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EVALUATION OF GENERAL EDUCATION SCHOOL STUDENTS' CAREER SELF-MANAGEMENT SKILLS AND THEIR FORMATION CONDITIONS IN THE CONTEXT OF COMPETITIVENESS

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Abstract. The sustainability of today's education depends on the extent to which education is diverse, flexible, mobile and changing and whether it corresponds to interests, needs and development aims of the evolving and changing modern society as well as the future society. One of the objectives of education is to promote the development of young people's competitiveness so that they are able of living and self-realization in the conditions of the changing environment (social environment economics, labour market, profession environment, etc.). An important component of the competitiveness structure is self-management, including career self-management in which the professional self-management takes a significant place. During schooling the career self-management of young people is connected with future intentions and aims, firstly, with choosing one's own career, incl. profession and thus also the future educational institution. The career support system established and offered by the school, namely, conditions in which the students' career self-management skills are formed largely defines how successful this choice has been. The aim of the study is to evaluate students' career self-management skills and the conditions of their formation. The study surveyed 162 students of general comprehensive schools. The findings show that in general students' career self-management skills are insufficiently developed in relation to the choice of their future profession. Diverse events organized in school and outside it, the correspondence of their themes to students' interests and needs as well as the cooperation of school and other educational institutions in the frame of supporting career development guidance influence positively the formation of career self-management skills.

Key words: career development guidance, career self-management skills, the choice of the profession, general comprehensive schools, students' competitiveness.
JEL code: I250

Introduction

Education for sustainable development, sustainability in education and sustainable education are reciprocally connected topicalities of the modern society because education has to promote and ensure sustainable development (Nounsheen A. et al., 2020; Vargas V. R. et.al., 2019), and at the same time the sustainability of education itself depends on the extent to which education is diverse, flexible, mobile and changing and whether it corresponds to interests, needs and development aims of the evolving and changing modern society as well as the future society (Aleixo A. N., Leal S., & Azeteiro U. M., 2018).

During modern globalization and the age of fourth industrial revolution the question about the advancement and competitiveness in the rapidly changing education and employment environment stands out as an intrinsic necessity. In order to reach one of the Sustainable Development aims defined by the United Nations (Transforming our world …, 2015) about qualitative education which leads to the acquisition of such knowledge, skills and competences that promote successful integration in the labour market and productive employability. Thus, one of the most important objectives of today's education is to help the young generation to accept changes, to get along with these continuous transformations as well as to self-actualize in the conditions of change. Nowadays, in the context of changes one of the most important tasks of the pedagogical process at schools is to promote the development of young people's competitiveness in the environment of formal and non-formal education both on the district and regional levels as well as national and international levels (Dementjeva O., 2012; Katane I. & Kalnina I., 2010). One of the components of the individual's competitiveness in the view of the new paradigm is self-management, including career

self-management which is a lifelong process. A competitive personality as a result of the career self-management, incl. professional self-management, owing to the acquired knowledge, skills, competences and experience is able to ensure one's own self-development and thus also demand and employability in the changing social, economic, labour market, field/profession environment.

Based on the synergetic approach, the idea that the career development, incl. professional development, is a non-linear development process in which there can be peaks of achievements and success as well as failures in professional performance becomes more topical. Career self-management skills and competences help the person to overcome the career failures and find motivation in oneself and internal resources for a new development stage ensuring the advancement of the career (Katane I. & Katans E., 2016).

The aim of the study: to evaluate students' career self-management skills and conditions of their formation.

