

THE CAUSES OF DROPOUT FROM UNDERGRADUATE COURSES AT A PUBLIC STATE UNIVERSITY AND POSSIBLE PUBLIC POLICIES TO FIGHT IT

AS CAUSAS DE EVASÃO DOS CURSOS DE GRADUAÇÃO DE UMA UNIVERSIDADE PÚBLICA ESTADUAL E AS POSSÍVEIS POLÍTICAS PÚBLICAS DE ENFRENTAMENTO

LAS CAUSAS DE LA DESERCIÓN DE LOS ESTUDIOS DE GRADO EN UNA UNIVERSIDAD PÚBLICA ESTATAL Y LAS POSIBLES POLÍTICAS PÚBLICAS PARA ENFRENTARLA



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ABSTRACT: Dropout is a complex phenomenon that affects public and private higher education institutions, constituting a major concern for managers and researchers in the field of education. The objective of this study was to identify the causes of dropout among students who entered undergraduate courses from 2014 to 2020 at a college belonging to a public university in the State of São Paulo, aiming at a diagnosis favorable to the planning of public policies to combat. Using a quantitative-qualitative methodology, it was demonstrated that, in general, dropout rates are higher in the first two years of each course, with the majority of students dropping out of courses in the exact sciences area, the degree modality and evening classes. The main reasons for dropping out were: dissatisfaction with my professional choice, family and health problems, financial difficulties, too many theoretical classes and lack of use of new teaching methodologies.

KEYWORDS: Higher Education. Public university. Student Dropout. Student Permanence.

RESUMO: A evasão é um fenômeno complexo que afeta as instituições de ensino superior públicas e privadas, constituindo-se em grande preocupação para os gestores e pesquisadores da área de educação. O objetivo deste estudo foi identificar as causas da evasão de alunos que ingressaram nos anos de 2014 a 2020, nos cursos de graduação de uma faculdade pertencente à uma universidade pública do Estado de São Paulo, visando a um diagnóstico favorável ao planejamento de políticas públicas de enfrentamento. Usando uma metodologia quanti-qualitativa, ficou demonstrado que, em geral, a evasão é maior nos dois primeiros anos de cada curso, sendo a maioria dos alunos desistentes dos cursos da área de exatas, da modalidade licenciatura e do período noturno. Os principais motivos de desistência foram: insatisfação com a minha escolha profissional, problemas familiares e de saúde, dificuldades financeiras, excesso de aulas teóricas e ausência de utilização de novas metodologias de ensino.

PALAVRAS-CHAVE: Ensino Superior. Universidade Pública. Evasão Estudantil. Permanência Estudantil.

RESUMEN: La deserción escolar es un fenómeno complejo que afecta a las instituciones de educación superior públicas y privadas, y es una de las principales preocupaciones de los gestores e investigadores en el campo de la educación. El objetivo fue identificar las causas del abandono estudiantil de estudiantes que ingresaron a cursos de pregrado entre 2014 y 2020, en una facultad de una universidad pública del Estado de São Paulo, buscando un diagnóstico favorable para la planificación de políticas públicas. Utilizando una metodología cuanti-cualitativa, se demostró que, en general, las tasas del abandono estudiantil son mayores en los dos primeros años de cada curso, siendo que la mayoría de los estudiantes abandonan los cursos del área de ciencias exactas, modalidad de licenciatura y clases nocturnas. Los principales motivos del abandono fueron: insatisfacción con mi elección profesional, problemas familiares y de salud, dificultades económicas, demasiadas clases teóricas y falta de uso de nuevas metodologías de enseñanza.

PALABRAS CLAVE: Enseñanza superior. Universidad Pública. Deserción estudiantil. Permanencia de los estudiantes.

