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FACTORS AFFECTING HIGHER EDUCATION INSTITUTION CHOICE: ATTITUDES OF SERBIAN HIGH SCHOOL STUDENTS

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Abstract

Students' higher education institution choice has been widely analyzed over the last four decades. As there is an evident gap in the research of this topic in Serbia, the aim of this study is to shed light on high school students' choice criteria as a part of the decisionmaking process with regard to enrolling a particular higher education institution. Aiming to identify the main choice criteria, this study also deals with various factors that influence that choice, such as socio-demographic and personal factors. The survey, conducted in various high schools in Belgrade, was the main method for collecting data. Descriptive statistics accompanied by statistical testing were used for data evaluation. As main choice criteria, two groups of criteria were recognized in this study: the criteria linked to employment opportunities and those related to the international position of the HEI. The main differences in the attitudes of the respondents were the result of the demographic and personal characteristics of high school students, seen as academic aspirations and academic achievements. Relevant managerial and policy implications were outlined in the study, from the perspective of higher education institutions in Serbia, which can adjust their marketing strategy to the characteristics of their target segment, and from the perspective of government institutions that develop the educational policy.

Key words: student choice, higher education, academic achievements, academic aspirations.

ФАКТОРИ ИЗБОРА ВИСОКОШКОЛСКЕ УСТАНОВЕ: СТАВОВИ СРЕДЊОШКОЛАЦА ИЗ СРБИЈЕ

Апстракт

Избор високошколске установе од стране средњошколаца је тема која је имала значајну истраживачку пажњу последњих неколико деценија. Како у Србији не постоје значајна истраживања ове теме, циљ рада је идентификација критеријума избора високошколске установе. У циљу разумевања процеса доношења одлуке, у раду је анализиран утицај различитих фактора који утичу на избор, као што су социо-економске и личне карактеристике испитаника. Истраживање је спроведено кроз упитник, у различитим средњим школама у Београду. Дескриптивна стати-

стичка анализа, као и одговарајући статистички тестови – коришћени су у циљу евалуације података. Две групе критеријума препознате су као најзначајније: критеријуми повезани са могућностима запослења и критеријуми повезани са међународном позицијом институције. Кључне разлике у ставовима испитаника су резултат демографских и личних карактеристика. У раду ће бити указано на импликације резултата за високошколске институције и државне органе, из угла развоја маркетиншке стратегије и из угла дефинисања релевантих политика, наведеним редоследом.

Кључне речи: студентски избор, високо образовање, академска постигнућа, академске тежње.

INTRODUCTION

Students' university choice has been a research topic since the 1980s, when the most important models and studies were published. They mainly addressed developed countries, but since then this topic has been widely investigated in different countries, as well as from different perspectives. The importance of this topic can be tracked from the perspective of the particular higher education institutions (HEIs), as they are interested in the behavior and attitudes of their potential customers, but also from the perspective of wide social interest, as it is important to understand the main considerations of high school students that can shape their decisions about further education. In general, the choice question has two elements: the question of choosing higher education compared to other alternatives (working or non-university alternatives), and the question of choosing a particular HEI. The central point in this paper is the question of the particular university/faculty choice. This is especially relevant for higher education institutions in Serbia where the competitive educational environment has significantly changed in the last two decades. On the one hand, with the competition increased, and the considerable increase in the number of HEIs, there is, at the same time, a negative population rate and the decrease in the number of high school students, mostly evident in recent years. That is why student choice and main criteria that shape that choice have become a contemporary issue, extremely important for the marketing strategy of HEIs.

The aim of this paper is to shed light on the Serbian students' choice of a higher education institution. Although the topic of high school student's choice is thoroughly examined worldwide, there is no considerable research of this topic in Serbia. The issue of undergraduate students' satisfaction was investigated in Serbia, in the context of the quality of service of HEIs (Milojević, Radosavljević, 2019; Jevremov, Lungulov & Dinić, 2016), but there is no evidence on high school students' attitudes. In order to fill this gap, this study deals with the main criteria that high school students use in the process of choosing the higher education institution to enroll. The paper is organized in six parts. After the introduction, a short review of the literature

on student choice models and criteria will be presented. The third part is dedicated to the methodology of the research, followed by the presentation of the main results. In the end, the discussion of the results and a conclusion with several implications and limitations of the research will be presented.

