Očekivanja studenata od kurseva visokoškolskih centara za razvoj karijere - slučaj Fakulteta za inženjerski menadžment

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Apstrakt: Visokoškolski centri za razvoj karijere postaju sve važniji element organizacije visokoškolskih ustanova širom sveta, a Republika Srbija ne predstavlja izuzetak. U Srbiji je, međutim, zabeležen nedostatak aktivnosti studenata u razvoju veština za uključivanje u tržište rada, kao i veština potrebnih na tržištu rada na različitim poslovima (tzv. prenosive veštine - *transferrable skills*). Razvijanje tih veština kod studenata postaje važan zadatak visokoškolskih centara za razvoj karijere. U procesu razvoja prakse karijernog vođenja i savetovanja na visokoškolskim ustanovama u Srbiji, na Fakultetu za inženjerski menadžment je uveden obavezni kurs *Upravljanje karijerom* sa ciljem da studenti razvijaju veštine potrebne za ulazak na tržište rada. U prvoj godini sprovođenja kursa, studenti su pre i posle pohađanja ovog kursa imali prilike da u vidu ankete iskažu svoja očekivanja od Centra za razvoj karijere. Očekivanja studenata od Centra su se promenila posle pohađanja kursa i postali su spremniji za aktivniju ulogu u upravljanju sopstvenom karijerom. Stoga je neophodno da visokoškolske ustanove u Srbiji uvedu obavezne programe čiji je cilj razvijanje karijere svih studenata.

Ključne reči: Karijera, razvoj karijere, visokoškolski centri za razvoj karijere, studenti.

The students' expectations from higher education career development centres' courses – Case of the School of engineering management

Abstract: Higher education career development centres are becoming all the more important elements of higher education institutions around the world and the Republic of Serbia. In Serbia, researchers have noticed the lack of activity among the students regarding development of skills needed for the job market with the emphasis on so called *transferrable skills*, needed on any job or a career. As a contribution to the career counselling practice in higher education institutions in Serbia, School of Engineering Management introduced obligatory course for the students - Career Management - in order to assist the students to develop skills needed for the entrance to the job market. In the first year of the course implementation, the students had the opportunity to express their expectations from the Centre through a survey before and after attending the course. The students' expectations from the Centre have changed after attending the course and the students have become ready for more proactive role in managing their own career. The students also started to understand better the importance of acquiring transferable skills for strengthening their own employability. It is necessary for higher education institutions in Serbia to introduce compulsory career development programs for all students.

Key Words: Career, career development, higher education career development centres, the students.

1. Introduction

Higher education centers for career development, based on the theory of career development and the theory and practice of career guidance and counseling, have become an increasingly important element of higher education institutions in the most developed countries of the world since the end of the 20th century. Career counselors provide the students with assistance in acquiring the skills needed to effectively plan careers and make career decisions. They encourage students to understand how career choices make a difference in life and help create realistic job and career expectations (Greenhouse et al.,

2010: 64-77). Niles and Harris-Baulsby have pointed out that the most important tasks of career counselors working with the students include assisting students in learning how to develop a right image of their own interests, values, motivation, knowledge, skills, and abilities; how to understand existing professions; how to improve, maintain, and refine the knowledge and skills required for a particular profession; how to participate in lifelong learning programs and how to effectively seek employment (Niles et al., 2009: 11), which is embedded in the programs of many higher education institutions (Chin, et al., 2018).

In the United States and the United Kingdom in the early 21st century, almost all higher education institutions through career development centers have provided career guidance and counseling services for the students (Niles et al., 2009; Neary, et al., 2015). The impact of the economic crisis since 2008 has led the higher education institutions in the US and UK to conclude that career guidance and counseling programs must include the students from the first year of study. Centers for career development in the 21st century are becoming a standard in higher education institutions in other developed countries in the world as well. The main characteristics of the finest higher education career centers are: providing a variety of programs, engaging the first year students, assisting the students in choosing a major, preparing students to seek employment, and acquiring the competencies needed to better understand and face the challenges of the job market (Amundson et al., 2009; Dey and Cruzvergara, 2014). The same principles should be followed by higher education centers for career development in Serbia.

