

Value Preferences and Life and Work Expectations of Higher Education Students

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Abstract—The paper is focused on the value preferences of students. The data collection of the survey was realized from 2009 to 2011 [with a sample of 340 (economics) students (in total)]. The answers were classified into ten categories. Schwartz's value types were one of the bases for this classification. The text also deals with the students' life and work expectations in the different horizons of one year, five, and ten years. We used the same categories mentioned above in the case of life expectations. In the second case (of work expectations) the responses were classified into five categories. The results of the fields of interest are presented.

Keywords—Values, value orientations, value preferences, life expectations, work expectations, higher education students.

I. INTRODUCTION

THE Higher education (HE) students are a significant group in many surveys (e.g. [1], [8], [10]). Namely, we can also mention the following selected ones: Value Orientations of Higher Education Students FHS CU (2010), then University Student (2008), Social Portrait of Higher Education Students in the CR V. (2005), Students of Tertiary Professional Schools and Higher Education Institutions (1997), EUROSTUDENT IV. (2009), or National Survey of Students NAŠEST (from 2006 to 2007), see [9, pp. 55-58] too. In the aforesaid years the data collection was realized.

The various issues are solved in these studies. The significant fields include among others: social / economic conditions of the (HE) students, issues related to the demographic characteristics as well as family background, information about their previous and current studies, quality of the (current) studies, work / life expectations, student activities (as a membership in the organizations). We can note that in the context of technological education the emphasis can be also put on intercultural (diversity) issues (e.g. [12]).

Nevertheless, the least explored fields include: information about the previous studies, school / university background (services, counselling's possibilities), or the students' personality (as values, norms, value orientations / preferences)

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[9, pp. 58-59].

With regard to the information mentioned above the paper deals with the values and value orientations of HE (or more precisely economics) students. The emphasis is put on the value preferences. Another part is focused on the life and work expectations (of themselves). The aim is to present the survey's results (from the period 2009 to 2011).

II. CONCEPTION OF VALUES

The theoretical part (of the contribution) contains the definition of the basic terms related (in particular) to values and value orientations. The fundamental values' conception is also added. It is possible to find a lot of value typologies in the literature. In this text, a special accent is put on the conception of S. H. Schwartz.

A. Definition of Basic Terms

The importance of the theory of human values has increased notably in the second half of the 20th century. The work of M. Rokeach (from 1973) was breakthrough in this field of study. He defines a value as an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence [14, p. 5]. It can be a conscious or unconscious idea of what is desirable [7]. Another author [17, p. 21] states that (the) values are desirable trans-situational goals, varying in importance, which serve as guiding principles in the life of a person or other social entity.

On the other side, the value orientations represent a specification of values taken by the holder in processes and orientations. It can be seen as specifications of the content of value preferences too. [13] These preferences reflect then the value hierarchy [ibid.]. We can note that preference is a choice in which an individual prioritizes a person, group, purpose or value over others [7]. The value structure is another relevant term in this field of interest. It enables us to capture the sum of interrelated value attributes of the individual [13].

B. Fundamental Values' Conception

With regard to the value typologies as well as issue of their measurement, the most frequent approaches are the following (ones): a) Rokeach's scale (e.g. [14]), b) Inglehart's scale (e.g. [6]), c) Hofstede's scale (e.g. [4]), and d) Schwartz's scale (e.g. [18]).

The Rokeach Value Survey (RVS) measures 36 values

divided into these categories: a) terminal values (regarding the final objectives of existence), and b) instrumental values (concerning the modes of conduct). Despite certain criticism (e.g. [18]) this conception (of M. Rokeach) was the basis for the work of other authors.

The second approach consists in 4-item or 12-item ways of values' batteries divided in the following groups: a) materialistic values, b) post-materialistic values. It can be added that criticism focuses on a strong dependence on contemporary economic conditions [2, in 16].

The next conception (of G. Hofstede) establishes a series of cultural areas that group together countries or regions according to their prevailing values [5]. His cultural dimensions theory describes these types of values: a) desired (with an accent on the real wishes of the individual), and b) desirable (with an accent on the purported wishes of the individual). The most frequent values' measurement, the Schwartz Value Survey (SVS) [e.g. 18], is emphasized in the following text.