LITERATURE REVIEW: STUDENT CHOICE MODELS AND CRITERIA

The main student choice models developed in literature can be systematized into three groups: economic models, status attainment models and combined models (Vrontis, Thrassou & Melanthiou, 2007; Obermeit, 2012). In economic models, the decision is made by comparing value and costs of enrolling each institution. An individual high school student will select a particular HEI if they perceive higher benefits over choosing a different institution, compared to costs, in order to maximize the expected utility of the choice. Status attainment models describe the decision making as a process influenced by various behavioral and social factors, such as the students' academic performance or the social status of parents. The focus is on different factors that influence the students' aspirations, which is an integrated element in the status attainment process. Combined models put all factors together - the economic, behavioral, social, and other, raising the explanatory power of such models.

Different models can also be categorized as stage models or generalized models (Hossler, Braxton & Coopersmith, 1989). For example, Champan (1981) and Jackson (1982) proposed general models, aiming to identify main factors that influence student choice along with the main implications for the general institutional policy. Stage models describe student choice as a stage process that is different for different individuals (Champan, 1984; Litten, 1982; Hossler, Braxton & Coopersmith, 1989). That way those models have allowed an opportunity of targeting the market and creating different and more effective marketing strategies for different market segments.

In general, there are two main issues pertaining to students' HEI choice. The first describes the high school students' decision process, which can be assessed based on the customer decision process, described in the marketing literature. Customer decision process is a five-stage process, which starts with the need recognition, information search, alternatives evaluation, purchase and consumption (Kotler & Keller, pg. 172). Need recognition addressed resolving the first question of the students' choice, regarding the continuation of education after high school graduation. The next step is information search, conducted by consultation with various information sources, such as an institution's web site, mass media, social networks, personal contacts, visiting the institution, educational fairs, etc. Alternatives evaluation is the central part of this process, where we can

recognize different choice criteria high school students use, based on which they make the final purchase decision. In this case, the purchase decision is associated with enrolling a particular institution, after which the students start their studies, which represents the consumption phase. As the main criteria that influence the HEI choice, literature singles out: the reputation of an institution (Chapman, 1993; Donaldson & McNicholas, 2004; Briggs, 2006; Pampaloni, 2010), financial considerations such as tuition, available scholarships, etc. (Donaldson & McNicholas, 2004; Shanka, Quintal & Taylor, 2005; Pampaloni, 2010), career prospects (Kallio, 1995; Donaldson & McNicholas, 2004; Maringe 2006), the quality of programs, their structure, nature and diversity (Kallio, 1995; Soutar & Turner, 2002; Donaldson & McNicholas, 2004; Shanka, Quintal & Taylor, 2005). The list of criteria is very diversified, with no universal and generally accepted set of criteria. The majority of researchers adapted the list of criteria to the specifics of the local environment and national educational landscape. Regarding the main results, although there are some criteria recognized in the majority of the studies, there is a lot of variation in different countries. As HEI choice is a high involvement decision, shaped by various social, psychological and environmental influences, it is expected to have high heterogeneity in the behavior of students in different countries and different social contexts (Dunnett, Moorhouse, Walsh & Barry, 2012).

The second issue is associated with the main factors influencing student choice, such as the socio-demographic, behavioral, environmental, institutional, etc. Based on the three models (Jacksons, 1982; Champan, 1984; Litten, 1982) Vrontis et al. (2007) systematized the different factors identified in the relevant literature. They recognized three broad groups of determinants which influence student choice: 1) individual determinants, 2) environmental determinants, 3) institutional determinants. Each group consists of several subgroups. For example, individual determinants have two subgroups: the characteristics of students (race, socioeconomic status, parents' education, family background, parents' personalities, sex, religion) and the personal attributes of students (academic ability, academic performance, lifestyle/social context, personal values, self-image, class rank, educational aspiration, personality). This way they provided a synthesis of various factors that are recognized in the literature since 1970s.

In order to determine the university choice criteria of high school students from Serbia, and the main factors that affect that choice, the following research questions are set up:

RQ1: What are the main criteria high school students use to select a HEI?

