

**Student Dropout in Higher Education: Exploring the Reasons Behind Student Attrition in Bosnia and Herzegovina**

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ABSTRACT

*Reducing tertiary education dropout rates is a critical concern for higher education institutions (HEI) due to its significant social, financial, and personal implications. This study aims to initiate region-specific and national research by presenting, for the first time, an insight of reasons of higher education attrition in Bosnia and Herzegovina (B&H) based on primary data. The data, collected from one of the public universities in the country, encompass students who withdrew voluntarily between 2007 and 2019. A survey of 96 undergraduate students who discontinued their studies reveals that approximately one-third of the dropouts could have been prevented, as they were linked to institutional factors. Among the identified reasons—private, institutional, financial, and pedagogical—the primary cause of attrition was disputes or conflicts with faculty members. These findings highlight the need for targeted interventions to improve faculty-student relationships and address institutional shortcomings to enhance retention.*

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## 1. Introduction

Dropout, attrition, or churn in higher education occurs when students leave the higher education institution (HEI) without obtaining their degree or continuing their education elsewhere. Among the various significant factors that indirectly influence the education level of citizens, the university students outflow is considered an important factor in the education system by European Commission and United Nations (UN). The 2030 Agenda for Sustainable Development UN identifies education as one of the most important factors for a sustainable economy. The European Strategy for Smart, Sustainable and Inclusive Growth 2020 also set a target that at least 40 percent of adults aged 30-34 should have a tertiary degree. According to EU Commission, increasing completion rates and reducing dropout rates is the key strategy to achieve this goal (European Commission, 2015). Dropout has far-reaching consequences for the country, the universities, as well as for individuals.

At the university level, dropout represents the loss of HE resources and opportunity costs, and when high, it can be an indicator of inefficiency in the education system (OECD, 2022, p. 202). Some countries penalize universities with high dropout rates as part of their assessment of high education (Schnepf, 2014). Income disparities are the second differentiator between churned and non-churned university students. Comparing earnings across Europe, dropouts earn, on average, 8 percent more than those who never entered HE but 25 percent less than university graduates (Berlingieri & Bolz, 2020). According to OECD (2022) report, the full-time workers with bachelor's degree have 44 percent (OECD countries average), 38 percent (EU22 average) higher salaries than full-time workers with high school degree. The salary advantages grow with age: for people aged 45-54, the difference is 75 percent comparing to their peers with high school diploma (OECD, 2022).

At the country level studies have showed that the high number of tertiary educated persons moves the GDP per capita up, as well as consump-

tion of real estates (cars and homes), longevity and wellbeing (US Department of Education, 2016), and broke down the crime rates and costs of health.

According to The Global Competitiveness Report 2019, B&H is in first place of 141 country by brain drain on the scale 1–7, reaching the 1.76 score, where 1 means that all highly educated people leaving the country, and 7 represents the value when they all are staying in the country (Schwab, 2019). B&H is listed in the 121<sup>st</sup> place at the World Bank's list in 2022 with 7.6 thousand of USD of Gross domestic product (GDP) per capita. To compare, all B&H border countries have higher GDP per capita rank: Croatia (72), Serbia (107), and Montenegro (102) (World Bank, 2023).

In B&H, the share of people with vocational and HE (college, university, masters, doctoral degrees) in the labor force is only 15.3 percent, which is almost three times lower than average in EU countries. This share in the working-age population is even lower, 9.6 percent by last available data for 2019 (Mijović et al., 2019).

In the last eleven years, the total number of students at HE institutions in B&H decreased by more than 40 percent (BHAS, 2022). The consequences of inaction and ignoring HEI student's churn and decrease of enrolled students have been widely visible in the last decade in B&H. Due to a significantly less number of students, universities are forced to reduce the offer of study programs, HE staff, and their budgets causing the long-term negative consequences for the country, as well as for HE institutions. Future freshmen can face higher tuition fees, limited diversity offer of study programs, and lack of quality HE staffs. In the long run the B&H may suffer from lack of educated professionals, too.

The main aim of this paper is to find out reasons behind churn of tertiary education students at one of the eight public universities in the country, and explore their trajectories upon dropping out, by employing online questionnaire among bachelor students. This research makes a significant contribution by presenting the first empirical evidence on

the reasons for study interruptions in Bosnia and Herzegovina, based on primary data. Furthermore, it explores whether students were satisfied with their decision to discontinue their studies and examines their trajectories following this decision.

The theoretical contribution lies in the systematic categorization of the reasons for leaving higher education into four distinct categories. From a policy perspective, the study highlights the importance of early identification of students at risk of dropping out and proposes the development of a standardized, state-level questionnaire to be completed by all students who discontinue their studies. The university management can benefit from data-driven decision-making by understanding the underlying reasons for study interruptions. This knowledge enables the strategic allocation of resources and the implementation of targeted interventions to address specific issues, thereby improving student retention and overall institutional effectiveness and reputation.

