



DROPOUT DETERMINANTS AT FACULTY UnB OF PLANALTINA (FUP)

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RESUMO

The FUP has been facing the challenge of reducing the high evasion rates. From its inception until the second half of 2014, the FUP trained 597 students and had 768 students evaded, reaching a number of dropouts about 30% higher than the number of graduates. The objective of the study was to analyze the causes of evasion in the undergraduate FUP courses. The data was obtained through the application of a questionnaire for students who had graduated and evacuees of the institution. The analytical instrument employed was logistic regression with the questions related to the socioeconomic, motivational and familiar aspects of the former students as explanatory variables of the evasion. The results indicated that the main causes of FUP evasion were related to economic difficulties and the lack of interest of students. From empirical verification, the study contributes to the understanding of the complex phenomenon that is evasion and presents practical results that support university management.

Palavras-chave: Graduation. Public Policy Management. University Management. Dropout.

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INTRODUCTION

Socioeconomic, technological and scientific changes have led to the expansion of Higher Education in Brazil in the last three decades. These changes led the Brazilian government to create public policies to increase access to higher education, increasing the number of vacancies in public and private High Education Institutes (HEIs). In face of these changes, the HEIs were faced with the challenges of expanding the number of vacancies in undergraduate courses, promoting the permanence of students and reducing the dropout rate, as well as adjusting graduation courses to the current reality of the country.

To meet these demands, the Federal Government has begun the process of expansion of higher education. In 2001, the government set the goal of higher education for at least 30% of individuals between 18 and 24 years of age in the National Education Plan (PNE), creating in 2004 the Program University for All (PROUNI), that offers partial and full scholarships in private HEIs and, in 2007, launched the Program for the Restructuring and Expansion of Universities (REUNI), with the objective of encouraging the increase in the number of vacancies in public universities. With the implementation of these policies, enrolments in higher education jumped from 143,595 in 2001 to 302,359 in 2010, representing a 110.6% increase in university entrance in that decade (INEP, 2022).

The expansion policy had a strong impact on the University of Brasília (UnB), which had about 20,000 registrations registered in 2007 and increased to approximately 35,000 in 2012 after joining the REUNI. The vacancy expansion at UnB occurred in conjunction with its democratization, given that part of the increase in vacancies occurred through the implementation of three *campuses* in the outskirts of Brasília, in the cities of Planaltina, Gama and Ceilândia, with night courses and selective processes that benefits low-income students (UnB, 2022).

On one hand the federal government expansion policy contributed to democratize access and expand the number of places in HEIs, on the other hand it has not been able to maintain these new students, as the new *campuses* are facing evasion problems such as the UnB *campus* in Planaltina. Lima and Machado (2016), evaluating REUNI effect at the Federal University of Minas Gerais, also pointed out student dropout problems.

The Faculty UnB of Planaltina (FUP), in particular, has been faced with the challenge of filling in the vacancies offered in the graduation and reducing the high evasion rate in the unit. From its inception until the second half of 2014, the FUP trained 597 students, while another 768 evaded, reaching an evasion number about 30% higher than the number of graduates. The FUP evasion rate in



the analysed period was around 40%, above the UnB average, which was calculated around 35% between the period of 2002 and 2011 by Brito (2013).

The problem with evasion in the FUP is worrisome since, based on the 2014 Management Report of UnB (2015), it is estimated that the total losses caused by the 768 students evaded from the FUP in the period from 2008 to 2014, considering the average cost per student in each year, was higher than R\$ 4 million. This is considering only the loss related to the financial dimension for the institution, because if we include social losses, such as the waste of time for the student and the institution, interruption of courses and other intangible losses, the negative consequences of evasion are even larger.

Evasion is a universal, multivariate, complex and multidimensional phenomenon that affects public and private higher education institutions, causing various institutional, financial and social losses. Thus, studies about evasion are of extreme relevance to educational institutions, given their complexity and multiple faces with which evasion presents itself. To study the causes of evasion in the FUP turns out to be a new discovery that is equally relevant for scientific research and university management.

Thus, the overall objective of the study is to quantify the impact of socioeconomic, motivational and family variables on the evasion of FUP students.

THEORETICAL BACKGROUND

According to Santos Baggi and Lopes (2011) evasion is a problem that worries educational institutions, whether public or private, as the exit of students causes serious social, academic and economic consequences. Lima and Machado (2014) and Mujica *et al.* (2019) cited that student evasion is a complex phenomenon, requiring systematic follow-up, knowledge of possible intervention factors and strategies to solve or minimize the problem.