RQ2: How different characteristics of high school students influence the choice of a HEI?

The influences of individual determinants on student choice will be tracked. This kind of analysis should provide useful guidelines for developing a university recruitment strategy.

METHODOLOGY

In order to identify the main university selection criteria and the most important factors that influence the high school students' choice of a HEI in Serbia, a survey was conducted. The questionnaire was distributed in 18 high schools in the area of Belgrade (11 grammar schools and 7 vocational schools). From every school, we chose a number of respondents based on the total number of enrolled students in the particular high school in relation to the number of enrolled students in their final high school year, who plan to enroll a HEI. There were 63% of students from grammar schools and 36% of students from vocational high schools. Students fulfilled the questionnaire in June, several days before the deadline for sending applications for HEIs. Descriptive statistics accompanied with statistical testing are used for data evaluation.

The list of 19 choice criteria was developed based on previous research, but it was adjusted to the specifics of the educational eco-system in Serbia. Participants were required to evaluate on a Likert scale from 1 to 5 (1 meant that the criteria were not considered important at all, while 5 meant it was extremely important to the student). In addition, several more issues regarding the characteristics of students were examined: academic achievements, academic aspirations of students and the demographic and socio-economic factors (sex, parents' education and employment status). Those determinants are the main independent variables that were tested using ANOVA or an independent sample test.

RESULTS

HEI choice criteria. All assessed choice criteria are presented in Table 1. Based on the descriptive statistics, we found that the most important determinant for choosing a particular university is employment rates after finishing studies. The next three criteria are: the reputation of the degree on the domestic market, international recognition of the degree and the expected earnings after graduation. All of those criteria are connected, directly or indirectly, with the employment status of students after graduation. There is one more criteria with an average mark higher than 3.5 (in the sixth place), which is connected to employment opportunities: possibilities of enrolling trainee programs during studies. There are three more criteria with above average marks: the reputation of the institution, the quality of communication and cooperation between professors and students, and the number and variations of modules that every institution offers.

Table 1. The results of HEI choice criteria

| Choice criteria | Mean | Std. |
|--|------|-----------|
| | | Deviation |
| Employment rates of graduate students | 4.24 | 1.05268 |
| Reputation of the degree in domestic market | 4.16 | 1.07952 |
| International recognition of the degree | 4.02 | 1.16402 |
| Expected earnings after finishing studies | 3.99 | 1.14863 |
| Opportunities for international mobility of students | 3.77 | 1.22378 |
| Possibilities for enrolling some trainee programs during studies | 3.71 | 1.16035 |
| Reputation of the institution | 3.70 | 1.13795 |
| Quality of communication and cooperation between professors | 3.55 | 1.15237 |
| and students | | |
| Number and variations of modules | 3.54 | 1.15544 |
| Social life at institution | 3.45 | 1.20336 |
| Difficulties of a particular programme | 3.33 | 1.26530 |
| Cooperation of the institution with specific industry | 3.31 | 1.27323 |
| Professors' reputation | 3.30 | 1.25849 |
| Modern equipment at the institution | 3.26 | 1.16524 |
| Difficulty of entrance exam | 3.16 | 1.31126 |
| Average number of years needed for completion | 3.14 | 1.28586 |
| Opportunities for participation in domestic and international | 3.12 | 1.32059 |
| competitions and projects | | |
| Number of applications and number of available places ratio | 3.08 | 1.31572 |
| Tuition fee | 3.04 | 1.32570 |

Among the criteria that are at the bottom of the list are those connected with the enrolment conditions that can constrain getting into a specific high education institution. These criteria are tuition fees, the number of students that would compete for enrolment and the difficulty of the entrance exam.

In order to have better understanding of the results, some differences between the attitudes of the respondents will be evaluated in the next part, based on students' socio-demographic characteristics, academic aspirations and achievements.

Demographic factors and HEI choice. High school students' gender, the parents' education and employment status were the main socio-demographic factors considered in the study.

Testing differences in attitudes of female (63,4% of the respondents) and male (36,6% of the respondents) respondents reveals that females expressed higher concerns regarding several criteria: the reputation of an institution, the number and variations of modules, possibilities for enrolling some trainee programs during studies, expected earnings after finishing studies, international mobility programs and the quality of communication and cooperation between professors and students.

