Data processing, interpretation and analysis

Latvijas - Ukrainas sadarbības programma
Projekts „**Digitālās gatavības un cilvēkkapitāla attīstības dzimumu aspekti reģionos**“

Content

Preface

Three various tools were used within the questionnaire that was carried out in Ukraine and Latvia in the framework of the Latvian-Ukrainian Cooperation Program project "Gender aspects of digital readiness and development of human capital in the region" (Project No.LV-UA / 2018/3):

- questionnaire "Attitudes Toward Information Technology" (Gokhale, Brauchle, & Machina, 2013);
- questionnaire "Cultural Values Scale" (Yoo, Donthu, & Lenartowicz, 2011);
- questionnaire "Personal cultural orientation" (Sharma, 2009).

This document summarizes the main results of the data analysis using SPSS 25.0 software. More detailed analysis and interpretation of the data is still ongoing and will be presented in scientific papers. Currently, three papers have been prepared by Ukrainian, Latvian and Canadian researchers, submitted for publication and are under review:

1) Blayone, T.J.B., Mykhailenko, O., Usca, S., Abuze, A., Romanets, I., Oleksiiv, M. Exploring the dispositional readiness of Latvian and Ukrainian university learners for digitalised work toward Industry 4.0. Preprint https://www.researchgate.net/publication/336848162_Exploring_the_dispositional_readiness_of_university_learners_for_digitalised_work_toward_Industry_40
2) Mykhailenko, O, Blayone, T.J.B., Usca, S. & Kvasovskyi, O. Optimism, interest and opportunity: Technology attitudes of university students in Latvia and Ukraine from a gender perspective. *Gender, Technology and Development.* Preprint https://www.researchgate.net/publication/337480460_Optimism_interest_and_opportunity_Technology_attitudes_of_university_students_in_Latvia_and_Ukraine_from_a_gender_perspective
3) Žogla, I., Ušča, S., Mikhailenko, O. Capability Approach in Tertiary Technology-Enriched Education: Looking for new directions. *Proceeding of the 13-th International Scientific Conference Rural Environment. Education. Personality (REEP-2020)*

1. Results of the questionnaire "Attitudes Toward Information Technology"

1.1.Methodology

The study used the instrument Attitudes toward IT (A-IT scale) (Gokhale, Brauchle, & Machina, 2013), which is advised by the authors as a tool for educators who need a general-purpose, reliable, and valid measure for student attitude toward IT including attitudes toward gender equality of opportunity in IT. To better understand psychological barriers, perceptions of advantages and disadvantages reinforcing attitudinal schemata, five attitudinal factors are defined—each addressing key interests and perceptions as shown in Table 1.

Table 1.1. **Overview of attitudes towards IT**

Factors	Description: Attitudes related to…
Interest in Learning about IT (AIT-LRN)	… personal interest in IT-related science, news, films and books.
Perceptions of Practical Value of IT (AIT-PRV)	… the overall value of IT for making people's lives better.
Perceptions of Negative Impact of IT (AIT-NEG)	… IT as a threat to human wellness and the environment.
Perceptions of Gender Equality in the IT Sector (AIT-GEQ)	… the IT sector as offering an equally positive professional/workplace experience *to both males and females*.
Perceptions of Job Opportunities in IT Sector (AIT-EMP)	… the overall quantity and quality of employment opportunities in the IT sector.

The A-IT scale contains 30 items addressing five attitudinal factors (as described above) measured on a 5-point Likert scale of agreement. This instrument was constructed from an earlier tool measuring attitudes toward science and technology, and the authors deployed a small set of tests for establishing the A-IT scale's reliability and construct validity. More specifically, Cronbach's Alpha produced a coefficient alpha for the 30-items as whole demonstrating "very good" internal consistency (0.814). To establish the validity of the five theorized factors, a factor analysis was conducted. As a result, a solution consisting of five orthogonal factors constructed from 23 of the 30 total items was adopted, and the reliability of these factors were tested with another "very good" result (Cronbach's coefficient alpha of 0.81).

However, our own review of this 23-item solution identified four items that appear semantically inconsistent with the factors to which they are (statistically) assigned. Namely, Item 10, referring to education and assigned to Factor 2, appears to belong thematically to Factor 1, which addresses attitudes towards learning. Similarly, Items 14 and 19, referring specifically to perceptions of women in IT, and assigned statistically to Factor 2, are thematically aligned with Factor 4, addressing attitudes towards gender. Finally, Item 8, which is included in Factor 5,

addresses positive effects of IT even though it is does *not* include an effect. It is unclear what factor this item was originally designed to represent. The reference to "family-friendly environments" may place it in Factor 2 or 4. Unfortunately, detailed results of face and content validation are not reported presumably because items were directly adapted from an earlier instrument. To avoid thematic mismatches, this study focuses on analyzing only 19 items that represent statistically grouped *and* thematically consistent items. Thus, the number of items representing each factor are as follows: Factor 1: 6; Factor 2: 3; Factor 3: 4; Factor 4: 3, and Factor 5.

Participants and Setting

In Ukraine, participants were recruited from Ternopil National Economic University (TNEU) in Western Ukraine (founded in 1966). The university hosts about 24,000 students and 700 instructors primarily in the fields of in economics, business finance, law and information technology. In Latvia, participants were recruited at Rēzekne Academy of Technologies (RAT), a small university (about 1500 students) with a focus on pedagogy, economics and management, and technology founded in 1922, and from three faculties at partner institutions: Education, Psychology and Art at the University of Latvia; Pedagogy and Social Work at Liepaja University; and the Department of Pedagogy and Pedagogical Psychology at Daugavpils University. Taken together, the participating Latvian faculties host about 7,000 students and 320 instructors (the data is gathered from the internal documentation of the participating institutions).

The profiles produced by survey respondents in both nations are presented in Table 1.2. The participated institutions provided the certificates of ethical accountability for the data collection. The recruitment of the survey participants – students and faculties – was done on the volunteer base. The Ukrainian participants were mainly female drawn primarily from the student population. The high number of female participants aligns with a reported demographic trend in Ukrainian higher education in which students are over 60% female in the social sciences, business and law (Kogyt, 2016). On the Latvian side, the participants consisted of an even higher percentage of females than Ukrainian respondents. It might relate the fact that participants were drawn mainly from pedagogical faculties with mainly female population. Although Latvian participants belonged largely to the student population as well, there was a greater level of instructor participation than in Ukraine.

Table 1.2. **Socio-demographic characteristics of respondents by country**

		Ukraine (N=753)		**Latvia (N=260)**	
Variables	**Values**	**Number**	**%**	**Number**	**%**
Gender	Male	282	37%	44	17%
	Female	467	62%	213	82%
	No response	4	<1%	3	1%
Academic Status	Student	717	95%	205	79%
	Instructor	36	5%	55	21%

