STUDENTS' VIEWS ON THE PROFESSIONAL CAREER OPPORTUNITIES

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Abstract. Along with the process of individual's socialization, the choice of a particular profession is becoming increasingly important. A lot of experts in the field of career choice point out that changes in the labour market, unemployment and the constantly increasing amount of information on various professions and the ways of acquiring education lead to confusion, uncertainty and misinformation among young people. The present article comprises the summary of the results obtained in one section of the international comparative study ROSE, which shows students' views about their future profession. The study encompasses the time period from 2002 to 2012, its participants being the 9th and 12th form students from different Latvian schools. The results show that there can be observed certain changes in the views of the respondents concerning career development opportunities. In the 12th form group, the most important criteria in choosing a future profession mentioned by the respondents are the possibility to develop one's knowledge and skills, the importance and meaningfulness of the job as well as the remuneration for the work done. The students have partly realised that successful individuals are those who can align their individual goals with the changes taking place in the society. Young people are becoming more pragmatic, and their understanding of career opportunities is focused on self-realization in a purposeful self-development process. This feature is more pronounced in the views of the 12th form students.

Keywords: career, individual's self-realization, pragmatism, the views of students.

Introduction

Work is the most universal meals of individuals' self-expression revealing their true nature and essence. If a profession is chosen successfully, work brigs joy and satisfaction; it further develops worker's personality and becomes the content and fulfilment of his/her life. The key principle in the optimum career choice is the correspondence of the work to the worker's interests and abilities; however, the demand in the labour market is equally important nowadays.

Many scholars studying career choice point out that changes in the labour market, unemployment and constantly increasing amount of information about professions and the ways of acquiring education are the factors that lead to confusion, uncertainty and misinformation among young people who are choosing their profession. As we all know, in Latvia professional career consultants and Internet sites give young people basic information and recommend the most suitable profession which corresponds to their psychological and social characteristics, or at least advise on the potential field of professional activity [1; 2]. Studies are carried out to identify the most popular professions among students and the criteria determining their choice [3; 4]; however, the reasons why young people are reluctant to choose certain professions, e.g., those in the field of natural sciences, have not been studied much so far. The fact that there is a lack of highly qualified workforce capable of working with modern technologies and equipment in some areas of national economy is also worrying.

The aim of the study is to clarify what changes have taken place in students' views about their future profession and career opportunities in the period from 2002 to 2012.

Materials and methods

The previous study carried out by the authors, which involved senior secondary school students, revealed that a significant number of would-be school-leavers chose their future profession shortly before finishing their studies at school. It was identified in the study that the respondents wanted to do a well-paid job (it was the decisive criterion in the career choice for two thirds of the respondents). It has to be admitted that under the influence of the processes of globalization and integration there is developing a consumer-oriented society where pragmatism and rationalism lead to the fact that material values start dominating over spiritual values [5]. The studies concerning education in the field of natural sciences show that the level of knowledge in chemistry and physics among students finishing secondary schools is decreasing not only in Latvia, but also in other countries, the developed countries in particular [6; 7]. Most students do not want to work in the field of science and technology [6]. There can be observed students' unwillingness to acquire subjects related to natural sciences,

which "distorts" a balanced division of career choice corresponding to the needs of the national economy. Specialists consider natural sciences as a very important and integral part of general education [8]; therefore, many countries are looking for solutions how to increase students' motivation to acquire these subjects. Actually, our government has just made a decision to introduce a compulsory centralized examination in physics or chemistry for the 12th form students in Latvia starting from the academic year 2015/2016, which will hopefully have a positive impact on students' motivation to study them. The Latvian Chamber of Trade and Commerce has appreciated this decision: "*Without studying physics and chemistry, it is impossible to get a job in many producing branches of national economy*" [9].

The theoretical and methodological basis of the present study is constituted by the theories of social psychology that notions are the psychic reflection of real entities existing in the objective world in conscious and verbalized models or images. According to J. P. Leyens and B. Dardenne [10], there are three kinds of reasons why cognition and the notions resulting from it are to be considered as the category of social psychology. They are as follows:

1. They have social roots; they can develop and improve as a result of social interaction;
2. They are made public in the social environment among its members;
3. Notions can develop on social entities existing in the objective world.

The key function of notions is the awareness of the information obtained in the process of cognition, its verbalization and generalization in particular images or models. According to O. Johnson [11] notions are dynamic.