The theoretical basis of empirical studies: literature review

Several scientific publications of the recent years establish the importance of career self-management in a person's life (Coetzee M., 2019; Krouwell S., van Luijn A., & Zweekhorst M., 2019; Lent R.W. et al., 2019; Lopez M.C., Gozalez-Lopez M.J., & Rodríguez-Ariza L., 2019; Paradnike K., Endriulaitiene A., & Bandzevičiene L., 2016; Secundo G. et al., 2019; Tims M. & Akkermans J., 2020). It is important for the individual in the career self-management process to be aware of his knowledge, skills, competences, abilities, experience to form the cooperation network and relations that can help him to attain the desired outcomes, to explore and understand oneself as well as in the interaction with the changing surrounding environment, incl. the labour environment, to see the diverse possibilities of the development and self-actualization (Arthur M.B., Inkson K., & Pringle J.K., 1999; Arthur M. B., Khapova S. N., & Wilderom C.P.M., 2005; Paradnike K., Endriulaitiene A., & Bandzeviciene L., 2016). Therefore already during schooling children and young people should accumulate knowledge, develop skills and along with experience develop also their competences that will be useful in the career self-management, and first of all, in choosing the future profession.

Studies of several authors (Ananina E.V., 2006; Aron I.S., 2015; Aron I.S., 2017; Besklubnaja A. B., 2013; Hirschi A. & Lage D., 2007; Imakaev V. et al., 2015; Katane I. et al., 2017; Klimov E. A., 2004; Koch M., Park S., & Zahra Sh.A., 2019; Sokolova D.V., 2015; Solomin I.L., 2006; Strods G., 2012; Wilhelm F. & Hirschi A., 2019) in which the authors of the current paper have singled out, summarized and systematized several career self-management skills: self-exploration and self-evaluation skills, the skill to explore and analyse the demands of the labour market, as well as to approximate personal interests and needs with one's knowledge, skills and competences in choosing the profession as well as with the demand of the concrete professions in the labour market can serve as the methodological basis for evaluating the career self-management skills; the skill to explore and sketch out the future intentions, to formulate aims, to draw future plans regarding education and/or professional activities; the skill to organise purposefully and guide the learning process, the skill to learn with motivation, independently and meaningfully; the skill to make decisions, incl. the skill to choose the profession and to take the responsibility for these decisions; the self-employment skills in the context of career self-management.

Until now several empirical studies have been performed in Latvia in the frame of which methods for evaluating career self-management skills have been developed and approbated experimentally (Lemesonoka I., 2017; Saulite M. & Andersone R., 2016). For instance, the following skills are singled

out in the group of skills necessary for employability (Saulite M. & Andersone R., 2016): 1) the skill to work in a team; 2) the skill to make decisions; 3) the planning and self-assessment skills; 4) the entrepreneurial skills; 5) the innovative technology skills.

The findings of researches performed by several authors (Tamaki M., Yamamoto K., & Managi Sh., 2018; Tomaszewski W., Perale F., & Xiang N., 2017) allow making the conclusion: the success of the students' career self-management, incl. the choice of the future profession and next educational institution, largely is defined by the career development guidance system established and developed in school, namely, conditions in which students' career self-management skills are formed. Self-exploration of students' interests and needs as well as self-assessment of oneself, incl. the career self-management skills is promoted in the frame of career development guidance (Aron I. S., 2017; Crisan C., Pavelea A., & Ghimbulut O., 2015; Katane I. et al., 2017; Wilhelm F. & Hirschi A., 2019;). The experience proves that many schools ensure a range of diverse activities to promote students' career self-management skills in the frame of career development guidance which has great importance.

Methodology

The empirical study is based on students' survey which was performed in 2019. It was a *case study* often used in educational sciences. This research took place in 7 comprehensive education schools of Aluksne district (Latvia).

In total, 162 students of Grade 7 - 9 from Latvia's general comprehensive schools, including urban and rural schools, participated in the survey. Group A includes 99 (61 %) students (49 boys and 50 girls), the distribution of respondents by grades: Grade 7 – 54, Grade 8 – 20, Grade 9 – 25 students. Group B comprises 63 (39 %) students (23 boys and 40 girls) with the following distribution of respondents: Grade 7– 25, Grade 8– 18, Grade 9 – 20 students. The sample comprises two groups of respondents – Group A and Group B. Group A includes students who participated in diverse events at school and outside it (class lessons with the career consultant; sessions of the mobile demonstration laboratories "TehnoBuss"; visits to the regional museum learning about the historian's work; meetings with businesspeople getting acquainted with entrepreneurship in the countryside; involving students in experiments testing the materials of the construction company; meetings and master cases with experts on art, etc.), the aim of which was the promotion of the career management skills of Grade 7 – 9 students. These students participated in different career guidance events at school and outside it. Group B students did not participate in these events.

