Managing Internal Personal Factors of Business Student Drop-Out to Build Retention

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Abstract – **The paper focuses on causes for drop-out from business study programs at case university over seven years. Causes of drop-outs were collected and the database consists of 1,154 drop-out. Students indicated their reasons and preferences of their causes leading to leave studies. The aim of this paper is to identify factors affecting of drop-outs in business higher education and its evolvement in past years to define main areas of negative causes. The article presents students perception on study conditions and identifies the most important personal reasons to quit. The outputs of this paper are based on survey data from the whole sample of dropping students in the case business school. Statistical analysis, including correlation and factor analysis were employed to analyse students' perception of the educational processes impacting retention. The analyses revealed clusters of variables with proven co-appearance and defining students´ main causes to drop-out. Orientation of students is primarily on expectations and personal reasons. The results lead to improvements in institutional processes to address students' requirements and expectations to improve retention at universities.**

Keywords – **Business, management, turnover, retention, education, support.**

1. Introduction

Dropping out of higher education institution is one of the most significant issues facing the higher education community [1], [2], [3], [4], [5], primarily because these are sunk costs in the global, societal, institutional and individual dimensions [6], [7]. To minimize the waste of financial and human resources, universities are increasingly looking for promising measures and programs to identify and assist students who are at risk of dropping out. According to Mouralová and Tomášková [8], the decision to leave studies early usually leads to impacts on the labor market, which can be seen in the sense of reducing the employability of these unsuccessful students, the absence of a qualification document usually leads to an increased risk of unemployment. The impacts are also social, which can be described as family disappointments. And last but not least, psychological, in the sense of personal failure [9], compare Conway [10].

Dropouts can be defined as students who leave the higher education system without obtaining a first degree [11], [12]. The list of terms can also include the frequently used term leaving university early [13], [14].

Economic models of early school leaving are based on rational choice theories and linked to human capital theory. According to these theories, students compare the expected returns of education with the costs as well as their expectations of educational success. Expected return to education depends, for example, on perceived career prospects [15]. Student behavior is influenced by the decision on the level of engagement. This assumes that the amount of time invested in educational activities is a determinant of the risk of dropping out [16], [17].

This article investigates the main causes and expectations of business university students impacting their intentions to drop-out. The aim of this paper is to identify factors affecting of drop-outs in business higher education in case of private business university and its evolvement in the period of seven years, and define strategies to minimize negative causes in Central European region.

The article brings information on students' perception and assesses study conditions and identifies the most important personal reasons to quit their studies.

1.1. Theoretical Background

First-year undergraduate students are most at risk of dropping out [7], [18]. In OECD countries [19], this affects 12% of students. (In all OECD countries with available data, women have higher completion rates than men in undergraduate programs.) Expectations, perceptions, and experiences of students in their first year of higher education are considered significant predictors of student satisfaction with the course, engagement, and engagement in learning [7], [20], [21].

According to Bardach *et al*. [5], it can be assumed that a certain percentage of MA students may have already been exposed to challenges in their undergraduate studies, and those who persevered despite these challenges may have developed specific strategies and motivational patterns – such as a higher personal orientation goals that enabled them to succeed and avoid (even intended) early graduation. If they are exposed to problems again during their master's studies, they can immediately activate these protective mechanisms to buffer their possible negative consequences.

A low number of graduates who successfully complete a degree program can lead to negative feedback from students and, as a result, damage the reputation of the college [22]. Especially nowadays, the student is perceived as a customer and universities basically compete for him [7], [23].

The purpose of this study is to better understand the causes of university students' decision to leave a study program and thus to distinguish predictors that can be structural, institutional, and individual in nature [5], although we emphasize that the causes of early exit from university studies are certainly multifactorial [7], [18], [22], [24], respectively rather, we should think about bundles (groups, areas, combinations) of these factors (variables). Based on the conducted investigation [17], it can be stated that there is rarely a single reason or reasons in one area that led students to leave college early. Therefore, the identification of these interrelated factors is especially useful for implementing more effective individual or group interventions. These interventions either support student integration or adapt the university environment to student needs and preferences [7], [25].

Behr *et al*. [17] identified six (bundles) of reasons for dropping out: a) study conditions, b) performance and requirements, c) interest and expectations, d) alternative employment and career, e) personal and family aspects, f) financial aspects. Heublein *et al*. [26] considered 33 reasons for early leaving university studies, which they classified into 9 bundles (groups): a) performance problems, b) lack of motivation, c) financial difficulties, d) job preference, e) career alternative, f) study organization, g) study conditions, h) personal reasons, i) family reasons. Most often, they reported unsatisfactory academic results, reduced or insufficient motivation to study, and, on the contrary, an effort to do practical work. Family reasons or study conditions and organization appeared to be less important.