This research is divided into following parts: In the Literature chapter we presented the latest research conducted in Europe of reasons for attrition

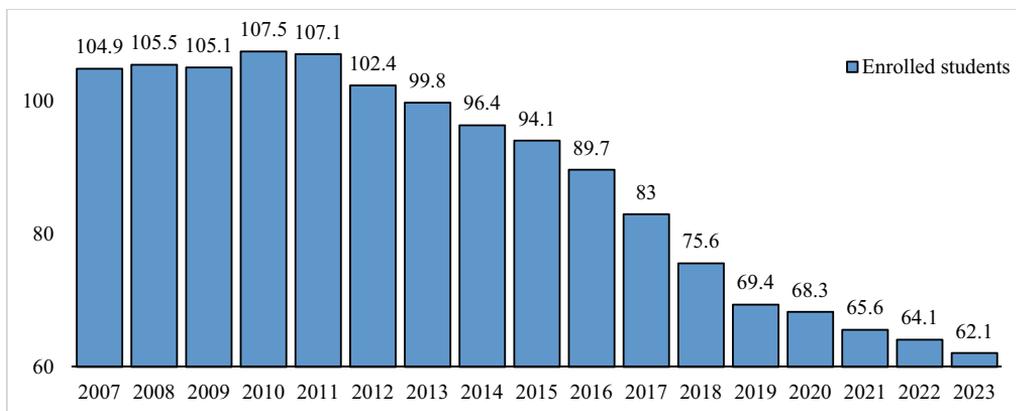
in tertiary education. Methodology encompasses the description of source and sample which is backbone of the research. The following chapter presents the results in detail and continues to the research main conclusion, limitations, and recommendation for further improvements.

## 2. Literature review

The reasons for leaving the university education by literature are identified first for Europe area, and then we tried to narrow the search to Balkan's countries with highlight to B&H. Prior to this research we could not identify any studies, reports, estimation or research done in B&H on tertiary education students regarding the reasons of dropping the higher education.

The urgency of action is highlighted due to the strong incline of enrollment at HEI in B&H in the last decade, according to Agency for Statistics of Bosnia and Herzegovina (BHAS), Figure 1.

**Figure 1**  
Enrolled students in all years of study, 2007/08–2022/23 academic year, in B&H (in thousands)



*Notes.* Data refer to students at universities, schools of higher education, and religious HE. Including students at the bachelor level (first cycle) who study according to the old program and students who study according to Bologna compliant program (first cycle and integrated I and II cycle) (BHAS, 2024, p. 2; BHAS, 2023, p. 2; BHAS, 2022, p. 2, BHAS, 2021, p. 2; BHAS 2020, p. 2; BHAS, 2019, p. 2; BHAS, 2018, p. 2; BHAS, 2017, p. 28; BHAS, 2016, p. 26; BHAS, 2015, p. 25; BHAS, 2014, p. 26; BHAS, 2013, p. 25; BHAS, 2012, p. 21; BHAS, 2011, p. 17; BHAS, 2010, p. 16; BHAS, 2009, p. 22).

The reasons for leaving the HE studies are numerous according to the literature. Among them the important place takes does student come from urban or rural area. In according to Behr et al. (2020), students in Germany from urban areas are three times more prone to dropout from university than their peers from rural areas.

Guzmán et al. (2021) conducted a systematic review of 59 factors influencing higher education dropout among students from rural areas in Europe. The study found dropout causes distributed across four categories: individual determinants (35%), socioeconomic reasons (25%), academic factors (27%), and institutional determinants (13%).

Individual determinants include gender (women are more likely to drop out), age (different challenges for younger and older students), parental education, mental health, minority status, and employment status. Rural students often face stress from adjusting to new academic environments, commuting, and forming new relationships. Family dynamics, such as single-parent households or large extended families, can also contribute to dropout decisions. Procrastination, fear of failure (especially among freshmen), and lack of autonomy further increase the risk. Working students must balance job and study demands, leading to increased pressure.

Socioeconomic factors shows that in countries with low or no tuition fees, the family income or employment status have less influence on dropout rates. However, rural students with low incomes may struggle with accommodation, often settling for distant, inexpensive housing that necessitates daily commuting, which can reduce motivation.