Table 2. Differences between male and female students

| t | Sig | Mean value | | |
|--------|---|--|---|--|
| ι | Sig. | Male | Female | |
| -2.643 | 0.008 | 3.5648 | 3.7829 | |
| -0.130 | 0.896 | 3.0167 | 3.0292 | |
| 1.470 | 0.142 | 3.3367 | 3.2121 | |
| -1.437 | 0.151 | 3.0736 | 3.2108 | |
| -1.209 | 0.227 | 3.0067 | 3.1228 | |
| | | | | |
| -0.580 | 0.562 | 4.2162 | 4.2607 | |
| -1.164 | 0.245 | 3.0640 | 3.1732 | |
| -0.496 | 0.620 | 3.2967 | 3.3424 | |
| -1.585 | 0.113 | 4.0842 | 4.2081 | |
| -1.735 | 0.083 | 3.9281 | 4.0753 | |
| 0.350 | 0.727 | 3.3209 | 3.2888 | |
| -2.516 | 0.012 | 3.4060 | 3.6175 | |
| 0.662 | 0.508 | 3.4916 | 3.4339 | |
| -2.514 | 0.012 | 3.5743 | 3.7874 | |
| | | | | |
| -2.261 | 0.024 | 3.6455 | 3.8474 | |
| -2.708 | 0.007 | 3.8467 | 4.0723 | |
| -0.481 | 0.631 | 3.2809 | 3.3255 | |
| -2.793 | 0.005 | 3.4020 | 3.6350 | |
| | | | | |
| -1.395 | 0.163 | 3.0465 | 3.1799 | |
| | | | | |
| | -0.130 1.470 -1.437 -1.209 -0.580 -1.164 -0.496 -1.585 -1.735 0.350 -2.516 0.662 -2.514 -2.708 -0.481 -2.793 | -2.643 0.008 -0.130 0.896 1.470 0.142 -1.437 0.151 -1.209 0.227 -0.580 0.562 -1.164 0.245 -0.496 0.620 -1.585 0.113 -1.735 0.083 0.350 0.727 -2.516 0.012 0.662 0.508 -2.514 0.012 -2.261 0.024 -2.708 0.007 -0.481 0.631 -2.793 0.005 | t Sig. Male -2.643 0.008 3.5648 -0.130 0.896 3.0167 1.470 0.142 3.3367 -1.437 0.151 3.0736 -1.209 0.227 3.0067 -0.580 0.562 4.2162 -1.164 0.245 3.0640 -0.496 0.620 3.2967 -1.585 0.113 4.0842 -1.735 0.083 3.9281 0.350 0.727 3.3209 -2.516 0.012 3.4060 0.662 0.508 3.4916 -2.514 0.012 3.5743 -2.261 0.024 3.6455 -2.708 0.007 3.8467 -0.481 0.631 3.2809 -2.793 0.005 3.4020 | |

Regarding the employment status of parents, there are no statistically significant differences. The education of a parent (father) makes a difference in case of several criteria: tuition fee (F=8.195512, p=0.000) and the reputation of professors (F=4.845298, p=0.008). Based on mean value, the findings show that tuition fee is more important to high school students whose parent has a lower level of education, and the reputation of professors is assessed as more important by students whose parent is more educated.

Academic achievement and HEI choice. Academic achievement during high school is evaluated based on total student's scores during all four years of secondary education. Based on their total high school score, students are grouped into three clusters: students with "excellent" score (54.4% of students in the sample), student with "very good" score (31%) and in the last cluster are students with "good" and "fair" scores (14.6%). ANOVA reveals statistically significant differences between the clusters' assessments of choice criteria, regarding difficulties of entrance exams (F= 4.232, p=0.015), average number of years needed for the completion of studies (F=3.087, p=0.046) and the number of students who would apply and compete for enrolment (F=6.572; p=0.001). Those criteria can be seen

as indicators of difficulties to enroll and finish a study program. Students with lower high school score and academic results evaluated the criteria that are connected with difficulties of a program and entrance exam with higher average marks. Students from this cluster are more worried about the difficulty of an entrance exam, the number of students who would apply and compete for enrolment and about the average number of years needed for the completion of studies. This group of students also expressed more interest in the tuition fee, as in Serbian high education system, the state provides scholarships for a limited number of high school students with the best academic results. That is why students with lower academic performance evaluated the issue of tuition fee as more important (M (students with "excellent" score) = 2.8917; M (students with "very good" score) = 3.1165; M (students with "good" and "fair" scores) = 3.3276; F=5.926; p=0.003).