Morosini *et al.* (2011) pointed out that evasion is understood as the loss of students at different levels of education, generating several socioeconomic and academic consequences, as well as affecting the human development of all social actors involved. Lobo (2012) pointed out the difficulties of standardizing everything regarding evasion and the necessity to elucidate about what kind of evasion is being discussed, as we can mention some different types of evasion: from the course, the HEI and the educational system or those derived from different evasion calculations.



For further clarification, Lobo (2012) described the three types of evasion as follows: course avoidance is one in which the student leaves a course for some reason, such as a course change, but remains in the same HEI. The HEI evasion is the evasion in which the student leaves or exchanges HEI. The evasion of the higher education system is the one in which the student stops studying and leaves the education system, in other words the student is no longer attending any HEI.

Still according to Lobo (2012), scientific studies on evasion are relatively recent. Since 1975, several theories have been elaborated to explain students' continuity in HEI based on student-institution affinity analysis, on variables related to students, institution and more specific topics such as the integration of students in HEI. Until then, hypotheses prevailed without scientific proof, trying to offer explanations based on a single variable, generally demographic or psychological.

According to Prim and Fávero (2013), student evasion is a complex phenomenon, being influenced by several variables which awaken the need to develop studies and analyses on the subject. According to Stoffel and Ziza (2014), the issue of work is a factor that influences evasion in all higher education institutions, as well as financial problems and incompatibility with the course. These same authors have pointed out that, throughout the world, the dropout rate in the first year of the course is two to three times higher than in the following years.

In the study carried out by Rosa (2014) at the Federal University of Goiás (FUG) between 2006 and 2011, the results showed that 20% of the UFG students dropped out in the first year of the course, and the dropout rate in the third year of the course was 18,94% in 2011. In the undergraduate courses, evasion was even more pronounced, reaching levels above 60% of enrolled students, whereas in the most prestigious social classes, evasion was lower, reaching less than 1% as was the case in with the medical school course.

Brito (2013) carried out a study at the University of Brasília about dropout in undergraduate courses from 2002 to 2010. The results of this study showed the reasons for abandonment in the following order of magnitude: 31.47% were disconnected due to problems with academic performance; 30.95% dropped out of the course; 22.5% were dismissed for various other reasons such as: health or personal problems, difficulty in traveling, lack of vocation for the course and 15.8% left their respective courses due to voluntary termination such as: delay in completing graduation, change of course by choice and the lack of financial conditions for students to remain in university.

According to Andriola *et al.* (2006), a student may decide to evade or persist in the course by a psychosocial phenomenon, in which opinions influence attitudes and these, in turn, influence decisions. In this sense, the decision to stay or evade is an issue related to the students' attitudes, to their adaptation



to the university, and external factors such as: family approval, friends' influence, institution infrastructure, financial situation and development expectation in the career.

According to Bardagi and Hutz (2005), among the numerous multidimensional aspects pointed out as relevant to explain evasion, some factors were determined: economical, personality, vocational, social and institutional factors among others. The authors also pointed out that the absence of academic activities or the presence of relationships problems with colleagues and teachers can potentiate dissatisfaction with academic experience and encourage evasion.

For Tinto (2006), the student can evade the university for problems caused by the lack of integration with the academic and social environment of the institution. The author also stated that integration can be influenced, directly or indirectly, by several factors, such as: socioeconomic profile, parents' expectations about the child's future, academic skills, knowledge acquired through formal or informal education, and characteristics such as gender and race.

In the same line of Tinto (2006), Lompa and Reszka (2015) highlighted the importance of social integration with colleagues, teachers and public servants to avoid evasion. For the authors, adjusting to the academic environment implies social integration with the people in this new context, participating in social activities and developing satisfactory interpersonal relationships. In terms of other individual characteristics, empirical evidence from Vignoles and Powdthavee (2009, p. 19) indicated that “there appears to be an ethnicity dimension to the problem of dropout. Almost all ethnic minority students are significantly less likely to dropout compared to white students”.

The factors that cause evasion in higher education institutions are complex and multidimensional. To facilitate the understanding of this phenomenon, Lobo (2012) summarized the most frequent causes of evasion, enumerating: 1) financial difficulties; 2) poor basic training; 3) lack of adaptation and maturity of the student with the teaching style of the course; 4) irritation with the precariousness of the services offered by the HEI; 5) disappointment with teachers' lack of motivation and attention; 6) difficulties with transportation, food and atmosphere in the HEI; 7) course change; And 8) residence change.