Factors of an individual nature [7] that contribute to the decision to leave university studies include difficulties: economic - financial, fear of debt, paid employment [20]; family – relational or caring responsibilities [27]; health - change, or deterioration of health, fatigue; social – a major life event such as bereavement or pregnancy [18], [28], [29], [30], [31], [32]. It can be concluded that these factors can rarely be influenced or controlled by the university.

Conversely, factors of an individual nature that can be better intervened at the university level [5], [33], [34] include: personal goals of students, which de facto widen the network motivational predictors, i.e. the student's motivation to study the chosen study program, individual subjects [35]; self-confidence, value congruence [34], [36], [37]; endurance, resistance (resilience); academic aspirations [35], [38], [39]; addressing poor academic performance [40]; student preparation for university studies; identification with the new social role of "student"; adaptation in the university environment [41]; affiliation with the university.

In order for students to successfully navigate the transition from high school to college, they need to develop a sense of belonging and a "student" identity. Students, despite coming from comparable backgrounds, may have vastly different experiences. For particular students, identifying with this new social role may be more difficult than for others. Students go through socialization, which we understand as processes during which they become familiar with social and societal customs, the school (system) environment, which enables them to fully participate in educational processes [42].

Therefore, a deeper understanding of the nuances of student identity formation is necessary, which can be complicated by the structural barriers [7] that students have to face: low income; from a minority racial/ethnic background; with a disability; who are the first in their family to attend university [43], [44], [45], [46].

A more integrated view of the early termination of higher education shows a connection between factors of an individual nature and how students perceive their contextual environment (e.g. [47]), i.e. in addition to obstacles of a structural nature, attention should also be focused on institutional factors [1], [48], [49], which can be characterized as organizational culture or social climate [5], [50], [51], [52]. Institutional factors also include study conditions, which include both a static (information about the study program and study subjects) and a dynamic component (support from academic and non-academic staff).

The connection between individual factors and contextual factors requires student support already at entry, or before entering university studies [5].

Possible interventions at the college level: pre-entry programs (e.g. summer schools) that can help students transition to higher education have a positive effect on students' academic self-esteem as a result [20], [41], [53], [54]; adaptation programs ensure that students have relevant information about the university and the study program and study organization [17]; support services that have a positive impact on student retention and satisfaction [25]; support programs (courses, seminars, workshops, group, individual counseling) which are aimed at:

- increasing resilience and the ability to succeed despite difficulties [44], [55];
- creating support networks [18], [56];
- personal tutoring [44], [7], or bridging courses [17], leveling courses [57];
- the use of technology to make teaching more flexible [57]);
- learning strategies [17], how to organize time for studying and preparing for exams, how to process lectures;
- support for initiative (tertiary education requires a higher degree of initiative from students than secondary education);
- coping strategies [58], [59];
- increasing motivation [55];
- to develop professional identity [7], [18];
- the support of academic persistence, more precisely, it is the support of students in setting goals, in fulfilling tasks and obligations associated with their studies [5], [35].

Efforts need to be focused on support programs. Important for academics, non-academics, and practitioners is the finding that equipping students with personal goal-setting strategies could prevent college dropout intentions even when students encounter structural disadvantages. Bardach *et al.* [5] emphasize that it is necessary to take into account the difficulties associated with the initiation and implementation of systemic changes in higher education institutions, as a result of often limited financial resources and dependence on the forces of, among other things, educational policy.

Strong support programs, elaborate support networks are positively associated especially with students who are at risk of structural problems [45], [60]. Central to this discourse is the idea that students should maintain their identity in their original culture, maintain their social networks outside the college, have their cultural capital valued by the college, and experience learning that matches their preferences [25].

According to Tinto [28], students need to break away from their established social norms and communities and embrace the values associated with the new university environment. Christie *et al.* [27] argue that this approach risks seeing some students, particularly those from expanding backgrounds, as 'problematic', with pressure being placed on them to make a fundamental change to enable them to adapt to the university environment. Pascarella and Terenzini [67], together with Tinto's model, are understood as classic models of academic failure [61].