The first University Career Development Centers in Serbia have been established in 2006 and 2007 at state and private universities and colleges. Know-how has been based on the experience of advisers in the fields of career development, education, and human resource management; on foreign literature on career development and career counseling; as well as on training programs provided by USAID projects as well as EU Tempus projects (Tempus, 2012). The still current Career Guidance and Counseling Strategy in the Republic of Serbia, adopted by the Government of the Republic of Serbia in 2010 (therefore, after the establishment of the first higher education centers for career development), has emphasized that career guidance and counseling programs for young people aged 19 to 30 should include informing, advising, guiding, and making career decisions in order to ensure that young people make realistic career choices, and that they should focus on several areas: the individual's personal development (goal setting, activities to gain further knowledge and skills, quality identification of career opportunities); exploring learning and employment opportunities (gathering and selecting information, evaluating potential career paths, etc.); planning and managing one's own career (such as assuming one's own responsibility) (Government of the Republic of Serbia, 2010).

2. The case of the School of Engineering Management

Since its establishment, the School of Engineering Management has, on the basis of the contemporary theory and practice of career guidance and counseling of the students and the Strategy of career guidance and counseling in the Republic of Serbia (2010) adopted by the Government of the Republic of Serbia, identified the students' career development as one of the key components of the mission and the vision of the School. Thus, establishing a higher education centre for career development through career guidance and counseling programs has been one of the foundations of the School. The core objective of this centre has been based on the premise of enabling the students to develop their potential for successful inclusion in the contemporary labour market. Figler (2007: 18) has emphasized that the first and key goal of a career counselor is to assist the client in taking responsibility for his or her own career development and for making personal career decisions, which is one of the cornerstones of building this centre.

In the development of the Career Development Centre of the School of Engineering Management, the focus has been on the development of the so-called transferable skills, or those skills that are required for successful study and work in any position in the future. According to Schutt (2008: 6) these include: teamwork, research and data analysis, problem solving, reporting, leadership, change management, innovations, etc.). Many studies in the Republic of Serbia have found that young people lack the employability skills - a combination of skills, attitudes and behaviors required to effectively seek work and effectively do their jobs, regardless of occupation, but also lacking independent activity in acquiring the skills needed to enter the labour market (Citizens' Initiatives, 2010: 18; Arandarenko et al., 2012).

The team of the Career Development Centre have concluded during the development of the program (2010-2012) that it is necessary to include in the curriculum a compulsory program for the students of the first year, which targets timely development of the career of the students like the programs introduced

at various higher education institutions at various periods (Lucy, 2017). Thus, in 2012, a 15-week (one semester) career management course has been created. The course program has consisted of two parts:

- The first part focuses on the academic development of students (writing essays, scientific papers, research methodology, referencing);
- The second part is intended for the students' professional development (personal assessment, goal setting, drafting of CV, drafting of motivation letters, behaviour at job interviews, etc.).

The ultimate objective has been to assist the students in acquiring these skills in order to prepare for entry into the labour market, rather than providing them with ready-made solutions.

3. Research

The Scope of Study and Data Collection

Like in the previous years, in the school year 2018/19, the Career Management course has been given to the first year students. After the introductory presentation, like in previous years, the students have had the opportunity to give their opinions on the program presented and to contribute their views on the role of the Career Development Centre. Most students involved in the discussion like the previous generations expressed deep-seated fears about their employability and developments in the job market. The students' expectations that the School and the Career Development Centre will "give" them adequate knowledge, skills and abilities needed in the labour market have been expressed very strongly, but without understanding of the importance of active participation of the individual student in acquiring skills that would make them more competitive in the labour market. This discussion has been the basis of the surveying the students' expressions of their expectations of Career development centres at the beginning of the Career Management course and after the Career Management course in order to analyze whether their expectations have changed upon obtaining and adopting many useful career development information and trainings.

At the beginning (October 2018) and at the end (February 2019) of the course, the students have been given a questionnaire within which they could express their expectations of the Career Development Centres. The same number of the students like in the previous, similar, study (Ilić-Kosanović, 2018) 69 students (N = 69) have been surveyed, in conditions of complete anonymity (the questionnaires have been placed in the reading room). In addition to demographic questions, the questionnaire have consisted of six close-ended questions, or statements, with have offered answers in the form of a five-point Likert scale (1 – I disagree completely, 2 – I somewhat disagree, 3 – I am neutral, 4 – I somewhat agree, 5 – I completely agree).

As a basis for the research, two groups of hypotheses have been formed, which, generally, determined the degree of student expectations from the career development centres regarding the assistance of the Development Centres in finding job opportunities and in developing additional knowledge and skills needed in the labor market. These hypotheses have formally been formulated as follows:

Group A hypotheses relate to the students' expectations that the Career Development Centre will find them a job, internship, or a volunteering opportunity:

- HA1: The students expect the Career Development Centre to find them a job.
- HA2: The students expect the Career Development Centre to find them an internship.
- HA3: The students expect the Career Development Centre to find them a chance to volunteer.