According to Tigrinho (2008), evasion can occur for various reasons, such as the non-filled vacancies in the vestibular, locked unrecovered registers, death, retirement and difficulties to conciliate work with studies, among others. According to the authors, the difficulty of reconciling working hours and school hours is one of the main reasons for the decision to leave college, pointing out that professional obligations conflict with study commitments, most of the time the study is the one postponed.



Leuchovios (2006) pointed out that the lack of involvement of parents in high school and the transition from High School to Higher Education is a relevant factor that contributes to evasion. According to the author, students who did not have parental guidance in high school are more likely to have children at an early age, health problems, learning disabilities, mistakes in course choice, and all of these factors may increase evasion.

Finally, Rosa (2014) associated evasion with the policies of expansion and democratization of higher education, as the expansion of vacancies directed to students with low incomes also demands the expansion of student support policies to maintain their permanence in the course. Thus, in the event of a mismatch between these policies, the consequences will be increased evasions due to students' difficulties in staying in university for reasons of socioeconomic vulnerability.

METHODOLOGICAL PROCEDURES

Study area

The UnB was inaugurated on April 21, 1962 and began its activities with 462 students enrolled in the undergraduate courses in Law, Administration, Economics, Brazilian Literature, Architecture and Urbanism. In 2019 UnB had 2.890 teachers, 3,233 technical and administrative staff, 39,699 undergraduate students and 8,819 postgraduate students, distributed over 134 graduation courses and 165 postgraduate courses (UnB 2022).

The UnB pioneered the expansion of higher education process in Brazil, founding three new *campuses* in cities on the outskirts of Brasília: Planaltina (FUP) Ceilândia (FCE) and Gama (FGA) (UnB 2005).

The first unit created through this expansion plan was the FUP. Created to meet the cities of Planaltina - DF, Sobradinho - DF, Brazlândia - DF, Sobradinho II - DF, Formosa - GO, Buritis - MG, Cabeceiras - GO, Planaltina - GO, Vila Boa - GO and Água Fria - GO (UnB 2005).

The FUP began its activities in 2006 with a faculty of 10 professors and 70 students enrolled in the Natural Sciences Degree (LCN) and Bachelor in Agribusiness Management (GAGRO). In 2007, the Bachelor of Education in the Field (LEDOC) course was created and in 2008, the Bachelor's courses in Environmental Management - GAM and Bachelor's Degree in Natural Sciences (Saraiva and Diniz, 2012) were created. In 2014 the academic community of the FUP counted approximately 1000 students, 100 teachers and 38 technical-administrative public servants (UnB, 2015).



In Brazil, Rural Education can be understood as one designed to meet the needs of capital, while Education in the Field represents organized rural movements, based on an education proposal built by themselves (Barros and Lihtnov, 2016). The Education in the Field courses emerged in opposition to the Rural Education courses, justified in the criticism that Rural Education does not aim at the common good of those who live in the countryside, but in the interest of capital.

Data

Data from this study was obtained through the electronic questionnaire for the population of graduates and dropout students and all FUP courses between the 1st half of 2006 to the 2nd half of 2014. Data collection took place between June and August 2015. After the questionnaire was sent via e-mail, all the students of the sample population were contacted by telephone, explaining the objectives and importance of the research. The reports containing the phone number, address and e-mail of the students were obtained from the Secretariat of Academic Administration (SAA) of UnB.

The population of ex-students and dropouts surveyed corresponded to the graduates and those who were separated from the FUP in the analyzed period, totaling 597 graduates and 768 dropouts.

Questionnaire

The questionnaire was structured with questions related to the socioeconomic conditions, motivational and family factors of the interviewees that can influence their evasion. The theoretical framework that based on the choice of variables were Leuchovius (2006), Silva Filho *et al.* (2007), Bardagi and Hutz (2005), Stoffel and Ziza (2014), Palharini (2008), Andriola *et al.* (2006), Rosas da Silva and Ferreira (2009), Gomes *et al.* (2010), Zordan (2012), Cunha and Morosini (2013), Sales Junior *et al.* (2015) and Lompa and Reszka (2015) (Table 1).