Introduction

The present study aimed to understand the concept of dropout in higher education, aiming to identify the reasons for this event in undergraduate courses at a college belonging to a multi-campus public university in the State of São Paulo. In this, from the extraction of academic information from three institutional databases of the university, it was possible to outline the profile of students who dropped out of undergraduate courses, who entered through entrance exams in the years 2014 to 2020, as well as propose actions that can minimize the problem and provide subsidies for the college management to think about and implement public policies for student retention.

Dropout in higher education institutions (HEIs) is a significant challenge that affects both public and private universities and compromises educational objectives, generating questions about the financial resources invested and the results achieved (Garcia; Lara; Antunes, 2021). This is a phenomenon involving multiple factors, which can occur with students from all socioeconomic and cultural contexts, and it is necessary to understand it to create retention alternatives, supporting students to remain at university and, consequently, to be successful in their studies (Silva *et al.*, 2022).

Based on data from the 2019 Higher Education Census (Brazil, 2021), which indicate a dropout rate of 38% by the end of the third year, and the importance of academic integration and pedagogical support for students' persistence, we raise hypotheses related to the choice of course and institution, on variables of students who enter through quotas or through the universal system, as well as related to the socioeconomic profile.

Goals

The general objective of this study was to identify the causes of dropout from undergraduate courses at a college belonging to a multi-campus public university in the State of São Paulo, with the aim of drawing up a diagnosis that favors the planning of actions aimed at preventing dropout from school, when this is not the result of the application of legal actions by the HEI. And, specifically, we also aim to understand the concepts of dropout in Higher Education; identify, from the analysis of the information, the topics covered, searching for the categories to be used in the analysis of the content (Bardin, 1977); identify the causes of course dropout, based on the analysis of quantitative and qualitative data, of dropout students who

entered college between 2014 and 2020, and who are registered in three HEI institutional databases; and, finally, treat and relate the information from these three institutional databases, characterizing the profile of students who dropped out of HEI courses, in an attempt to identify and understand the problem, its causes and possible contributions to the management of the faculty, thinking and implement public policies aimed at tackling this problem.

Evasion concept

The term evasion is not just limited to the loss of students at different levels of education, but can generate, in addition to academic, social and economic consequences (Bradley; Migali, 2019; Hashimoto, 2023). Concerns about dropout rates in higher education institutions have led to studies and research to understand their causes and propose prevention and intervention strategies (Silva, 2013).

Research on dropout in Brazil is divided into two groups: dropout in the school system as a whole and dropout in public universities (Silva, 2013). The Brazilian government invested in expanding access to higher education through public policies such as FIES and PROUNI (Brasil, 2001; Brasil, 2004). Santos Jr. and Real (2017) highlight that the expansion of Brazilian universities since the 1990s did not result in an improvement in the dropout rate.

Evasion can be measured in terms of annual evasion and total evasion. In the first, the percentage of students enrolled in an education system who, having not graduated, did not enroll in the following year or semester is measured. In the second, the number of students who, having entered a specific course, HEI or education system, did not obtain a diploma at the end of the study period is measured (Silva Filho *et al.*, 2007).

The Special Commission for Studies on Evasion in Brazilian Public Universities (Andifes; Abruem; Sesu/Mec, 1996) presents three types of evasion: course evasion, institution evasion, and system evasion. Hashimoto (2023) informs that course dropout is associated with dismissal or abandonment of the course, that is, when the student does not enroll, they formalize the withdrawal or course transfer; dropout from the institution is related to leaving or abandoning the institution, but remaining in higher education; and, dropout from the system is related to definitive or temporary abandonment of higher education.

According to Vitelli and Fritsch (2016), the use of the term "evasion" is linked to different perspectives, temporalities, granularities and formulas, manifesting itself in different conceptions and applications in academic productions. This diversity, as indicated by the authors, is also related to the autonomy of educational institutions in developing their own

management indicators, considering the particularities that characterize them. Silva Filho and Lobo (2012) state that there is no ideal formula, as the calculation of evasion is subject to the criteria and methodologies adopted, corroborating the perspective presented by Vitelli and Fritsch (2016).