A notion is an image of previously perceived objects, phenomena, particular situations and events preserved in memory. It results from processing and generalizing previous perceptions. Unlike perception, the reflection of objects in notions has a more generalized character. Notions comprise the characteristic features of objects and phenomena. Thus, the notions of senior secondary school students on their future professions are formed based on their experience and generalizations. To imagine means to transform the previous notions about a familiar environment or events in a new combination. As a result of imagination, along with the known world, there appears a new subjective self-created and imagined world in individual's mind. Therefore, students live as if in two realities – the internal and the external ones, both of which affect their lives. The reflection of the objective world is known to take place at two interconnected levels. The first level refers to feelings, perception, notions. At this level, the subject of reflection and its result are images of the surrounding world. The notion based on the perception of one particular object will be unique since it reflects specific features characteristic of the respective object. The present study is focused on students' general views since they reflect qualities pertaining to many objects in the particular group. At the second level, the world is depicted indirectly and generally, and this is done by thinking. The subject and the result of this process refer to concepts, judgments and conclusions [12].

The article contains the summary of the results and conclusions obtained in the international comparative study ROSE [13], which demonstrate the views of 15-year-old Latvian students on their future profession [14-17], as well as previously unpublished results obtained in the ROSE re-run in 2007/2008 and 2010/201. In the additional study conducted in 2010 – 2012, the same questions were asked to 12th form students.

The participants of the study were the 9th and 12th form students from various Latvian schools (Table 1).

Table 1

Characteristics of the respondents

Form	**Number of the respondents**					
	2002-2003		2007-2008		2010-2012	
	girls	boys	girls	boys	girls	boys
Form 9	623	432	383	358	131	133
Form 12	-	-	-	-	250	196
Total	623	432	383	358	381	329

In the study conducted in 2010-2012, there was used the project ROSE questionnaire, where apart from several sections devoted to students' attitude to science and technology a section "My future profession" was inserted.

In the study questionnaire, there was a 4-category Likert scale used, each of the categories represented by numbers from 1 (*not important*) to 4 (*very important*) respectively. This made it possible to obtain the so-called mean value M, which can be in the range of $1 \leq M \leq 4$. At the value $M > 2.5$, it can be concluded that the respective group of the respondents consider the particular indicator (criterion, view, etc.) as *very important* or *agree* contrary to those students who rate the particular indicator as $M \leq 2.5$. Besides, the value $M = 2.5$ can theoretically be taken as a neutral value, and, using mean values obtained in this way, it is possible to compare these quantities according to *t*-criterion, which makes it possible to draw conclusions about the statistical significance of the observed mean values.

In order to characterise the difference of mean values from the neutral value ($M = 2.5$), according to the methodology [17] there was also *Cohen d* index calculated, which in this case is $d = (M_i - 2.5)/SD_i$, where M_i = *i*-its changeable mean value, 2.5 – neutral value, SD_i standard deviation. According to this approach, it can be inferred that:

- if *i*-its changeable mean value is $2.3 \leq M_i \leq 2.7$, the result has to be considered as neutral, i.e., it is not possible to talk about a significant deviation in the interest of the respondents' group to one side or the other (Cohen $d < 0.2$).
- if *i*-its changeable mean value M_i is 2.0-2.3 or 2.7-3.0, the result has to be considered as slightly different from the neutral evaluation, i.e., it is possible to talk about a little deviation in the interests of the respondents' group to one side or the other ($0.2 \leq$ Cohen $d < 0.5$).
- if *i*-its changeable mean value M_i is 1.7-2.0 or 3.0-3.3, the result has to be considered as significantly different from the neutral evaluation, i.e., it is possible to talk about a significant deviation in the interest of the respondents' group to one side or the other ($0.5 \leq$ Cohen $d < 0.8$).
- if *i*-its changeable mean value M_i is below 1.7 or above 3.3, the result has to be regarded as considerably different from the neutral evaluation, i.e., one has to talk about a pronounced deviation in the interest of the respondents' group from the neutral value to one side or the other ($0.8 \leq$ Cohen d).

The data of the questionnaires have been analysed with regard to each separate variable as well as variables in groups [18] or common factors.

Results and discussion

According to the analysis of the obtained results (mean values) (Fig. 1), the views of the 9th form students concerning their future profession generally have not changed in eight years, or the mean value tends to decrease (Fig. 1).

