

Factors Influencing the Probability of Dropout in a Romanian Higher Education Institution, Incorporating the Impact of the COVID-19 Pandemic

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Abstract: Dropout rate is an important indicator of the quality of higher education systems, especially in the case of mass education. When the Bologna reform in higher education was introduced, it was hoped that more people would graduate from short-cycle undergraduate courses, but the transition from a more traditional educational model to the Bologna system did not reduce the dropout rates. In Romania, a recent study carried out by UEFISCDI indicates that almost half of the students enrolled in undergraduate programmes in 2015 had not completed their studies by 2021, while Herţeliu et al. (2022) show that 43.8% of students drop out of university while being enrolled in the first year of a bachelor's degree programme. The current study focuses on two surveys carried out at a Romanian higher education institution (Babeş-Bolyai University), with the aim of identifying individual, socio-demographic and institutional risk factors for university dropout, as well as factors that protect against it. Using factorial analysis, the study reveals that the factors associated with university dropout have a multi-causal character, and are related to both institutional, economic and external factors.

Keywords: university dropout, higher education, dropout risk factors.

Introduction

Dropout rate is an important indicator of the quality of higher education, especially in the case of mass education systems. When the Bologna reform in higher education was introduced, it was hoped that more people would graduate from short-cycle undergraduate courses, but the transition from a more traditional educational model to the Bologna system did not reduce the dropout rates. The dropout rate in Romania was analysed by UEFISCDI and the results indicate that almost half of the students enrolled in undergraduate programs in 2015 had not completed their studies with a degree in 2021, which means that the dropout rate was 47.96%, while 43.8% of students dropped out of university while being enrolled in their first year of a bachelor's degree program (Herțeliu et al., 2022). The dropout rate at the level of Babeş-Bolyai University varies from one cohort to another, but on average, it is situated at around 19%. Similarly to the trends observed at the national level, the dropout rate has the highest values in the first year of studies. Thus, of the total number of students who dropped out, more than 75% dropped out in the first year in the case of 3-year study programmes and over 65% in the case of 4-year programmes (UBB Report, 2020, 2021, 2022). Still, it should be noted that the university dropout rate in Romania is still below that of the European states, as well as the fact that comparing dropout rates in different countries (but also across institutions) based on raw statistics can be problematic, given the fact that the regulations on higher education can vary greatly even within a single European region (Szemerszki, 2018).

In recent years, increased attention has been paid to evaluating the performance of higher education systems, both at national and international levels. A number of studies have been dedicated to measuring the phenomenon, clarifying the concepts and identifying possible indicators that would allow for a more objective assessment of the current state of affairs. University dropout is also a major political concern throughout the world, due to its effects on the individual, institutions and society at large. As a result, the majority of articles addressing these issues aim to explore and explain the underlying causes of failure and dropout.

Babeş-Bolyai University (henceforth UBB) has developed a strategy for reducing the risk of dropping out, which is a working tool focussed on highlighting the need to assume, at the various decision-making and executive levels of the university, some concrete, actionable approaches and steps towards preventing and intervening in situations of university dropout, as well as establishing concrete directions of actions in this regard. The analyses so far have concluded that the dropout rate is the highest in the first year of undergraduate university studies, the target population being people who were enrolled in a bachelor's degree programme at UBB, and who, at the end of their first year of university studies were expelled. This confirms an essential finding of both national and international literature, according to which a significant wave of dropout occurs at the beginning of studies (Szemerszki, 2018; Mălăescu, Chiribuca & Pavlenko, 2018). It is important to mention, however, that the dropout rate also depends on the definition or methodology used with regard to the time after which one is considered to have dropped out.

The main objective of the present study is to identify individual risk factors, as well as socio-demographic and institutional factors for university dropout, together with protective factors against it, using two surveys carried out in 2019 and 2021 at the level of UBB. The study has two main parts. In the first part of the study, we analysed the evolution of university dropout on the basis of a comparative analysis of the two aforementioned studies. In principle, we focussed on the data from 2021 and compared it with the results of the previous survey from 2019, from various perspectives. In the second part of the study, we used factor analysis using data from the 2021 survey in order to identify the key factors that lead to student dropout.

Theoretical background

University dropout is a problem that involves all actors in higher education at several levels. The phenomenon of dropout has been studied as a research topic since the 1970s, across the world. At the time, university dropout was mainly explained by social and sociological reasons. Research in the 1980s identified individual causes by focussing more strongly on psychological and socio-psychological factors. Considering the lack of common practice both at the

international and national level, there are a variety of approaches to the phenomenon of university dropout. Likewise, a great variety of terms have been used to refer to this phenomenon, including terms such as “dropout”, “non-persistence”, “academic performance / success versus academic failure”, “withdrawal”, “retention versus attrition”, “disengagement” and “desertion” (Herțeliu et al., 2022). This conceptual diversity can also be found in Romania, where no nationally agreed definition of university dropout exists.

From a sociological perspective, Tinto’s research (1975, 1988) should be noted, as it emphasises the importance of three factors that cause students to drop out of university: individual characteristics, pre-university experience and family environment (social status, family values and expectations). These three factors interact with each other and directly influence the student’s initial commitment to the institution and to their academic goals. Tinto’s Student Integration Model assumes that students’ initial level of engagement influences how they integrate into the social and academic fabric of the institution, and shows that the level of integration directly affects their decision to continue or give up on their university studies. According to Tinto, social integration is achieved through informal peer grouping, taking part in extracurricular activities and interaction with administrative and faculty staff.

