

# **CHOOSING HIGHER EDUCATION: RESEARCH OF STUDENT BEHAVIOURS AND OPINIONS THAT INFLUENCE CHOICE OF HIGHER EDUCATION INSTITUTIONS IN BOSNIA AND HERZEGOVINA**

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## **Abstract**

*In this paper, opinions of students in finishing grades of high school about continuing education in higher education institutions in Bosnia and Herzegovina are researched. We have tried to determine which factors influence decisions about continuing education, as well as, which characteristics of higher education institutions are significant in the process of their selection. As information sources necessary for this research, we used primary data gathered from 3185 students of finishing grades of high school. Through research, we have included all four-year high schools in thirteen counties of Tuzla Canton. We have determined that success in school and desire to continue education have a more dominant influence in the selection of further studies than does the economic status of families. The quality of education in a higher education institution and student expectations to gain necessary knowledge are much more significant factors in the decision-making process than is the proximity of university to residence or the cost of studies.*

*Keywords: Selections of Continuing Education, Student Perceptions, Student Expectations, Selection Criteria, Higher Education, Bosnia and Herzegovina*

## **INTRODUCTION**

Behavioral economics has much to say about student decision-making. A number of human characteristics as well as characteristics of the higher education market itself are particularly relevant. For example, higher education is a highly complex product with both the costs and

outcomes that are subject to uncertainty, and it is accruing over an extended period of time (Diamond et al, 2013). The decision-making process about continuing education in a higher education institution is usually done once in a lifetime, where decision-makers, on the basis of inadequate data about labor market position and supply on higher education institutions, should make decisions that will determine their future occupation.

Students in finishing grades in high schools face, before all, a decision if they will continue their education or if they will go on the labor market. With that, they try to estimate the amount of their investment in education. Becker and Hecken emphasize that, during the estimation of cost/benefit relation, students from blue collar families will chose specialized education in this case, with the possibility of further education, because the costs, which they must bare instantly, seem higher than the future unpredictable income (Becker, Hecken, 2008). The further important determinant in the decision regarding continuing education is the subjective estimation of a chance to successfully finish the studies (Becker, Hecken, 2007).

The decision-making process about continuing education in a higher education institution itself may be observed through a prism of two types of determining variables. Namely, it is necessary to differentiate factors, that mainly influence the flow of decision-making process (such as the social origins, status, personality traits, etc.) and factors that directly influence student choices (such as interests, talents, professional orientation consultations, etc.). Classification into these two categories, onto factors that influence the flow of the decision-making process and factors that influence the choice itself, cannot be observed distinctively. It is intended more to ease the analysis of empirical results in order to differentiate different types of decision-makers (Hachmeister, Harde, Langer, 2007).

Through consideration of the complexity of the decision-making process about continuing education in a higher education institution, we can adopt an assumption that the decision-makers from various social-economic statuses will differently evaluate factors that influence selection of a higher education institution. With that, the need to research factors, that determine decision-making process of students about continuing education in Bosnia and Herzegovina, emerged.

## Research Questions

In this paper, we started with the following research questions:

1. What is the influence of socio-demographic characteristics on the surveyed in relation to make decisions about continuing education in a higher education institution?
2. What are the reasons to make a decision to continue education in Bosnia and Herzegovina or abroad?

3. What are the dominant factors in the selection process of a certain higher education institution?

## OVERVIEW OF LITERATURE

The decision-making process about continuing education in a higher education institution is very complex and is determined by numerous factors. One consequence of this process of choice is that researchers only observe imperfectly the things that determine the choices made, so that the impact of unobserved factors (motivation, ambition and so on) may bias their estimated school sector effects (these are 'selection' effects) (Ryan and Wattson, 2010). With this, the complexity of the decision-making process about continuing education, as well as the process of choosing the higher education institution, has been influenced by the various approaches to these research subjects.