The biggest decrease in the mean value can be observed in the characterization of such future jobs as *To do something that involves travelling* ($\Delta M_i = 0.63$), *To become famous* ($\Delta M_i = 0.55$), *To spend a lot of time with friends* ($\Delta M_i = 0.31$) and *To work in a place where something new and exciting frequently happens* ($\Delta M_i = 0.30$). These examples show that the wishes of 9th form students with regard to their future profession have become more pragmatically oriented. On the other hand, the least change in the mean value can be observed in such characterizations as *To help other people* ($\Delta M_i = 0.01$), *To spend a lot of time with family* ($\Delta M_i = 0.01$) and *To use one's talents and abilities* ($\Delta M_i = 0.01$). As the mean values in these three characterizations have always been and remained above 3.0, it is obvious that these qualities (characterizations) are still highly rated by the 9th form students, i.e., they are stable values.

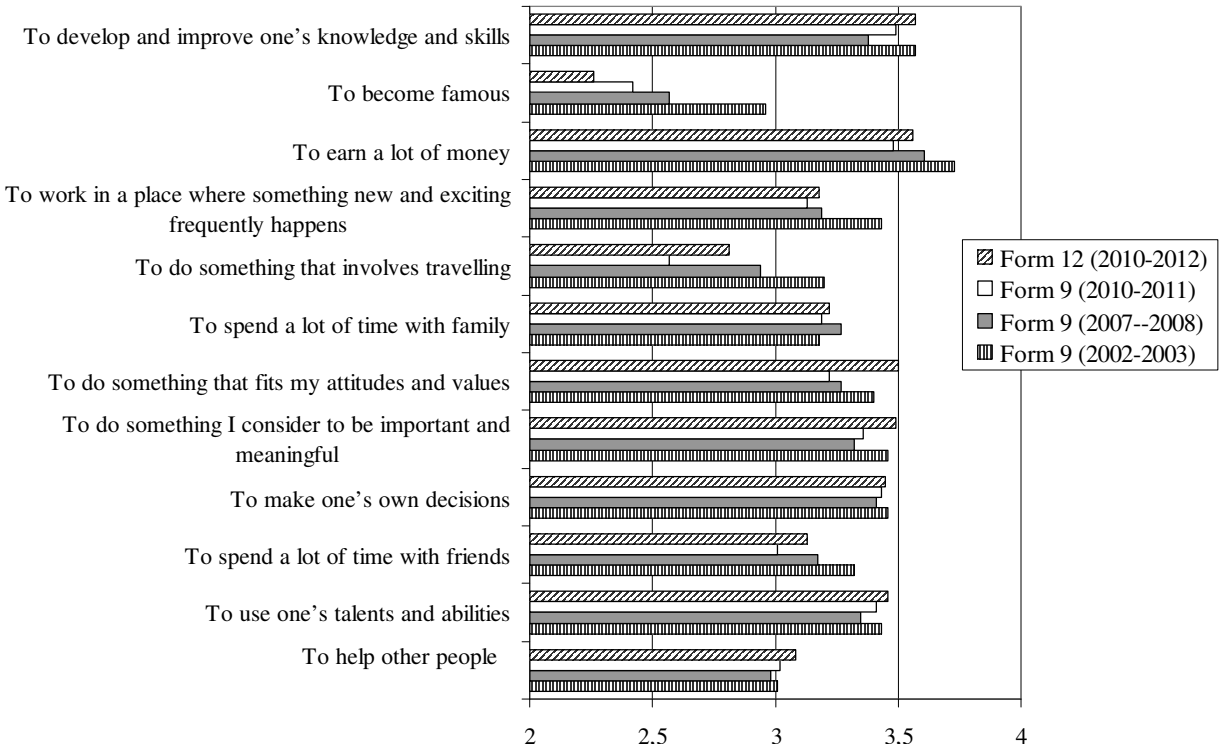

Fig. 1. **Respondents' views regarding their future profession**

The mean values remain relatively high (M_i>3.3) with regard to such characterizations of future professions as *To make one's own decisions* (ΔM_i = 0.03), *To develop and improve one's knowledge and skills* (ΔM_i = 0.07) and *To earn a lot of money* (ΔM_i = 0.02). By the way, earning money is not the most important criterion at all either according to the absolute quantity of the mean value (M = 3.73 and M = 3.48 respectively; ΔM_i = 0.25), or the acquired rank (R = 1 and R = 2 respectively). The division of the mean values of the responses of 12th form students according to their rank (Fig. 2).