Ristoff (1999) highlights evasion as a phenomenon that is related to social and institutional life. The internal reasons for dropout include issues related to human resources, didactic-pedagogical elements and infrastructure, while the external causes are related to socioeconomic aspects (Coimbra; Silva; Costa, 2021).

Almeida and Schimiguel (2011), Lobo (2012), Silva (2013), Sales Junior *et al.* (2016) and Davok and Bernard (2016) reinforce these internal causes of dropout, also adding students' personal issues, related to financial issues, choice of profession, health and course performance. Almeida, Soares and Ferreira (2002) also mention students' dissatisfaction and lack of motivation with the institution, due to courses that do not correspond to the first option in the entrance exam.

Several authors point to the importance of monitoring and supporting students as a way to prevent dropout. Psychopedagogical support, academic guidance, the creation of tutoring programs, the quality of teaching and the adaptation of courses to the demands of the job market are relevant factors in reducing dropout rates and, consequently, effective measures to improve student retention (Almeida; Soares; Ferreira, 2002).

Other factors related to dropout are the socioeconomic conditions of students, such as the lack of financial resources to continue studying. Student assistance programs, such as scholarships and financial aid, can contribute to mitigating these socioeconomic difficulties and reducing dropout rates (Silva Filho *et al.*, 2007)

It is important to highlight that the causes and contexts of dropout may vary according to the institution and level of education. Therefore, it is essential that each institution carries out specific studies and analyzes to understand dropout in its context and develop appropriate intervention strategies (Vitelli; Fritsch, 2016).

Methodological aspects

This study was carried out at a college that serves a total of 3,300 students, 2,400 undergraduate students and 900 postgraduate students. Data from students who dropped out of the 10 undergraduate courses offered by the college were analyzed, in the three major areas of knowledge: biological, exact and human sciences, listed in table 1:

Table 1 - Undergraduate Courses offered by the Faculty.

Course	Period	Modality	Area
Computer Science	Full	Bachelor's degree	Exact Sciences
biological Sciences	Full-time and Evening	Bachelor's and Licensure	Biological
Physical education	Full-time and Evening	Bachelor's and Licensure	Biological
Physical	Afternoon/Evening	Bachelor's and Licensure	Exact Sciences
Mathematics	Evening	Licensure	Exact Sciences
Meteorology	Full	Bachelor's degree	Exact Sciences
Pedagogy	Evening	Licensure	Humanities
Psychology	Full-time and Evening	Bachelor's degree	Humanities
Chemical	Evening	Bachelor's and Licensure	Exact Sciences
Information systems	Evening	Bachelor's degree	Exact Sciences

Source: Prepared by the authors.

For data collection, the following were used: 1) the Institutional Graduation System of the HEI, responsible for controlling and storing all records and academic occurrences of the HEI students, extracting information from dropout students who entered through entrance exams in the years of 2014 to 2020; 2) institutional information from a socioeconomic questionnaire with 29 questions answered by students when registering for the entrance exam; 3) institutional information from an online questionnaire to collect the causes of dropout, developed and applied by the Dean of Undergraduate Studies of the HEI, with the aim of collecting voluntary responses from dropout students, regarding the specific causes of their dropout, as well how to advance in defining their causes and promoting actions to combat them (Massini-Cagliari *et al.*, 2020).

Therefore, to begin the analysis and characterize the profile of students who abandoned their studies, we opted for a quantitative-qualitative approach. Initially, we carried out a literature review to build the theoretical framework related to the phenomenon of evasion. Subsequently, we conducted field research through content analysis, using as a basis the information available on the topic in the three institutional databases of the HEI.

Content analysis, according to Bardin (1977), represents an instrumental methodology applicable to different discourses and forms of communication, regardless of the nature of the

support used. This technique comprises three essential phases: pre-analysis, exploration of the material, and treatment of results.