Academic factors which are pre-academic background, including knowledge of the chosen major, high school GPA, and performance in demanding fields like medicine or engineering, strongly influences retention. Academic GPA is the strongest predictor of persistence; higher GPA reduces dropout risk. Poor alignment between students' chosen majors and their interests, often influenced by family pressure or lack of information, increases dropout risk. Frequent absences, whether objective or not, are also a significant factor. Institutional factors, i.e. support pro-

grams like persistence or graduation plans significantly improve autonomy, GPA, and learning skills. Diversification of communication channels, particularly in virtual education, lowers dropout rates. Additionally, recognizing prior academic achievements, courses, or work experience enhances retention. Unlike the Guzman et al. (2021), the systematic review of empirical literature in Europe Kehm et al. (2019) divide the reasons for churn at those at the university side, students side and external conditions, which are not influenced by HE institutions (Table 1).

**Table 1**  
*Determinants of dropout at universities in Europe*

Determinants of churn in HEI	Affected by
Study conditions at university:	Influenced by university side. HE institutions with higher institutional resources meets lower dropout rates. - Curriculum, study structure, exam organization - Teaching and exam methods - Learning environment - Support and counseling services - Peer effects - Major declared
Academic integration at university	Student and university side of influence.
Social integration at university	Student housing (living in campus).
Personal efforts and motivation	Interest in the subject, Time used for self-study, Interest in the future job
Informational and admission requirements	Pre-enrolled entrance: admission via tests which are graded, and which are not graded. Study demands prior to university enrollment.
Pre-university education	School achievement, subject focus, private or public-school type. Grades in Mathematics.
Personal characteristics of student	Age, gender, learning approach and conscientiousness.
Sociodemographic background	Education level of parents and belonging to social class (occupational level) of parents. Financial status of student (family). Working status of student while study (part-time).
External conditions	

*Notes.* Author's presentation based on Kehm et al., 2019.

Different classification of dropout reasons summarized by Kehm et al. (2019), are portrayed due to understanding of complexity and chaos in the field. The most comprehensive state of the art of university dropout determinants, collected between 2000-2020, only from peer-reviewed journals, limited to Europe's countries, in English, come from (Behr et al., 2020). Authors summarized dropout reasons by institutional and individual level, showing a huge number of dropouts describing variables, and demonstrate the necessity of field development in a following way: a) existence of the large and longitudinal countries data studies for comparison, comprised not only the university data, and b) accent to the large and longitudinal detailed survey of dropout students.

Appropriate solutions to reduce dropout rates consist of policies, strategies, and standards to identify, classify, and respond to negative trends. But first, policymakers need to understand the reasons for dropouts. According to the European Commission's main report on student dropout and completion in European HE, the effectiveness of the tools used by policymakers has not been studied comprehensively and in sufficient detail (Vossensteyn et al., 2015).

Few countries in Europe and around the world have established standardized methods and statistical reports for tracking study dropouts: Finland (Hiltunen, 2018), Austria (Bianca Thaler & Martin Unger, 2014), Spain (Arce et al., 2015), Hungary (Baranyi et al., 2020), and Denmark (Troelsen & Laursen, 2014). Even with 13 Ministries of Education and Agency for Development of HE and Quality Insurance there are no reports, estimations, statistics or research papers that use primary data to present attrition for tertiary education in the B&H and what happened with students after they leave the HEI.

The preceding section highlighted the lack of data concerning students who discontinue their studies at HEI in Bosnia and Herzegovina, as well as the underlying factors contributing to their decisions. This lack of data extends to neighboring countries as well, where there are also no reports

or statistics about interruptions in HE, aside from few research papers like one in Croatia, where the estimation of study interruption is done in 2007/08 academic year and counts of 40 percent, (European Commission. Directorate General for Education and Culture. et al., 2015), and Serbia, where the tertiary churn is estimated around 10 percent in academic 2017/18 year, with no primary data (Stepanovic Ilic et al., 2020). B&H is not the only case where there is a lack of information about students leaving tertiary education. This issue is not only present in European countries, but also at a global level.

The main contribution of this paper is to provide insight into reasons for dropping out at one of the eight public HEI in B&H, and to start the pioneer tertiary dropout research in the country and region.

### **3. Methodology and data**

#### *3.1. Data source and sample size*

Student data, including email addresses, were collected from five out of eight public universities in B&H, covering the academic years from 2007/08 to 2022/23. The present research was conducted at one of these institutions. However, only 20% of the email addresses belonging to students who voluntarily withdrew were available in the university's database, as shown in Table 2.

In the university database, the field for reason of dropout does not exist. This brought us to the hard copy documents of dropouts. Each faculty unit has its own records (hard copies) of dropouts which consist of student's ID and student's name, date of birth, place of birth, date of dropout, number of exams passed, and reason for dropout. The field of the reason for dropping out is usually blank or filled in with "personal reasons." Due to a lack of any research and data on churn reasons in the country and at this particular university, we had to start our own source: online survey. We defined a survey distributed by email, in which we collected 96 samples between March 6, 2022, and June 6, 2022.