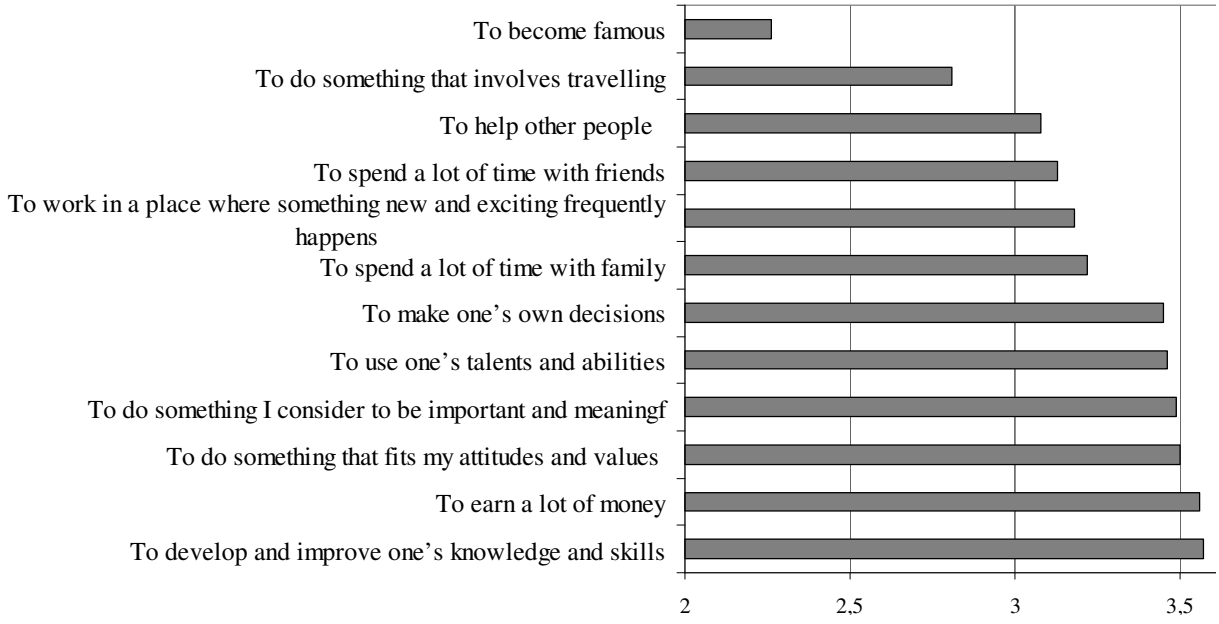

Fig. 2. **Division of the mean values of the responses of 12th form students according to their rank (R), 1≤ M≤ 4**

Table 2

Average values of common factors, 1≤M≤4

No	Common factors[1] and their criteria	Form 9			Form 12
		2002-2003	2007-2008	2010-2011	2010-2012
1	*2*	*3*	*4*	*5*	*6*
1	**Self-realization** Criteria: · To use one's talents and abilities · To make one's own decisions · To do something I consider to be important and meaningful · To do something that fits my attitudes and values · To develop and improve one's knowledge and abilities	3.46	3.35	3.38*	3.49 ^{a}
2	**Creativity** Criteria: · To work artistically and creatively in the field of art · To develop projects or invent something · To come up with new ideas	2.86	2.78	2.71**	2.82 ^{n}
3	**Leisure time** Criteria: · To spend a lot of time with friends · To spend a lot of time with family · To devote a lot of time to one's interests, hobbies and events	3.24	3.14	3.04***	3.12 ^{n}
4	**Concern for the environment** Criteria: · To work with people rather than things · To help other people · To work with animals · To work in the field of environmental protection	2.63	2.53	2.53*	2.55 ^{n}
5	**Fame** Criteria: · To earn a lot of money · To test other people · To become famous · To become a boss at work	3.15	2.99	2.83***	2.80 ^{n}
6	**Dynamism** Criteria: · To do something simple and easy to understand · To do something that involves travelling · To work in a place where something new and exciting frequently happens · To work in a team with a lot of people	3.09	2.97	2.78***	2.83 ^{n}
7	**Manual work** Criteria: · To build or repair objects with one's own hands · To work with equipment or tools	2.22	2.28	2.29 ^{n}	2.08 ^{a}

[1] Common factors have been taken from the work [18].