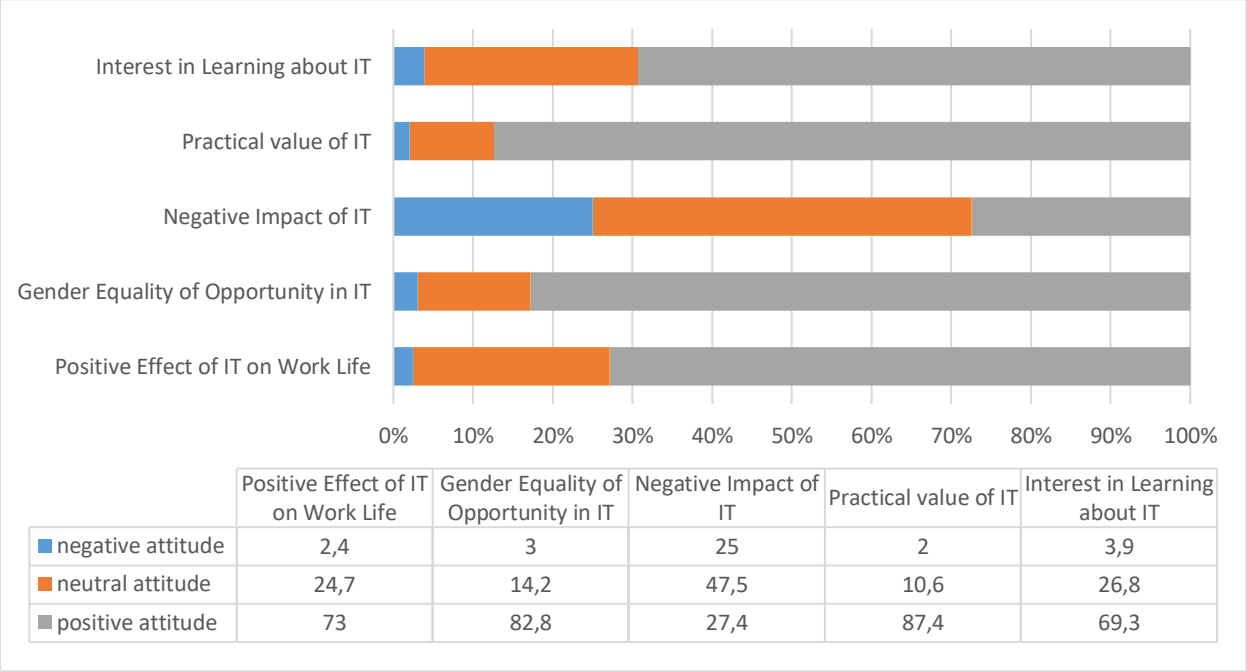
The results were processed using SPSS 25.0 software. Descriptive statistical methods were used to determine distribution, as well as T-test, Univariate Analysis of Variance, Factor analysis, and Cluster analysis.

1.2. Results

The Likert scale was used for the assessment of the proposed claims, where 1 means Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 - Agree and 5 - Strongly Agree.

Five factors were analyzed, according to the method (Gokhale et. Al, 2013): factor 1 - Interest in Learning about IT, factor 2 - Practical value of IT, factor 3 - Negative Impact of IT, factor 4 - Gender Equality of Opportunity in IT, and factor 5 - Positive Effects of IT on Work Life. Three levels of attitude were determined in the data analysis: negative attitude (answers Strongly Disagree and Disagree), neutral attitude, and positive attitude (answers Agree and Strongly Agree).

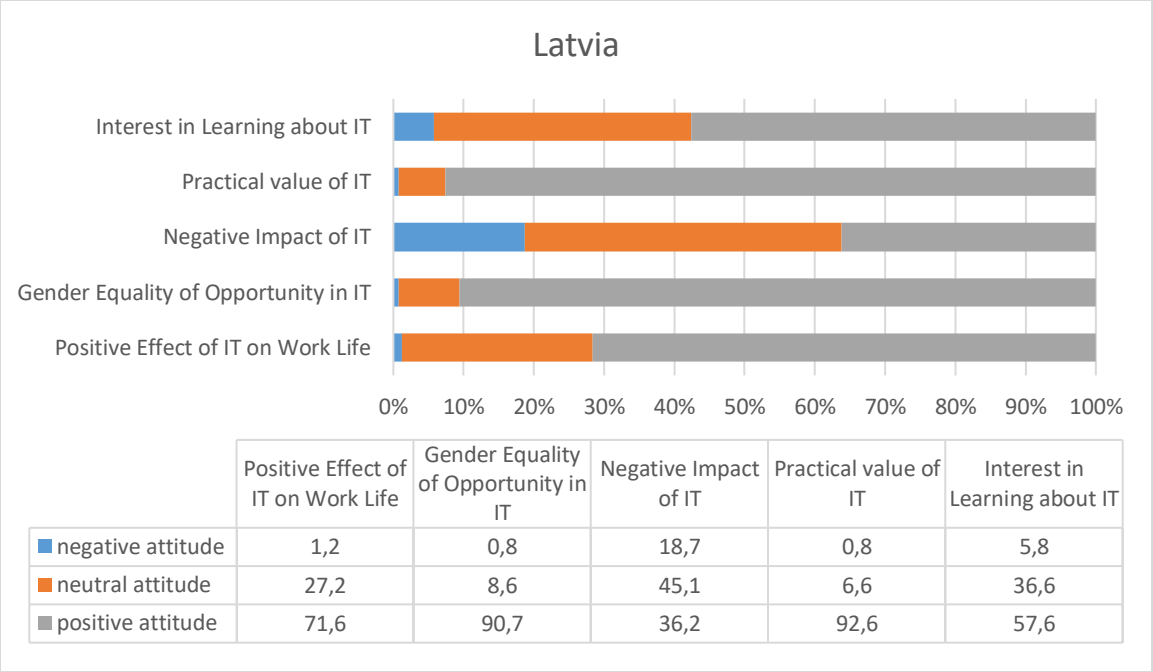
Assessment of all factors in percentage is seen in Figure 1.1.



	Positive Effect of IT on Work Life	Gender Equality of Opportunity in IT	Negative Impact of IT	Practical value of IT	Interest in Learning about IT
negative attitude	2,4	3	25	2	3,9
neutral attitude	24,7	14,2	47,5	10,6	26,8
positive attitude	73	82,8	27,4	87,4	69,3

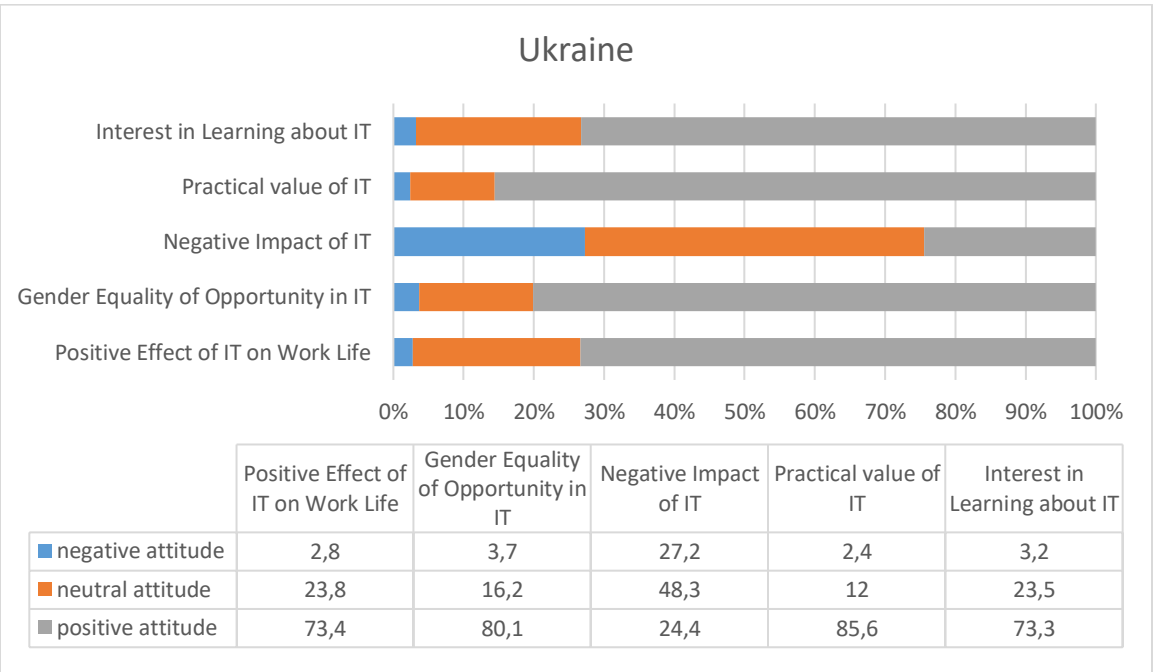
Figure 1.1. **Assessment of all factors in percentage**

The review on the percentage of the factors' assessment separately by countries is shown in Figure 1.2. and Figure 1.3.