The aim of the research was to evaluate students' career self-management skills and conditions of their formation. *The tasks of the research:* 1) to obtain students' self-management skills evaluation data using survey; 2) to compare the self-assessment data between both groups obtained during the experiment to determine the impact of school career development guidance measures on student self-esteem; 3) to perform data processing to obtain conclusive statistics.

The methodology of evaluating the career self-management skills developed and experimentally approbated by I. Lemeshonoka (Lemesonoka I., 2017) served as a basis when developing authors' questionnaire. Five groups of questions that describe students of the respective age group – Grade 7-9, were developed according to the career self-management skills included in the study (Table 1).

The questionnaire comprised 31 closed questions the answers to which were coded on 4-point scale (1-strongly disagree, 4-strongly agree). The Cronbach's alpha 0.77 describes the internal coherence of questions. Students filled in the questionnaires electronically.

Table 1

Career Self-Management Skills and their Indicators

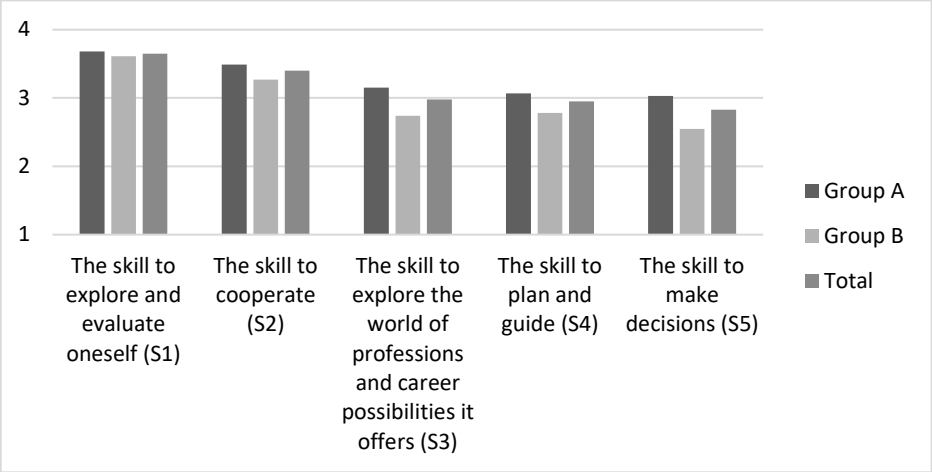
Career Self-Management Skills	Indicators
The skill to explore and evaluate oneself (S1)	• The student is aware of his possibilities and is able to relate realistically his interests. • The student is able to define the most important conditions that affect his attitude to learning. • The student can do a presentation and present oneself. • The student reacts to changes adjusting to new circumstances. • The student is able to summarise, maintain and apply his personal information.
The skill to cooperate (S2)	• The student is able to cooperate with classmates. • The student is able to cooperate with school mates. • The student is able to cooperate with school staff.
The skill to explore the world of professions and career possibilities it offers (S3)	• The student is able to obtain information about the local labour market. • The student knows that his personal health conditions could be an obstacle in choosing different professions. • The student is able to apply knowledge about the employment world. • The student is able to formulate his education possibilities after acquiring basic education.
The skill to plan and guide (S4)	• The student is able to evaluate factors related to finances. • The student is able to plan in real his actions. • The student is able to find adequate sources of information about the career possibilities. • The student overcomes stereotypes in forming the career.
The skill to make decisions (S5)	• The student uses the knowledge about himself to make decisions. • The student is able to express his personal opinion. • The student is able to listen to others' opinions and find a compromise. • The student performs research on the level of basic skills. • The student is able to express himself creatively.

Source: The questionnaire developed by the authors based on the research methodology by I. Lemeshonoka (Lemesonoka I., 2017)

The SPSS programme was used for data processing. Using the one sample Kolmogorov-Smirnov test, it was found out that data did not correspond to the normal distribution therefore further in the study the authors used non-parametric data analysis methods. The Mann-Whitney U test was used to compare differences between two independent groups.

