically significant deviations – equal variances are not assumed). Factor 7 *University importance for society* is correspondingly more significant for female rather than for male respondents ( $t = -2.11$ ,  $df = 542$ ,  $p = 0.035$ ). Hypothetically, female students are more engaged in services provided by the university so that to gain some weight in society and acquire high social status that can be awarded by university education thus providing guarantee for their independence.

Statistically significant deviations in terms of the year of studies have been obtained considering Factors 1, 3 and 4 (Table 11). One-way ANOVA analysis was used for investigating any significant differences between different groups of the respondents.

Table 11. The indexes of factor significance according to the year of studies.

	1 <sup>st</sup> year		2 <sup>nd</sup> year		3 <sup>rd</sup> year		4 <sup>th</sup> year	
	SI	SD	SI	SD	SI	SD	SI	SD
Factor 1	0.55	0.16	0.48	0.19	0.49	0.17	0.47	0.19
Factor 2	0.55	0.18	0.53	0.17	0.53	0.19	0.50	0.18
Factor 3	0.69	0.43	0.60	0.22	0.60	0.21	0.61	0.21
Factor 4	0.54	0.23	0.58	0.22	0.60	0.19	0.63	0.21
Factor 5	0.74	0.12	0.74	0.13	0.74	0.12	0.73	0.14
Factor 6	0.63	0.24	0.58	0.21	0.66	0.22	0.63	0.23
Factor 7	0.63	0.19	0.64	0.20	0.60	0.25	0.58	0.20

The results of the ANOVA test are presented in Table 12. If the obtained F value is much higher than 1, it is likely that the averages differ; when it is close to 1, differences between the averages are small. In the case of Factors 1, 3 and 4, F values are higher than 1. Thus, the averages are different.

Table 12. The results of the ANOVA test between factors depending on the year of studies.

		Sum of Squares	df	Mean Square	F	Sig.
Factor 1	<i>Between the groups</i>	0.537	3	0.179	5.434	0.001
	<i>Within the groups</i>	17.777	540	0.033		
	<i>Total</i>	18.313	543			
Factor2	<i>Between the groups</i>	0.198	3	0.066	1.931	0.123
	<i>Within the groups</i>	18.454	540	0.034		
	<i>Total</i>	18.652	543			
Factor 3	<i>Between the groups</i>	0.934	3	0,311	3.308	0.020
	<i>Within the groups</i>	50.844	540	0.094		
	<i>Total</i>	51.779	543			
Factor 4	<i>Between the groups</i>	0.731	3	0.244	4.993	0.002
	<i>Within the groups</i>	26.363	540	0.049		
	<i>Total</i>	27.095	543			
Factor 5	<i>Between the groups</i>	0.011	3	0.004	0.195	0.900
	<i>Within the groups</i>	9.767	540	0.018		
	<i>Total</i>	9.778	543			
Factor 6	<i>Between the groups</i>	0.390	3	0.130	2.413	0.066
	<i>Within the groups</i>	29.108	540	0.054		
	<i>Total</i>	29.498	543			
Factor 7	<i>Between the groups</i>	0.323	3	0.108	2.422	0.065
	<i>Within the groups</i>	24.002	540	0.044		
	<i>Total</i>	24.325	543			

Factor 1 is more significant for the first year students (SI=0.55), and the least significant for the graduates (fourth year students) (SI=0.47). Factor 3 is also the most significant for the first year students (SI=0.69). Other students found this factor less significant, which obviously shows that the first year students are intensively thinking about their career possibilities in the future, hopefully planning their future professional activities and accept university education as promising and having important implications in the labour market, which, in turn, gives certain guarantees. Senior year students are more involved in considering their possibilities of the future job, and therefore can more realistically evaluate the situation in the labour market. The final year students encounter negative processes taking place in the labour market worldwide at the moment: an insufficient number of intellectual working places, the precarization of the labour market, etc. This causes a less optimistic attitude to professional activities and career opportunities. A controversial tendency is observed discussing Factor 4 which is the least significant for the first year students (SI=0.54) and the most relevant for the graduates (SI=0.63). It is supposed that at the end of their studies, the students though understand a complicated and unfavourable situation of the labour market during the economic crisis, and realistically evaluate emerging threats concerning successful career possibilities, still accept the importance of university education and support the idea it should play a key role in society. On the other hand, a graduate student has to make a choice of how to plan working activities or take up postgraduate studies. The process of expecting a diploma becomes justified, as it can guarantee new student options.

Generally speaking, the respondents remain critical regarding the question of university infrastructure. They do not think university studies display leadership skills (SI=0.36). In respect of improvements on university education, the respondents remain critical and do not support the idea that brought changes make a positive impact on the whole system (SI=0.47). The respondents disagree with the national education policy claiming that there are too many universities in Lithuania and that they have to be optimized (SI=0.25). The obtained results disclose that the respondents tend to trust more in foreign rather than in Lithuanian universities (SI=0.27). Finally, the respondents do not think the universities prepare the best staff.