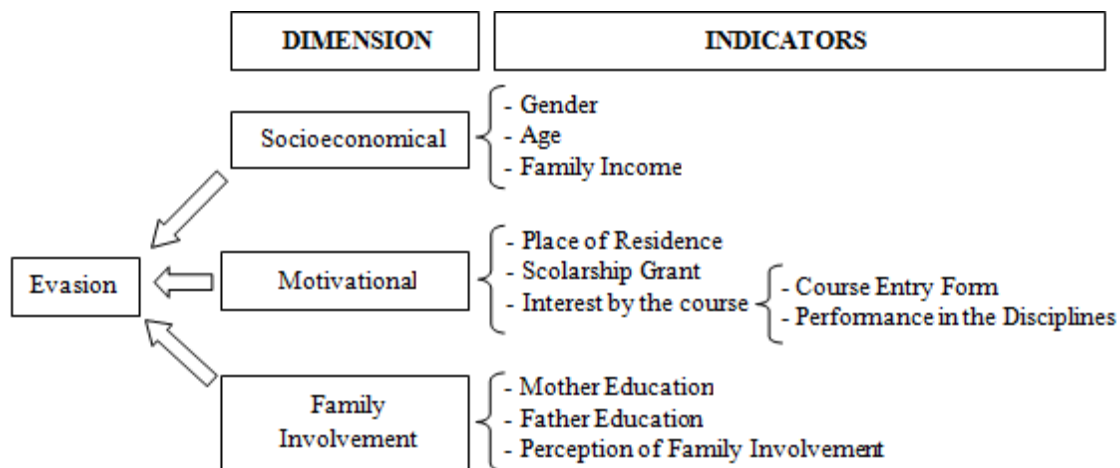
TABLE 1 – Questionnaire applied to graduated and evaded students

<p>SOCIOECONOMICAL DIMENSION</p> <p>1. Gender: () Male () Female.</p> <p>2. Age: _____ years</p> <p>3. What is the total income of your family during the graduation period in the FUP?</p> <p>() Up to 1,5 minimum wage (up to R\$ 1.017,00)</p> <p>() From 1,5 to 3 minimum wages (R\$ 1.017,01 to R\$ 2.034,00).</p> <p>() From 3 to 4,5 minimum wages (R\$ 2.034,01 to R\$ 3.051,00).</p> <p>() From 4,5 to 6 minimum wages (R\$ 3.051,01 to R\$ 4.068,00).</p> <p>() From 6 to 10 minimum wages (R\$ 4.068,01 to R\$ 6.780,00).</p> <p>() From 10 to 30 minimum wages (R\$ 6.780,01 to R\$ 20.340,00).</p> <p>() Above 30 minimum wages (more than R\$ 20.340,01).</p> <p>MOTIVATIONAL DIMENSION</p> <p>4. Place of residence during graduation in the FUP</p> <p>() Planaltina DF () Other. Where? _____</p> <p>5. Academic performance in undergraduate subjects in the FUP:</p> <p>() Most of your mentions were SS () Most of your mentions were MS</p> <p>() Most of your mentions were MM</p> <p>6. Throughout your academic career, have you received any type of scholarship?</p> <p>() None () Any assistance (housing, food, stay, other)</p> <p>7) What was your form of joining the FUP?</p> <p>() Vestibular or PAS () ENEM or SISU () Other. What? _____</p> <p>FAMILY DIMENSION</p> <p>8. What is the educational level of your mother? (If you have been educated by your grandmother or aunt, consider them as your Mother)</p> <p>() None () Incomplete Elementary School () Complete Elementary School</p> <p>() Incomplete High School () Complete High School () Incomplete College () Complete College</p> <p>() Master's Degree () P.h.D or Doctor's Degree</p> <p>9. What is your father's level of education? (If you have been educated by your grandfather or uncle, consider them as your Father)</p> <p>() None () Incomplete Elementary School () Complete Elementary School</p> <p>() Incomplete High School () Complete High School () Incomplete College () Complete College</p> <p>() Master's Degree () P.h.D or Doctor's Degree</p> <p>10. What is your parents' involvement with your undergraduate education?</p> <p>() High (they know the course well and closely monitors my performance)</p> <p>() Average (they know the course superficially and have little information about my performance)</p> <p>() Low (they know just the name of the course and do not know anything about my performance)</p> <p>() None (they do not even know the name of the course I chose)</p>

Fonte: the authors

The questions of the socioeconomic dimension were represented by the gender, age and income of the interviewees. The motivational questions were related to the easiness of access to FUP, interest in the course and incentives for non-evasion, and these variables were measured by the indicators: place of residence, mentions in the disciplines, entry form into the FUP and receipt of scholarship permanence (a R\$ 465 aid for students in situations of socioeconomic vulnerability). A last group of variables sought to measure the influence of family involvement with evasion. Therefore, the indicators used were the parents' educational level and the students' perception of the degree of family involvement during graduation. The theoretical model used to explain evasion was in accordance with Figure 1.