Therefore, some authors consider the decision-making process about continuing education in a higher education institution focusing on high school students as decision-makers and factors that influence the decision itself. Heine and Quast have conducted a research on a representative sample of 6000 students in the academic 2007/08. With the application of multivariable analysis, they tried to determine if decisions of individuals, who are for or against higher education, are directly dependent on anticipated costs of studying, expected benefits of education, as well as on expectations to successfully graduate. The influence of these factors has been observed in relation to influence of other variables, such as gender and gained education. With that, they tried to determine how gender and gained education influence estimation of costs of studying, future income and chances for success, which influences the decision about continuing education (Heine, Quast, 2011). Similar research was conducted by Diamond, who emphasizes that in student choice we are dealing with decision-making under uncertainty because neither the costs nor the benefits of various options can be known with certainty, and they will depend on many factors outside the individual's control. To take one simple example, the individual's wage on graduation, which is likely to be at least three and half years from the initial higher education choice, will depend on the state of the labor market when they graduate (Diamond et al, 2013). However, the decision about continuing education in a higher education institution is not always just a decision made by an individual. It is more often than not a decision-making process influenced by parents, relatives and other referent groups. Therefore, Becker and Hecken state that children from higher social classes show better success in school due to better social predisposition and targeted encouragement in family home, while children from blue collar families have relative cognitive faults due to their origins, and so they show poorer results in school (Becker, Hecken, 2008). Paulsen emphasizes that

parental encouragement, a contextual factor, has been found to have potentially greater impact than either socioeconomic status or academic aptitude (Paulsen 1990, p. 8).

Other authors have researched the decision-making process of students about enrolling into higher education institutions where they, as determinants of decision-making process, considered characteristics of higher education institutions. Therefore, results of research conducted by Niu and Tienda demonstrate that type of high school attended determines how broadly and how high students set their college sights, and ultimately, how they weigh various college attributes in ranking their personal preferences. They also determined that geographical distance between higher education institution and the place of residence must not be neglected. The fact that most students attend public, in-state institutions implies that college options are circumscribed by state of residence (Niu and Tienda, 2007). Research conducted on students of finishing grades of high school in Canada has also shown that surveyed prefer universities that are closer to their homes (Drewes and Michael, 2006). Long has researched how much the college decisions changed over time. With that, she tried to determine how students choose colleges, and how individuals decide whether to attend college at all. She determined that price was an important factor when choosing a college, but not that significant as it was in 1972, while the quality of college has become a more important factor in the decision-making process (Long, 2004).

Some authors have conducted researches on higher education institutions researching determinants of choosing a certain education institution. The results, gathered from the research conducted by groups of students at the Faculty of Economics and the Faculty of Mechanical Engineering, are interesting. Significant differences were reflected in the criteria related to motivation when choosing university where the students of technical faculty show greater interest in chosen field whilst students of economical faculty are more focused on promising career prospect and consequent succeeding in their future career. At the same time the personal skills, abilities and talents seems to be significant barrier in the decision-making process in case of the technical faculty students (Navrátilvá, 2013).

In higher education institutions, research with students was conducted as well, where the researchers focused on characteristics of HEI, as determinants for choosing a certain HEI. One of such researches, relating to the higher education service quality, was conducted at the Faculty of Economics and Business Management in Szeged, Hungary, GTK) (sample of 130 students), Faculty of Economics in Osijek, Croatia (EFO) (sample of 310 students) and Faculty of Economics in Ljubljana, Slovenia FELU) (sample of 250 students). Students have rated the following factors as crucial when choosing a college: possibility of employment, programme quality, institution image and reputation, costs, location, and that they could not get in the

desired institution (Štimac and Šimić, 2012). Research conducted by Montgomery has shown that students apparently choose a business school mainly on grounds other than cost. On the other hand, location is a powerful determinant of school choice; even as adults, students are reluctant to go to a school outside their geographic region (Montgomery, 2002). Elliott and Healy state that the “prestige of the university” would seemingly be very important. A university like Harvard does not have difficulty recruiting students partly because of the image and prestige of the institution (Elliott and Healy, 2001).

## METHODOLOGY

Bosnia and Herzegovina (BiH) is a decentralized state composed of two entities: Federation of BiH, Republic of Srpska, and Brcko District of BiH as a separate administrative unit. The BiH Constitution defines competences and responsibilities for each level of government. Taking into account the constitutional framework of Bosnia and Herzegovina, education is under full and undivided responsibility of the Republic of Srpska, ten cantons in the Federation of BiH and Brcko District of BiH. Each of these twelve administrative units has its own ministry of education, education legislation, education budgets, creates its education policy and has all other rights and obligations arising from the mandate of a competent education authority responsible for the organization and functioning of education within its area of competence (Education for All 2015 Country Report).