1) *Conception of S. H. Schwartz*

The work of previous authors (see also [3]) related to human values, or more precisely the structure of values, was a good basis for S. H. Schwartz. The assumption (of his conception) is the fact that values represent the universal

requirements of humans. These are: a) individuals' biological needs, b) coordinated social interaction, c) group efficiency and survival [11, p. 459]. A set of 10 value types (see Table I) was proposed after the first initiation of model [19] and its subsequent modifications.

The model postulates the dynamic (and circular) structure of (motivational) types of values and their mutual convergent and divergent relations. It can be stated that the empirical surveys in different countries have demonstrated that the set (of 10 value types) is complete (the expected value structure appeared in all the research samples) [15, p. 112].

The values' positions around the circle are related to their motivational aspects among them. It can be noted that if the values are placed closer to each other, their motivations are more similar, (on the other side) if the values are placed further apart, their motivations are more dissimilar [15] (see Fig. 1).

We can note that the hedonism value type can be considered as part of these (adjacent) value types: achievement as well as stimulation.

It can be added that the model (of relations) enables to group similar value types into these value orientations: a) self-transcendence, b) conversation, c) self-enhancement, and d) openness to change.

Table I (a): Motivational Types of Values, adapted from [17]

Value Types and Definitions	Values
Universalism (Self-Transcendence): Understanding, appreciation, tolerance, and protection of the welfare of all people and of nature.	A world of beauty, a world at peace, broad-minded, equality, inner harmony, protecting the environment, social justice, unity with nature, wisdom.
Benevolence (Self-Transcendence): Preservation and enhancement of the welfare of people with whom one is in frequent personal contact.	A spiritual life, forgiving, helpful, honest, loyal, mature love, meaning in life, responsible, true friendship.
Conformity (Conservation): Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms.	Honoring parents and elders, obedient, politeness, self-discipline.
Tradition (Conservation): Respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide.	Accepting portion in life, detachment, devout, humble, moderate, respect for tradition.
Security (Conservation): Safety, harmony, and stability of society, of relationships, and of self.	Clean, family security, healthy, national security, reciprocation of favors, sense of belonging, social order.
Power (Self-Enhancement): Social status and prestige, control or dominance over people and resources.	Authority, preserving my public image, social power, social recognition, wealth.
Achievement (Self-Enhancement): Personal success through demonstrating competence according to social standards.	Ambitious, capable, influential, intelligent, self-respect, successful.
Hedonism (Self-Enhancement, Openness to Change): Pleasure and sensuous gratification for oneself.	Enjoying life, pleasure.
Stimulation (Openness to Change): Excitement, novelty, and challenge in life.	A varied life, an exciting life, daring.

Table I (b): Motivational Types of Values, adapted from [17]