FIGURE 1 – Theoretical model explaining evasion



Fonte: the authors

The evaluation of the interest in the course considered the form of entrance in the FUP and the performance in the disciplines by the graduates and dropouts. The entrance form separated the students into two groups, those who entered via the entrance exam and PAS, that is, they chose the course they wanted to attend from the beginning, and those who were selected by SISU and ENEM who may have opted for the course because there were non-filled vacancies available and not as their first choice. In order to measure performance in the subjects, students were asked to indicate whether the majority of their mentions were SS (upper), MS (upper middle) or MM (middle) during their undergraduate period, assuming that there is a relation between academic performance and interest in the course.

Analytical tools

The method used to evaluate the profile of the dropouts was logistic regression using stepwise feature to assist the specification models. Logistic regression or logit model is a statistical tool that can predict a dichotomous dependent variable on a set of explanatory variables (Hair *et al.* 2005).

The dichotomous dependent variable considered the group of dropouts and graduates, the first coded with “1” and the second with “0”. The independent variables considered the 10 questions related to the socioeconomic, motivational and familiar dimensions of the questionnaire.

The specification of the logit model was in accordance with equation [1] and, along with the equation, used encodings were presented in the data tabulation to facilitate understanding of the direction of effect of variables. The equation model [1] was estimated with the data aggregated from all FUP courses.

$$S_{FUP} = \beta_1 + \beta_2 G + \beta_3 A + \beta_4 FI + \beta_5 PR + \beta_6 MD + \beta_7 EF + \beta_8 SG + \beta_9 ME + \beta_{10} FE + \beta_{11} FIN + \varepsilon \quad [1]$$

SFUP = student group of FUP (“0” for graduate and “1” for dropout)

G = Gender (“0” for woman and “1” for man)

A = Age (ratio scale)

FI = Family Income (“1” up to 1,5 Minimum Wage - SM, “2” from 1,5 up to 3 SM, “3” from 3 up to 4,5 SM, “4” from 4,5 up to 6 SM; “5” from 6 to 10 SM; “7” from 10 to 30 SM; “8” from 30 SM)

PR = Place of Residence (“0” residence in Planaltina DF and “1” other locations)

MD = Mentions in the Disciplines (“1” majority SS, “2” majority MS and “3” majority MM)

EF = Entry Form (“0” entry per vestibular or PAS and “1” by SISU or ENEM)

SG = Scholarship Grant (“0” received some aid and “1” received no aid)

ME = Mother Education (“1” None; “2” Incomplete Elementary Education; “3” Complete Elementary Education; “4” Incomplete High School; “5” Complete High School; “6” Incomplete Superior; “8” Master’s Degree, “9” Doctorate Degree or P.h.D).

FE = Father Education (“1” None; “2” Incomplete Elementary Education; “3” Complete Elementary Education; “4” Incomplete High School; “5” Complete High School; “6” Incomplete Superior; “8” Master’s Degree, “9” Doctorate Degree or P.h.D).

FIN = Family Involvement (“1” None, “2” Low, “3” Medium, “4” High)

ε = Stochastic error

The logit model is estimated by the method of Maximum Likelihood (ML) and does not estimate the values of the dependent variable, but rather the probability of occurrence of the event under study, in this case, the probability (pi) of the student to evade or not to evade, according to equation [2] (Favero and Belfiore, 2017).

$$S_{FUP} = pi = \frac{1}{1 + e^{-(\beta_1 + \beta_2 G + \beta_3 A + \dots + \beta_{10} FE + \beta_{11} FIN + \varepsilon)}} \quad [2]$$

The hypotheses are that students with higher economic problems and access to *campus* difficulties, low interest with the course and with low family involvement tend to evade. In addition, it is expected that the permanency aid policy will be effective in reducing evasion and the students benefiting will have the propensity of not evading. Therefore, according to the adopted encodings, the expected direction of the coefficients signs was: $\beta_4, \beta_9, \beta_{10}$ and $\beta_{11} < 0$ and $\beta_5, \beta_6, \beta_7$ and $\beta_8 > 0$, all of these hypotheses analyzed by the unicaudal test of Wald.



The coefficients β_2 and β_3 , related to the effect of gender and age on evasion have no theoretical justification that allows a prior determination of the direction of their effects, and these variables were analyzed in an exploratory way by a two-tailed test. Thus, it is expected that β_2 and β_3 are different from zero, indicating no advance if there is an evasion tendency for men or women or younger or older.