Among the conceptual models of the dropout phenomena of the 1980s, Bean’s (1985) model (known in the international literature as the Student Attrition Model), gives more importance to factors related to support and encouragement. These include, for example, organisational factors of higher education (including elements of the organisational culture of the institution, such as an incentive-based system or information programmes), and academic factors related to the learning process, such as career guidance and skills development. At the same time, Bean’s model gives great importance to other factors, such as self-development capacity, self-confidence, stress and motivation.

Cabrera et al. (1993) provide an integrated model in which the two theories are not mutually exclusive, but rather complement each other in terms of the assumed role of the organisational roles and students’ commitment to the institution. As such, it provides a different understanding of the dropout process, where the focus is on the

structural specification of the psychological and sociological processes underlying dropout behaviour.

Tinto's (1975) and Bean's (1985) models, which emphasised the link between dropout behaviour and students' interaction with the institutional environment, have received considerable attention in the literature, but nowadays we must also take into consideration external factors, such as students' financial situation, working while studying, family commitments and the possibility of transferring to another higher education institution.

Research from the 1990s focussed on the economic, ethnic and cultural factors in university dropout. Brawer (1996), for instance, identified risk factors such as working during studies or the less favourable social status of the family.

Bennett's (2003) studies reveal that financial difficulties exert a strong influence on students' decision to stay at or to drop out of university. The second strongest reason for dropping out was unexpected external problems (such as having to care for a family member or facing a serious illness), followed by poor academic performance.

Kiss (2009) emphasised the student side of university dropout, as in his opinion, those who will lose out will be the ones who lack essential skills for higher education, the ability to master the curriculum, as well as self-management and communication skills. According to a more recent study (Sittichai, 2011), four primary factors were identified that determined students' decision to drop out. These included geographical location, enrolment in a field of study which the student does not identify with, a break up or changes in one's personal relationships, as well as the inability to manage time effectively.

An analysis by OECD (2012) identifies six risk factors that increase the dropout risk: academic performance, student behaviour, family environment, institutional structure / institutional resources, educational policy and labour market attractiveness. While academic performance is identified as being most closely correlated with dropout rates, the report points out that family status and lack of family support can also increase the risk of leaving the school system early. Institutional structure, that is, the presence of institutional resources, is also significant, including institutional culture, the degree of peer interaction, pedagogical practices together with other institutional

characteristics. Last but not least, attractiveness on the labour market is also a risk factor, if students consider it economically more advantageous to work before completing their studies.

The shared view in the theoretical approaches is that university dropout is a complex phenomenon, influenced by numerous factors, but each approach emphasises the importance of different factors (personal and institutional factors, family status, social factors, support and encouragement etc.).

The aim of the present study is to investigate the factors predicting university dropout among students of Babeş-Bolyai University, in an attempt to identify protective factors and inform appropriate interventions to prevent students from dropping out.

Methodology

The study is based on data collected by Qualitas Centre during two surveys, carried out at the level of Babeş-Bolyai University in 2019 and 2021.

The first survey, conducted in 2019 targeted students expelled after the first year of their studies in the 2015/2016, 2016/2017 and 2017/2018 academic years, which included a total number of 5991 students. A sample of 600 students was taken from the total population, using the simple random sampling method. Data collection took place in the form of telephone interviews, conducted between October 2018 and January 2019.

The second survey was carried out at the end of 2021, and similarly to the first one, it targeted students expelled at the end of the first year of their studies. The survey focussed on students enrolled in the 2019/2020 and 2020/2021 academic years. Data collection took place online between November 2021 and February 2022. From the total population of 5069 students expelled, 227 students, for whom no contact data was available, were eliminated, resulting in a population of 4842. In the first phase of the survey, the entire population of expelled students received an invitation to complete a questionnaire through the QuestionPro platform. This way, a total of 222 responses were collected. In the second phase of the survey, students were surveyed by phone, generally respecting a quota sampling corresponding to the distribution of students per faculty at the level of UBB. The survey

followed the rules of the sampling procedure, but it cannot be considered representative in the traditional sense, as it was conducted partly online and partly by telephone. Out of 4842 students, 443 people completed the questionnaire, which corresponds to a response rate of approximately 10%.

To collect the data a questionnaire was used, which addressed the reasons for not completing a chosen study programme at UBB, the involvement of different people (internal or external to the university) in making the decision to withdraw from university studies, the intention to resume the studies in the next 3 years and socio-demographic aspects of the respondents. In addition to these, the questionnaire used in 2021 also contained questions related to the nature of the study programme chosen at the university (even if not completed), as well as the impact of the COVID-19 pandemic on the decision to withdraw from university studies.

Reasons for dropping out of university studies

The reasons for not completing the chosen study programme at UBB were evaluated using two questions and a Likert scale. In the first question, 9¹ aspects were listed, and the respondents were asked to evaluate, on a scale from 1 (*not important at all*) to 5 (*very important*), the importance of each aspect in making the decision to withdraw from university studies. The aspects listed concerned both personal aspects of the respondents' lives as well as aspects related to the characteristics of the chosen study programme. In the case of the second question, respondents' possible reasons for not completing their university studies were formulated in the form of statements². Respondents were asked to mark the extent to which they agreed with each statement on a scale of 1 (*strongly agree*) to 5 (*strongly disagree*).