Additional statistically significant differences were found regarding the assessment of the following choice criteria: the reputation of an institution (F=6.459; p=0.002), the international recognition of the degree (F=4.028, p=0.018), the possibilities for international mobility of students (F=3.026, p=0.049) and the expected earnings after finishing studies (F=3.633, p=0.027). Students with the highest high school score evaluated those criteria with higher average marks than other groups of students. The results indicate that the high school students with high academic achievements (cluster of students with "excellent" high school score) expressed more interest in international learning opportunities that one HEI can provide.

Academic aspirations and HEI choice. Academic aspirations of high school students were considered based on the intended field of studies. All fields of studies mentioned in the survey are categorized in several groups: (1) social sciences and humanities (56.7% of respondents), (2) natural sciences and mathematics (5.5% of respondents), (3) medical sciences (6.5% of respondents), (4) engineering, computing and other technical studies (28.9% of respondents) and (5) arts (2.8% of respondents). Based on the intended field of studies, students uttered different choice criteria (Table 3). Students who intend to enroll institutions in the area of social sciences and humanities, evaluated the criteria associated with the difficulties of enrolling and finishing a particular study program with higher average marks. Regarding the difficulty of an entrance exam (F=7.959; p=0.000) and an average number of years needed for completion (F=3.490; p=0.008), there are statistically significant differences between the five groups of students.

Table 3. Differences in university choice criteria assessments based on the field of study

| | Field of study (Mean value) | | | | | | |
|---|-----------------------------------|---------|-----------------------|--|--------|-------|-------|
| Choice criteria | social science & humanities | medical | technical sciences | natural sciences and mathematics | art | F | Sig. |
| Reputation of the institution | 3.7741 | 3.7826 | 3.6881 | 3.6429 | 3.5000 | 0.537 | 0.708 |
| Tuition fee | 3.0824 | 2.6522 | 2.9442 | 3.2619 | 2.5500 | 2.276 | 0.060 |
| Modern equipment at the institution | 3.1958 | 3.2609 | 3.3721 | 3.2143 | 2.8500 | 1.443 | 0.218 |
| Difficulty of entrance exam | 3.2553 | 2.7391 | 3.1163 | 2.4048 | 2.2000 | 7.959 | 0.000 |
| Number of applications and number of available places ratio | 3.0751 | 2.9565 | 3.0794 | 3.0000 | 2.6316 | 0.611 | 0.655 |
| Employment rates of graduate students | 4.1825 | 4.1522 | 4.4791 | 4.1190 | 3.4500 | 6.306 | 0.000 |
| Average number of years needed for completion | 3.1714 | 2.7778 | 3.0841 | 3.0976 | 2.2000 | 3.490 | 0.008 |
| Difficulties of a particular programmes | 3.3411 | 3.1522 | 3.3134 | 3.0000 | 2.6500 | 2.174 | 0.070 |
| Reputation of the degree in domestic market | 4.1402 | 4.2826 | 4.2870 | 4.1951 | 3.2000 | 5.098 | 0.000 |
| International recognition of the degree | 3.9078 | 3.9778 | 4.2778 | 3.9756 | 3.8500 | 3.865 | 0.004 |
| Professors' reputation | 3.2759 | 3.2667 | 3.2870 | 3.0952 | 4.2500 | 3.187 | 0.013 |
| Number and variations of modules | 3.5012 | 3.3043 | 3.5654 | 3.6429 | 4.5500 | 4.655 | 0.001 |
| Social life at the institution | 3.5553 | 3.0652 | 3.4630 | 3.0488 | 3.2632 | 3.237 | 0.012 |
| Possibilities for enrolling some trainee program during studies | 3.5867 | 3.8913 | 3.9431 | 3.5476 | 4.1500 | 4.653 | 0.001 |
| Opportunities for international mobility of students | 3.7173 | 4.0000 | 3.9167 | 3.5000 | 3.5000 | 2.123 | 0.076 |
| Expected earnings after finishing studies | 3.9549 | 4.1333 | 4.1157 | 3.8810 | 2.9500 | 5.278 | 0.000 |
| Cooperation of the institution with specific industry | 3.3128 | 2.8261 | 3.4722 | 3.0000 | 2.7000 | 4.354 | 0.002 |
| Quality of communication and cooperation between professors and students | 3.5785 | 3.3556 | 3.5853 | 3.2857 | 4.0526 | 1.878 | 0.112 |
| Opportunities for participation in domestic and international competitions and projects | 3.1077 | 2.9348 | 3.1521 | 3.1667 | 3.9000 | 2.033 | 0.088 |