**Table 2**

Academic year, recorded emails, and dropouts between 2007/08 and 2018/19

Year of the first enrollment	No. of email addresses recorded in a database of students who drop out	No. of students who left this particular HEI by own request/will
2007	0	44
2008	0	97
2008	0	253
2010	1	209
2011	2	220
2012	32	231
2013	53	418
2014	166	399
2015	227	429
2016	411	538
2017	361	347
2018	459	381
Total:	1,712	3,566

Notes. Number of dropouts by own request, by first enrolled year. Author's calculation.

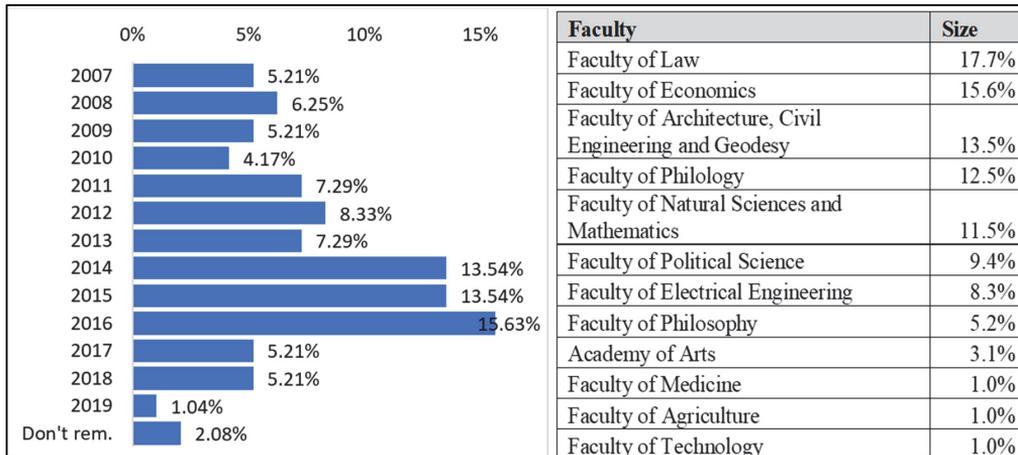
Table 2 shows disparity among the number of recorded email addresses of all students who are classified as dropouts, and the target group of university students – those who left education by their will. This was one of the challenges in research. A total of 321 e-mail addresses could not be delivered for various reasons. After 90 days it was collected 96 respondents.

### 3.2. Data description

The gender structure of the respondents shows that 23 percent of the respondents are men and 77 percent of the respondents are women. Most of the respondents dropped out of their studies between 2011 and 2016, as shown in Figure 2.

**Figure 2**

Distribution of the dropouts by year of enroll (left), and by faculty (right) in the survey at public HEI



Notes. Author's calculation based on sample size of 96 students.

In the survey sample were 12 faculties, but university encompassed more of 12. The most numerous are students of Law, Economics and Faculty of Architecture, Civil Engineering and Geodesy, while

Medicine, Agriculture, and Technology are the list represented in the sample.

For the purpose of this paper, it was used the descriptive analysis.

#### 4. Results

According to respondents' answers, the main reason for dropping out was dispute or conflict with the lecturer/professor (15.6 percent), followed by financial reasons (13.5 percent) and inability to work and study (13.5 percent), Table 3. Corruption, unprofessionalism, lack of objectivity (6.3 percent), and a study program without perspective, outdated and poorly organized (6.3 percent) were reasons for dropping out. According to one respondent's answer, there is even a case of harassment by a professor. Reasons contributing of 2 to 3 percent to the total dropout are health reasons, lack of motivation or modest previous education, pregnancy or starting a family, shiftees (the ones who changed faculty or study program), and not seeing oneself as a student.

**Table 3**  
*Dominant reason for bachelor dropping out at HEI, 2007-2018*

Reason	In percentage
Dispute or conflict with lecturer	15.6%
Financial	13.5%
I worked, and due to work, I did not manage to fulfill my obligations at the faculty	13.5%
Continue education abroad	12.5%
Went abroad (not for study purposes)	11.5%
Corruption, unprofessionalism, lack of objectiveness	6.3%
Unperspective, outdated, poorly organized study program	6.3%
Wrong choice	5.2%
Health reasons	3.1%
I did not found myself as be a student.	2.1%
Lack of motivation	2.1%
Lack of previous education	2.1%
Pregnancy/starting the family	2.1%
Shifted to another faculty/study program	2.1%
Answer not related to dropout reason	1.0%
Harassment by professor	1.0%

*Notes.* Survey distributed via email. Author's calculation based on sample of 96 responds.