Group B hypotheses relate to the students' expectations that the Career Development Centre will assist them in developing additional knowledge and skills:

- HB1: The students expect the Career Development Centre to help them develop additional knowledge and skills needed in the job market.
- HB2: The students expect the Career Development Centre to teach them the skills they need to find a job.
- HB3: The students expect the Career Development Centre to teach them how to write a CV.

Based on the hypotheses, research questions have been formulated as follows:

RQA1	I expect Career Development Centre to find me a job.
RQA2	I expect Career Development Centre to find me an internship.
RQA3	I expect Career Development Centre to find me a chance to volunteer.
RQB1	I expect Career Development Centre to help me develop additional knowledge and skills needed in the job market.
RQB2	I expect Career Development Centre to teach me the skills they need to find a job.
RQB3	I expect Career Development Centre to teach me how to write a CV.

Methods

This paper presents the results obtained by determining the degree and manner of correlation (individual) of individual respondents' answers, with the so-called Pearson's Product Moment Correlation Coefficient. For the formal testing of all the above hypotheses, *Student's t test* of equality of expectations of the surveyed students has been used before and after attending the career management course, which has determined the degree of significance of differences of their answers before and after attending the course. By calculating the differences of the observed means, the way in which the structure of their responses itself has been changed, thereby determining the validity of the hypotheses formulated above. Statistical data processing has been performed within the relevant modules of the SPSS (Statistical Program for Social Sciences) package.

Results

Table 1 shows the basic statistical indicators that relate to the average values of the students' expectations that the Career Development Center will find them a job. Before attending the Career Management course, the students' expectations have been expressed to a considerable extent (the average value of their answers has been as high as 4.13), and then dropped to only 2.59. Thus, there is a pronounced tendency of decreasing this type of the students' expectations, which is statistically confirmed. Specifically, the relatively high realized value of the test statistic $t = 8,616$ (with the significance level $p = 0$), confirms the conclusion that there is a statistically significant difference, but also a decrease in student expectations before and after attending the Career Management course. Finally, the negative value of *Pearson's simple linear correlation coefficient* ($r = -0.126$) indicates that there is a negative but very weak correlation between the responses of the surveyed students before and after attending the course. In this way, hypothesis A1 is formally confirmed.

Table 1. *Student's t test* of equality of means of the students' expectations for the Career Development Center to find them a job

Survey	Mean	Std. Deviation	Std. Error Mean	N	Mean Diff.	t	p	r	95% Confidence Interval of the Difference	
									Lower	Upper
T1	4.13	0.922	0.111	69	1.54	8.616	0.000	-0.126	1.180	1.892
T2	2.59	1.048	0.126	69						

Table 2 presents basic comparative statistical parameters that relate to the students' expectations that the Career Development Centre will find them a professional internship. The values obtained, and therefore the corresponding conclusions, are very similar to those in the previous case. The students' expectations before attending the Career Management course have been very pronounced (average response value has been 4.16), only to drop to 3.20 after attending the course. The tendency to decrease this type of expectations, although somewhat less pronounced than in the previous case, is also statistically significant here, and it is formally confirmed by the *Student's t test*. The (again) relatively high value of the corresponding test statistic $t = 4.646$ has been obtained, with the same significance level $p = 0$. In this way, it is confirmed that there is a statistically significant difference, i.e. reducing this type of the students' expectations.

Table 2. *Student's t test* of equality of means of expectations of the students for the Career Development Centre to find them professional practice

Survey	Mean	Std. Deviation	Std. Error Mean	N	Mean Diff.	t	p	r	95% Confidence Interval of the Difference	
									Lower	Upper
T1	4.16	1.158	0.139	69	0.96	4.646	0.000	-0.127	0.546	1.367
T2	3.20	1.119	0.135	69						

Here, too, a negative, relatively low correlation of their responses is present, because the value of Pearson's simple linear correlation coefficient ($r = -0.127$) is almost identical to the previous one. Thus, hypothesis A2 is formally confirmed in this case as well.