In other words, students from an expanding environment may have positive consequences for their sense of belonging to the university, greater engagement in their studies, and greater cultural heterogenization of graduates. However, it could also be argued that the transformative potential of education is being lost [5].

Per information described by the theory on the studied phenomena, the research question is stated as follows: What are the main factors leading to student drop-out and how are those developing in time in business higher education and how can universities address it and support students?

2. Methodology

The article is based on the method of analyzing scientific studies and research on the student retention and dropouts. The original data for the study presented in results section was collected by questionnaire among dropping students. The data were collected in the period of seven years between 2017 and 2023. The questionnaire was compulsory for all students otherwise their request to drop out was not processed.

2.1. Data Collection

The article analyses and assess data from the primary survey collected by web-based questioning (CAWI method) at business university operating for over 20 years on the market.

The university offers undergraduate and graduate degrees in areas of management, economics, marketing and human resources. The student data comprised a total of 1,154 dropping students. The evaluated areas designed based on theoretical background, similar studies and long-term evaluation of student drop-outs at case university were (1) expectations; (2) work relations; (3) communication at university; (4) university culture; (5) personal reasons; (6) study program; (7) financial situation and (8) administration and bureaucracy of studies.

The surveyed students general demographic information were as follows:

- Gender: 658 (57%) female, 496 (43%) male
- Bachelor students: 946 (82%), master students: 208 (18%)
- Full time: 295 (25.6%) and part-time/distance students: 858 (74.4%)

The distribution among years is shown in Table 1.

Table 1. Sample description [%]

Year	Grad	Bac.	Part-time	Full-time	M	F
2017	26	74	74	26	39	61
2018	24	76	68	32	48	52
2019	18	82	73	27	42	58
2020	19	81	78	22	49	51
2021	15	85	73	27	44	56
2022	14	86	78	22	35	65
2023	17	83	83	17	40	60
AVG	18	82	74	26	43	57

2.2. Research Structure and Construction

This survey was designed to analyze reasons of students drop-out in seven main cause clusters specified in the previous section. The research questions used in questionnaire and factors analyzed were created using theory and similar studies or researches cited in the theoretical part of this paper. Dropping-out students' attitudes associated with defined factors were described by prepared statements under each factor. The tested statements are coming from other researches and studies on the searched phenomena and modified to fit the specifics of the case of business university. The statements were firstly designed and piloted on several students to finalize the content and number of statements, as long as their understandability and adequateness. The pilot questioning brought minor redefinitions and adjustments to the final version of the survey. The coherence of statements in questionnaire were reaching CA 0.8 and thus were considered appropriate and usable for further data collection and analysis.

2.3. Data Operationalization

The article brings in-depth information of students' expectations in business higher education. Firstly, the survey data were cleared, data matrix created and cleared from partially missing answers. Secondly, answers were coded and structured according to the area and type of variables. The data processing through statistical tests used hypotheses regarding the frequency of pre-defined categories of each variable loading. Further, two-dimensional tests were used to define dependencies of selected variables. The aim of the selected steps of analyses was to assess any intercorrelation among data structures to avoid misinterpretation and focus on the new information. The operationalization of the data in the file was processed by the standard hypothesis evaluation. Cramer´s V and Spearman´s correlation tests were used. Whenever the p–value resulted in a number that was less than the selected level of significance $\alpha = 0.05$, a hypothesis was rejected.

Multivariate method, namely factor analysis was used to limit the number of unique and stand-out approaches and appearances. The defined perquisite conditions for variables to enter selected analysis were specified and tested according to Hendl [62]. The analysis chosen is frequently used in social research [63] and in the area of education, training, and development. Factor analysis is often used by researchers in specified areas [64]. Loadings of correlation coefficients were adequate based on recommendation by Anderson *et al*. [64], as significance levels and correlation coefficients in the correlation table were significant. The Kaiser-Meyer-Olkin test (KMO) level was found at the 0.79 which is defined as meritorious and it is possible to use the data to conduct factor analysis.

The final loading of factors that consisted of variables were extruded by the Varimax rotation method. To construct valid factors, the Kaiser-Guttman rule was used and consequently only factors with loadings higher than 1 were considered. Further, Sutin test helped to extrude less important factors. The resultant coefficients in the factor analysis reached values in the interval <-1;1>. Positive coefficients show direct relation within each factor and negative means indirect proportion. For the final data table assessment, only values of loadings reaching over 0.3 were accepted and interpreted, as such value indicates moderate correlation as defined by Anderson [64].