The statistical test used in the logistic regression to verify the significance level of the hypotheses is the Wald test, with accepted values that are statistically significant at the 5% level for all analyzes. The quality of the logistic regression adjustment is obtained by the R^2 Nagelkerke. The R^2 Nagelkerke assumes values between 0 and 1, with values closer to 1 indicating a greater degree of evasion explanation by the independent variables.

According to Hair *et al.* (2005), the application of logistic regression is quite flexible and appropriate in many situations, since it does not depend on rigid statistical assumptions such as: normality of data and equal variance-covariance matrices in the groups, the kind of assumptions that are not met in many situations.

RESULTS AND DISCUSSIONS

The determinants of the FUP evasion, considering the level of significance of 5% and the values of R^2 Nagelkerke and the sample size used in the model can be found in the equation [3].

$$S_{FUP} = -1.23 - 0.29FI + 0.66PR + 0.65MD + 0.74SG + 3.05EF - 0.32FIN \quad [3]$$

Sig. 0.07 0.01 0.01 0.01 0.01 0.01 0.01

n = 391 R^2 Nagelkerke = 0.37

Before discussing the results, it is important to assess the reliability of those results, therefore, it was analysed the quality of the adjustment of the models through the R^2 Nagelkerke, through the sample size and waste dispersion.

Regarding the adjustment degree of the model, as measured by the R^2 Nagelkerke, there is no conclusive test to indicate a minimum acceptable value. However, given that the value obtained was 0.37 and this indicator varies from 0 to 1, it can be stated that the variables used explained less than half of the evasion variance in the FUP. These results indicate that evasion is a complex phenomenon and is influenced by other variables that were not analysed, suggesting tests with other variables in new researches.

On the one hand the low R^2 values indicates the influence of other variables in the models, on the other, this indicator says nothing about the reliability of these estimates. Thus, following the advice of Gujarati (2006) and Goldberger (1991), the importance of R^2 was toned down because the objective



was not to get a high R^2 but to analyse the effect of the variables considered. Still according to Goldberger (1991), a high R^2 is no evidence in favour of the model and a low R^2 is no evidence against him.

With respect to the minimum size of the sample for application of logistic regression technique, the adjusted model had a sample of 65 cases for each explanatory variable, far superior to the 20 cases per explanatory variable suggested by Hair *et al.* (2005).

The results of equations [3] indicated that the variables tested, addressing the socioeconomic, motivational and familiar dimensions were important in explaining evasion. Except for the variables related to gender, age and parental schooling, all other variables showed the direction of their effect as expected and were statistically significant at the 1% level.

The main explanatory variables were related to the dimension of motivational factors (PR - Place of Residence, MD - Mentions in the Disciplines, EF – Entry Form in the FUP, SG - Scholarship Grant), since these presented coefficients with a greater magnitude and therefore greater impact on evasion.

The results indicated that the students with better performances at disciplines and those who did not enter through the vacancy criteria (SISU-ENEM), tend not to evade. These results demonstrated the importance of vocational tests for the choice of profession, as well as the risk of public policies aimed at the unplanned inclusion of young people in higher education. In other words, the search for a rampant and populist inclusion of young people in higher education disregarding their desires, profile and ambitions can lead to their evasion. To Zajac and Komendant-Brodowska (2019, p. 1), one of the reasons for drop out “lies in the process of choosing the study programme. Improving this decision process by providing more information and support to candidates should help reduce dropout rates”.

According to the report of the Dean of Undergraduate Degrees from UnB, the FUP achieved an average success rate in filling vacancies of 60,32% against 39% of the Darcy Ribeiro *campus* (UnB, 2015). This represents a good performance in terms of access to courses. However, on average, 75% of these vacancies were filled via SISU-ENEM. This number raises concerns about the issue of permanence and evasion, since most of the vacancies offered through ENEM are not filled by the student's choice as in the traditional entrance exam, but as a second or third option of the student, which in some cases occupy the position temporarily until he/she is approved in another course of their preference.

The relationship between academic performance with evasion was confirmed in the works of Pereira *et al.* (2015) and Cabello and Chagas (2021). According to these authors, the greater the number



of failures in disciplines, the greater the chance of evasion, especially for those who fail at the beginning of the course. With similar results, Tinto (2006) stated that academic performance is a condition for the student to stay in the course or not. Likewise, Casanova *et al.* (2018) and Li and Carroll (2019) research confirmed academic performance as a determining variable in the decision to remain or drop out. In addition, Ambiel *et al.* (2018, p. 14) analyzed the effect of socio-cognitive and socio-affective variables, concluding that "the belief in being organized, self-regulated, and self-motivated leads students to see themselves with lower changes of dropout, regardless of the immediate results of academic assessments".