Self-Direction (Openness to Change): Independent thought and action-choosing, creating, exploring.	Creativity, curious, freedom, choosing own goals, independent.
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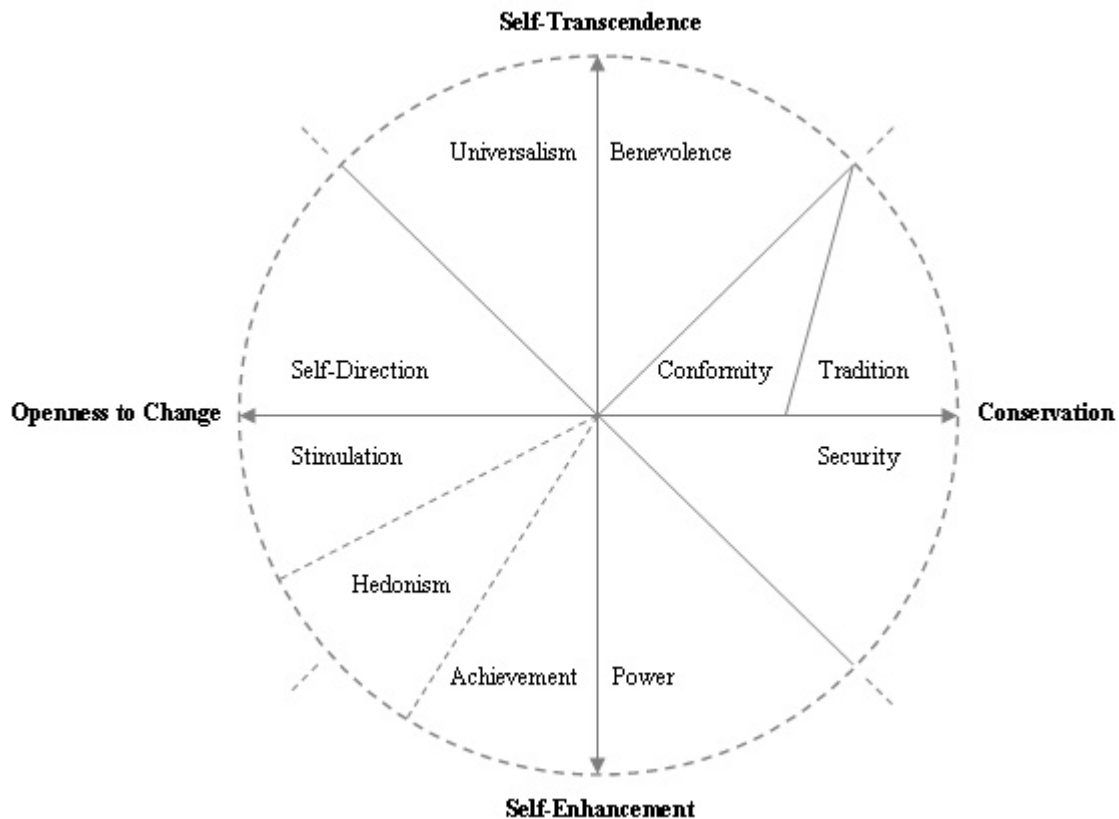


Fig. 1: Relations among Motivational Values' Types, adapted from [18, p. 45]

III. VALUE PREFERENCES AND LIFE AND WORK EXPECTATIONS OF HE STUDENTS

The practical part of the paper deals with the results of the study of value preferences of higher education students. Then, life and work expectations of these students are described. The information on the used methodology is also added.

A. Methodology of Study

The data collection was realized from 2009 to 2011. The sample of the study consisted of 340 economics students, 104 in 2009, 136 in 2010 and 100 in 2011. Within these groups there were 272 females (i.e. 80.000%) and 68 males (i.e. 20.000%). We can also mention that the students were in the 3rd year of university studies and their age ranged from 20 to 28 (in the period from 2009 to 2011).

The higher education students filled in a questionnaire. It included open questions on the aforesaid areas of interest. It was also focused on other relevant issues, such as expenditures and revenues' of students, etc. However these are not part of the paper.

In the case of value preferences, the students were asked to list five important things in order of significance. The answers

were then classified into ten categories. Schwartz's value types were one of the bases for this classification. The weights were assigned for each order of values (category), 1st order was equal to 0.333, 2nd to 0.267, 3rd to 0.200, 4th to 0.133, and 5th to 0.067. We can add that it was based on the scoring method. The total order of values (category) was influenced by the amount of score in the period (from 2009 to 2011 or in each year separately). It was calculated as the sum of the products of the category frequency and the relevant weight of the order.

In addition, the students also specified their life and work expectations in horizons of one year, five, and ten years. In the first case, we used the same ten categories for classification mentioned above. In the second case, the responses were divided into five groups. It can be noted that we focused mainly on the category frequency in both cases (the life and work expectations).

B. Value Preferences of Students

The value preferences of higher education students were examined. We identified the following ten categories (in a total): (a) personal harmony and relationship to nature, (b) interpersonal relationships, (c) values related to principles of

conduct, (d) traditional values, (e) safety, (f) dominance over resources, (g) success, (h) pleasure, (i) excitement and variety, and (j) creative activities and independence. It can be added that the categories are presented under these letters in the text. The order of categories was influenced by the amount of score.

The rationale consisted in the fact that if the amount was higher, then the order was better. The results of total and partial scores of categories are documented in Table II. The differences between females and males are also presented (below).