	Positive Effect of IT on Work Life	Gender Equality of Opportunity in IT	Negative Impact of IT	Practical value of IT	Interest in Learning about IT
negative attitude	1,2	0,8	18,7	0,8	5,8
neutral attitude	27,2	8,6	45,1	6,6	36,6
positive attitude	71,6	90,7	36,2	92,6	57,6

Figure 1.2. **Assessment of all factors in percentage (Latvia)**



	Positive Effect of IT on Work Life	Gender Equality of Opportunity in IT	Negative Impact of IT	Practical value of IT	Interest in Learning about IT
negative attitude	2,8	3,7	27,2	2,4	3,2
neutral attitude	23,8	16,2	48,3	12	23,5
positive attitude	73,4	80,1	24,4	85,6	73,3

Figure 1.3. **Assessment of all factors in percentage (Ukraine)**

The average rating of the factors (by levels) is shown in Figure 1.4.

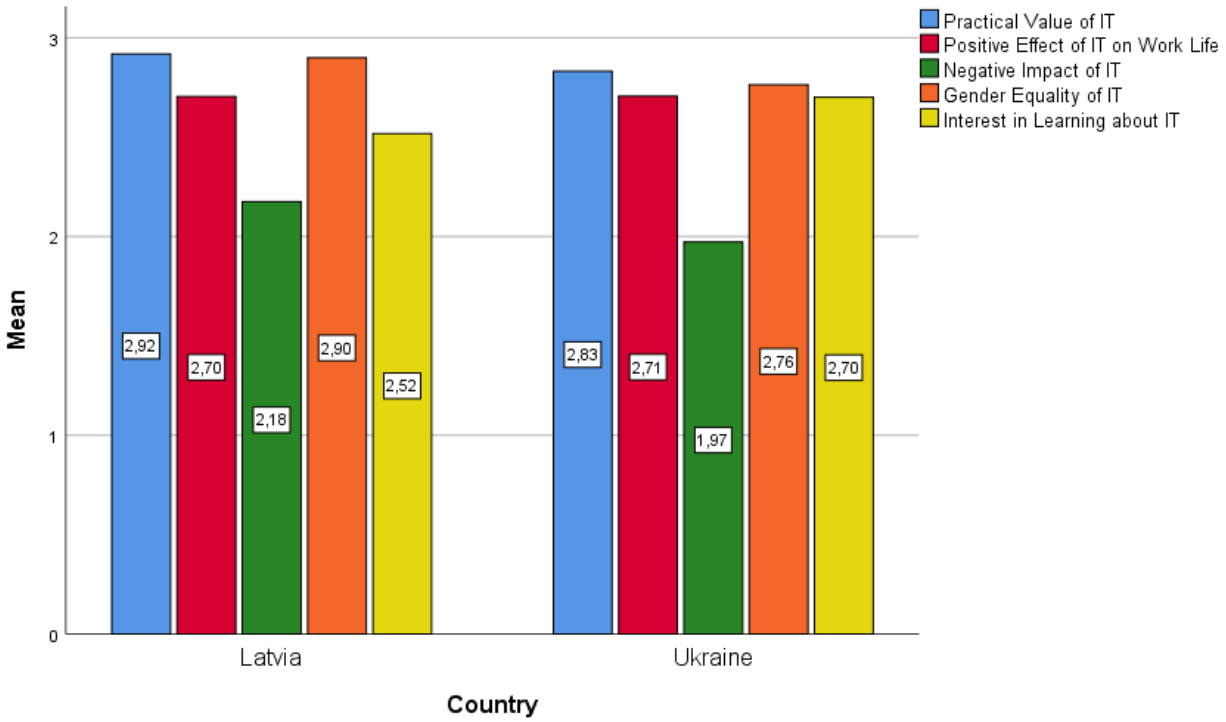


Figure 1.4. **The average rating of the factors (by levels)**

In connection with the organization of the study process, the data obtained by Cluster analysis is interesting. There are five clusters: the first cluster has 246 respondents or 24,5 % respondents, the second cluster has 241 or 24 % respondents, the third cluster has 234 respondents or 23,3 %, the fourth cluster has 156 respondents or 15,5 %, and the fifth cluster has 129 respondents or 12,8 % (see Figure 1.5.).

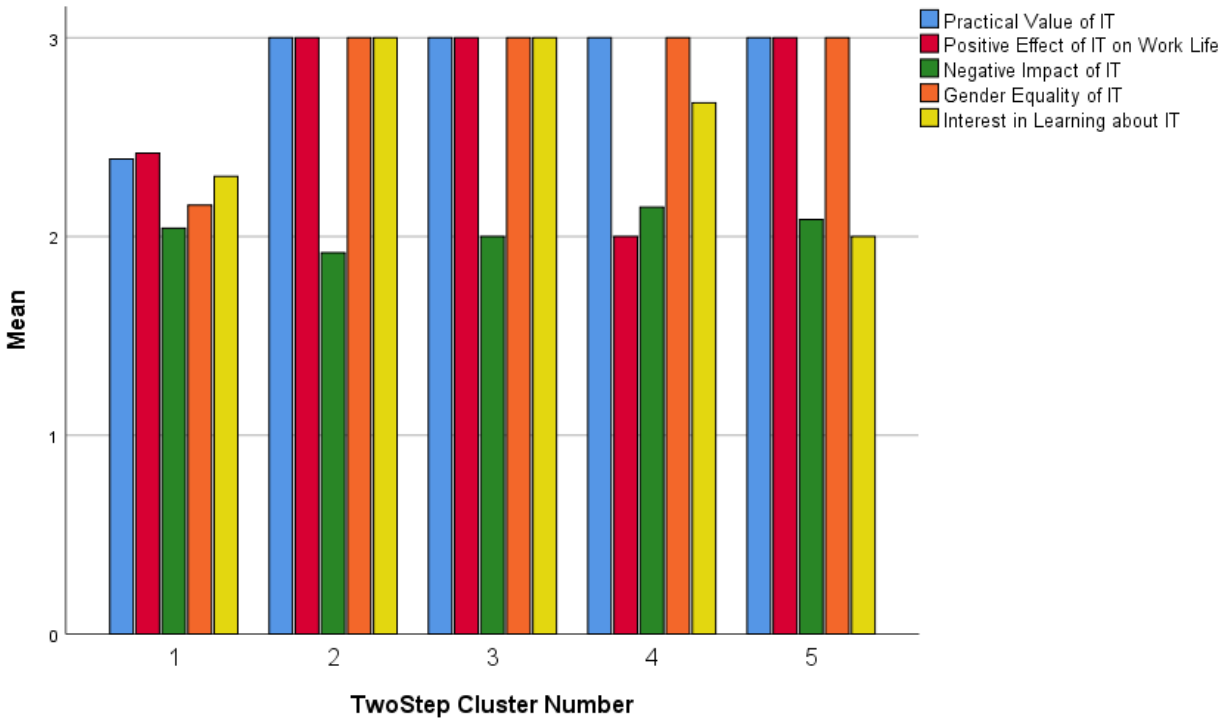


Figure 1.5. **Results of Cluster analysis**

This division in clusters reflects both different groups of respondents depending on their attitudes towards IT and different educational needs. Using traditional study forms and methods, it is not possible to meet the educational needs of all students at the same time. Mechanical use of IT in the study courses will not contribute to the achievement of performance indicators. In order to meet the different needs of the learners, different approaches have to be applied with different sets of pedagogical tools.