#### 4. Discussion

Students' opinion obviously shows massiveness and an increased demand for university education. Students suppose that the massiveness of university education positively affects public development. According to P.G.Altbach and McGill Peterson (2007), the 7<sup>th</sup> decade of the 20<sup>th</sup> century can be accepted as the outset of the rapid growth in university education in the majority of regions worldwide. Yet in 1973, M.Trow was the first to analyze this process. He states that university education is considered highly prestigious when 15 percent of the cohort of the whole century, massive when 16 – 50 percent and universal when more than 50 percent of the population attend the establishments of university education (Trow, 2005). Middle and Eastern Europe, including Lithuania approached this process only after the fall of the communist regime. With reference to data collected by the Department of Statistics, 212 university students of 10000 inhabitants studied at universities in 1998, whereas in 2010, the figure reached 412 (Department of Statistics under the Government of the Republic of Lithuania).

Research on university education carried out by the authors of the article has showed certain differences in the opinions expressed by the students. Female rather than male respondents have a more positive position on university education, which is encouraged by the tendencies such as an increase in women's emancipation, the feminist movement, a desire to realize potential activities and building a career clearly displayed worldwide (Giddens, 2005). This tendency can be obviously supported by the current situation in Lithuania. In 2010-2011, 108 661 women and 75 482 men were seeking for university education (Department of Statistics under the Government of the Republic of Lithuania).

Pursuing a career is a long term and complicated process; therefore, at the very start of a personal career, choosing studies, formulating professional goals and acquiring professional qualification are the questions of particular importance. Students' position on making a decision is directly related to having a dream, accumulating information about the future profession and the level of perceiving requirements for the chosen profession. Valuable beliefs, emotional experiences and professional visions also play a crucial role. The carried out research confirms this common tendency, because the students of the first several years rather than graduates have a more positive opinion on university education. The faced situation demonstrates that students are closely focused on the peculiarities of the chosen profession and get intensively involved into the process of professional socialization, which helps with a real acquisition of career opportunities and potential prospects. It is supposed, that for the first year students, entering the university forms a new period of their personal life. It seems that successful studies at the university will assure new career opportunities and certain place in society. First, studies stimulate a growth in personal maturity; second, students become more self-critical and demanding for the environment. Thus, they perceive that university studies are not a full guarantee as much depends on personal features and even on the unexpected environmental factors. It is worth paying attention to the fact that students get involved into different forms of practice in factories, organizations, schools, etc. A phenomenon of overestimating personal abilities and possibilities having encountered with the real working environment can be noticed and cause a certain disappointment and decrease confidence in the acquired education. Previous investigations also confirm such regularity because the more students want to study the chosen subject, the clearer they imagine future career and link it with the selected profession. The identification of a professional choice and career building are interrelated processes (Braslauskienė, Petrošienė, Saveljeva, 2011). Yet in 2002, researches carried out in some Lithuanian universities showed that the majority of respondents (80%) negatively evaluated insufficient financial support for studies (Luobikienė, Brazienė, Navasaitienė, 2002). Teacher competence is a very urgent question. In fact, teachers and students' opinions regarding teachers' educational competence differ. The students think that the teachers overestimate their professional experience: the carried out research has revealed a lack of practical methodical knowledge and a gap in the educational reform - the absence of a training system for university teachers (Raišienė, 2004).

The other important aspect is the current situation in the labour market. Students' interest in a personal career is related to finding a working position. The analysis performed by the authors has showed that students perceive the importance of university education and find it important for employers (SI=0.68). Such result correlates with

the previously conducted international research in some EU countries, because strong support was given to the idea of the programmes focusing on skills meeting demands for the present workplace: 9 of 10 students agreed that the programmes of studies should cover communication skills, teamwork and “learning to learn” techniques (Students and Higher Education..., 2009). Such student expectations are completely understandable, which in turn, requires extremely high qualification held by university teachers. In this case, relations between university and business play a crucial role as they might be essential for better utility of university education in the future (Sadirkhanov, 2009; Rasul, Bukhsh, Akram, 2010). A modern university is forced to constantly search for a dialogue with society for reassuring academic activity success and the high prestige of the institution. The formation of education on university basis helps the academic society with maintaining direct relations with professional societies and with satisfying their requirements and expectations.

## 5. Conclusions

The majority of students are satisfied with the quality of studies important for entirely all students. The first year students are most satisfied with the quality of studies, whereas later the attitude significantly changes. It seems to be understandable, as direct involvement in the process of studies includes different aspects of evaluation facing objective and subjective problems and considering new personal expectations.