Table II: Total and Partial Scores of Categories in Periods (in Points)

Year / Cat.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
2009 (n = 104)	4.600	45.267	0.000	0.000	25.733	7.933	0.267	2.400	0.200	16.200
2010 (n = 136)	5.067	55.200	0.533	0.067	30.533	11.067	4.333	4.067	0.333	22.267
2011 (n = 100)	7.533	38.600	0.000	0.400	29.400	6.667	2.667	2.133	0.400	12.000
Total (n = 340)	17.200 (5)	139.067 (1)	0.533 (9)	0.467 (10)	85.667 (2)	25.667 (4)	7.267 (7)	8.600 (6)	0.933 (8)	50.467 (3)

Notes: (a) personal harmony and relationship to nature, (b) interpersonal relationships, (c) values related to principles of conduct, (d) traditional values, (e) safety, (f) dominance over resources, (g) success, (h) pleasure, (i) excitement and variety, and (j) creative activities and independence

The category of interpersonal relationships (b) reached the highest (total) score (139.067 points). These selected values dominated in the mentioned group: family, friends, love, and partner. The 2nd highest score (and thus the 2nd order) was achieved by the category of safety (e, 85.667 points). It was represented especially by: health, housing, and security. The category of creative activities and independence (j) was placed on the 3rd position (with 50.467 points). It contained: work, studies, freedom, and self-actualization. The positions of these three categories were also achieved in each year separately.

The 4th order (with 25.667 points) was reached by the category of dominance over resources (f). It included especially: money, property, and status. The partial scores of this group were similar. However the result of category of personal harmony and relationship to nature (a, 7.533 points) was better in 2011.

The mentioned category (of personal harmony and relationship to nature, a) achieved the next highest score (17.200 points). These values were dominated: satisfaction, nature, appreciation, or peace. The partial scores were also similar. However the category of dominance over resources (f) had a better result (6.667 points) in 2011.

The category of pleasure (h) was placed on the 6th position (with 8.600 points). It was represented mainly by the values of: entertainment, interest, and leisure. The position of this group was the same in 2009. The partial scores of category of success (g) were higher in 2010 (4.333 points) and 2011 (2.667 points).

This category (of success, g) reached the next highest score

(7.267 points). The value of career dominated. The order was the same in 2009. The result of category of pleasure (h) was better in 2010 (4.067 points) and 2011 (2.133 points).

The 8th order (with 0.933 points) was achieved by the category of excitement and variety (i). It included mainly the value of experiences. The positions were similar in 2009 and 2011 [the category of traditional values (d) had the same partial score in this year, 0.400 points]. Only the category of values related to principles of conduct (c) had a better position in 2010 (0.533 points).

The last mentioned category (of values related to principles of conduct, c) was represented by the next score (0.533 points). This group contained: truthfulness, and reliability. The orders were similar in 2009 [the category of traditional values (d) had the same partial score in this year, 0.000 points]. The result of category of excitement and variety (i) was better in 2010 (with 0.333 points).

Finally, the category of traditional values (d) reached the lowest score (0.467 points). It included especially: humbleness, and trust. The same positions were achieved by the categories of traditional values (d) in 2010 (0.067 points) and values related to principles of conduct (c) in 2011 (0.000 points). The differences between female and male respondents are presented in Table III.

Table III: Total Scores of Categories in Period (from 2009 to 2011, in Points)

Year / Cat.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Fem. (n = 272)	13.467 (5)	115.133 (1)	0.333 (9)	0.267 (10)	70.467 (2)	18.333 (4)	4.933 (6)	4.733 (7)	0.800 (8)	40.467 (3)
Males (n = 68)	3.733 (6)	23.933 (1)	0.200 (8.5)	0.200 (8.5)	15.200 (2)	7.333 (4)	2.333 (7)	3.867 (5)	0.133 (10)	10.000 (3)
Total (n = 340)	17.200 (5)	139.067 (1)	0.533 (9)	0.467 (10)	85.667 (2)	25.667 (4)	7.267 (7)	8.600 (6)	0.933 (8)	50.467 (3)

Notes: (a) personal harmony and relationship to nature, (b) interpersonal relationships, (c) values related to principles of conduct, (d) traditional values, (e) safety, (f) dominance over resources, (g) success, (h) pleasure, (i) excitement and variety, and (j) creative activities and independence

C. Life Expectations of Students

Another part of the survey was focused on the life expectations of higher education students. There were the different time horizons of one year, five, and ten years. The answers were classified into ten categories. Schwartz's value types were one of the bases for this classification too (as in the case of value preferences). The proportions of groups are shown in Table IV (with regard to the results for women and men).