Table 3 provides basic statistical indicators of the students' expectations that the Career Development Centre will find them an opportunity to volunteer. Here, the expectations of students before attending a career management course were slightly less pronounced than in the previous two cases (the average of their answers was 3.59), and after their attendance it would drop to 2.59. However, the tendency to decrease this type of expectation is also statistically significant here, as evidenced by the relatively high value of the corresponding test statistic $t = 4.422$ (the significance level is again $p = 0$). Thus, it has formally been confirmed that there has been a statistically significant difference as well as a decrease in students' expectations. Note that a negative but slightly more pronounced linear correlation of the students' responses is present (Pearson's simple linear correlation coefficient is $r = -0.308$). Therefore, in this case, we have confirmed hypothesis A3.

Table 3. *Student's t test* of equality of means of the students' expectations that the Career Development Centre will find them an opportunity to volunteer

Survey	Mean	Std. Deviation	Std. Error Mean	N	Mean Diff.	t	p	r	95% Confidence Interval of the Difference	
									Lower	Upper
T1	3.59	1.321	0.159	69	1.00	4.422	0.000	-0.308	0.549	1.451
T2	2.59	0.990	0.119	69						

Next, Table 4 presents basic statistical indicators of the students' expectations that the Career Development Centre will help them develop additional knowledge and skills needed in the job market. Unlike the previous ones, the expectations of students before attending the Career Management course (response average 4.07) have been only slightly higher than expectations after attending the course (average response value 3.87). This has also been confirmed by *Student's t test*. In this case, the corresponding value of the test statistic is $t = 1.178$ and is less than the critical value of 1.666 (with the significance level $p = 0.243 > 0.05$). So, with a risk level of 5%, we claim that there is no statistically significant difference (decrease) in the students' expectations. Finally, although there is also a negative correlation between the students' responses before and after attending the course, it is statistically almost insignificant ($r = -0.021$). Consequently, hypothesis B1 is not confirmed in this case.

Table 4. *Student's t test* of equality of means of the students' expectations for the Career Development Center to help them develop additional knowledge and skills needed in the job market

Survey	Mean	Std. Deviation	Std. Error Mean	N	Mean Diff.	t	p	r	95% Confidence Interval of the Difference	
									Lower	Upper
T1	4.07	1.129	0.136	69	0.20	1.178	0.243	-0.021	-0.141	0.547
T2	3.87	0.856	0.103	69						

Similar conclusions can be drawn in the case of the students' expectations that the Career Development Centre will teach them the skills they need to find a job. As can be seen in Table 5, here, too, the expectations of students before attending a career management course (response average 4.23) are slightly higher than expectations after attending the course (response average is 4.06). The realized value of *Student's test* statistics is $t = 1,136$, ie. it is again less than the critical value of 1.666 (with a significance level of $p = 0.260 > 0.05$). So, in this case, we also claim that there is no statistically significant difference (decrease) in the students' expectations that the Career Development Centre will teach them the skills they need to find a job. Finally, the negative correlation of the students' responses related to this expectation before and after attending the course is again statistically insignificant ($r = -0.018$). Thus, hypothesis B2 is not formally confirmed in this case either.

Table 5. *Student's t test* of equality of means of students' expectations that the Career Development Centre will teach them the skills they need to find a job

Survey	Mean	Std. Deviation	Std. Error Mean	N	Mean Diff.	t	p	r	95% Confidence Interval of the Difference	
									Lower	Upper
T1	4.23	1.002	0.121	69	0.17	1.136	0.260	-0.018	-0.32	0.479
T2	4.06	0.765	0.092	69						

Table 6 presents basic statistical indicators of the students' expectations that the Career Development Centre will teach them how to write a professional CV. In this case, the expectations of the students before attending a career management course (response average 4.32) are somewhat higher than expectations after attending the course (response average 3.99). The realized value of *Student's test* statistics here is $t = 2.145$, ie. slightly "exceeds" the critical test value of 1.666 (with a significance level of $p = 0.0360 < 0.05$), while the negative correlation of the students' responses to this expectation before and after attending the course is again statistically almost insignificant ($r = -0.012$). So, in this case, we argue that there is a statistically significant difference (decrease) in the students' expectations. This means that hypothesis B3 is formally confirmed.

Table 6. *Student's t test* of equality of means of students' expectations that the Career Development Centre will teach them to write a professional CV

Survey	Mean	Std. Deviation	Std. Error Mean	N	Mean Diff.	t	p	r	95% Confidence Interval of the Difference	
									Lower	Upper
T1	4.32	0.947	0.114	69	0.33	2.145	0.036	-0.012	0.023	0.643
T2	3.99	0.866	0.104	69						

4. Conclusion

As can be seen from the research, the students of the School of Engineering Management had, before attending the Career Management course, a clear expectation that the Career Development Centre would find them a job and professional internship without understanding their own, active, role in the process,

while those expectations were reduced at the end of the course. Similarly, the expectations have been expressed when it came to finding opportunities to volunteer and assisting in writing a CV. In contrast, the expectations regarding assistance in developing additional knowledge and skills needed in the labor market and in finding a job, have not been significantly differently expressed before and after attending the course.