The factor analysis and related tests helped to define and confirm significant groups of respondent approaches regarding approaches to student dissatisfaction, breakout point leading to drop-offs.

The aim of all analyses was to define and confirm groupings of variables that significantly affect student turnover and at the same time provide unique approaches represented by unified content within each factor to describe main coherent causes of drop outs. The outputs of analyses should improve personalized strategies to address the key expectations of students to maintain students in study programs. The formed factors help confirm the current orientation of students. The generalization of output data by factor analysis improves the selection and clustering to create significant similarities while filtering out inconsistencies.

To process the data SPSS software was employed. All processing was conducted in accordance with the ethical codes and EU law describing possible approaches to the sensitive information.

3. Results

This part of article brings results obtained by conducting quantitative research for n=1,154 dropped students. The responses that contained causes for students to drop off structured to eight areas according to the methodology showed that the main reason why students leave their studies are personal reasons (1486 responses; the variable with the most responses among this factor was job promotion and lack of time to study, that was mentioned by 566 students), followed by expectations (1023 responses; 396 because of lost interest in the studied program/area), work relations (912 responses; 521 because of lack of time to study), communication at university (667 responses; 179 because of impersonalized administration of studies), study program (621 responses; 216 because of difficulties to write thesis), culture (553 responses; 123 because of lack of social interaction among students), financial situation (420 responses; 167 because of loss of job due to the need to take care of family members) and administration of studies (189 responses, out of 131 were pointing at bureaucracy).

Details on most selected variables leading to student drop offs are listed in Table 2 below. Table shows variables that reached over 10% of all responses.

Table 2. Main variables leading to student drop-offs

Statement	Responses	Percent
Personal / Job promotion and lack of time	566	49.05
Personal / Stress and imbalance	271	23.48
Personal / Maternity	163	14.12
Expectations / Lost interest in the studied program/area	398	34.49
Expectations / Wrong choice of study program	186	16.12
Work relations / Lack of time to study	521	45.15
Work relations / Lost motivation to study given work tasks	299	25.91
Communication / Impersonalized administration	179	15.51
Communication / Lack of information	175	15.16
Study program / Difficulties to write thesis	216	18.72
Study program / Wrong time management	204	17.68
Culture / Lack of social interaction among students	123	10.66
Financial situation / Care of family members	167	14.47
Administration / Bureaucracy	131	11.35

To present the development over studied period between 2017 and 2023 the Table 3 is showing percentages of the whole year total drop-offs given the sample of main variables leading students to drop their studies. The leading factor was related to the personal reasons, expectations, and work-related requirements through the whole period.

The data show the growing reason to drop studies happens to be job promotion and lack of time to finish the degree (grown from 40% to over 50% in the monitored period). Stress and imbalance are keeping the value around 25% with peak in the COVID-19 period that reached over 27%. The number of drop-offs due to maternity has decreased from over 17% to 13% as students either pause their studies or have more flexibility to continue in part-time or distance form.

Expectations are staying at the same level for lost interest in studied area (around 39% with lower numbers in COVID-19 pandemic period), but wrong decision on study program grew from 9 to over 16% with peak in pandemic reaching over 21%. During pandemic period students were mostly focusing on their personal growth as most businesses were closed and were searching for the most suitable study programs. After the pandemic period the number dropped dramatically but still shows significant growth compared to the first monitored year. This area has to be monitored and students clearly informed on the content, requirements, and structure of study programs.

The reason this has happened in the case university is new state system of accreditations that caused changes in study programs that became more unified.

On the other hand, work relations, especially lack of time due to work tasks are growing as a reason to drop off, from 30% in 2017 to 55.5% in 2023 with drop to 40% in COVID-19 period. Lost motivation due to work is constantly on 30% of reasons to drop off, declining in pandemic period to 22%, as most students were focusing on studying in the time of business closures and were more motivated to study in their free time.

Communication was an issue primarily before COVID-19, and improved significantly in pandemic period. Students indicated impersonal communication as a source of drop-off in 30% in 2017, only around 10% in COVID-19 due to the focus on answering all students' questions and concerns and proactive constant communication with students regarding changes and options to alternative studies; and after COVID-19 significant improvement in the general process that was initiated was implemented and the original percentage dropped in nearly half to 16%. Lack of information ranged around 13% the whole period, with declination in the beginning of COVID-19 period to 10% (2020) and rise at the end to 18% (2022). Students perceived having enough information in the beginning of change period and the updates were not as fast in the second and third year of Covid. In 2023 the percentage of students referring lack of information dropped again as students have constant channels with information available.