Results of Univariate Analysis of Variance show that factor assessment is influenced by the country of residence of respondents and their gender (see Figure 1.6.).

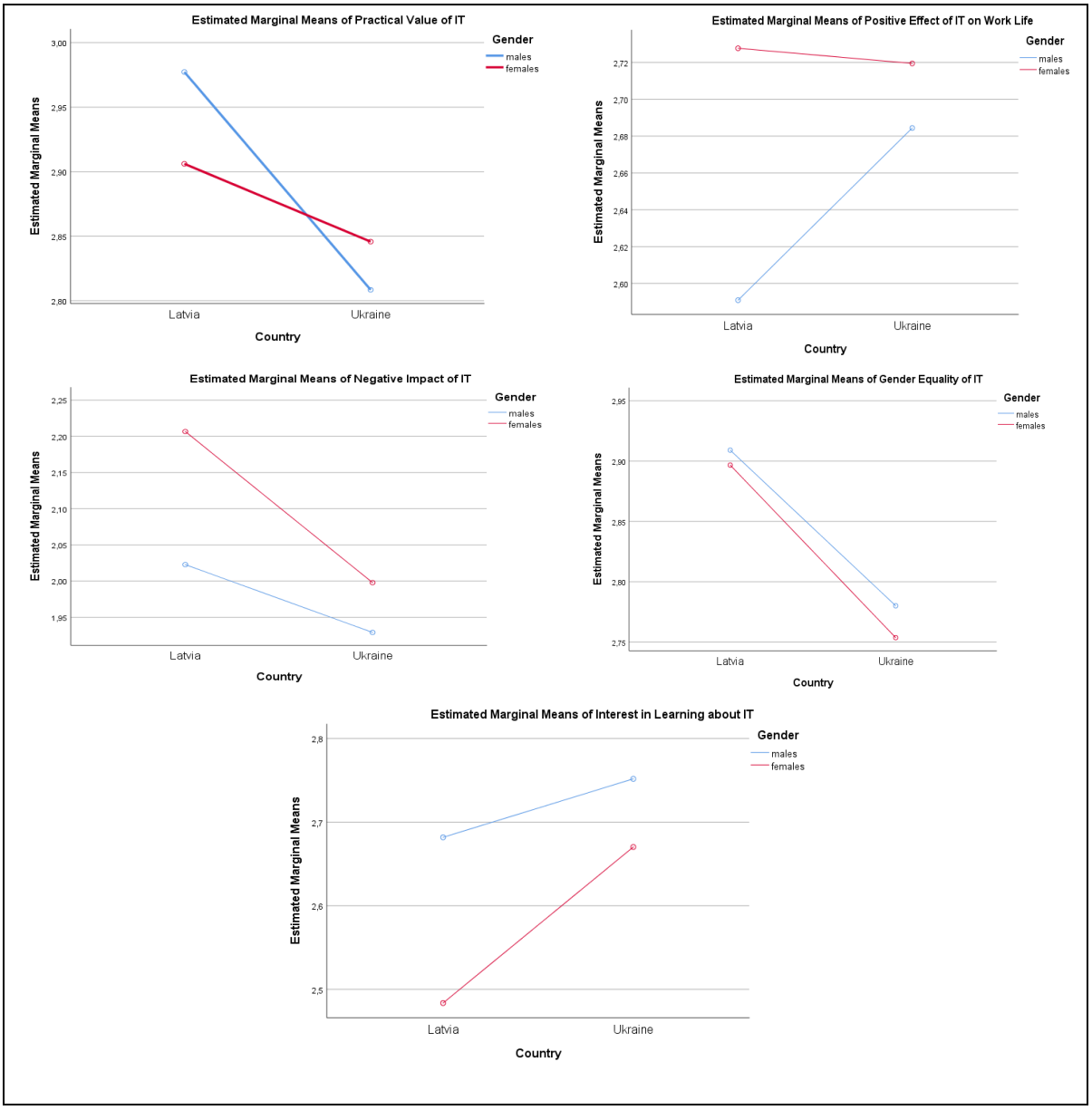


Figure 1.6. **Results of Univariate Analysis of Variance**

This is also evidenced by the results of the T test, which show statistically significant differences in the average estimates of four factors, depending on the country in which the respondents live (Practical Value of IT (p=.000), Negative Impact of IT (p=.000), Gender Equality of IT (p=.000) and Interest in Learning about IT (p=.000)), but statistically significant differences depending on the gender of the respondents were found for the average estimation of two factors – Negative Impact of IT (p=.013) and Interest in Learning about IT (p=.000).

2. Results of the questionnaire "Cultural Values Scale"

2.1. Methodology

The study used the instrument Cultural Values Scale (CVScale) (Yoo, Donthu, & Lenartowicz, 2011). The survey results obtained were encoded. The results were processed using SPSS 25.0 software. Descriptive statistical methods were used to determine distribution, as well as T-test, Factor analysis, and Cluster analysis.

Each statement was assigned a code to be used in the description below (Table 2.1).

Table 2.1. **Code table**

Code	Statement
Power Distance (PD)	
PD1	People in higher positions should make most decisions without consulting people in lower positions
PD2	People in higher positions should not ask the opinions of people in lower positions too frequently
PD3	People in higher positions should avoid social interaction with people in lower positions
PD4	People in lower positions should not disagree with decisions by people in higher positions.
PD5	People in higher positions should not delegate important tasks to people in lower positions
Uncertainty Avoidance (UA)	
UA1	It is important to have instructions spelled out in detail so that I always know what I'm expected to do
UA2	It is important to closely follow instructions and procedures
UA3	Rules and regulations are important because they inform me of what is expected of me
UA4	Standardized work procedures are helpful
UA5	Instructions for operations are important
Collectivism (CO)	
CO1	Individuals should sacrifice self-interest for the group (either at school or the work place)
CO2	Individuals should stick with the group even through difficulties
CO3	Group welfare is more important than individual rewards
CO4	Group success is more important than individual success
CO5	Individuals should only pursue their goals after considering the welfare of the group
CO6	Group loyalty should be encouraged even if individual goals suffer
Masculinity (MA)	
MA1	It is more important for men to have a professional career than it is for women
MA2	Men usually solve problems with logical analysis; women usually solve problems with intuition
MA3	Solving difficult problems usually requires an active, forcible approach, which is typical of men
MA4	There are some jobs that a man can always do better than a woman
Long-Short Term Orientation (LTO)	
LTO1	Careful management of money (Thrift)
LTO2	Going on resolutely despite opposition (Persistence)
LTO3	Personal steadiness and stability
LTO4	Long-term planning
LTO5	Giving up today's fun for success in the future
LTO6	Working hard for success in the future

In order to determine the extent to which respondents agree or disagree with each statement, the Likert scale was used, where 1 - Strongly disagree, 2 - Disagree, 3 - Somewhat disagree, 4 - Neither agree or disagree, 5 - Somewhat agree, 6 - Agree and 7 - Strongly agree.