The research of opinions of students of finishing grades in four-year high schools was limited to the area of Tuzla Canton, which is one of the ten cantons in Federation of BiH. As information sources necessary for this research, we used the primary data gathered from the students of finishing grades of four-year high schools in thirteen counties of Tuzla Canton. Data has been gathered through the application of survey in November and December of 2012, after we have gotten the approval from the Ministry of Education, Science, Culture and Sports of Tuzla Canton. Through this survey, we have included students of all high schools that offer four-year studies, which was the foundational assumption for the continuing education in higher education institution in BiH. The student success in Bosnia and Herzegovina is measured by marks from 1 to 5, where 1 represents fail, 2 satisfactory, 3 good, 4 very good, and 5 excellent. Considering that the general goal of the conducted primary research is related to determination of opinions of students in finishing grades towards higher education institutions in BiH, a 20-question survey has been created, in which these questions have been defined in accordance with the following operative goals of the research:

- Determine socio-demographic, gender, and other attributes of the surveyed students.

- Determine attitudes and opinions of surveyed students that influence students' choice for continuing studies.
- Determine criteria used by the surveyed students when choosing a higher education institution.

The survey contained closed ended questions, where surveyed students could choose one of the offered answers, while they expressed their opinions to offered answers by grading them from 1 to 5 on Likert scale, where 1 represented that they completely disagree, and 5 represented that they completely agree with an offered statement. For the analysis of data, gathered through research, we used the following statistical scientific methods: Descriptive statistical analysis of gathered data; Descriptive analysis of mutual relations between chosen data.

## EMPIRICAL RESULTS AND DISCUSSION

In Table 1 the basic overview of socio-demographic characteristics of surveyed is presented. In total, there were 3185 students surveyed. From the total number of surveyed, 54.41% were female, and 45.52% were male. The total share of mothers with an undergraduate degree, masters degree, of PhD is 9.57%, while the share of fathers with an undergraduate degree, masters degree, of PhD is significantly higher and it is 16.23%.

Table 1: Total Statistical Overview of Demographic Characteristics of Students

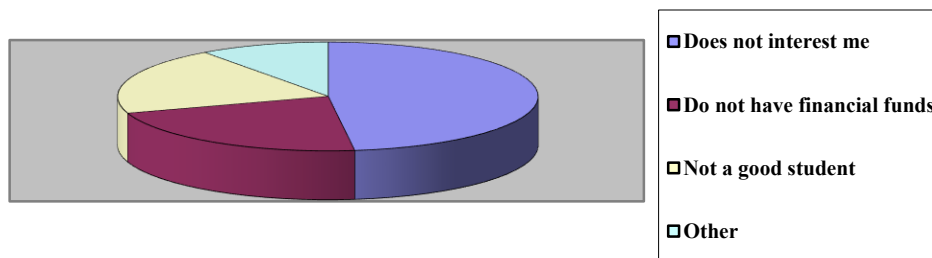
	Plans to get higher education	Maybe will get higher education	Does not plan to get higher education
Female	35.94%	14.94%	3.02%
Male	24.8%	14.31%	6.02%
Mothers with undergraduate degree, masters degree or PhD	7.84%	1.31%	0.31%
Fathers with undergraduate degree, masters degree or PhD	13.37%	2.19%	0.53%
Employed mothers	3.64%	1.85%	0.62%
Employed fathers	24.48%	13.84%	4.17%
Both parents employed	16.2%	4.14%	1.27%
No parents employed	5.9%	4.86%	2.5%
Average grade at the end of the third grade	4.39	3.86	3.35
<b>Total number of students</b>	<b>3185</b>		

Here, we can observe that there is a gender difference in the level of education of parents of the surveyed. From the total number of students, 60.74% have stated that they plan to pursue further studies, and from those, 35.94% are female, and 24.8% are male. Almost one third of surveyed have stated that they may get higher education, where 14.94% were female, and

14.31% are male, while 3.02% of female and 6.02% of male students surveyed does not plan to get higher education. The average grades of students that plan to get higher education is 4.39, students that may get higher education is 3.86, while students who do not plan to get higher education have an average grade of 3.35. We may observe that there is a significant difference in the level of average grades between students who plan to, who may, and who do not plan to continue their education.