Many factors influence the student's academic performance, such as aspects related to family, work, teaching methods, lack of career expectations, lack of knowledge of the course, infrastructure, motivation and personal commitment of the student to the course. According to Miranda *et al.* (2017), understanding the determinants of academic performance is a crucial issue for improving learning and for combating evasion. Mujica *et al.* (2019, p. 434) demonstrated the importance of not limit the research to variables with direct influence on the intention to drop out, "but rather addressing all of the cognitive, emotional and behavioral constructs that could also indirectly mediate this phenomenon".

The results for the variable "place of residence" indicated that students residing in Planaltina - DF tend not to evade. The motivation of the students residing in Planaltina - DF to not abandon may be related to a lower personal cost of these students for conclusion of the course, because they reside in a place closer to the FUP and /or the UnB in the selection of students in the region.

Until the 2016 year, there was the regional bonus which was the increase of 20% upon the total ENEM score for candidates to UnB courses that have made at least two years of secondary education in schools located in regions around the FUP, facilitating the entry of students who live near the *campus*.

Regarding the lower personal cost of the students who live in Planaltina, this is not only due to the lower cost with transportation, meal, among others. It can also be highlighted the lower opportunity cost due to the easiness of reconciling work and study for students who live near the *campus*, which encourages the non-evasion from FUP. Palharini's research (2008) found similar results, pointing to the difficulty of access and displacement as causes of evasion at the Federal University Fluminense (FUF). The author verified that the difficulty of access in the UFF was pointed out as a cause responsible for the evasion of 47% of the students who escaped from the Letters course.

The scholarship grants (SG) is used by UnB to combat evasion, and among the objectives of this policy are the viability of permanence of students in a situation of economic vulnerability and



reduction of the maintenance costs of vacant positions due to student evasion (MEC 2015). According to the results found, this policy of student assistance for students with socioeconomic vulnerability was effective in reducing FUP evasion, achieving the objectives proposed by the MEC (2015). Saccaro *et al.* (2019), analysing evasion of courses in exact area from Brazil, highlighted student assistance programs in reducing evasion.

According to the UnB (2010), the requirements for inclusion of the student in the student assistance program and to be entitled to this scholarship permanence are the following: to be resident in the Federal District, to come from rural areas and regions of difficult access.

Among the variables related to the socioeconomic dimension, the economic question, measured by family income (FI), was the only one that presented significant importance in evasion, suggesting that students with low income tend to abandon the course before graduating.

The effect of income on evasion was corroborated by several authors. According to Santos Baggi and Lopes (2011), evasion has multiple reasons, depending on the social, cultural, political and economic context, but the financial reasons are one of the main factors that lead the student to drop out of HEI studies. For Gomes *et al.* (2010), the financial deficiency leads to evasion due to the students' choice for work in detriment of the studies. According to Silva Filho *et al.* (2007), the results indicated that, when asked about the reasons for evasion, the students highlighted the lack of financial resources as the main reason to pursue their studies. To Vignoles and Powdthavee (2009, p. 18), "in broad terms, students with higher socioeconomic backgrounds who live in less materially deprived and more educated neighbourhoods have lower dropout rates".

Among the variables that sought to capture the influence of family involvement in evasion, no relationship was found between the indicators measured by the parent's education level, both variables were not significant at 5%. On the other hand, the variable that sought to capture the family involvement (FIN) from the perception of the graduates was significant at 1%. The results indicated that an increase in parental involvement in the education of their children reduce their chances to evade.

As Soares *et al.* (2014) pointed out, parental involvement can positively influence the student in the transition from secondary school to higher education, in the appropriate choice of profession, psychological and motivational support to overcome the difficulties in learning, engagement with the institution, financial support, among others. According to Rosas da Silva and Ferreira (2009), the conflict, the lack of support and the family opposition about the course and the educational institution chosen by the student are factors that can lead him to abandon his studies and can lead to alcoholism and depression.



Leuchovius (2006) pointed out that family involvement is one of the most important contributions to the completion of higher education successfully. Participation can be an important performance indicator for the student, as long as his family support and encourage his learning. Success is more likely when the family communicates expectations for the professional future of the student and is directly involved in their training.