With regard to the first horizon (of one year) the highest proportion (of answers) was reached by the category of creative activities and independence (j) [64.118%, it's 218 responses]. On the 2nd order was the category of interpersonal relationships (b) [20.000%, 68 answers in total]. The next position was represented by the category of safety (e, 10.294% with 35 responses).

The category of excitement and variety (i) was on the 4th order. The (total) proportion was 1.176% (so 4 answers). The following (ones) were the categories of dominance over resources (f) with pleasure (h) [0.294%, 1 response in total]. Then, the rest of categories [of personal harmony and relationship to nature (a), values related to principles of conduct (c), traditional values (d), success (g)] had 0.000% of answers.

The category of interpersonal relationships (b) was placed on the 1st order in the horizon of five years (52.059%, it's 177 responses). The 2nd position was represented by the category of creative activities and independence (j) [the proportion of 23.529%, 80 answers]. The next order had the category of

safety (e) [17.059%, i.e. 58 responses].

The 4th order was achieved by the category of excitement and variety (i) [2.059%, 7 answers]. Then, the categories of dominance over resources (f), success (g), pleasure (h) were represented by the position with 0.294% (it's only 1 response). The rest of categories [of personal harmony and relationship to nature (a), values related to principles of conduct (c), traditional values (d)] achieved 0.000% of answers.

The category of interpersonal relationships (b) reached 81.765% (i.e. 278 responses) in the third horizon (of ten years). The 2nd order was achieved by the category of creative activities and independence (j) [11.765%, it's 40 answers]. The category of safety (e) was placed on the 3rd position (so 2.059%, 7 responses).

Then, the categories of personal harmony and relationship to nature (a), dominance over resources (f), success (g), excitement and variety (i) represented the next position (2.294%, 1 answer). Other categories [of values related to principles of conduct (c), traditional values (d), pleasure (h)] reached 0.000% of answers.

There was also the category of no responses. The proportions were 3.824% (13 answers) in the horizon of one year, 4.412% (it's 15 responses) in the next horizon (of five years), 3.235% (11 answers) in the horizon of ten years.

Table IV (a): Life Expectations in Period (from 2009 to 2011, in %)

Horizon / Cat.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1 y., t. (order)	0.000 (8.5)	20.000 (2)	0.000 (8.5)	0.000 (8.5)	10.294 (3)	0.294 (5.5)	0.000 (8.5)	0.294 (5.5)	1.176 (4)	64.118 (1)
Fem.	0.000	17.941	0.000	0.000	9.118	0.294	0.000	0.294	0.882	49.118
Males	0.000	2.059	0.000	0.000	1.176	0.000	0.000	0.000	0.294	15.000
5 y., t. (order)	0.000 (9)	52.059 (1)	0.000 (9)	0.000 (9)	17.059 (3)	0.294 (6)	0.294 (6)	0.294 (6)	2.059 (4)	23.529 (2)
Fem.	0.000	44.412	0.000	0.000	14.118	0.000	0.294	0.000	1.471	16.471
Males	0.000	7.647	0.000	0.000	2.941	0.294	0.000	0.294	0.588	7.059

Table IV (b): Life Expectations in Period (from 2009 to 2011, in %)

10 y., t. (order)	0.294 (5.5)	81.765 (1)	0.000 (9)	0.000 (9)	2.059 (3)	0.294 (5.5)	0.294 (5.5)	0.000 (9)	0.294 (5.5)	11.765 (2)
Fem.	0.294	65.588	0.000	0.000	1.471	0.000	0.294	0.000	0.294	9.706
Males	0.000	16.176	0.000	0.000	0.588	0.294	0.000	0.000	0.000	2.059

Notes: (a) personal harmony and relationship to nature, (b) interpersonal relationships, (c) values related to principles of conduct, (d) traditional values, (e) safety, (f) dominance over resources, (g) success, (h) pleasure, (i) excitement and variety, and (j) creative activities and independence

D. Work Expectations of Students

The survey was also focused on the students' work expectations. The time horizons (of one year, five, ten years) were used too. The responses were classified into five categories as: (i) preparation for future work, (ii) broader specification of work, (iii) broad specification of work, (iv) narrower specification of work, (v) other (non-economic activities). In Table V the proportions (of groups) are presented. In addition, the results' differences between females and males are also added (below).