Students are interested in the problems and changes of Lithuanian university education as these have a direct impact on student needs, accessibility and the quality of studies. However, interest in the questions of European university education remains quite low. The surveyed respondents are more likely to study abroad rather than to choose a university in Lithuania. They also have a rather critical point of view to the infrastructure of universities and changes taking place in the whole education system in Lithuania.

Stronger career possibilities more precisely determine a choice for university studies. Personal initiative and predetermined self-judgement as well as parents' advice are the major factors in choosing university studies. However, teachers have no influence on making a choice. In this case, a possible reason can be insufficient attention paid to professional information and career education received in comprehensive schools.

An interesting point is that the process of choosing university studies is not related to high prestige. Pragmatic-practical interests are vitally important, i.e. the choice is determined by future activities and career opportunities.

Students do not think university studies display leadership skills and prepare the best employees. A large part of the respondents accept that receiving a diploma is the main reason for studies at a university. On the other hand, students positively evaluate university studies in terms of the future career and thus perceive the importance of university education.

The image of the university has been given full attention which grows steadily over the years of studies. Apparent differences can be observed between the first and the following years of students. Those studying first years have a more positive position on university studies as they have a more idealistic approach.

Female rather male students find university education more important. A certain student position, opinion dispersion and contradictions can be observed, which is likely determined by considerably increased instability in the education system and insufficient rationality of frequently introduced socioeconomic changes.

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**Appendix**

Table 1. The results of statements on the evaluation of university education N/%/SI/SD).

No	Statements	Agree	Partly agree	Do not agree	SI/SD*
1	Positive employers' attitude to universities	318/58.5	212/39.0	14/2.6	0.77/0.27
2	University student should be independently involved into self-education	156/28.7	307/56.4	81/14.9	0.56/0.32
3	A real university mission calls for exploring and developing a specific academic area	290/53.3	220/40.4	34/6.2	0.73/0.30
4	Universities "produce" a thinking and creative personality	161/29.6	303/55.7	80/14.7	0.57/0.32
5	A graduate from the university has to be encouraged to pursue academic career	302/55.5	210/38.6	32/5.9	0.74/0.30
6	Strong belief in the university as an institution preparing the best employees	67/12.3	314/57.7	163/30.0	0.41/0.31
7	A choice of graduates in the institutions of university education is based on the formed image	228/41.9	266/48.9	50/9.2	0.66/0.31
8	Students have to choose a university and programme of studies following their own wishes and needs	459/84.4	81/14.9	4/0.7	0.91/0.19
9	Students must choose an educational institution and a programme of studies taking into account the current situation in the labour market	123/22.6	297/54.6	124/22.8	0.49/0.33
10	University studies attract the youth due to a diploma only	115/21.1	315/57.9	114/21.0	0.50/0.32
11	University prestige is an important factor in choosing studies	187/34.4	281/51.7	76/14.0	0.60/0.33
12	Employers find important that a potential worker should have a diploma awarded by Lithuanian universities	264/48.5	213/39.2	67/12.3	0.68/0.34
13	The reformation of Lithuanian university education makes a positive impact on the development of the whole system	90/16.5	288/52.9	165/30.3	0.47/1.0
14	University students are greatly interested in the processes of university education both in Lithuania and Europe	85/15.6	350/64.3	109/20.0	0.47/0.29
15	Increased university education is important for the positive development of society	230/42.3	239/43.9	75/13.8	0.64/0.34
16	Demand on specialists having university education is growing	224/41.2	222/40.8	98/18.0	0.61/0.36
17	Studying at Lithuanian universities is better than at similar institutions abroad	47/8.6	207/38.1	290/53.3	0.27/0.32
18	There are too many universities in Lithuania	84/15.4	111/20.4	349/64.2	0.25/0.37
19	University education forms good preconditions for making a successful career	322/59.2	197/36.2	25/4.6	0.77/0.29
20	Studies at Lithuanian universities form a possibility of proceeding with further studies in the universities abroad	314/57.7	203/37.3	27/5.0	0.76/0.29

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21.	Due to general competencies acquired at university, the possibilities of finding a job become stronger	147/27.0	285/52.4	112/20.6	0.53/0.34
22.	University studies display leadership skills	65/11.9	270/49.6	209/38.4	0.36/0.32
23.	University studies ensure decent education	147/27.0	309/56.8	88/16.2	0.55/0.32
24.	University studies encourage self-expression and demonstrate abilities	180/33.1	308/56.6	56/10.3	0.61/0.30
25.	Learning infrastructure at universities satisfies student demands	70/12.9	389/71.5	85/15.6	0.48/0.26
26.	University studies offer possibilities of getting employed abroad	108/19.9	306/56.2	130/23.9	0.47/0.33
27.	University is an important cultural centre generating changes	229/42.1	279/51.3	36/6.6	0.67/0.30
28.	An increase in university education is a positive tendency	159/29.2	291/53.5	94/17.3	0.55/0.33

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SI- significance index, SD – standard deviation