Study program itself declined after COVID-19 period as a reason to drop off. Students were dropping due to perceived difficulty of thesis mainly before pandemic (17-19%) and the percentage dropped significantly in 2023 to 8%. Incorrect time management of studies, exams and thesis is oscillating around 18% through the whole period with drop in 2023 to 10%.

The culture lacking interaction between students, faculty and administration is constantly showing 10% of reasons of drop offs, with rise to 14% in COVID-19 period. This result is understandable as interaction was limited to mostly online meetings and webinars.

Financial reasons to drop offs were mainly related to family care and loss of sources, especially during maternity leave or full-time care of a family member. The percentages of these reasons were oscillating around 15%, with drop during COVID-19, as most students and families were studying at home and lost the need to take offense due to the state-financed support. After the pandemic it appears that this reason will again oscillate around 13-18% of causes to drop off.

Last area of drop offs that shown significant results was bureaucracy of studies. The percentages are not reaching other variables but constantly ranges around 10%. Thus, there is a possibility for improvement and focusing on processes in this area. Students expect responses and flexibility in their studies, study plans, and requirements in the real time and do not want to wait for official letters or decisions based on boards, committees etc.
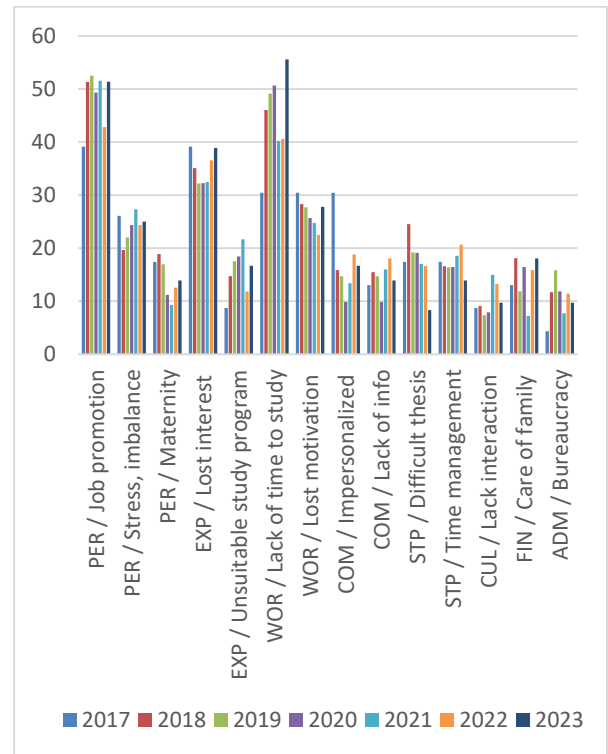

Figure 1. Development of student drop-offs [%]

The results have shown statistically significant correlations between the lost interest in studied area and lost motivation to study (Cramer's V and Spearman´s correlation=0.382; p=0.000), promotion and lack of time to continue studies (r=0.378; p=0.000), impersonal administration of studies and lack of information (r=0.339; p=0.000) and start of family with newborn child and financial struggling due to lack of income and care of family members (r=0.279; p=0.000). These four main correlations define four main areas why students were dropping off. It is either demanding job, wrong choice when selecting study area or program, information deficiency and family requirements connected with lack of financial sources.

Due to the fact that the correlation analysis shown significant relations, multicriterial analysis was used to confirm significant factors. The tests shown adequate values to process the data: KMO 0.79, Bartlett test 714.5, sig 0.000. The factor analysis was chosen to conduct the analysis with extraction method: Principal Component Analysis with Rotation Method: Varimax with Kaiser Normalization.

The analysis revealed three major categories of students' attitudes to drop-offs, which explains 60.6% of the total sample. Analysis grouped variables into factors in the composition shown in the Table 4 below. Significant dependencies are in bold.