¹ Attending another study programme; High difficulty of the subjects; Obligations at work; Family situation; Insufficient income; Teaching quality; Teacher behaviour; Too little practical knowledge taught.

² The subjects taught and their content were below expectations; The programme I enrolled in does not offer the career prospects I would have liked; I felt that the environment did not suit me and I did not adapt; I came to the conclusion that you do not need to go to university to be successful; The specialisation I chose does not suit me; I expected something else when I chose this specialisation; For my professional success I thought it was more important to work; I felt that the effort I had to make is too great; I lost the motivation to complete my studies.

In making the decision not to complete the undergraduate programme started at UBB, the top three factors identified were: (i) *teaching quality*; (ii) *obligations at work*; and (iii) *teacher behaviour*. Compared to the 2019 survey, we can notice a significant change in the results, when the three most important factors that determined university dropout included: (i) *obligations at work*; (ii) *high difficulty of the subjects*; and (iii) *family situation* (Fig. 1).

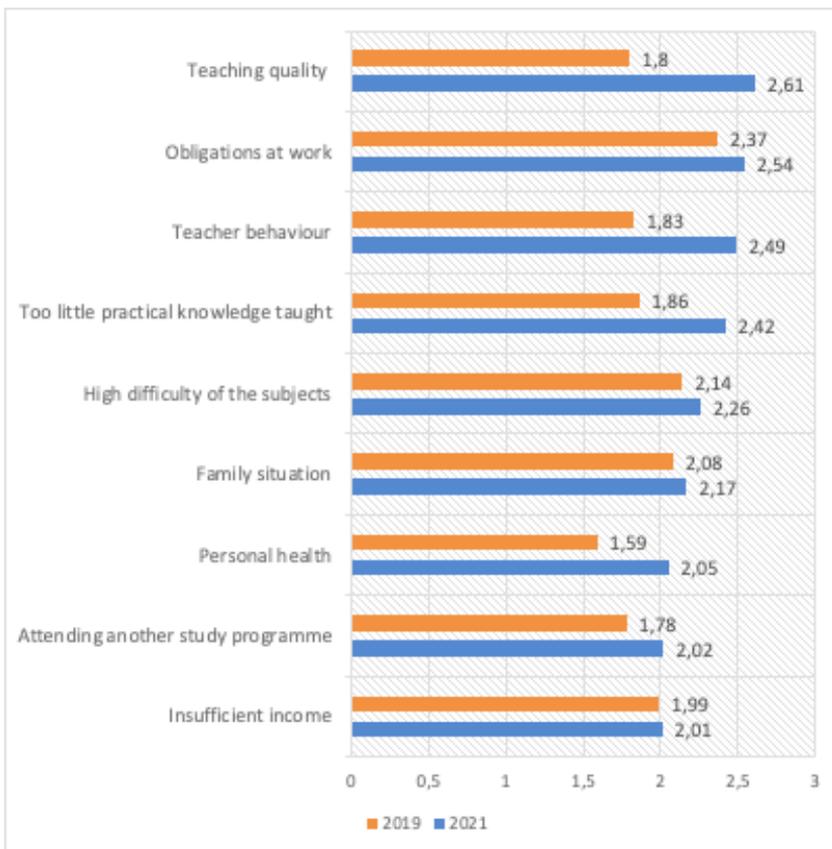


Figure 1. Important aspects in making the decision not to complete the study programme – average N = 481, N = 443

Regarding the possible reasons for not completing the study programme started at UBB, most importance was given to the statement *I expected something else when I enrolled in this specialisation*, followed by *I lost the motivation to complete my studies*, respectively *I consider that the environment did not suit me and I did not adapt*. This is

similar to the results of the previous survey, when most respondents agreed with the statement *I expected something else when I enrolled in this specialisation*, followed by the statement *The program I enrolled in does not offer the career prospects I would have liked* and *I consider that the environment did not suit me and I did not adapt* (Fig. 2).