The option of the second reason for leaving the university was completed by 62 respondents. The summary is presented in Table 4. The first place among the reasons for leaving the university is again disputes or conflicts with the lecturer (23.4 percent), followed by the imbalance between work and study (20.3 percent) and moving abroad (14.1 percent). Financial reasons are equally distributed among respondents as the lack of perspective, outdated, poorly organized study program (9.4 percent).

**Table 4**  
*Summary of the second most important reason for dropping out at HEI, 2007-2018*

The second reason for leaving the university	In perc.
<i>Dispute or conflict with lecturer</i>	23.4%
I worked, and due to work, I did not manage to fulfill my obligations at the faculty	20.3%
Moved abroad	14.1%
Financial	9.4%
<i>Lack of perspective, outdated, poorly organized study program</i>	9.4%
Pregnancy / starting family	6.3%
Health reasons	6.3%
Continue education abroad	3.1%
<i>Corruption, unprofessionalism, lack of objectivnes</i>	3.1%
Family emergency	1.6%
Lack of motivation	1.6%
Shifted to another faculty or program	1.6%

*Notes.* Survey distributed via email. Author's calculation based on sample of 64 responds.

Further analysis asked for the personal, institutional, pedagogical and financial reasons, which were systemized and offered, as major reasons identified in the literature. Looking at the answers about personal reasons for dropping out of studies (Table 5), almost two-thirds of the respondents cited issues related to mental overwhelm, psychological unpreparedness, or lack of occupation and motivation. Only a small number of students (3.5 percent) interrupted their studies due to "pregnancy and marriage".

**Table 5**

Summary of the personal reasons for dropping out at HEI, 2007-2018

Personal reasons	In percent
It was an exhausting study, mentally, for me	31.8%
Not applicable to me	27.1%
At that moment, I was not ready for such kind of commitment	15.3%
Blank	12.9%
As I got familiar with the study program, I felt that this career path was not for me and that I would not do a job well	10.6%
Other (unsatisfied with curriculum, staff and professors, lack of interest, mobbing (3), health, went to study abroad (3), ask for original documents)	10.6%
I had very good revenues and I was not motivated to study	9.4%
Pregnancy and marriage	3.5%
It was difficult to study because my family was not close to me	1.2%

Notes. Survey distributed via email. Author's calculation based on sample of 85 responds.

Almost one-third of the students who dropped out of their studies did so because of financial reasons, as indicated in Table 6.

**Table 6**

Summary of the financial reasons for dropping out at HEI, 2007-2018

Financial reasons for dropout	In percent
Not applicable	71.6%
Parents could not afford to pay for my study, and I left university	12.5%
Blank	9.1%
I could not afford to study anymore	9.1%
I had to find a job to support my family	8.0%
Other (I needed a job, left)	2.3%
I stayed without my scholarship	0.0%

Notes. Survey distributed via email. Author's calculation based on sample size of 88 responds.

Almost half of the survey respondents discontinued their studies due to institutional reasons, including insufficient internships or practical experience, programs not meeting the needs of the labor market, and boring teaching methods (Table 7).

**Table 7**

Summary of the institutional and pedagogical reasons for dropping out at HEI, 2007-2018

Institutional and pedagogical reasons for dropout	In Percent
I lost motivation and interest to study during the school year	35.6%
Not applicable to me	34.4%
My expectations were unmet since there was not enough internship	28.9%
Professors' classes are boring	26.7%
Other (4 study or move abroad, 1 harassment due to physical look (long hair), 1 late at the classes, 2 poor learning environment (faculty physical resources), 1 dean refused to extend the deadline for paying semester's fee (100 Euros), 3 organization of the class, exam, poor curriculum, 1 unable to attend the classes, 1 corruption)	10.0%
Blank	6.7%

Notes. Survey distributed via email. Author's calculation based on sample of 90 responds.

*What happens after students leave?* At the literature review stage, we did not identify any research that follows the path of churned students after quitting their HE in B&H. According to survey data, almost one third of quitters leave HEI permanently (Figure 3). That number increased at a bit more than 40 percent, by counting those who leave their second HEI.

Regarding the reasons for permanently leaving higher education, 31 respondents provided answers. For approximately two-thirds of them, the decision was primarily driven by financial chal-

lenges. These included a lack of funds for housing and tuition (n = 10), difficulties balancing employment with academic responsibilities—again indicating financial strain (n = 7), and emigration for reasons unrelated to further study (n = 5). Fewer respondents cited factors such as dissatisfaction with the quality or organization of the study program, perceived corruption, conflicts with professors, health issues, or pregnancy.