Participants

In Ukraine, participants were recruited from Ternopil National Economic University (TNEU) in Western Ukraine (founded in 1966). The university hosts about 24,000 students and 700 instructors primarily in the fields of in economics, business finance, law and information technology. In Latvia, participants were recruited at Rēzekne Academy of Technologies (RAT), a small university (about 1500 students) with a focus on pedagogy, economics and management, and technology founded in 1922, and from three faculties at partner institutions: Education, Psychology and Art at the University of Latvia; Pedagogy and Social Work at Liepaja University; and the Department of Pedagogy and Pedagogical Psychology at Daugavpils University. Taken together, the participating Latvian faculties host about 7,000 students and 320 instructors (the data is gathered from the internal documentation of the participating institutions).

The profiles produced by survey respondents in both nations are presented in Table 2.1. The participated institutions provided the certificates of ethical accountability for the data collection. The recruitment of the survey participants – students and faculties – was done on the volunteer base. The Ukrainian participants were mainly female drawn primarily from the student population. The high number of female participants aligns with a reported demographic trend in Ukrainian higher education in which students are over 60% female in the social sciences, business and law (Kogyt, 2016). On the Latvian side, the participants consisted of an even higher percentage of females than Ukrainian respondents. It might relate the fact that participants were drawn mainly from pedagogical faculties with mainly female population. Although Latvian participants belonged largely to the student population as well, there was a greater level of instructor participation than in Ukraine.

Table 2.1. **Socio-demographic characteristics of respondents by country**

		Ukraine (N=765)		**Latvia (N=238)**	
Variables	**Values**	**Number**	**%**	**Number**	**%**
Gender	Male	285	37,3	33	13,9
	Female	480	62,7	205	86,1
Academic Status	Student	728	95,2	184	77,3
	Instructor	37	4,8	54	22,7

2.2. Results

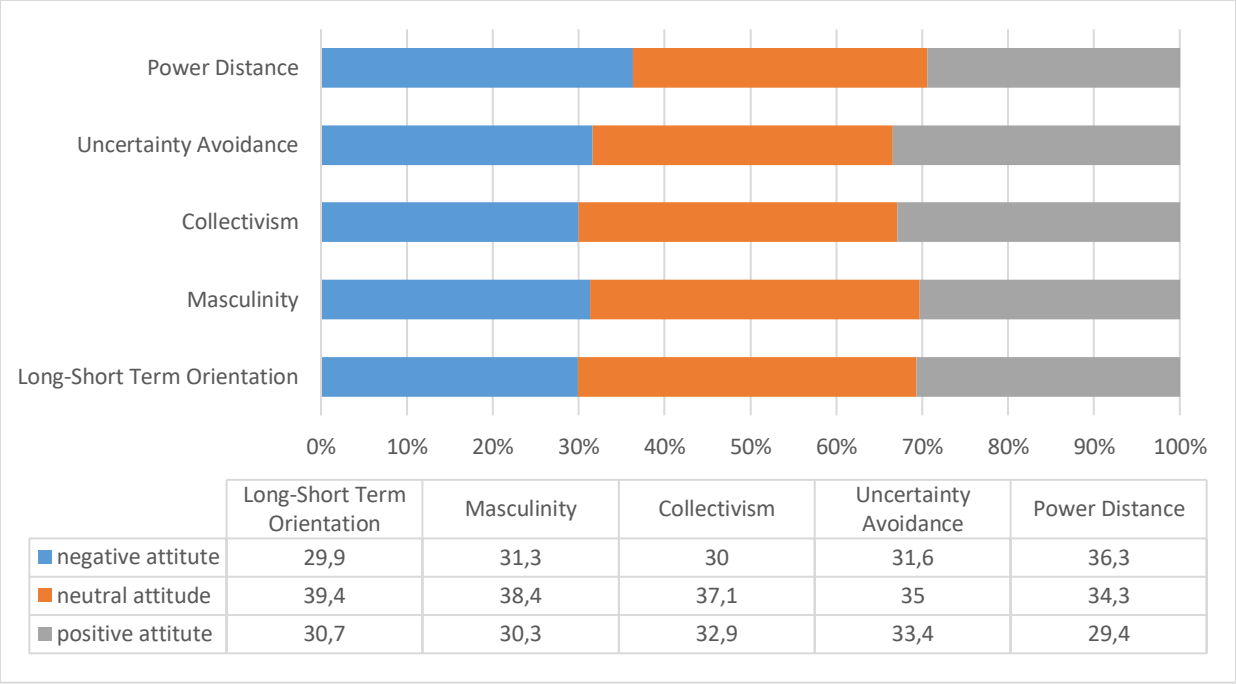
At first, Cronbach's alpha test was performed to determine the internal consistency of the survey. In this case α =.836, which is a good coefficient. Cronbach's alpha coefficient was also established for each statement. The average value (Mean) and mean error for each statement were also determined (Table 2.2.)

Table 2.2 **Item Statistics**

Statement	Mean	Std. Deviation	Cronbach's Alpha if Item Deleted
POWER DISTANCE (PD)			
PD1	3,14	1,608	,832
PD2	3,07	1,583	,833
PD3	2,35	1,427	,836
PD4	3,08	1,566	,833
PD5	3,18	1,497	,834
UNCERTAINTY AVOIDANCE (UA)			
UA1	5,08	1,583	,832
UA2	5,02	1,428	,828
UA3	5,19	1,397	,829
UA4	4,90	1,347	,829
UA5	5,30	1,308	,832
COLLECTIVISM (CO)			
CO1	3,73	1,591	,828
CO2	4,28	1,506	,825
CO3	4,08	1,559	,827
CO4	4,10	1,618	,827
CO5	3,92	1,495	,826
CO6	3,79	1,499	,828
MASCULINITY (MA)			
MA1	3,31	1,789	,833
MA2	3,94	1,680	,831
MA3	3,87	1,634	,827
MA4	4,78	1,612	,833
LONG-SHORT TERM ORIENTATION (LTO)			
LTO1	5,07	1,429	,830
LTO2	4,70	1,308	,831
LTO3	5,33	1,335	,831
LTO4	5,01	1,350	,831
LTO5	4,73	1,495	,830
LTO6	5,37	1,411	,832

According to the respondents' answers, 3 groups of answers were defined, where Group 1 (negative attitude) includes respondents who answered Strongly disagree and Disagree, Somewhat disagree, in Group 2 (doubtful) are respondents who answered Neither agree or disagree, but Group 3 (positive attitute) are those who answered Somewhat agree, Agree and Strongly agree.

Assessment of all factors in percentage is seen in Figure 2.1.



	Long-Short Term Orientation	Masculinity	Collectivism	Uncertainty Avoidance	Power Distance
negative attitute	29,9	31,3	30	31,6	36,3
neutral attitude	39,4	38,4	37,1	35	34,3
positive attitute	30,7	30,3	32,9	33,4	29,4

Figure 2.1. **Assessment of all factors in percentage**

The analysis of the average values shows that the respondents' sample has a negative attitude towards the statements of the criteria PD (Mean 1.93) and MA (Mean 1.99); the average values of the other criteria LTO (Mean 2.01), UA (Mean 2.02) and CO (Mean 2.03) indicate a tendency towards positive attitude.