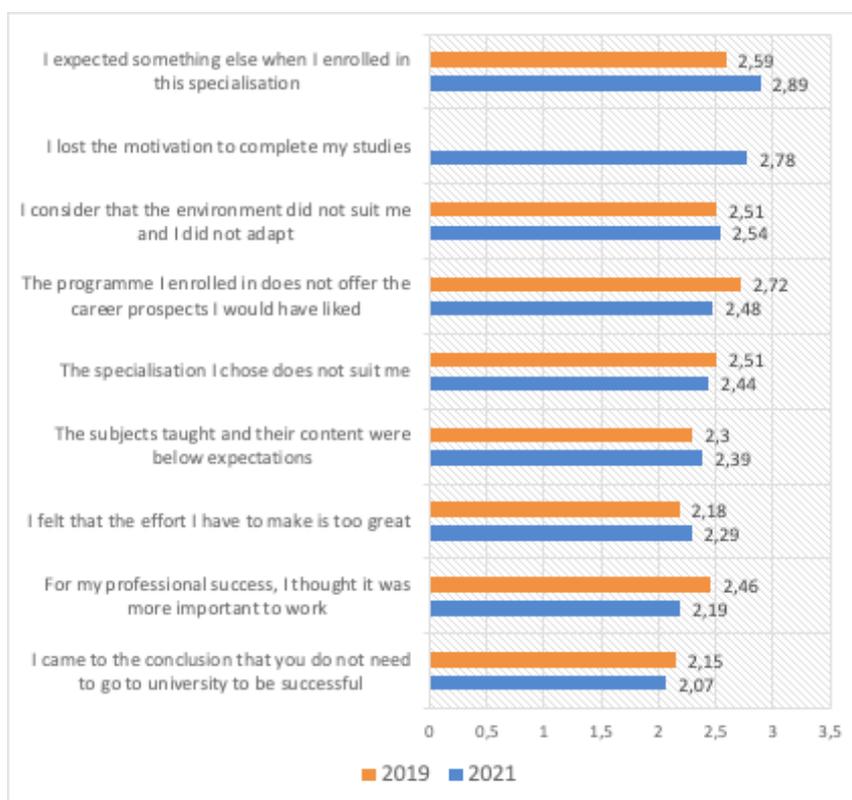


Figure 2. Possible reasons for not completing the undergraduate studies – average N = 481, N=443

For both items, in the case of all aspects / reasons mentioned, the modal value (the value with the highest frequency) is 1. This shows that the subjects' answers were concentrated towards the left side of the scale, in the area of *not important* or *strong disagreement* regarding the stated aspects/reasons.

Next, we analysed (using the V Cramer association coefficient and the Chi-squared contingency coefficient) the socio-demographic factors that influence the phenomenon of university dropout. To do

this, we aggregated the Likert scale scores, creating a three-point scale for a more transparent interpretation of the cross-tabulations. The figures below only show the percentage of respondents who perceived the respective aspect as important or very important.

Regarding the socio-demographic characteristics, no significant differences were observed between female and male subjects for the variable “aspects in making the decision to drop out.” No significant differences were found according to ethnicity either. In contrast, significant differences were identified in the case of factors that influence students’ decision to drop out depending on the place of residence, age and marital status.

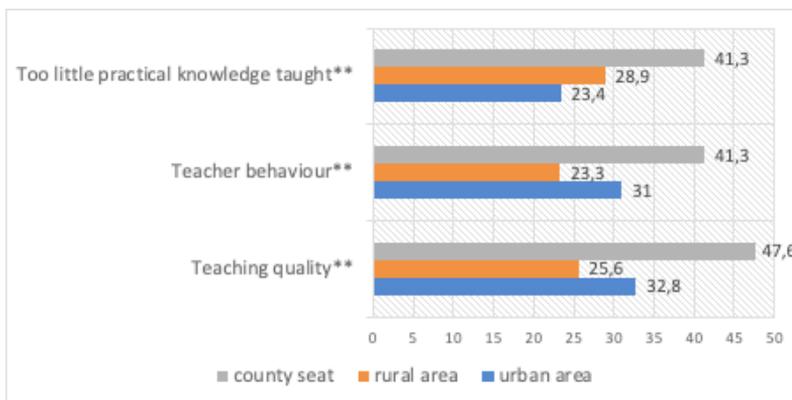


Figure 3. The weight of the aspects perceived as **important** and **very important** in making the decision not to complete the university studies – depending on the place of residence (**Sig<0.000)

The place of residence (urban/rural) has a significant association with the following factors: *teaching quality* (V Cramer = 0.135), *teacher behaviour* (V Cramer = 0.128) and *too little practical knowledge taught* (V Cramer = 0.128), meaning that the respondents coming from an urban environment (county seat) give more importance to these factors (Fig. 3).

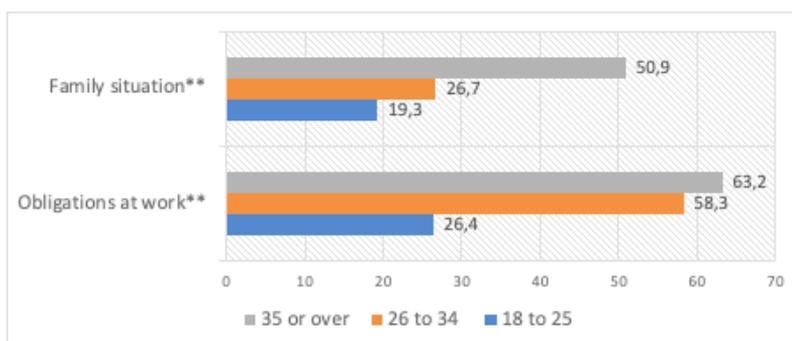


Figure 4. The weight of the aspects perceived as **important** and **very important** in making the decision not to complete the university studies – according to age (**Sig<0.000)

The age of the respondents shows a significant association with the following variables: *obligations at work* (V Cramer = 0.232) and *family situation* (V Cramer = 0.206). For older people, these two factors have a greater influence on dropping out. Most likely the meaningful variable here is not age, but family status which is correlated with age.