Research results and discussion

Survey data were summed according to indicators obtaining the mean values of respondents' answers for each skill which were then used for evaluating students' career self-management skills. As seen in Figure 1, all skills of Group A are higher in comparison with Group B. The Mann-Whitney U test showed that there were significant differences between groups in the self-evaluation of the four skills: U=2222, p=0.005 (S2); U=1926, p<0.001 (S3); U=2154, p=0.003 (S4); U=1485, p<0.001 (S5).

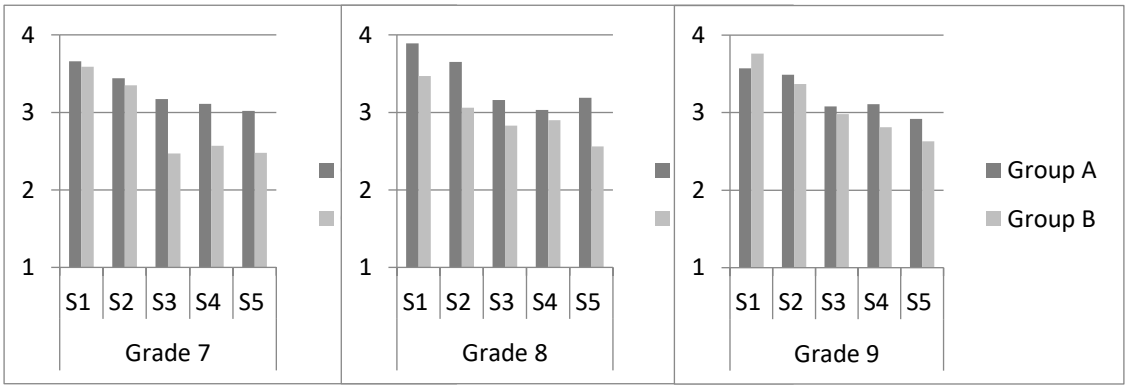


Source: authors' survey

Fig. 1. **Mean values of evaluations of Group A and Group B students' career self-management**

Thus, Group A respondents, judging by mean indicators, are able to cooperate better with school mates and school staff, to obtain information about the local labour market; they are able to evaluate better factors related to finances and are able to plan their actions and make decisions. The findings of the study allow concluding that the first *skill to explore and evaluate oneself* (S1) *develops in a longer period of time therefore students have not improved it in the frame of the study; the respondents' self-evaluation in relation to self-exploration has risen in both the groups therefore no differences have been established*.

Comparing students' skills per grades, it is evident that differences in skill levels are bigger between A and B groups in Grades 7 and 8 than between these groups in Grade 9 (Figure 2).



Source: authors' survey

Fig. 2. **Comparison of students' career self-management skills per grades**

The Mann-Whitney U test shows that the differences between Group A and Group B of Grades 7 and 8 are statistically significant (Table 2).

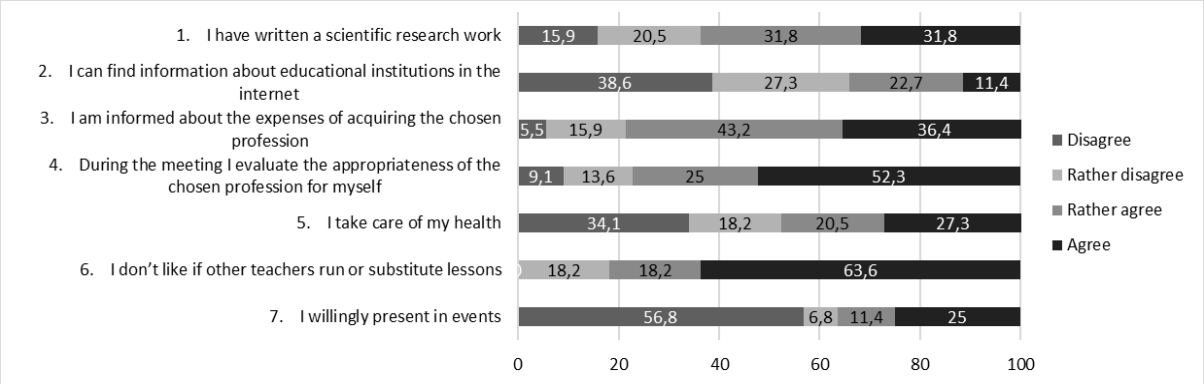
Table 2

Comparison of Group A and Group B respondents' skills: Results of Mann-Whitney U test