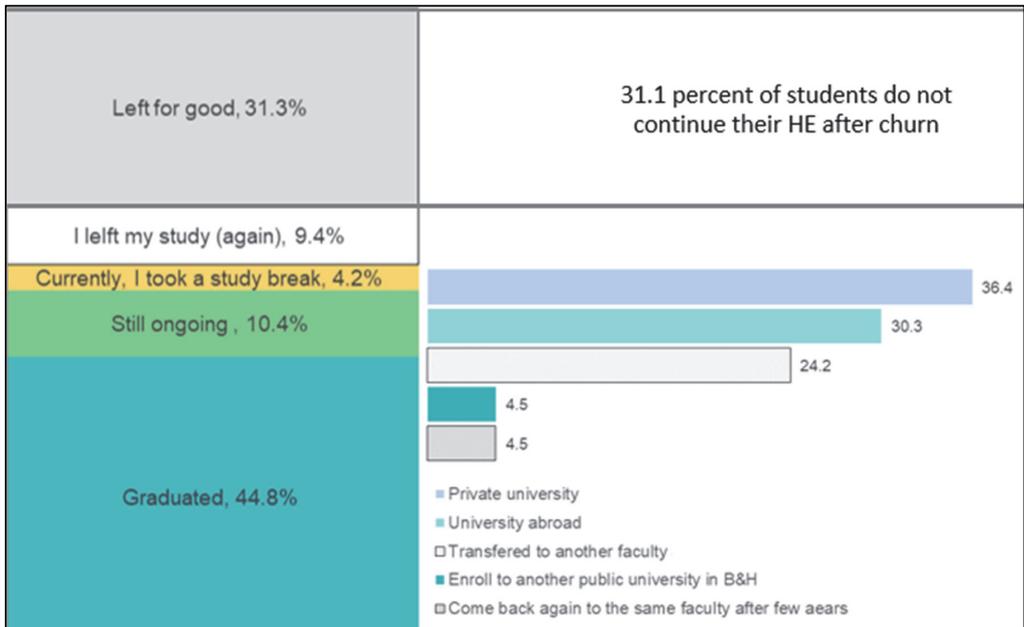
The 28 respondents answered to question “Why you did not continue HE (somewhere else)?” with variety of reasons: health reasons (of the students or of the family member), lack of money, lack of motivation, fear of harassment, not having enough time due to full-time work, family or other reasons, high income at current job, career change, change of habitation place, outdated study program, enrolled but did not passed admission requirements, lack of flexibility from the faculty side due to specific medical condition of students.

The majority of students who quit temporary at this particular HEI went to some of the private universities in the country (36.4 percent), or abroad (30.3 percent). The rest of them, around one-third came back at this particular HEI, or another public university in the country.

Among students who transferred from a public university to a private HEI, the most frequently reported reason was conflict or harassment by professors (46 percent). This was followed by dissatisfaction with the quality of the study program and perceived mistreatment by academic staff (15 percent). Among individual-level factors, financial difficulties related to study costs and housing were the most commonly cited reason for transfer (23 percent), followed by health-related issues and a mismatch between personal interests and the chosen field of study.

Among students who transferred from the current public HEI to institutions abroad, 53 percent did so with the explicit intention of continuing their studies. The remaining students cited reasons unrelated to pursuing education abroad.

**Figure 3**  
*What happened after dropping out?*

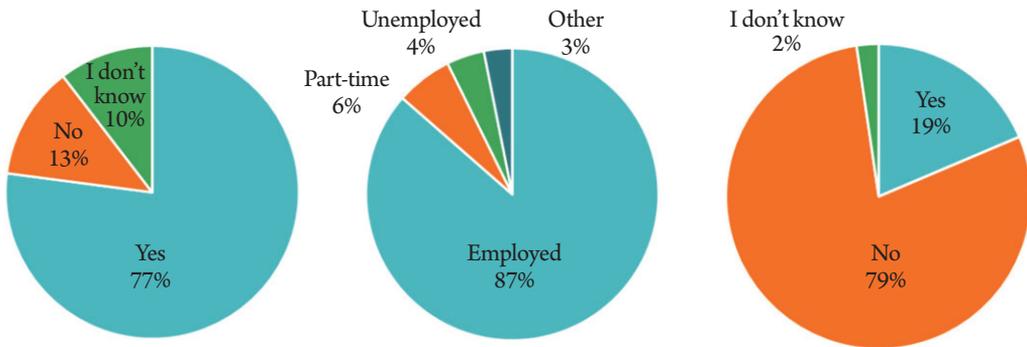


Notes. Survey distributed via email. Share of students among 96 respondents of those who quit by own request. Author’s calculation.