The analysis focused on whether there are statistically significant differences between respondents by gender, status and country of residence. The average values indicate a trend (see Table 2.3.). Statistically significant differences were not found in the factors' evaluation depending on the status of respondents. Depending on the country in which respondents live, statistically significant (p = .000) differences were found in the evaluation of the factor UA: Latvian respondents have a more positive attitude than Ukrainian respondents. Depending on the gender of respondents, statistically significant differences (p = .002 in both cases) were found in the evaluation of the factors UA (women have more positive attitude towards the statements) and MA (men have more positive attitude)

Table 2.3. **The average values and statistically significant differences**

Factors	differences								
	by country			by gender			by status		
	p	Ukraine	Latvia	p	male	female	p	students	professors
PD	.246	1.95	1.88	.361	1.97	1.92	.144	1.94	1.81
UA	**.000**	1.93	2.30	**.002**	1.90	2.07	.960	2.02	2.02
CO	.629	2.02	2.05	.563	2.05	2.02	.107	2.04	1.90
MA	.972	1.99	1.99	**.002**	2.10	1.94	.409	1.98	2.05
LTO	.218	1.99	2.06	.465	1.98	2.02	.727	2.01	2.03

For a better understanding of the situation, it was considered whether there are statistically significant differences within the country in terms of gender and status of respondents.

Statistically significant differences were not found in the responses of Ukrainian respondents depending on their status. Depending on the gender of respondents, statistically significant differences (p = .013) were found in the evaluation of the factor MA: men agree more (Mean 2.08) than women (Mean 1.94).

Answers of respondents in Latvia showed statistically significant differences depending on the status of respondents in the evaluation of the factor UA (p =.000), where the student's attitude is more positive (Mean 2.39) than the professor's (Mean 2.00), and in the evaluation of the factor CO (p =.022) - students agree more with the statements (Mean 2.11) than professors (Mean 1.85). Depending on the gender of respondents, statistically significant differences (p = .026) were found in the evaluation of the factor MA: men agree more (Mean 2.27) than women (Mean 1.95).

In connection with the organization of the study process, the data obtained by Cluster analysis is interesting. There are three clusters: the first cluster has 371 respondents or 37.0 % respondents, the second cluster has 338 or 33.7 % respondents, and the third cluster has 294 respondents or 29.3 % (see Figure…).

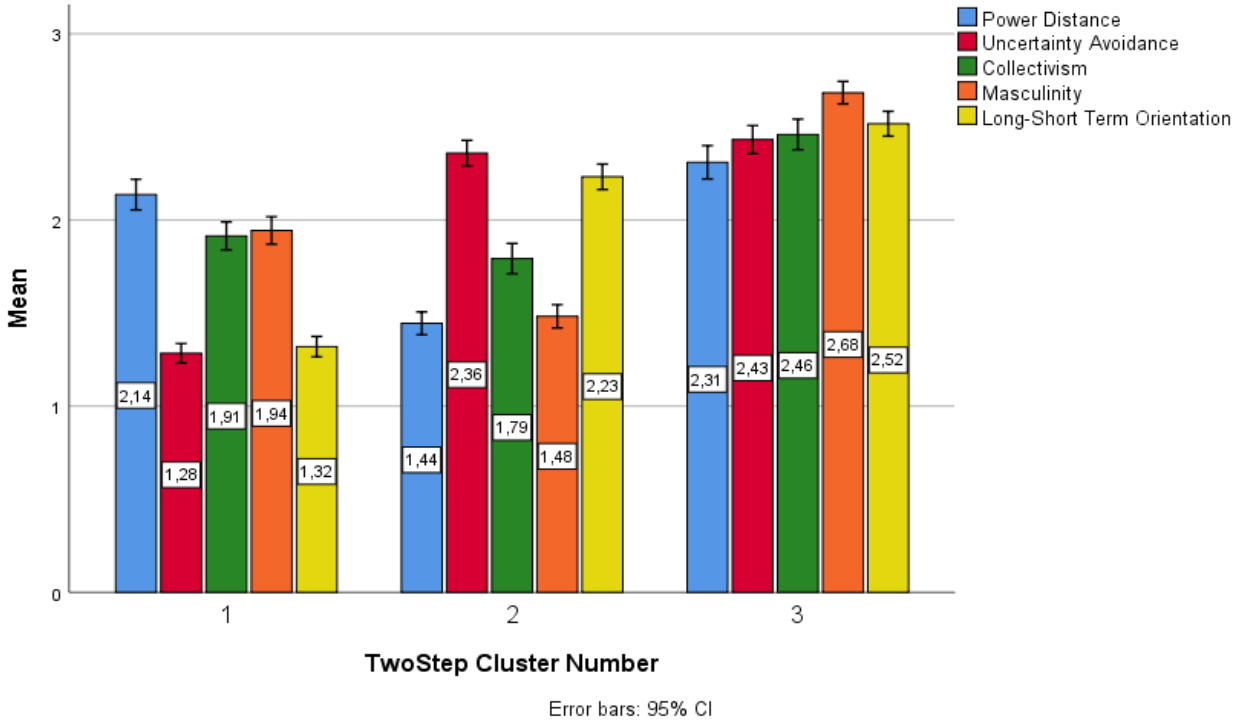


Figure ... shows that the first group includes respondents who have a more negative attitude towards the factors UA, CO, MA and LTO on average, while the attitude towards the factor PD is more positive than average. In the second group of respondents, the attitude towards the factors of UA and LTO is more positive than average in the sample and below the average towards the other factors. The third group consists of respondents who have more positive attitude towards all factors than the average in the sample.

3. Results of the questionnaire "Personal cultural orientation"

3.2. Methodology

The study used the instrument Personal cultural orientation (Sharma, 2009). The survey results obtained were encoded. The results were processed using SPSS 25.0 software. Descriptive statistical methods were used to determine distribution, as well as T-test, Factor analysis, and Cluster analysis.

Each statement was assigned a code to be used in the description below (Table 3.1).

Table 3.1. **Code table**

Code	**Statement**
Independence (IND)	
IND 1	I would rather depend on myself than others
IND 2	My personal identity, independent of others, is important to me
IND 3	I rely on myself most of the time, rarely on others
IND 4	It is important that I do my job better than others
IND 5	I enjoy being unique and different from others in many respects
Interdependence (INT)	
INT 1	The well-being of my group members is important for me
INT 2	I feel good when I cooperate with my group members
INT 3	It is my duty to take care of my family members, whatever it takes
INT 4	Family members should stick together, even if they do not agree
INT 5	I enjoy spending time with my group members
Power (POW)	
POW 1	I easily conform to the wishes of someone in a higher position than mine
POW 2	It is difficult for me to refuse a request if someone senior asks me
POW 3	I tend to follow orders without asking any questions
POW 4	I find it hard to disagree with authority figures
Social Inequality (IEQ)	
IEQ 1	A person's social status reflects his or her place in the society
IEQ 2	It is important for everyone to know their rightful place in the society
IEQ 3	It is difficult to interact with people from different social status than mine
IEQ 4	Unequal treatment for different people is an acceptable way of life for me
Risk Aversion (RSK)	
RSK 1	I tend to avoid talking to strangers
RSK 2	I prefer a routine way of life to an unpredictable one full of change
RSK 3	I would not describe myself as a risk-taker
RSK 4	I do not like taking too many chances to avoid making a mistake
RSK 5	I do not like taking too many chances to avoid making a mistake
Ambiguity Intolerance (AMB)	
AMB 1	I find it difficult to function without clear directions and instructions
AMB 2	I prefer specific instructions to broad guidelines
AMB 3	I tend to get anxious easily when I don't know an outcome
AMB 4	I feel stressful when I cannot predict consequences
AMB 5	I feel safe when I am in my familiar surroundings
Masculinity (MAS)	
MAS 1	Women are generally more caring than men
MAS 2	Men are generally physically stronger than women
MAS 3	Men are generally more ambitious than women