Students enrolling technical and medical faculties are in general more concerned with various criteria associated with employment possibilities. Employment rate after graduation is the most important for technical sciences (M=4.48), and the least important for students enrolling art faculties (M=3.45). From the other group of criteria, associated with employment possibilities, there are major differences in attitude regarding possibilities for enrolling some trainee programs during studies (F=4.653; p=0.001), expected earnings after finishing studies (F=5.278; p=0.000) and cooperation of the institution with the specific industry (F=4.354; p=0.002). Trainee program possibilities are the most important for art studies, technical sciences and medical studies, and the least important for natural sciences and mathematics (based on mean value). Students who enroll medical and technical studies are the most concerned with expected earnings after finishing studies (with mean about 4.1), and students oriented toward art faculties expressed the least interest in this criterion (M=2.95). Cooperation of the institution with the specific industry is the most important in the case of technical sciences (M=3.47), but also for the social sciences and humanities (M=3.31). A low value in the case of medical science is due to the state faculties' practice of establishing their own university clinics, for the purpose of practical lessons, which are also financed by the state.

Statistically significant differences in the case of different reputational criteria are linked to: (1) the reputation of the degree on the domestic market (F=5.098, p=0.000); (2) the international recognition of the degree (F=3.865, p=0.004) and (3) the reputation of professors (F=3.187, p=0.013). The first criterion is more important for technical and medical faculties, the second for technical faculties and third for students of art faculties. As students from technical faculties often try to find employment abroad, it is expected that they are more interested in the international reputation of their degree. They are also more interested in opportunities for international studies, and so are the students who planned to enroll medical faculties.

There is a statistically significant difference in the case of the evaluation of the number and variations of modules offered to students, the choice criteria (F=4.655, p=0.001). The number and variations of modules was assessed with the highest marks by art students (M=4.55). On the other hand, art students showed specific attitudes toward various choice criteria. They valued several criteria, which are not of high importance for other groups of students: trainee program possibilities, the reputation of professors, opportunities for the participation in domestic and international competitions and projects and the quality of communication and cooperation between students and professors.

DISCUSSION

Various lists of HEI choice criteria were developed in the literature and tested in different countries. In this study, the main choice criteria of high school students were evaluated in the case of Serbia. Those results can be interpreted from the perspective of a marketing strategy of a HEI, as an important part of their business strategy in the environment which has become more competitive.

To respond to the first research question, respondents evaluated a list of 19 criteria for choosing a higher education institution. The most important criteria, with above average marks are: the employment rates of graduate students, the reputation of the degree on the domestic market, the international recognition of the degree, the expected earnings after the completion of studies, the opportunities for international mobility of students, possibilities for enrolling some trainee programs during studies and reputation of the institution. Having in mind that Serbia is a small developing country, it is not surprising that the major concerns of high school students are employment opportunities. Several criteria are connected, directly or indirectly, with employment prospects: employment rates of graduate students, the expected earnings after finishing studies and possibilities for enrolling some trainee programs during studies. This result is in accordance with the results in some developed countries (Donaldson & McNicholas, 2004), where the students also highly value employment possibilities, but it is additionally supported by the high unemployment rate in Serbia, especially among young people. As a second group of highly assessed criteria, the study reveals the importance of international position of a higher education institution, with regard to: international recognition of the degree and opportunities for international mobility of students. Those results indicate that students are highly interested in continuing studies or employment abroad. Having in mind the relatively high emigration from Serbia, particularly of the young, educated people, such a result could be expected. Reputational criteria are the third group of major choice criteria, also recognized in case of students from developed countries (Donaldson & McNicholas, 2004; Briggs, 2006; Pampaloni, 2010; Simões & Soares, 2010). High school students are concerned with the reputation of the degree and the reputation of an institution, which is relevant for a service business, due to the intangible nature of services. In general, academic reputation of a HEI is among the top factors in the students' choice, but its role should be reconsidered in the context of the prestige of the institution that a student plans to enroll (Hemsley-Brown & Izhar, 2016). Given that there are indications of higher importance of reputational factors to students that choose a more prestigious university, the results of this study can be discussed in terms of dominant orientation of high school students from Belgrade toward the University of Belgrade, as a highly prestigious HEI in the region.