Among students who either took a break and later returned to the same HEI or transferred to a different faculty within the same institution, 37 percent cited financial constraints as the primary reason, while 21 percent reported a mismatch between their personal interests and the originally chosen field of study. Other reasons for switching included personal circumstances such as pregnancy or starting a family, challenges related to demanding or overloaded study programs, conflicts with professors, and dissatisfaction with the quality of the academic offering.

The quitters are satisfied with their decision to leave HE for good (77 percent) and majority of them are employed (93 percent) (Figure 4). Still, 13 percent is not happy about their decision to leave this HEI, and 19 percent think that they would have higher income now if they would not leave the HE.

**Figure 4**  
*Satisfaction and employment after HEI leave*



*Notes.* Survey distributed via email. Answers to the questions: Are you satisfied with your decision to terminate the first enrolled study? (Left) Status of employment (Middle) Do you think that your income would be higher now if you had finished your studies? (Right). Author's calculation.

Half of the employed leavers work in administration, business or IT. The rest of them is in service (accommodation, restaurants, transport, wellness, etc.), retail, wholesale, construction, health care, or manufacture.

### 5. Discussion

For each university it is very important to have at least insight in the structure of reasons for churn, because there are reasons where university could have direct, or partial contribution to affect decision to stay. Non acting and not having information of attrition reasons and its magnitude may lead to harm university's reputation, showing social irresponsibility, and lack of support programs, as well as decrease of financial and academic performance.

Decrease of tertiary enrollment of more than 40 percent in the last decade can be partially ex-

plained as the cause of the visa liberalization process for B&H citizens in some West European countries (Germany, for instance). Adults and young people are leaving the country for a job abroad. There is also a broad range of scholarship opportunities abroad for youth from B&H, which goes hand in hand with more than a decade of a negative annual increase in population and causes the decrease of freshmen at B&H HEI's.

Inaction and turning a blind eye to this phenomenon can weaken the country's poor results in terms of brain drain, the participation of highly educated people in the workforce, and ultimately contribute to even greater GDP lagging behind the bordering and Europe countries.

The analyses of reasons for leaving the HE at one of the six public universities in B&H, suggest that around 1/3 of leavers is possible to prevent, since they are directly influenced by university as

institution. Guzmán et al. (2021) found out that this share in Europe is 13 percent, almost three times lower than at this current cohort.

The main reason for leaving the current HEI was dispute or conflict with lecturer/professor, 15.6 percent, which we could not find in literature review by other researches. That may indicate its uniqueness for the Balkan area. The majority of those students transferred to the private HEIs, or to some other faculty at the same HEI. The management could check individual cases of those conflicts and analyze their participants, as well to make the process of reporting those conflicts safe and supportive for students.

On the second place with 13.5 percent of dropout is caused by financial reasons, and the same share goes for reason: inability to work and study at the same time. While tuition fees for domestic students are low (a scholarship holder pays 84 EUR per year), other associated costs such as housing, food, transportation, healthcare, etc. are very high, particularly for students who do not live on the campus and do not use the student restaurant. Those findings are in align with Kehm et al. (2019), who placed the financial reason and working while studying in external conditions that may cause the churn, and provided studies which showed that work while study increase the chance of study interruption. The possible solution that we present is partial. By establishing new rules or laws which has to be embraced by employers that will allow students to work part time and only during the days they don't have classes or in the exam weeks. Also, many municipalities, even those developed, don't provide scholarships for their HE students.

The survey respondents reported and other reasons for dropout: personal (almost 2/3 had mental overwhelm, psychological unpreparedness, lack of occupation, or motivation) which is partially in align with other researchers (Guzmán et al., 2021). Pregnancy and marriage were low on the list of personal reasons, still this is important information because it allows the university management to find ways to help this group return to or continue their

studies. Research shows that some universities have organized childcare facilities for students who are also parents. To improve student social and academic integration, we propose organizing the social events as early as possible in the first enrolled month, as well as introducing the support groups led by psychologists.

The reported institutional reasons (around half of dropouts are partially caused by insufficient internships, outdated study programs, and boring teaching methods) are particularly important for university management because the HEI is the first place where the efforts of reducing study leave may start. The faculty development is seen as the way to tackle this problem. The faculties can enhance faculty communication and teaching skills to foster engaging, interactive, and contemporary learning environments. Also, making the teachers evaluations by students transparent, rewarding high performance is our second proposal.

Where the students go after dropout and their satisfaction with decision to leave is the last part of the survey. Around 31 percent of all those who enrolled at this particular university left HEI for good. The rest of quitters continue education at private HEI in the country (1/3), abroad (1/3), and at the current HEI (1/3). The rise of number and quality of study programs at private HEI in the country pull the share of public university students to the private ones. Also, the large offer of scholarships for study abroad impacts the decision to leave the HEI in the country.