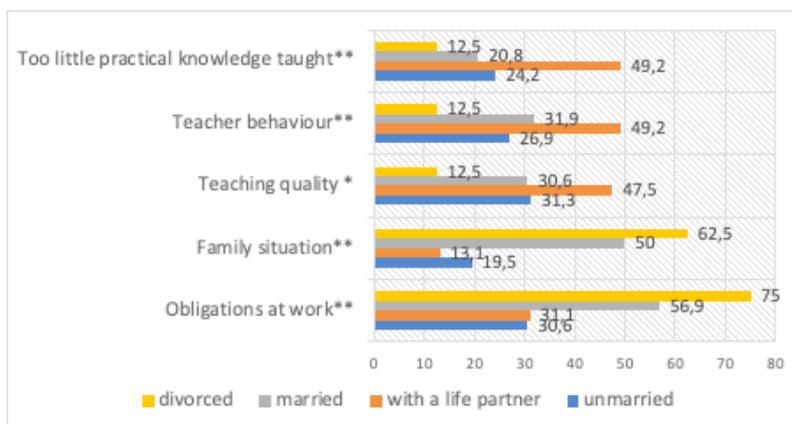


Figure 5. The weight of the aspects perceived as **important** and **very important** in making the decision not to complete the university studies – according to marital status (**Sig<0.000)

The most significant correlations were identified according to marital status, and included the following: *obligations at work* (V Cramer = 0.172); *family situation* (V Cramer = 0.220); *teaching quality* (V Cramer = 0.030); *teacher behaviour* (V Cramer = 0.140); and *too little practical knowledge taught* (V Cramer = 0.148).

In the case of divorced and unmarried respondents, the obligations at the workplace and the family situation were the two most relevant factors in dropping out of university, while the other aspects, such as the quality of teaching, the behaviour of teachers and too little practical knowledge taught were more important, i.e., play a more important role, in the decision-making process among respondents living with a partner (Fig. 5).

We also analysed the following questions, regarding the possible reasons for not completing studies according to socio-demographic factors: gender, marital status, ethnicity, age, place of residence. Depending on the gender, we can find a significant correlation between two variables: men tend to agree more with the statement I came to the conclusion that you do not need to go to university to be successful, while women seem to agree more with the statement *The specialisation I chose does not suit me* (Fig. 6).

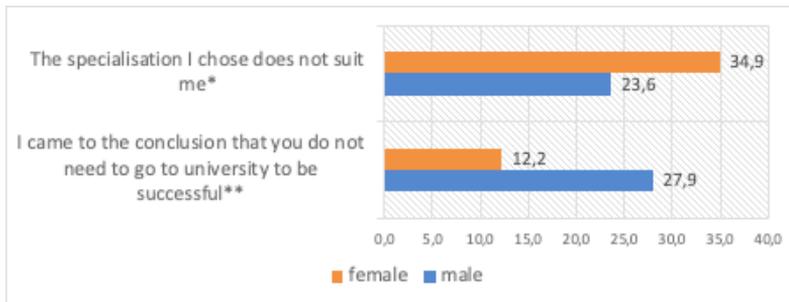


Figure 6. Possible reasons for not completing the studies according to gender – Strongly agree and agree (**Sig<0.05)

Respondents who live in a county seat give more importance to all the statements, but significant differences were found in the case of the following factors: *the subjects taught and their content were below expectations* (V Cramer = 0.113); *I consider that the environment did not suit me and I did not adapt* (V Cramer = 0.117); *I felt that the effort I have to make is too great* (V Cramer = 0.119); *I lost the motivation to complete my studies* (V Cramer = 0.116) (Fig. 7).

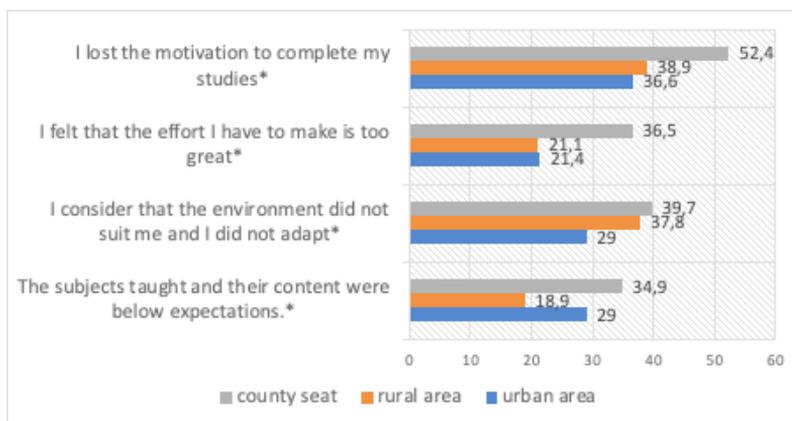


Figure 7. Possible reasons for not completing the studies according to place of residence – **Strongly agree** and **agree** (**Sig<0.05)

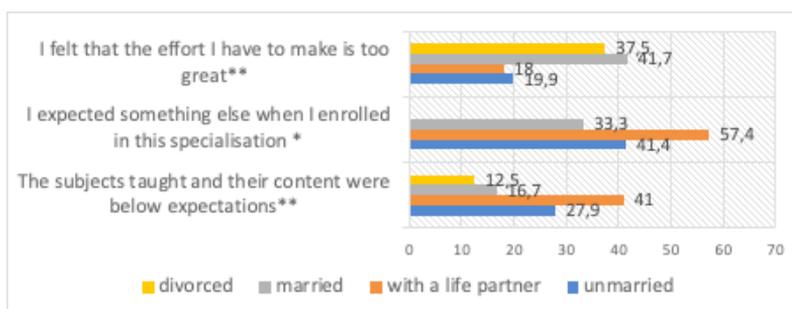


Figure 8. Possible reasons for not completing the studies according to marital status – **Strongly agree** and **agree** (**Sig<0.05)

Among the analysed variables, marital status and age have also been shown to have an impact on university dropout. Younger respondents tend to agree more with the statements *The environment did not suit me and I did not adapt*; *I came to the conclusion that you do not need to go to university to be successful*; *The specialisation I chose does not suit me*; and *I expected something else when I enrolled in this specialisation* (Fig. 9).