The overall conclusion is that students' expectations of higher education centres for career development changed after attending the Career Management course and that students became more prepared for an active role in managing their own careers. Therefore, it is necessary to introduce programs that would involve working with the students from the first year of the study throughout all years of study to be ready to take on a "major role" in the process of managing their own careers. It is necessary to encourage higher education institutions in Serbia to introduce mandatory career management courses and other career guidance and counseling programs for career development centers for all students in order to facilitate their employability. It is necessary to create the conditions and means to involve students in such programs from the first year of study, which enables timely work with the students, which means acquiring knowledge, skills and abilities for successful integration into the labor market and career management. This implies a more active role of the state, when it comes to state higher education institutions and also the owners of private universities and colleges in order to obtain the necessary technical and other conditions and financial resources.

References

1. Amundson, Norman E; JoAnn Harris-Bowlsbey, Spencer G. Niles (2009). *Essential Elements of Career Counseling: Processes and Techniques* – 2nd ed. Upper Saddle River etc: Pearson Education, Inc.
2. Arandarenko, Mihail; Will Bartlett (2012). *Labour Market and Skills in the Western Balkans*. Belgrade: FREN.
3. Chin, M. Y., Blackburn Cohen, C. A., and Hora, M. T. (2018). The role of career services programs and sociocultural factors in student career development (WCER Working Paper No. 2018-8). Retrieved from University of Wisconsin–Madison, Wisconsin Center for Education Research website: <http://www.wcer.wisc.edu/publications/working-papers>
4. Dey, F. and Cruzvergara, C.Y. (2014), *Evolution of Career Services in Higher Education*. *New Directions for Student Services*, 2014: 5-18. doi:10.1002/ss.20105
5. Figler, Howard; Richard N. Bolles (2007). *The Career Counselor's Handbook* – 2nd ed. Berkley etc: Ten Speed Press.
6. Greenhaus, Jeffrey H; Gerard A. Callanan, Veronica, M. Godshalk (2010). *Career Management* – 4th ed. Thousand Oaks etc: Sage Publications, Inc.
7. Građanske inicijative (2010). *Izveštaj o zapošljavanju i migracijama mladih u Srbiji 2010*. Pregled politika i mera i preporuke za javno zagovaranje. Beograd: Građanske inicijative.
8. Ilić-Kosanović, T. (2018) Zapošljivost i kompetencije studenata inženjerskog menadžmenta - očekivanja studenata Fakulteta za inženjerski menadžment, *Serbian Journal of Engineering Management*, vol. 3, no. 1, pp. 8-14.
9. Lucy, C.A. (2017). Experiences and benefits of a career development course for undergraduate chemistry students. *Anal Bioanal Chem* 409, 5185–5190 (2017). <https://doi.org/10.1007/s00216-017-0480-x>
10. Niles, Spencer G; JoAnn Harris-Bowlsbey (2009). *Career Development Interventions in the 21st Century*. 3rd ed. Upper Saddle River etc: Pearson Education, Inc.
11. Neary, S., Dodd, V. and Hooley, T. (2015). *Understanding Career Management Skills: Findings From the First Phase of the CMS Leader Project*. Derby: International Centre for Guidance Studies, University of Derby.
12. Republika Srbija. Vlada Republike Srbije. (2010) *Strategija karijernog vođenja i savetovanja u Republici Srbiji*. Beograd. Službeni glasnik RS", br. 55/05, 71/05-ispravka, 101/07 i 65/08
13. Schutt, Donald A. Jr. (2008). *Career Development and the Role of Career Centers*, in: Schutt, Donald A. Jr. (ed.). *How to Plan & Develop A Career Center*. 2nd ed. New York: Ferguson Publishing.
14. Tempus. (2012). *University Centres for Career Development and Students Counseling – Career guidance at Universities in Serbia*. Tempus projekat Razvoj karijernog vođenja u cilju unapređenja visokog obrazovanja u Srbiji. Belgrade: Tempus. <http://www.careers.ac.rs/documents-download/viewcategory/4-publications.html>. Accessed 18. 12. 2017.