Most students (80.882%, i.e. 275) listed the preparation for future work (i) in the first horizon (so in one year). This category included especially studies in home country, and abroad. Then, the 2nd order was represented by the category of broader specification of work (ii) [10.882%, 37 responses]. These selected items were contained: work, business, or voluntary (part-time) work. On the 3rd position was the category of narrower specification of work (iv). The proportion was 5.882% (20 answers), represented mainly by the following items: assistant, clerk, accountant, director, administrative worker, financial adviser, officer, sales representative, broker, or economist.

The next order was achieved by the category of broad specification of work (iii) [0.882%, 3 responses]. It included the positions of management. The lowest proportion (0.294%, so only 1 answer) was reached by the category of other (non-economic activities, v). It was represented by these items: family, maternity, or children.

The 1st order was reached by the category of broader specification of work (ii) in the following horizon (of five

years) [41.471%, 141 responses]. The 2nd position was represented by the category of narrower specification of work (iv) [with 32.941%, so 112 answers]. The next (one) was the category of broad specification of work (iii) [15.000%, 51 responses].

The 4th order was reached by the category of other (non-economic activities, v) [the proportion of 4.412%, so 15 answers]. The lowest proportion (3.529%, 15 responses) had the category of preparation for future work (i) [3.529%, i.e. 12 answers].

In the last horizon (of ten years) the 1st position was represented by the category of broad specification of work (iii) [42.941%, 146 answers]. The 2nd order was achieved by the category of broader specification of work (ii) [with the proportion of 29.706%, it's 101 responses]. The next position (18.235%, 62 answers) was represented by the category of narrower specification of work (iv).

The category of other (non-economic activities, v) had 5.000% (17 responses). The category with the last order (preparation for future work, i) achieved 0.882% (3 answers.)

We can add that the proportions of category of no responses were 1.176% (4 answers) in the horizon of one year, 2.647% (9 responses) in the horizon of five years, and 3.235% (11 answers) in the third horizon (of ten years).

Table V (a): Work Expectations in Period (from 2009 to 2011, in %)

Horizon / Cat.	(i)	(ii)	(iii)	(iv)	(v)
1 y., t. (order)	80.882 (1)	10.882 (2)	0.882 (4)	5.882 (3)	0.294 (5)
Fem.	64.118	8.824	0.588	5.588	0.000
Males	16.765	2.059	0.294	0.294	0.294
5 y., t. (order)	3.529 (5)	41.471 (1)	15.000 (3)	32.941 (2)	4.412 (4)
Fem.	3.235	31.765	10.588	28.235	4.118
Males	0.294	9.706	4.412	4.706	0.294

Table V (b): Work Expectations in Period (from 2009 to 2011, in %)

10 y., t. (order)	0.882 (5)	29.706 (2)	42.941 (1)	18.235 (3)	5.000 (4)
Fem.	0.882	23.824	33.235	15.000	4.412
Males	0.000	5.882	9.706	3.235	0.588

Notes: (i) preparation for future work, (ii) broader specification of work, (iii) broad specification of work, (iv) narrower specification of work, (v) other (non-economic activities)

IV. CONCLUSION

The text was focused on the value preferences of (economics) students. The data collection was realized from 2009 to 2011. The responses were classified into ten categories. Schwartz's value types were one of the bases for this classification. The order (of categories) was influenced by the amount of score (in the period). It can be noted that if the amount was higher, then the order was better. In addition, the survey dealt with the students' life and work expectations. There were the time horizons of one year, five, and ten years. In the first case, we used the same ten categories for classification described above. In the second case, the answers were divided into five groups. We focused on the (category) frequency in both cases (the life and work expectations).