Focusing on sociodemographic characteristics, the results of Venegas-Muggli (2019, p. 316) indicated “that students who are parents, have a job, are not the heads of their households, are enrolled in longer programmes and who attended adult high school are more likely to drop out of higher education during their first year of study”. The author suggests institutional practices to better integrate mature students into higher education to avoid drop out.

Finally, the results regarding the influence of gender and age were not statistically significant. Some researchers found contradictory effects for the effect of age on evasion. In general, when the results indicated that younger people tend to escape, the reasons were based on low maturity of the students in the choice of courses (Gomes *et al.*, 2010). When the ratio is the opposite, the explanations were based on financial issues arising from the increased need for work of older students (Cunha and Morosini, 2013).

The results generally found in the literature for gender indicate a higher evasion for men (Zordan, 2012; Tinto, 2006; Sales Junior *et al.*, 2015). The explanations for greater male evasion in most cases are associated with cultural factors. These factors may originate from remnants of a patriarchal society inherited from the Portuguese, where the man is the head of the family and probably still has a lower mobility in work abdication in favour of studies.

CONCLUSIONS

In the first decade of the 21st century, higher education in Brazil expanded and democratized the number of vacancies mightily, raising concerns about student dropout. Thus, this paper aimed to analyse the causes of dropout from courses at Faculty UnB of Planaltina - FUP.

The main factors causing the evasion in the FUP were related to economic hardships and lack of concern to the students' progress. Economic difficulties were expressed by evidence that students with better financial conditions tend not to evade, as well as for demonstrating the effectiveness of the remaining aid policy in reducing the dropout rate of students. The lack of interest in the course, measured by the form of entrance, by the performance in the disciplines and by the family involvement also had a strong influence in the evasion FUP students.



The results indicated that the democratization and expansion of higher education policies need to be combined with student aid policies, otherwise the student with financial difficulties tend to evade, and require an even greater concern with the quality of the training of these students to be effective.

The main suggestions for reducing evasion are related to greater inclusion of students in scientific initiation programs, extension, internship opportunities in the training area, among others. Because besides providing resource for the students, these provides greater inclusion and better training for them.

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DETERMINANTES DA EVASÃO NA FACULDADE UnB DE PLANALTINA (FUP)

RESUMO

A FUP tem se deparado com o desafio de diminuir seu alto índice de evasão. Desde a sua criação e até o 2º semestre de 2014, a FUP formou 597 alunos e contou com 768 alunos evadidos, alcançando um número de evadidos cerca de 30% maior ao número de egressos. O objetivo do trabalho foi analisar as causas da evasão nos cursos de graduação da FUP. Os dados foram obtidos por meio da aplicação de questionário para alunos egressos e evadidos da instituição. O instrumental analítico empregado foi a regressão logística com questões relacionadas aos aspectos socioeconômicos, motivacionais e familiares dos ex-alunos como variáveis explicativas da evasão. Os resultados indicaram que as principais causas da evasão na FUP estiveram relacionadas com dificuldades econômicas e a falta de interesse dos estudantes. A partir de verificação empírica, o estudo contribui com o entendimento do fenômeno complexo que é a evasão e apresenta resultados práticos que subsidiam a gestão universitária.

Palavras-chave: Graduação. Gestão de Políticas Públicas. Gestão Universitária. Evasão.

DETERMINANTES DE EVASIÓN EN FACULTAD UnB DE PLANALTINA (FUP)

RESUMEN

La FUP se ha enfrentado al desafío de reducir su alta tasa de deserción. Desde su creación y hasta el 2º semestre de 2014, la FUP ha graduado a 597 alumnos y ha tenido 768 desertores, alcanzando un número de desertores aproximadamente un 30% superior al de egresados. El objetivo del trabajo fue analizar las causas de la deserción en los cursos de graduación de la FUP. Los datos se obtuvieron mediante la aplicación de un cuestionario a los estudiantes que se habían graduado y que habían evadido la institución. La herramienta analítica utilizada fue la regresión logística con preguntas relacionadas con aspectos socioeconómicos, motivacionales y familiares de los exalumnos como variables explicativas de la deserción. Los resultados indicaron que las principales causas de deserción en la FUP estaban relacionadas con las dificultades económicas y la falta de interés de los estudiantes. A partir de la verificación empírica, el estudio contribuye a la comprensión del complejo fenómeno de la deserción y presenta resultados prácticos que apoyan la gestión universitaria.

Palabras clave: Graduación. Gestión de políticas públicas. Gestión Universitaria. Evasión.

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