MAS 4	Women are generally more modest than men
MAS 5	Men are generally more logical than women
Gender Equality (GEQ)	
GEQ 1	It is ok for men to be emotional sometimes
GEQ 2	Men do not have to be the sole bread winner in a family
GEQ 3	Men can be as caring as women
GEQ 4	Women can be as ambitious as men
Tradition (TRD)	
TRD 1	I am proud of my culture
TRD 2	Respect for tradition is important for me
TRD 3	I value a strong link to my past
TRD 4	Traditional values are important for me
TRD 5	I care a lot about my family history
Prudence (PRU)	
PRU 1	I believe in planning for the long term
PRU 2	I work hard for success in the future
PRU 3	I am willing to give up today's fun for success in the future
PRU 4	I do not give up easily even if I do not succeed on my first attempt
PRU 5	I plan everything carefully

In order to determine the extent to which respondents agree or disagree with each statement, the Likert scale was used, where 1 - Strongly disagree, 2 - Disagree, 3 - Somewhat disagree, 4 - Neither agree or disagree, 5 - Somewhat agree, 6 - Agree and 7 - Strongly agree.

Participants

In Ukraine, participants were recruited from Ternopil National Economic University (TNEU) in Western Ukraine (founded in 1966). The university hosts about 24,000 students and 700 instructors primarily in the fields of in economics, business finance, law and information technology. In Latvia, participants were recruited at Rēzekne Academy of Technologies (RAT), a small university (about 1500 students) with a focus on pedagogy, economics and management, and technology founded in 1922, and from three faculties at partner institutions: Education, Psychology and Art at the University of Latvia; Pedagogy and Social Work at Liepaja University; and the Department of Pedagogy and Pedagogical Psychology at Daugavpils University. Taken together, the participating Latvian faculties host about 7,000 students and 320 instructors (the data is gathered from the internal documentation of the participating institutions).

The profiles produced by survey respondents in both nations are presented in Table 3.2. The participated institutions provided the certificates of ethical accountability for the data collection. The recruitment of the survey participants – students and faculties – was done on the volunteer base. The Ukrainian participants were mainly female drawn primarily from the student population. On the Latvian side, the participants consisted of an even higher percentage of females than Ukrainian respondents. It might relate the fact that participants were drawn mainly from pedagogical faculties with mainly female population. Although Latvian participants belonged largely to the student population as well, there was a greater level of instructor participation than in Ukraine.

Table 3.2. **Socio-demographic characteristics of respondents by country**

		Ukraine (N=745)		Latvia (N=288)	
Variables	**Values**	**Number**	**%**	**Number**	**%**
Gender	Male	279	37,4	47	16,3
	Female	466	62,6	241	83,7
Academic Status	Student	709	95,2	219	76
	Instructor	36	4,8	69	24

3.3. Results

At first, Cronbach's alpha test was performed to determine the internal consistency of the survey. In this case α =.883, which is a good coefficient. Cronbach's alpha coefficient was also established for each statement. The average value (Mean) and mean error for each statement were also determined (Table 3.3.)

Table 3.3. **Item Statistics**

Statement	Mean	Std. Deviation	Cronbach's Alpha if Item Deleted
Independence (IND)			
IND1	5,56	1,517	.881
IND2	5,56	1,346	.881
IND3	5,48	1,364	.881
IND4	5,12	1,383	.881
IND5	5,19	1,434	.882
Interdependence (INT)			
INT1	5,42	1,279	.879
INT2	5,23	1,280	.880
INT3	5,90	1,296	.879
INT4	5,65	1,442	.879
INT5	5,31	1,258	.880
Power (POW).881			
POW1	4,17	1,491	.881
POW2	4,51	1,599	.879
POW3	3,73	1,536	.882
POW4	4,00	1,475	.881
Social Inequality (IEQ)			
IEQ1	4,49	1,599	.881
IEQ2	5,11	1,477	.880
IEQ3	3,54	1,567	.882
IEQ4	3,17	1,721	.886
Risk Aversion (RSK)			
RSK1	3,84	1,552	.883
RSK2	4,28	1,546	,881
RSK3	3,99	1,681	.883
RSK4	4,15	1,590	.882
RSK5	4,59	1,581	.882
Ambiguity Intolerance (AMB)			
AMB1	3,79	1,598	,881
AMB2	4,68	1,528	,881
AMB3	4,64	1,502	,881

AMB4	4,56	1,490	,880
AMB5	5,43	1,324	,879
Masculinity (MAS)			
MAS1	4,63	1,578	,881
MAS2	5,26	1,442	,881
MAS3	3,86	1,494	,883
MAS4	3,82	1,568	,883
MAS5	3,94	1,673	,884
Gender Equality (GEQ)			
GEQ1	5,56	1,340	,881
GEQ2	5,37	1,448	,882
GEQ3	5,70	1,256	,880
GEQ4	5,74	1,188	,881
Tradition (TRD)			
TRD1	5,54	1,386	,879
TRD2	5,32	1,371	,880
TRD3	4,96	1,483	,880
TRD4	5,18	1,421	,880
TRD5	4,87	1,528	,880
Prudence (PRU)			
PRU1	4,96	1,458	,881
PRU2	5,26	1,283	,881
PRU3	4,89	1,462	,881
PRU4	5,25	1,341	,881
PRU5	4,86	1,407	,881

According to the respondents' answers, 3 groups of answers were defined, where Group 1 (negative attitude) includes respondents who answered Strongly disagree and Disagree, Somewhat disagree, in Group 2 (doubtful) are respondents who answered Neither agree or disagree, but Group 3 (positive attitute) are those who answered Somewhat agree, Agree and Strongly agree.

Assessment of all factors in percentage is seen in Figure 3.1.