The aim of the second research question was to reveal the main differences in attitudes of students with some specific characteristics. This way, main socio-demographic and personal factors were evaluated. Statistically significant differences in high school students' attitudes were recognized in the case of demographic and personal characteristics. Socioeconomic influences were not found relevant for the student choice. This study reveals gender differences in choice criteria assessment, as well as differences in students' academic aspirations and achievements (variables that also affect preferences of information sources, in case of different groups of Portuguese students, Simões & Soares, 2010). Regarding gender, the main result is that female high school students assessed numerous criteria as more important than male students, expressing more concern for the HEI choice. The most interesting difference in the attitudes of male and female students is regarding expected earnings, with female high school students more concerned with this criterion. That can indicate their need for material independence and safety in the country where the average wage is among the lowest in Europe (Median gross hourly earnings, all employees, 2014), but can also be the result of high gender inequality in Serbia (Gender Equality Index for Serbia, 2016). Contrary to this, one Italian study showed that in the post-crises period, after 2008, in the circumstances of constrained labor market, male students were more concerned about employment oriented criteria, than female students. As Hemsley-Brown and Izhar (2016) pointed out, the influence of gender on students' choice is one complex issue, although widely investigated, in different contexts, still without a clear and unique answer.

All personal attributes evaluated in the study - academic achievement and academic aspirations, appear to be relevant dependent variables that influence student choice. Understanding those variations can help higher education institutions to adjust their strategies toward specific target groups of students. If a higher education institution mainly targets students with an excellent high school score, it has to point out international prospects and expected earnings after graduation. On the other hand, due to the decrease in the number of high school students in Serbia and the increase in competition, some institutions have to target a segment of students with lower scores. Those students are more interested in the difficulty of a study program and the entrance exam, as well as in tuition fees (since, due to lower results, they do not expect to get a state scholarship).

Maybe the most valuable outcome of this study is the revelation of the main differences in attitudes of students who chose different fields of study. Those results provide valuable information for developing competitive strategies of HEIs from particular fields that can effectively respond to the requirements of their customers. Students of art universities are quite specific: they evaluate several criteria as more important, compared to other students: international recognition of the degree, possibilities for enrolling some trainee

programs during studies, the reputation of professors, the number and variations of modules, opportunities for participation in domestic and international competitions and projects, the quality of communication and cooperation between professors and students. The last four are highly evaluated only by art students, which can be the result of the specifics of the field. Regarding the attitudes of students applying to institutions in the field of natural sciences and mathematics, there are no distinctive variations from average marks. In general, they assessed the majority of criteria with average marks or slightly below average marks. Students oriented toward social sciences, apart from employment and international issues, assessed criteria connected with the difficulty of studies as important: the difficulty of a specific study program and the difficulty of the entrance exam, which should be addressed in the marketing communications of HEIs in this field. Compared to other students, they are more interested in the social life at the institution. In the medical field, above average marks are evident in the case of the reputation of the degree on the domestic market, trainee programs (in this case, it is about practical lessons and clinical work), international mobility programs, expected earnings after graduation. Several criteria have relatively high marks for students enrolling technical science institutions: the employment rate of graduate students, trainee programs, cooperation of institution with main industry players, international recognition of the degree, international mobility programs, the reputation of the degree on the domestic market, the difficulty of the study program and existence of modern equipment at the institution. The last one is unique for this area, due to the specifics of the technical sciences. This group of students is more concerned with numerous criteria, therefore they may be more engaged in the HEI's selection process.