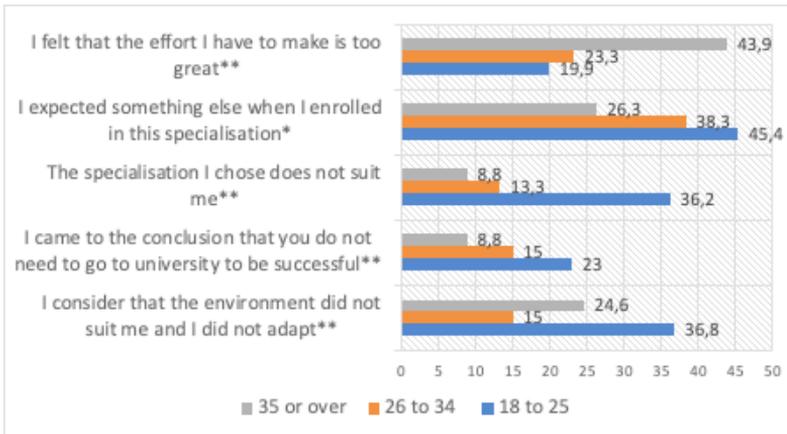


Figure 9. Possible reasons for not completing the studies according to age – **Strongly agree** and **agree** (**Sig<0.05)

For older, married or divorced respondents, the most important factor, i.e., the risk factor, is: *The effort I have to make is too great.*

Factor analysis

We used factorial analysis in order to study the factors that influence respondents' decision to drop out of university and to find out which factors can be regrouped based on the respondents' evaluation. The goal of Principal Component Analysis method (PCA) is to obtain a small number of linear combinations, i.e., principal components, from a set of variables that retain as much information as possible from the original variables. The main purpose of this method is to identify the number and nature of the factors underlying a set of manifest variables. We used Cronbach's alpha test to test the internal consistency of the indicator system. Since all indicators were measured on a single scale, no standardisation was necessary. The Alpha value is not very high, but it is acceptable at 0.693.

Using the Principal Component Analysis method regarding the factors determining dropout in higher education, three factors were generated. In Figure 10, the eigenvalues for all principal components, are graphically represented in a sequence of main factors. The number of factors is chosen where the levels of the graph show a linearly decreasing pattern. The scree plot of PCA (Fig. 10) suggests the existence of three factors. The variance explained by each factor is

distributed as follows: the first factor, 32.80%, the second factor, 19.95%, the third factor 11.21%. In total, the factors explain 64.01% of the total variance analysed.

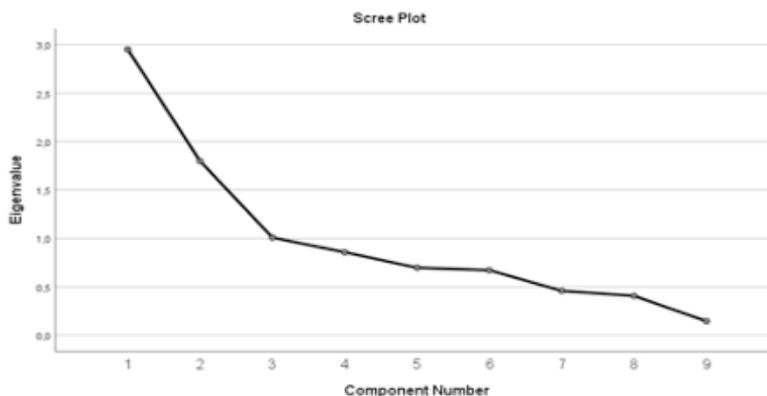


Figure 10. The scree plot of PCA

The first factor is made up of the variables: *teaching quality* (0.877), *teacher behaviour* (0.875), *too little practical knowledge taught* (0.777), *high difficulty of the subjects* (0.640). We called this the institutional factor, which shows that the reason for dropping out is related to the institution, respectively to the quality or the difficulty of the subjects taught. The second factor is made up of three variables and contains economic factors, such as: *insufficient income* (0.771), *obligations at work* (0.580), respectively *family situation* (0.808), which is also related to economic factors. The third factor contains two variables: *attending another university programme* (0.757), and *personal health* (0.400), which shows that the third factor that determines university dropout is an external one. Using this type of factorial analysis, we can obtain useful information about the factors that have a greater influence on students' decisions, while at the same time, it highlights the variables with a greater factor score.

Table 1. Determining factors in making the decision not to complete the undergraduate programme at UBB

	Institutional factors	Economic factors	External factors
Attending another study programme			0.757
The difficulty of the courses taught	0.640		
Workplace obligations		0.580	
Family situation		0.808	
Insufficient income		0.771	
Quality of teaching	0.877		
The behaviour of the teaching staff	0.875		
Personal health			0.400
Too little practical knowledge taught	0.777		

Extraction Method: Principal Component Analysis

Total Variance Expained: 64.01%

KMO 0.726

Another set of questions referred to possible reasons for not completing the undergraduate programme at UBB and the extent to which respondents agree with a range of possible reasons³ for not completing the undergraduate programme they chose. We calculated the Cronbach Alpha value this time as well, which was quite high, 0.786.

The figure below allows us to draw the final conclusions, regarding the factor structure for the analysed variables, which shows that we have three factors. The variance explained by each factor is distributed as follows: the first factor 19.07%, the second factor 15.99% and the third factor 15.65%. In total, the factors explain 50.72% of the analysed variance value.