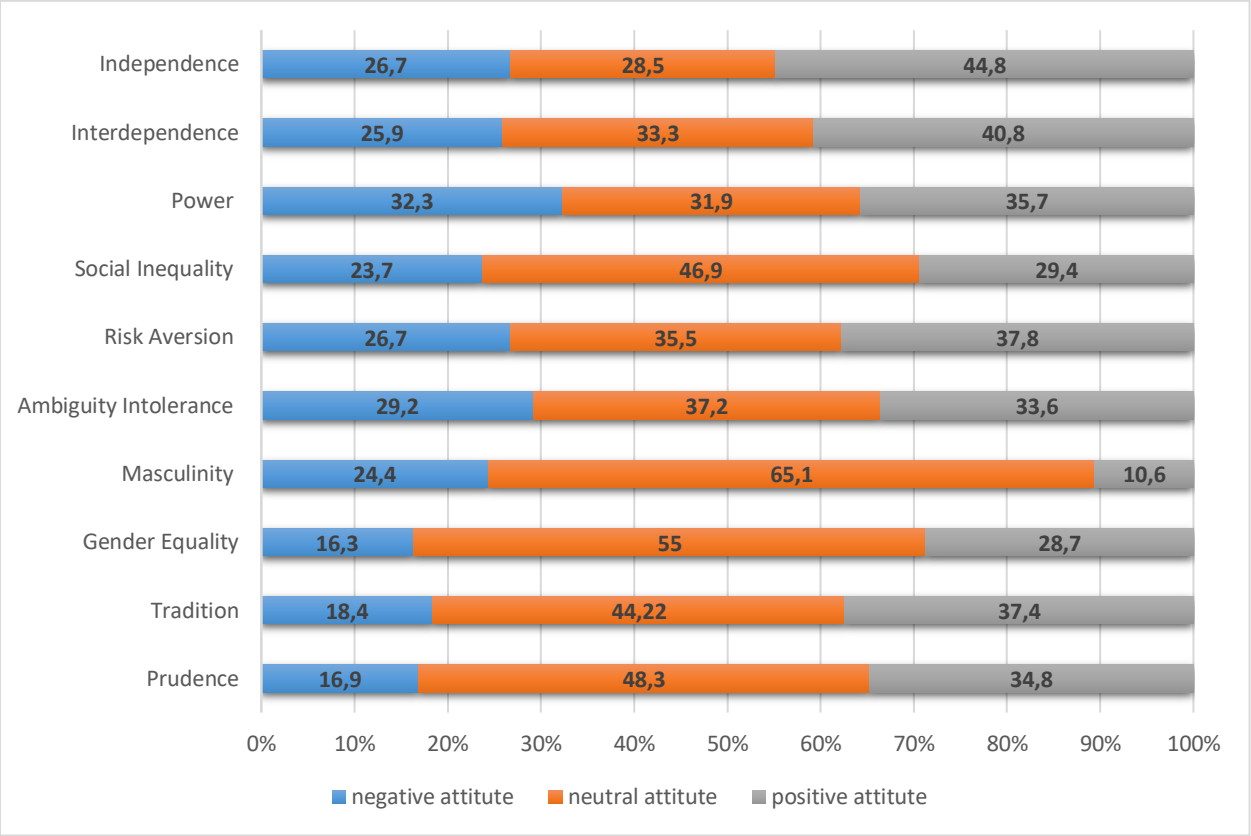


Figure 2.1. **Assessment of all factors in percentage**

The analysis of the average values shows that the respondents' sample has a negative attitude towards the statements of the criteria MAS (Mean 1.86); the average values of the other criteria indicate a tendency towards positive attitude (Mean > 2.00).

The analysis focused on whether there are statistically significant differences between respondents by gender, status and country of residence. The average values indicate a trend (see Table 3.4.).

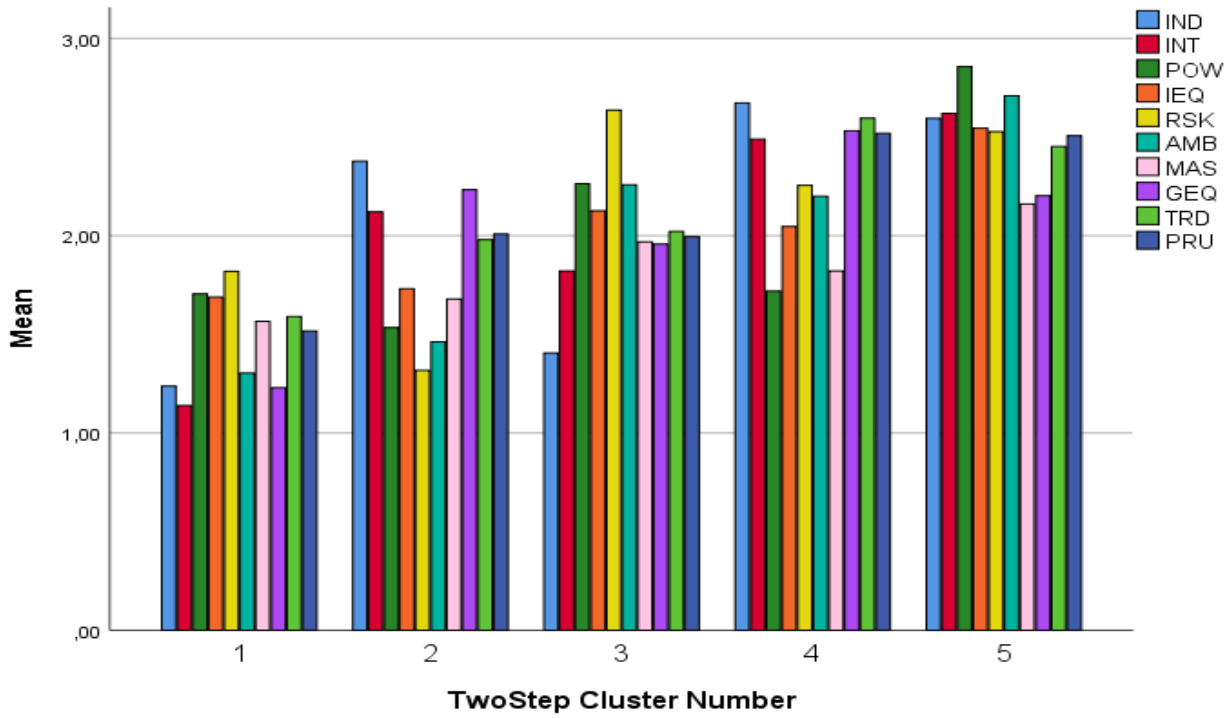
Table 3.4. **The average values and statistically significant differences**

Factors	differences								
	by country			by gender			by status		
	p	Ukraine	Latvia	p	male	female	p	students	professors
IND	.134	2.16	2.24	.418	2.15	2.20	.868	2.18	2.17
INT	.185	2.13	2.20	**.015**	2.06	2.19	.240	2.14	2.23
POW	**.002**	1.98	2.16	.009	1.94	2.08	.373	2.03	2.10
IEQ	**.005**	2.02	2.16	**.030**	1.99	2.09	.420	2.06	2.00
RSK	.112	2.09	2.17	.799	2.12	2.11	.993	2.11	2.11
AMB	**.001**	1.99	2.17	.088	1,98	2.07	.715	2.05	2.02
MAS	.526	1.86	1.88	.828	1.86	1.86	.974	1.86	1.86
GEQ	**.008**	2.09	2.21	.325	2.10	2.14	.685	2.12	2.15
TRD	**.000**	2.13	2.35	**.002**	2.09	2.24	**.000**	2.15	2.56
PRU	**.002**	2.14	2.29	.148	2.13	2.20	.249	2.17	2.25

The table shows that the most statistically significant differences were found depending on the country in which the respondent lives. These were found in the evaluations of six factors: POW ($p = .002$), IEQ ($p = .005$), AMB ($p = .001$), GEQ ($p = .008$), TRD ($p = .000$), and PRU ($p = .002$). In all cases, respondents from Latvia agree more with the statements describing the factors than respondents from Ukraine. Depending on the gender of the respondents, statistically significant differences were found for the factors INT ($p = .015$), IEQ ($p = .030$), and TRD ($p = .002$): the average values indicate that women are more likely to agree with the statements. Depending on the status of the respondents, statistically significant differences were found only in the evaluation of the factor TRD ($p = .000$): professors agree more than students. These results suggest that the individual's cultural orientation is most influenced by the socio-cultural context, in which the individual has evolved as a personality and lives, and his/her gender.

Correlations are found between the factors. There is a correlation between POW and AMB ($r = .991$, $p = .009$), TRD and IEQ ($r = .994$, $p = .006$), and PRU and IEQ ($r = .964$, $p = .036$).

In connection with the organization of the study process, the data obtained by Cluster analysis is interesting. There are five clusters: the first cluster has 249 respondents or 24.1 % respondents, the second cluster has 237 or 22.9% respondents, and the third cluster has 235 respondents or 22.7 %, the fourth cluster has 190 respondents or 18.4%, and the fifth cluster has 122 respondents or 11.8% (see Figure 3.2.).


IND
INT
POW
IEQ
RSK
AMB
MAS
GEQ
TRD
PRU
3,00
2,00
1,00
,00
Mean
1
2
3
4
5
TwoStep Cluster Number