There were these (total) orders of values (categories): interpersonal relationships (b), safety (e), creative activities and independence (j), dominance over resources (f), personal harmony and relationship to nature (a), pleasure (h), success (g), excitement and variety (i), values related to principles of conduct (c), and traditional values (d) [see Table VI]. The orders of categories of female respondents were very similar [except the 6th (g), and 7th (h) positions]. On the other side, in the case of males the differences were in the 5th (h), 6th (a), 8.5th (c, d), and 10th (i) orders. The students presented their value preferences. Nevertheless we don't know if the behaviour is in accordance with the preferences. Another fact is that these preferences can still change over time (they were in the 3rd year of studies).

There were the orders of categories related to the students' life expectations in the first horizon (of one year): creative activities and independence (j), interpersonal relationships (b), safety (e), excitement and variety (i), dominance over resources (f), pleasure (h), personal harmony and relationship to nature (a), values related to principles of conduct (c), traditional values (d), and success (g). It was similar in the case of females [except the 4.5th (f, h), and 6th (i) positions]. Then, the male respondents had the different 7.5th (a, c, d, f, g, h) order.

In the horizon of five years there were these positions: interpersonal relationships (b), creative activities and independence (j), safety (e), excitement and variety (i), dominance over resources (f), success (g), pleasure (h), personal harmony and relationship to nature (a), values related to principles of conduct (c), and traditional values (d). For

females it was different in the 5th (g), and 8th (a, c, d, f, h) order. In the case of males it was in the 5.5th (f, h), and 8.5th (a, c, d, g) positions.

The following orders were in the last horizon (of ten years): interpersonal relationships (b), creative activities and independence (j), safety (e), personal harmony and relationship to nature (a), dominance over resources (f), success (g), excitement and variety (i), values related to principles of conduct (c), traditional values (d), and pleasure (h). In the case of female respondents the differences were in the 5th (a, g, i), and 8.5th (c, d, f, h) orders. For males these were in the 4th (f), and 7.5th (a, c, d, g, h, i) positions.

In the first horizon (of one year) there were these orders of categories related to the students' work expectations: preparation for future work (i), broader specification of work (ii), narrower specification of work (iv), broad specification of work (iii), and other (non-economic activities, v) [see Table VII]. These were the same for females. In the case of male respondents the difference was in the 4th (iv, v) order.

There were the following positions in the horizon of five years: broader specification of work (ii), narrower specification of work (iv), broad specification of work (iii), other (non-economic activities, v), and preparation for future work (i). These were the same for female respondents. On the other side, the males had the different 4.5th (i, v) order.

In the last horizon (of ten years) there were the orders of: broad specification of work (iii), broader specification of work (ii), narrower specification of work (iv), other (non-economic activities, v), and preparation for future work (i). The results in the case of female and male respondents were the same.

Mostly, if the horizon was longer, then the work specification was narrower. It can be also added that the proportion of expected (general) positions of management (in the 3rd category) and work in general (included in the 2nd category) was higher in the longer horizon. It was 7.500% in the horizon of one year, 26.563% in the second horizon (of five years), and 59.109% in the horizon of ten years.

Table VI: Results' Summary of Value Preferences

Order	Cat.	Total Scores (in Points)	Dominated Values
1.	(b)	139.067	Family, friends, love, partner
2.	(e)	85.667	Health, housing, security
3.	(j)	50.467	Work, studies, freedom, self-actualization
4.	(f)	25.667	Money, property, status
5.	(a)	17.200	Satisfaction, nature, appreciation, peace
6.	(h)	8.600	Entertainment, interest, leisure
7.	(g)	7.267	Career
8.	(i)	0.933	Experiences
9.	(c)	0.533	Truthfulness, reliability
10.	(d)	0.467	Humbleness, trust

Notes: (a) personal harmony and relationship to nature, (b) interpersonal relationships, (c) values related to principles of conduct, (d) traditional values, (e) safety, (f) dominance over resources, (g) success, (h) pleasure, (i) excitement and variety, and (j) creative activities and independence