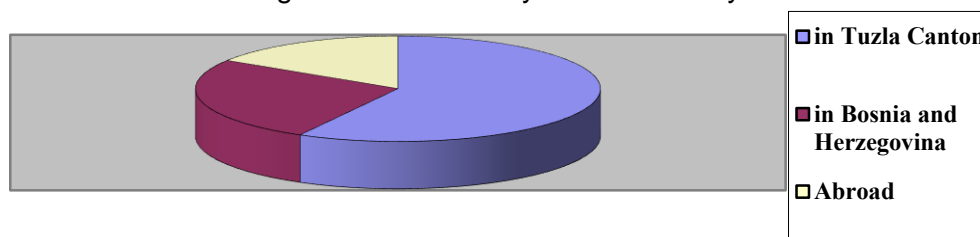
If we observe the level of education of parents, we may notice that parents who have an undergraduate degree, masters degree or PhD of students who plan to study are significantly more represented (21.21%) than the parents of students who may study (3.5%), or parents of students who do not plan to study (0.84%). With students who wish to pursue further studies, both parents are employed in 16.2% of cases, with students that may pursue further studies, both parents are employed in 4.14% of cases, while with students who do not wish to pursue further studies, both parents are employed in 1.27% of cases. With students who wish to pursue further studies, both parents are unemployed in 5.9% of cases, with students that may pursue further studies, both parents are unemployed in 4.86% of cases, while with students who do not wish to pursue further studies, both parents are unemployed in 2.5% of cases.

Figure 1: Reasons for not continuing Education



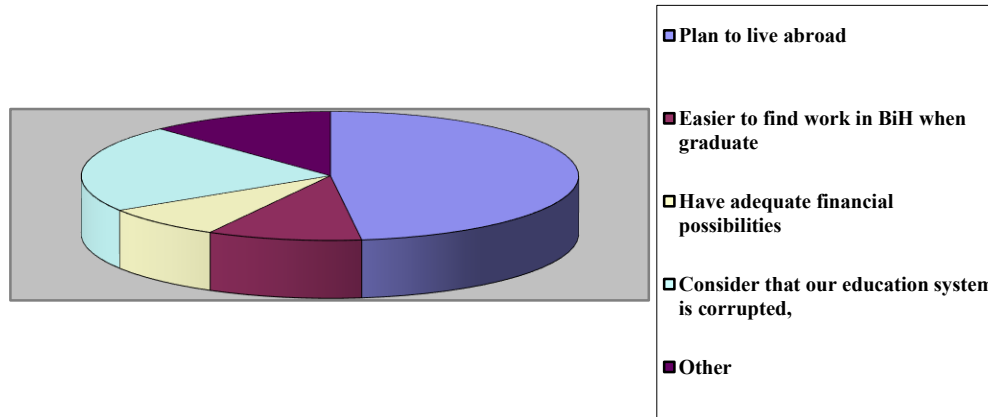
From the total of 9% of students who do not wish to pursue further studies, 48% say that it is because they are not interested, 22% due to lack of financial funds, while 20% say that they are not good enough students to pursue further studies.

Figure 2: Where They Intend to Study



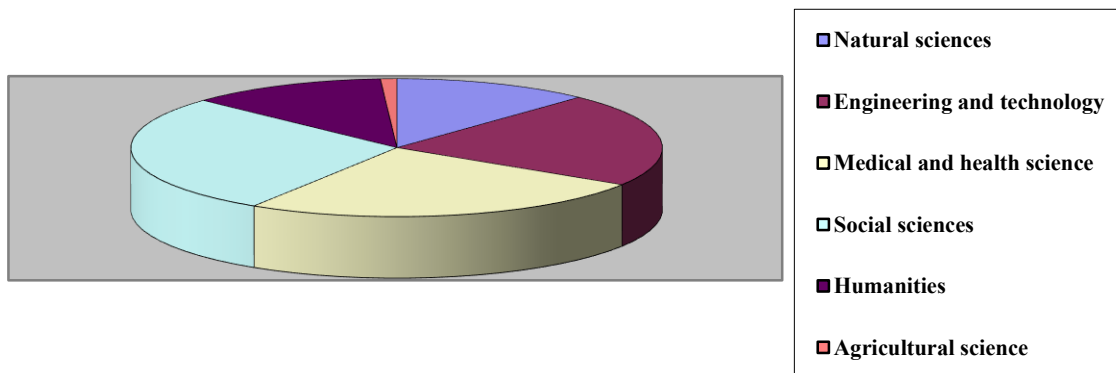
Other 90% of students plan to pursue further education. From those, 58% plans to study in Tuzla Canton, 26% plan to study outside of Tuzla Canton, but still in Bosnia and Herzegovina, while 16% plan to study abroad.