Table 3. Factor analysis on causes for drop offs

Factor	1	2	3	4
EXP / Unsuitable study program	**.318**	.018	.120	.013
EXP / Lost interest	**.800**	.109	-.022	-.031
WOR / Lack of time to study	.024	**.840**	-.011	.034
WOR / Lost motivation	**.819**	.004	.043	-.003
COM / Impersonalized	.070	.076	**.802**	.052
COM / Lack of info	.122	-.059	**.802**	-.013
PER / Job promotion	.097	**.807**	.030	-.026
PER / Maternity	.017	-.022	-.125	**.811**
FIN / Care of family	-.025	.030	.173	**.786**
Variance explained	18.93	15.00	14.31	12.35

The first factor explaining 18.93% of sample groups student reasons to drop off related to their unfilled expectations which include perceived unsuitable study program, lost interest in studies and lost motivation due to work requirements. Therefore, this factor was named expectations. This group of reasons to terminate studies are pointing at the necessity to match students' expectations to study programs and to create quality consultations with prospective students to choose adequate study program and delivery to suite specific requirements of traditional or non-traditional students.

The second factor explains 15% of the sample and is composed of lack of time to study due to work requirements and job promotion. This factor shows that students are often facing increasing job tasks and lacking time to continue their studies. To support these students an institution should focus on flexibility of studies, non-traditional, hybrid and online/distance learning, flexible examination and other personalized activities to support working students.

The third factor represents 14.31% of sample and points at lack of information provided to students. The factor is composed of impersonalized communication and lack of information perceived by students. The efficient, inclusive, in real time, personalized communication is the key to today´s students. Students expect reactions from faculty and staff the same day, usually within minutes.

The generation z and millennials are not used to read long texts but expect all information in hand in a few clicks and on videos.

Last factor groups 12.35% of surveyed sample, and summarizes family reasons such as maternity and care of family members related with lack of finances to continue studies. Again, such students need flexibility and special personalized individual approach such as working students. All factors point at current needs of students for individualization of studies, flexibility and personalized communication which are the main causes of student drop offs.

4. Discussion

A significant trend leading to the institutional availability of support can be noted and seen in the development of results showing reasons to drop off. The internal reasons can be addressed and external (such as work and family) are prevailing over internal dissatisfaction with conditions at a university. This is in line with researches conducted by Tight [65]), Zepke and Leach [25]. It was proven that Tint's [28] model is no longer applicable as the focus on the student's ability to assimilate into the university environment of university culture cannot be used but student-centered approach is crucial in student retention. Same results were achieved by Bardach *et al.* [5], Mihaljević Kosor [61] and Haarala-Muhonen *et al.* [66]. Based on long term research conducted in studying reasons of students´ drop out, a criticism of this model for its excessive emphasis on social integration with a low emphasis on the individual characteristics of students is relevant [61].

It is possible to address most common internal reasons for student drop outs and identify students at risk or improve the most problematic issues, such as perceived difficulty of thesis or inability to plan studies and apply time management with courses for threatened students, special tutors for thesis and time management, improved communication and interaction to address questions and needs of students in advance. Accordingly, Pascarello and Terenzini [67] found the similar result that dropouts can be prevented by timely and well-planned interventions by the institution if students who are likely to drop out are identified in time.

5. Conclusion

The research showed that in order to prevent early termination of studies, it is necessary to pay attention to the student's personal goals. The factors affecting student retention are expectations, work related reasons, personal reasons, and communication.

All factors point at current needs of students for individualization of studies, flexibility and personalized communication which are the main causes of student drop offs. Education institutions need to focus on higher flexibility of study plans and delivery methods to retain current more and more non-traditional students who work at the same time, care for family members, start or run businesses and having other activities. As today's students expect real-time communication, education institutions need to focus quality consultations with prospective students to choose adequate study program and delivery, non-traditional, hybrid and online/distance learning, flexible examination and other personalized activities to suite specific requirements.

Through the duration of studies generally important factors are culture, finance and bureaucracy of studies. The final reasons to drop off are lost motivation to study, promotion and lack of time to continue studies, impersonal administration of studies and lack of information and start of family related to financial struggling. Over the studied period the reason for drop off that continues to grow is job promotion and work-related issues leading to lack of time to study (growth from 30% to 50% of drop outs). Other reasons could be addressed and solved, but external factors need to be addressed by flexible study programs.

The limit of this study is focus on one sample business university. On the other hand, the sample is representative as this study is based on 100% of students who dropped off. Directions for future research should be indicated. Studies on dropout intentions use different methods, e.g. interviews or focus groups together with quantitative measures. The inclusion of other actors can be essential, i.e. in addition to students, the research should also be focused on academic and non-academic workers, guarantors of study programs, school management, experts in practice so that this issue can be approached from different points of view. There is a need to examine student behavior before graduation. It might be particularly informative to extend the scope to specific personality traits such as self-compassion, or motivational aspects not yet considered in college dropout research such as implicit theories or achieved goals.

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