Grades	Values	S1	S2	S3	S4	S5
Grade 7	Mann-Whitney U p-value	594.000 0.388	561.500 0.220	269.500 <0.001*	290.000 <0.001*	319.500 <0.001*
Grade 8	Mann-Whitney U p-value	73.000 0.008*	74.000 0.008*	108.000 0.131	126.500 0.375	48.000 <0.001*
Grade 9	Mann-Whitney U p-value	175.000 0.121	191.500 0.240	215.500 0.559	177.500 0.136	157.000 0.048

**** - statistically significant differences***
Source: authors' survey

The majority of Grade 9 students only with difficulties can adjust to new circumstances (Item 6), la large part of students lack the necessary planning and self-management skills – they can hardly find information about educational institutions in the internet (Item 2), they have not been interested in finding out the expenses related to acquiring the chosen profession (Item 3). *Results of the evaluation of the above mentioned career self-management skills allow judging about the insufficient introduction into the self-managed learning process and the acquisition of innovative technologies, besides the application of the above mentioned skills in life activity is not directed towards the student's individual development aim* (Figure 3).



Source: authors' survey

Fig. 3. **Distribution of Grade9 students' responses (%):some examples to illustrate the insufficient skills**

The readiness of Grade 9 students to choosing the future profession is an important issue. Mean values of answers to this question of Group A students in Grade 9 (M=2.50, SD=1.25) do not differ significantly from Group B answers (M=2.75, SD=1.07), therefore the analysis was performed for all Grade 9 students together. The distribution of answers on whether a student has already chosen the future profession shows that only 30 % of students have already made their choice, 27 % of students are not yet sure about their choice and there are 18 % of students who have different versions of professions in mind but have not yet chosen it. The disturbing fact is that a quarter (25 %) of the surveyed Grade 9 students have not yet thought about the choice of the profession although 60 % of them participated in the events promoting the development of career self-management skills. *These data prove that in the context of the modern new competitiveness paradigm students are only partly aware of the fact that only people who are able to attune their personal aims that are directed to self-development and self-actualization, including the choice of the future profession, the development of the career self-management skills, to the transformations taking place in the society are successful*.

The evaluation of the obtained results allows concluding that in general Group A has higher career self-management skills than Group B. If students are compared by grades then one has to conclude that the carried out events have little impact on Grade 9 students. Thus, the events have been more valuable for Grades 7 and 8, encouraging students to start thinking about the future career in good time. *These data will be specified in further research*.

Conclusions

1) There are differences between self-evaluations of four career skills between Group A and Group B students that proves the impact of career guidance events on the self-evaluations of the career self-management skills of Group A students, except the skill to explore and evaluate oneself that

develops in a longer period of time therefore no differences have been stated in the frame of evaluating these differences between groups A and B.

2) The diverse events organized at school and outside it, the correspondence of their themes to students' interests and needs as well as the cooperation between school and other educational institutions in the frame of supporting the career development guidance influence positively the formation of students' self-management skills, therefore it is important to ensure a diverse support system of the career development guidance.
3) Without the support on the part of professional pedagogical staff and introduction into self-guided learning process students find it difficult to make rational decisions independently in the situations of choosing the career because they have not yet developed sufficient career self-management skills, including self-exploration and self-evaluation skills. Grade 7 – 9 students, students of the second stage of basic education, are not yet able to fully orient themselves in the process of social economic transformations, to evaluate the opportunities offered by the environment, and to define self-development aims in the everyday learning experience.

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