³ The subjects taught and their content were below expectations; The programme I enrolled in does not offer the career prospects I would have liked; I consider that the environment did not suit me and I did not adapt; I came to the conclusion that you do not need to go to university to be successful; The specialisation I chose does not suit me; I expected something else when I chose this specialisation; For my professional success I thought it was more important to work; I felt that the effort I had to make is too great; I lost the motivation to complete my studies.

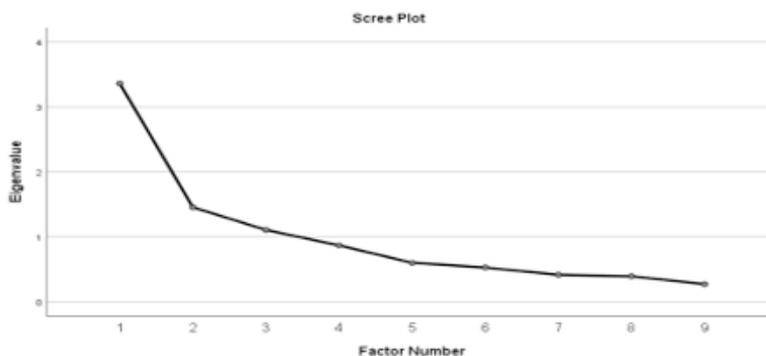


Figure 10. The scree plot of the factor analysis

The first factor consists of three variables, i.e., *the courses taught and their content were below expectations* (0.988), *I expected something else when I enrolled in this specialisation* (0.596), *The programme I enrolled in does not offer the career prospects I would have liked* (0.494), which is why we will call this factor “Professional reasons”.

The second factor is made up of the variables: *the specialisation I chose does not suit me* (0.670), *I consider that the environment did not suit me and I did not adapt* (0.645), *I lost the motivation to complete my studies* (0.386). These factors show that the reason for dropping out is the choice of inappropriately chosen specialisations.

The third factor contains the variables: *I came to the conclusion that you do not need to go to university to be successful; For my professional success, I thought it was more important to work; I felt that the effort I had to make is too great*, and, at the same time, the weight of the variable *I have lost the motivation to complete my studies* is high.

Table 2. Possible reasons for not completing the undergraduate programme at UBB

	Professional reasons	Inappropriate specialisation	Disinterest
The subjects taught and their content were below expectations.	0.988		
The programme I enrolled in does not offer the career prospects I would have liked.	0.494		
I consider that the environment did not suit me and I did not adapt.		0.645	
I have come to the conclusion that you do not need to go to university to be successful.			0.680
The specialisation I chose does not suit me.		0.670	
I expected something else when I enrolled in this specialisation.	0.596		
For my professional success, I found it more important to work.			0.760
I felt that the effort I had to make is too great.			0.370
I lost the motivation to complete my studies.		0.386	0.372

Extraction Method: Maximum Likelihood. Rotation Method: Varimax with Kaiser Normalisation.

Total Variance Expained: 50.72%

KMO 0.736

In conclusion, using factor analysis, we can obtain useful information regarding the factors that influence university dropout. Using this method, we have identified three main factors that have a significant influence on university dropout, and namely: Professional reasons, Inappropriate specialisation and Disinterest.

Discussion and conclusion

The primary objective of the present study was to investigate the underlying causes of dropout, specifically within the context of Babeş-Bolyai University. The study aimed to explore and understand the

factors contributing to dropout among students in this particular university setting.

Knowing the factors that determine the risk of dropout is important to plan when and at what point institutions and public actors can effectively intervene to ensure that students can stay in higher education and successfully finish their studies, despite the difficulties they face.

The article revealed that the three main aspects that influence the decision to drop out are: (1) *teaching quality*; (2) *workplace obligations*; and (3) *teacher behaviour*. Regarding the possible reasons for not completing the study programme started at UBB, the items given the most importance were: (1) *I expected something else when I enrolled in this specialisation*; followed by (2) *I lost the motivation to complete my studies*; respectively (3) *I consider that the environment did not suit me and I did not adapt*. Consequently, the main reasons seem to be the fact that the respondents' expectations did not correspond to the services received, respectively the loss of motivation, but it is important to emphasise the fact that on the scale used (from 1 – *not important at all* to 5 – *very important*) to measure the importance of various aspects in making the decision to withdraw from university studies, the modal value was 1. This fact shows that the subjects' answers were concentrated towards the left side of the scale, in the area of no importance or disagreement with regard the aspects/reasons formulated.

Furthermore, it is also important to mention the fact that the potential impact of limited or nonexistent offline teaching experiences for students enrolled in 2019 and 2020 should be taken into account when interpreting the results of the questionnaire. The observed variations in the case of items such as 'teaching quality', 'teacher behavior', and 'insufficient practical knowledge' between the first and second surveys are likely attributable to the restrictions imposed by the COVID-19 pandemic as well as the sudden changes that took place in the educational sphere in response to the pandemic.

The dropout rate can also be the result of different life situations, including factors of a personal, familial, educational or social nature. At the same time, it is important to take into account the fact that sometimes, from the outside, a phenomenon can be identified as a dropout, but it can actually be a conscious decision on the part of the

student, part of the students' career strategy, for example when a student reaches the conclusion that the specialisation they chose does not suit them and their interests.