There are 13 percent of quitters who are not satisfied with their decision to quit the first study they were enrolled in, and 19 percent of them think they would have now higher income if obtained the quitted degree. Those results come align to the work of (Berlingieri & Bolz, 2020). To our best knowledge, we did not found other authors investigate would quitters regret their decision to leave.

The small sample of surveyed students who withdrawal at their request, 96 in total, is not large enough to make generalized conclusion, but despite its size limitations, brings valuable insights into

share and reasons of churn. As a solution to this limitation, a systematized questionnaire for all public and private HEI in the country can be created that is obligatory to fulfill at withdrawal and to be sealed for three or six months upon leave, to ensure students anonymity.

## 6. Conclusions and implications

This research seeks to raise awareness of students HE dropout importance which may lead to establishing a systematic support program to prevent attrition in HE in the whole country. In that way the HEIs could improve their reputation and retention rates, moving the country's GDP up in the long range, as the consequence of having more highly educated citizens. Implications of higher retention rates spread broader to less crime rates, less burden of health care expenditure, and increase in longevity, income, collected taxes, consumption of real estate and life quality.

Neglecting the phenomenon of students' attrition to HEIs in the country may led to financial, social and institutional negative implications worsening, leaving the individuals, institutions and society not reaching their potential for grow and progress, and falling behind other countries.

The contribution of this first-ever research on the reasons for leaving higher education in the country employing questionnaire by dropouts in tertiary education lies in providing valuable insights into the structure and causes of student dropout, as well as a preliminary understanding of their trajectories in the years following their departure.

### 6.1. Theoretical contributions

The theoretical contribution of this research offers systematic categorization of the reasons for leaving HE into four distinct categories and leaving the students to identify the first dominant and the second most influential reason for leaving. The reasons for leaving are divided into personal, pedagogical, institutional and financial, offering the students a variety of choices based on literature review. Furthermore, the questionnaire branches out into sec-

tion for those who continue their HE, and for those who terminate it for good. Also, the research contributes by providing the insight into quitters' satisfaction and trajectory after departure.

### 6.2. Policy and managerial implications

This study highlights the importance of early identification of students at risk of dropping out, emphasizing the potential of advanced analytical methods such as machine learning to enhance in time prediction. A key policy recommendation is the development of a standardized, state-level questionnaire to be completed by all students who discontinue their studies. This instrument should ensure anonymity, particularly in cases where conflicts with university staff may influence students' decisions to leave.

Implementing a data-driven decision-making approach within HEIs would enable a more systematic understanding of dropout factors, facilitating timely and evidence-based interventions. Such an approach can enhance student retention, improve institutional communication and operational effectiveness, and strengthen the university's reputation. Additionally, reducing dropout rates would contribute to increased enrollment stability, ultimately securing long-term financial sustainability for universities.

### 6.3. Limitations and suggestions for future research

One of the primary limitations of this study is the sample size, which includes only 96 students who voluntarily discontinued their studies at particular (one of six public universities). The limited number of respondents restricts the generalizability of the findings. Addressing this constraint in future research could involve obtaining more recent and comprehensive HEI data, particularly by improving access to student email addresses. A larger sample size would also enable the application of more advanced statistical methods, allowing for a deeper exploration of dropout patterns and their underlying causes.

Another limitation pertains to research design and methodological experience of authors, particu-

larly in structuring the research process and formulating survey questions. This limitation could be mitigated by refining the research framework through more systematic methodological approaches, pilot studies, and interdisciplinary collaboration.

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## Biography

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**Прекид студија у високом образовању: Истраживање разлога  
прекида студирања у Босни и Херцеговини**

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истраживање

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САЖЕТАК

*Смањење стопе напуштања терцијарног образовања представља кључни изазов за установе високог образовања (УВО) због њихових значајних друштвених, финансијских и личних посљедица. Ово истраживање има за циљ да покрене регионално и национално испитивање тако што по први пут представља увид у разлоге напуштања високог образовања у Босни и Херцеговини (БиХ), на основу примарних података. Подаци су прикупљени на једном од јавних универзитета у земљи и обухватају студенте који су добровољно напустили студије у периоду од 2007. до 2019. године. Анкета спроведена међу 96 студената основних студија који су прекинули школовање показује да се отприлике једна трећина случајева напуштања студија могла спријечити, будући да су били повезани с институционалним факторима. Међу идентификованим разлозима — приватним, институционалним, финансијским и педагошким — као главни узрок прекида студирања издвојени су неспоразуми или конфликти са наставним особљем. Ови налази указују на потребу за циљаним интервенцијама у циљу побољшања односа између студената и наставника, као и отклањања институционалних недостатака ради унапређења задржавања студената.*