***- p<0.05; ** - p<0.01; *** - p<0,001; ^{n} – there is no statistically significant difference (Form 9, 2002-2011)

^{a} - p<0.05; ^{n} – there is no statistically significant difference (Forms 9 and 12, 2010-2012)

In the group of 12th form respondents, the most important criteria in the choice of their future profession are: *To develop and improve one's knowledge and abilities; To do something I consider to be important and meaningful; To do something that fits my attitudes and values; To earn a lot of money*, (Cohen *d* = 1.5-1.7), as well as *To make one's own decisions* and *To use one's talents and*

abilities (Cohen *d* = 1.3). It is interesting that all these criteria except for the 10th criterion (*To earn a lot of money*), form the common factor *Self-realization* according to the project ROSE. As Table 2 shows, it is the most important factor concerning the choice of a profession both for the 12th form and the 9th form students.

The second most important common factor in both student groups is *Leisure time,* followed by the common factors *Fame* (Form 9) and *Dynamism* (Form 12). It has to be noted that in the 9th form group the values of all common factors have decreased in the time period from 2002 to 2012 except the last one (*Manual work*), whose value has increased in the same time period.

With regard to their absolute value, most of the common factors marked in the group of 12th form respondents have a slightly higher evaluation than the same factors in the group of 9th form respondents in 2010. Only the common factors *Fame* and *Manual work* have a slightly lower absolute value.

The analysis of the changes in common factors in the group of 9th form respondents in the time period from 2002/2003 to 2010/2011 leads to the conclusion the changes in these common factors, except *Manual work*, are statistically significant; moreover, the mean values have decreased. This might have been caused by general depressive tendencies that could be observed in the Latvian society in the last years; nevertheless, this assumption requires further research, which is beyond the scope of the present study.

Comparing the views of the 9th and 12th form students about their future profession, it has to be noted that differences between both groups of respondents refer only to such common factors as *Self-realization* and *Manual work*; in both groups p=0.008 at $\alpha = 0.95$. Thus, it can be asserted that generally there are no essential differences in the views of the 9th form students and 12th form students regarding their future profession. Clearly, as far as particular details are concerned (particular variables), the differences may be significant.

All in all, it can be concluded that changes in students' views about their potential future career have a pragmatic tendency, and they are more pronounced in the group of 12th form students. Although the wish to earn more is an important criterion of the career choice, the 12th form students consider the development of their knowledge and abilities as the main criterion. The obtained data correspond to the results of the survey carried out by the State Employment Agency [4]. The proportion of the students choosing a profession that does not always guarantee the highest earnings, but give them other development opportunities and stability is increasing. Hopefully, the introduction of the compulsory education in physics/ chemistry will give goal-oriented young people more opportunities to continue education in the institutions of higher education and the prospects of finding a well-paid job, while the state will get qualified specialists in many branches of science and technology.

It was revealed in the study that individual's self-actualization and self-realization are becoming topical issues in students' views about their future profession. Ego-centred thinking and behaviour give rise to various contradictions; however, the personality – a student – competes with himself/herself in his/her development rather than with others. It would be normal that before finishing secondary school there would have developed a goal-oriented personality with a clear career choice, ability to make decisions and self-directed responsibility. Unfortunately, it has to be concluded that both among the 9th form students and those finishing secondary school (Form 12) there are quite a lot of respondents whose career choice is rather unclear. Certainly, it can be due to some factors not directly dependent on the student, e.g., the socio-economic situation of parents, the choice of study programmes offered by educational institutions, etc.

Conclusions

It was identified in the present study that secondary school students gave the highest rating to those criteria of career choice that can ensure individual's self-realization. Comparing the results obtained in 2010-2012 with those obtained in 2002-2003 and 2007-2008, there can be identified certain changes in the views of the respondents. The students have partly realized that successful individuals are those who can align their personal goals with the changes taking place in the society. Young people are becoming more pragmatic, and their understanding of future career opportunities is

focused on self-realization in the purposeful self-development process. This feature is more pronounced in the views of the 12th form students.

To ensure a successful career choice, it is very important to encourage young people to get to know themselves – their interests and abilities, to help them form an adequate idea of the economic situation in the country and to evaluate their job prospects accordingly.

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