Analysing the social-demographic characteristics of the respondents, we found significant differences, the most important factors influencing the risk of dropout being age, place of residence, marital status, but also gender in certain cases. Based on the results, we can conclude that students with the highest risk of dropping out of university are older students, those coming from rural areas, and divorced or married students.

The use of confirmatory factor analysis was useful to identify the main reasons and factors behind university dropout, and namely: *professional reasons*, *inappropriate specialisation*, and *disinterest*, which is consistent with the results of the previous question where we also identified three factors that determine university dropout: institutional factors, *economic factors* and *external factors*.

In the specialised literature, the following factors influencing university dropout are constantly identified: institutional factors; economic factors; psychological and pedagogical factors; and socio-cultural factors. In our analysis, institutional factors (Tinto, 1975) and economic factors (Benett, 1993) have a strong impact. At the same time, we have also identified external and socio-cultural factors (Bean, 1985; Benett, 1993; Cambera et al., 1993) that influence university dropout.

Institutional factors of higher education and academic factors related to the learning process are emphasised in Tinto's (1975) theory, which argues that there is a close relationship between dropout behaviour and students' interaction with the institutional environment. The factor analysis demonstrates this aspect, and, at the same time, it highlights the importance of the family background and social status (Tinto, 1975). Bean (1985) gives greater importance to factors related to support and encouragement, such as the incentive system and information programmes, while for individual skills, factors such as the capacity for self-development, stress and motivation. We were unable to test these aspects.

On the whole, the overall conclusion is that the factors associated with university dropout have a multi-causal character and are related to both institutional and economic factors (family background, income etc.), as well as certain factors of a more discrepant

nature, such as inappropriate specialisation and disinterest, as well as the impact of the labour market. We agree with the theory of Cambera et al. (1993), that offers an integrated model in which the two theories (i.e., the Student Intergation Model and Student Attrition Model) are complementary to each other in terms of the assumed role of the institution. Our findings lend support to the idea that the phenomenon of dropout must be approached and analysed from several perspectives.

All in all, the factors responsible for school dropout can be of macro-level, such as factors related to higher education policies (such as curriculum, training structure, funding), and meso-level, from the socio-economic background of the individual, their educational career, academic background and achievements. For all of these challenges, and in order to reduce university dropout, the implementation tools and policies must be treated with great care and call for an interdisciplinary approach. The study aims to draw attention to the complex and multidimensional nature of early university dropout, and we hope, that the results of the present study will contribute to the scientific advancement and to a better understanding of the motivational study of university dropout.

Limitations

Our findings are limited by the fact that we could only explore the cumulative effects among the main predictors of university dropout. The decisive factors of university dropout are quite numerous and complex, and apart from the factors investigated in the present study, there are other factors as well – such as, for example, ones related to social inequalities, a weaker socio-economic environment, poor academic performance, institutional integration etc. -, which have not been explored due to the unavailability of such data in our dataset.

Another limitation of the present study is the exclusive use of Likert-type scales (for measuring the possible reasons for not completing the chosen study programme), which might contribute to a high bias of the respondents. In order to ensure a multidimensional approach to studying the phenomena of university dropout, we consider that it would be important to take into account other factors as well, such as the infrastructure and the reputation of the university, the

administrative experiences, academic achievements and relational integration, to mention just a few.

Furthermore, we are aware of the fact that dropout rates differ across faculties and study programmes and that the likelihood of students leaving their studies prematurely can be influenced by the characteristics of the specific study programme. Nevertheless, considering the fact that this was an online survey, it cannot be called a representative measurement, hence no deeper correlation could be drawn. We believe that exploring this phenomenon in more depth could be a worthwhile endeavour for further analysis, but in order to do that a different database would be needed.

Last but not least, we did not aim to examine the effects of the COVID-19 pandemic on the dropout rates at UBB, as we did not have enough data to evaluate its impact in detail. Nevertheless, a study carried out in 2020 (Deaconu & Háj, 2022) shows that the intention to drop out was higher in the case of respondents enrolled in an undergraduate study programme, but the majority of the students surveyed did not consider dropping out. More precisely, 65.9% of the surveyed students said that they did not consider giving up on their studies following the general context created by the global COVID-19 pandemic, while 18.9% of the respondents did not provide a conclusive answer. In total, only 15.3% of the respondents enrolled in an undergraduate course considered dropping out.

Analysing the impact of the pandemic on university dropout at the level of Babeş-Bolyai University, it appears that online teaching conditions were not a relevant factor influencing students' decision not to complete their studies. In a survey carried out in 2022 at the level of UBB (see UBB Report, 2023), 60% of the students surveyed disagreed with the following statement: "If the pandemic had not intervened, I would have completed the study programme." Nevertheless, a significant proportion (27%) of students who encountered various difficulties as a result of the context created by the pandemic have considered abandoning their studies. Students who reported having encountered certain difficulties as a result of the pandemic reported, first of all, psycho-emotional problems, problems with regard to the designing and the organisation of the teaching activities and the quality of teaching in the online environment (see also Nemes, 2021).

Acknowledgements

This work was funded by a FDI Grant entitled “Sprijinirea accesului generației born-digital la învățământul superior prin măsuri adecvate de incluziune – Born2UBB” (Supporting the access of the digital-born generation to higher education through appropriate inclusion measures – Born2UBB), Grant No. CNFIS-FDI-2022-0568.

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