Table VII: Results' Summary of Work Expectations

Cat.	Dominated Issues	1-y. Hor.		5-y. Hor.		10-y. Hor.	
		Order	In %	Order	In %	Order	In %
(i)	Studies in home country, abroad	1.	80.882	5.	3.529	5.	0.882
(ii)	Work, business, voluntary (part-time) work	2.	10.882	1.	41.471	2.	29.706
(iii)	Positions of management	4.	0.882	3.	15.000	1.	42.941
(iv)	Assistant, clerk, accountant, director, administrative worker, financial adviser, officer, sales representative, broker, economist	3.	5.882	2.	32.941	3.	18.235
(v)	Family, maternity, children	5.	0.294	4.	4.412	4.	5.000

Notes: (i) preparation for future work, (ii) broader specification of work, (iii) broad specification of work, (iv) narrower specification of work, (v) other (non-economic activities)

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REFERENCES

- [1] Ayub, A. F. M., Tarmizi, R. A., Jaafar, W. M. W., Ali, W. Z. W., Luan, W. S., Utilization of learning management system portal: Perspective from higher education students, *ADVANCED EDUCATIONAL TECHNOLOGIES*, 2010, pp. 93-97, ISSN 1790-5109, ISBN 978-960-474-186-1.
- [2] Clarke, H. D., Kornberg, A., McIntyre, C., Bauer-Kasse, P., Kasse, M., The effect of economic priorities on the measurement of value change: New experimental evidence, *American Political Science Review*, vol. 93, no. 3, 1999, pp. 637-647.
- [3] Feather, N. T., Values in education and society, Free Press, 1975, 350 p.
- [4] Hofstede, G., Culture and organizations: Software of the mind, McGraw-Hill, 1991.
- [5] Hofstede, G., Culture's consequences: International differences in work-related values, Sage, 1980.
- [6] Inglehart, R., The Silent revolution: Changing values and political styles among western publics, Princeton University Press, 1977, 482 p.
- [7] Jandourek, J., Sociologický slovník, Praha: Portál, 2001, 288 p. ISBN 80-7178-535-0.
- [8] Marin-García, J. A., Gómez, M. M., Lloret, J. Job description survey adapted to engineering higher education, *5th WSEAS / IASME International Conference on ENGINEERING EDUCATION (EE '08)*, Heraklion, Greece, 2008, pp. 215-220, ISSN 1790-2769, ISBN 978-960-6766-86-2.
- [9] Minksová, L., Vysokoškoláci – přehled hlavních sociologických výzkumů realizovaných v ČR, *Data a výzkum – SDA Info*, 4, 1, 2010, pp. 39-60.
- [10] Naenudorn, E., Singthongchai, J., Kerdprasop, N., Kerdprasop, K., Classification model induction for student recruiting, *Latest Advances in Educational Technologies*, 2012, pp. 117-122, ISBN 978-1-61804-093-0.
- [11] Pakizeh, A., Gebauer, J., Maio, G., Basic human values: Inter-value structure in memory, *Journal of Experimental Social Psychology*, vol. 43, 2007, pp. 458-465.
- [12] Panturu, S., Cocan, C., An intercultural perspective on technological education, *WSEAS TRANSACTIONS on ADVANCES in ENGINEERING EDUCATION*, is. 9, vol. 7, 2010, pp. 277-286, ISSN 1790-1979.
- [13] Prudký, L. et al., Inventura hodnot: výsledky sociologických výzkumů hodnot ve společnosti České republiky, Praha: Academia, 2009, 341 p. ISBN 978-80-200-1751-2.
- [14] Rokeach, M., The nature of human values, Free Press, 1973, 438 p.
- [15] Řeháková, B., Měření hodnotových orientací metodou hodnotových portrétů S. H. Schwartz, *Sociologický časopis*, vol. 42, no. 1, 2006, pp. 107-128.
- [16] Řeháková, B., Změny hodnot v České republice a Inglehartova hodnotová typologie, *Sociální studia*, 6, 2001, pp. 47-71.
- [17] Schwartz, S. H., Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, vol. 50, no. 4, 1994, pp. 19-45.
- [18] Schwartz, S. H., Universals in the content and structure of values: Theory and empirical tests in 20 countries, *Advances in Experimental Social Psychology*, vol. 25, 1992, pp. 1-65.
- [19] Schwartz, S. H., Bilsky, W., Toward a universal psychological structure of human values, *Journal of Personality and Social Psychology*, vol. 53, no. 3, 1987, pp. 550-562.