This kind of analysis has implications for higher education institutions as well as for the public policy. Higher education institutions can use the results in their marketing strategies, in order to develop a specific offer that can fulfil the requirements of their target group and to develop an effective marketing communication strategy. Understanding the motivation and attitudes of high school students, as their customers, in an increasingly competitive environment has become an important prerequisite for formulating and developing successful competitive strategies of HEIs. From the perspective of public policies, this research can provide a general insight into the main considerations of high school students regarding their further education and their main concerns regarding the choice of a HEI.

CONCLUSION

This paper summarizes different models of student choice behavior with the focus on different variables that influence the choice of a HEI. Studies dealing with university choice, in general, are not so frequent in the developing countries. This study, conducted in one developing, posttransitional country reveals two main groups of students' choice criteria. The first are the criteria linked to employment opportunities and the second are those related to the international position of a HEI, with regard to the recognition of a diploma abroad and possibilities for continuation of studies at an international HEI. Those results are in accordance with the low level of economic development of the country and high outflow of highly educated people to developed countries. In such an environment, the question of employment emerges, as well as seeking employment and study opportunities abroad. The study provides more insight into the differences between different groups of respondents, by testing influences of independent variables, such as demographic factors, academic abilities of students and their academic aspirations. That way it provides valuable data for the development of effective competitive strategies, for different types of higher education institutions, depending on the field of study they cover and their goals. The study has several limitations, but the central ones are linked to the scope of the research. The sample included only high school students from the capital city, so the results should not be generalized for the whole country. Also, grammar school students are predominant in the sample, so it does not adequately reflect the attitudes of students from different vocational schools, which are highly diversified. As one of the rare studies about student HEI choice in Serbia, this research provides a valuable insight into the main considerations and concerns of high school students, which can be used by HEIs in the process of formulation and implementation of their marketing strategies, and by government institutions in developing an educational policy. As HEIs face increasing competition, in line with the well-known trend of the commercialization of higher education, firstly recognized in developed countries, understanding the requirements of students, as customers, allows institutions to develop, deliver and communicate their offer effectively in order to establish and maintain a strong market position.

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ФАКТОРИ ИЗБОРА ВИСОКОШКОЛСКЕ УСТАНОВЕ: СТАВОВИ СРЕДЊОШКОЛАЦА ИЗ СРБИЈЕ

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Резиме

Питање студентског избора заокупља пажњу истраживача још од осамдесетих година прошлог века, када су предложени први модели. Моделима је описан процес доношења одлуке о избору високошколске установе и идентификовни су најзначајнији фактори који утичу на тај процес. Централни део различитих модела је фаза евалуације алтернатива, што је тема овог истраживања. У раду су приказани резултати истраживања спроведених у средњим школама у Србији, у циљу евалуације критеријума избора високошколске установе, као и разумевања утицаја социо-економских, демографских фактора и личних карактеристика испитаника на избор. Истраживање је показало да средњошколци у Србији највише вреднују критеријуме повезане са могућностима запослења и са међународном позицијом високошколске институције. Критеријуми који нису вредновани као значајни су висина школарине и они повезани са тежином уписа и завршетка одређених студијских програма. Фактори који утичу на ставове испитаника су пол испитаника, као и личне карактеристике испитаника, тј. академска постигнућа испитаника и њихове академске аспирације. Академска постигнућа су вреднована кроз успех у средњој школи, док су академске аспирације праћене на основу жељеног поља студија. Није утврђен значајан утицај социо-економских фактора, који су праћени на основу радног статуса родитеља и њиховог образовања. Импликације резултата истраживања су праћене из угла високошколских установа, као и државних институција, у функцији осмишљавања релевантних образовних политика. Високообразовне институције могу користити резултате истраживања у процесу дефинисања маркетиншке стратегије, чији значај расте у условима интензивирања конкуренције на тржишту високог образовања. Претпоставка дефинисања успешне маркетиншке стратегије високошколске установе је разумевање мотива и ставова средњошколаца, као циљне групе. Из перспективе јавних политика, истраживање пружа релевантне увиде у ставове средњошколаца, њихове академске аспирације и кључне дилеме поводом избора универзитета, што може бити коришћено у формулацији нових образовних стратегија и политика.