Figure 3: Reasons to Study Abroad



Students have named various reasons why they plan to study abroad, where planning to live abroad dominates with 48%, as well as the opinion that higher education in BiH is corrupted, 22%. Other reasons include easier employment in BiH when they graduate, 10%, and that they have financial possibilities, 8%.

Figure 4: Choosing Field of Study



Students choose, in the greatest number, to study social sciences 28%, medical and health sciences 25%, engineering and technology 22%, humanities 12%, and agricultural science 1%).



Table 2: Reasons for Study Field Choice

Named statements	Average grade of significance of statements
Chosen college will enable me to find a job fast.	3,84
I will gain necessary knowledge at the chosen college that I will use my whole life.	4,12
Price of studies at the chosen college is lower than at the other colleges.	2,27
I have preferences towards the chosen college.	4,02
The chosen college is located in the same city or close to my residence.	3,14
The chosen college will enable me good salary.	3,93
The chosen college offers me numerous possibilities for employment.	3,82
I expect to gain the best education from the chosen college.	4,07
I am completely informed about the position of the college of my choice.	3,50

Students were offered nine statements in order for their opinions and perceptions of their future studies to be graded. The surveyed were offered statements to grade according to the Likert scale with grades from 1 to 5. The highest level of agreement was reached with the statement about gaining necessary knowledge that they will use their whole life at the chosen college 4.12, and that the chosen college will offer them the best education 4.07. In the third place, according to the level of agreement, 4.02 have talents and abilities for the chosen college, and in the fourth place that the chosen college will enable them good salary with 3.93. In the fifth place, according to the level of agreement, 3.84 have graded that the chosen college will enable them to get employed fast, and in the sixth place that the chosen college offers numerous employment possibilities, with 3.82. The proximity of a college to the place of residence has also been graded as not that important with 3.14, while the price of college is graded as the least significant with 2.27. The results should be observed through a prism of an average grade, of the knowledge of the surveyed about the chosen higher education institution, which is 3.5.

## CONCLUSION

On the basis of analysis of data gathered through conducted survey of students, it has been determined that there is gender difference in preference towards continuing education in higher education institutions, that is, there is a greater percentage of female students who wish to pursue further studies. This is a significant shift in comparison to the previous generation. Namely, less percentage of mothers of surveyed students who have undergraduate degree, masters degree, or PhD is present than fathers of same level of education. Also, it has been determined that parents of students, who have a greater average and plan to continue their education, have a higher level of education than parents of students who do not wish to pursue

further studies and have lower grades average. With that, we can adopt an assumption that educated parents offer better support to their children during their studies, and that they encourage them to pursue higher education. The research results, that show a higher percentage of students who wish to pursue further studies with both parents employed, but also with both parents unemployed, than in students who do not wish to pursue further studies, is very interesting. These results have been justified by results that show the reasons why surveyed students do not wish to pursue their studies. Namely, the greatest number of surveyed students has stated that they are not interested for further education, and that they are not good enough students.

Geographical proximity is not dominating factor in the process of decision-making about higher education institution. A little more than half of the surveyed students plan to continue studies close to their home, that is, in Tuzla Canton, while others plan to study in Bosnia and Herzegovina or abroad. These results have their justification in grades that show significance of factors in the process of selection and choosing the higher education institution, where the proximity of college to place of residence did not rate high either. The most common reason for planning to continue education abroad is planning to live abroad.

The surveyed students, in the greatest number, plan to continue their education in the field of social sciences, medical and health sciences, and engineering and technology. The surveyed students have graded the following factors as significant in the decision-making process when choosing a higher education institution: expectation that they will gain knowledge they will use their whole life, that the chosen collage will offer them the most quality education, as well as having preferences towards the chosen college. The expected height of income and possibilities of employment are placed in the fourth, fifth, and sixth place, while the price of college was ranked as the least significant.

## **RECOMENDATIONS FOR FURTHER RESEARCH**

Further research could relate to:

- Determination if there is a difference in opinions of students in finishing grades of high schools towards the private and public higher education institutions in Bosnia and Herzegovina.
- Research of influence of parents and other referent groups on the decision-making process about continuing education in a higher education institution.
- Determination of dominant sources of information in the process of selection and choice of a higher education institution.

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