The organization of the data in this initial stage of the pre-analysis resulted in the creation of three spreadsheets, each corresponding to one of the institutional databases used in the research. These spreadsheets consolidated information from 3,667 students who entered during the cutoff period. All dropouts up to the base date, who were admitted through the entrance exam in the years covered by the study, were considered as the target audience for this research, totaling 1,345 students who dropped out of an undergraduate course at college. Among the students who dropped out, 144 voluntarily participated in the online questionnaire that addressed the causes of course dropout.

In the next stage, the information present in the spreadsheets was explored, aiming to develop coding, classification and categorization methods. The purpose was to relate the data, using each student's academic record, resulting in a consolidated spreadsheet that covered all the essential information to achieve the established objectives.

In the data processing and interpretation phase, we examine the raw results with the aim of giving them meaning through the analysis and interpretation of the collected and organized information. We classify the reasons for evasion into internal, external and personal factors (Coimbra; Silva; Costa, 2021). Internal factors are associated with institutional infrastructure conditions, external factors are related to socio-political and economic aspects, while personal factors are linked to financial issues, choice of profession, health and course performance.

Thus, it was possible to identify the reasons for evasion, tracing the profile of the evaded students and providing information for the college management to think about proposals for implementing public policies for student retention.

The profile of dropped out students

We found that 36.7% (1,345 students) of the total of 3,667 students entering college courses through the entrance exam between 2014 and 2020 had dropped out of the course by the base date of data collection (07/17/2022). The Meteorology, Physics, Mathematics, and Comprehensive Physical Education courses had the highest average dropout rates during the period, recording rates of 61.5% (Meteorology), 57.3% (Physics), 43.4% (Mathematics) and 37.8% (Comprehensive Physical Education), that is, with values that exceeded the general college dropout average, which was 36.7% (Hashimoto, 2023).

We highlight that in the class that entered in 2014, the Meteorology, Physics and Mathematics courses showed a high dropout rate, being 85.4%, 71.7% and 62.5%, respectively.

In general, it was evident that dropouts are more significant in the first two years of each course, with notable cases in Computer Science (50%), Mathematics (48%), Meteorology (57.1%) and Chemistry (50%). In these courses, practically half of the students who entered in 2014 abandoned the course by 2015, that is, by the end of the second year of the course.

We identified that the majority of students who abandoned their studies belonged to undergraduate courses in the evening period, totaling 23.49%, followed by bachelor's degree courses in the full period, with 22.45%, and bachelor's/licensure courses in the afternoon/evening period, with 18.29%. When analyzing dropouts according to the area of knowledge and period of the course, we found that the highest dropout rates occurred in courses in the exact sciences area, with 23.79% in the evening period and 17.17% in the full-time period. On the other hand, courses in the human sciences area had the lowest dropout rates, both full-time (4.54%) and night-time (9.14%).

With regard to dropouts according to area of knowledge and course modality, we observed that the highest rate was recorded in bachelor's degree courses in the area of exact sciences, reaching 25.28%, while the lowest dropout rate was identified in courses of the bachelor's degree in the area of biological sciences, with 1.64%. These results, obtained in our research, align with those presented by Lobo (2012) and Davok and Bernard (2016).

The research indicated that the majority of students who abandoned their studies had not previously started any higher education course. In other words, the course they dropped out of represented the first academic experience in higher education for these students. Additionally, it was observed that the majority of students who dropped out of college courses had already taken the entrance exam at least once, with some of them passing, but later dropping out of the course. It is concluded, therefore, that many of these students faced uncertainty regarding the choice of course and, consequently, concerning the professional career to follow (Hashimoto, 2023).

Throughout the period examined, it was found that the predominance of students who dropped out were male, aged between 19 and 24 years old, comprising 38.96% of the total number of students who dropped out of college undergraduate courses. In the case of female students, the highest dropout rate was also concentrated in the 19 to 24 age group, reaching 22.16%.

When analyzing the age group, it is clear that dropout rates are in line with the number of entrants in each group. There is a greater number of students enrolled in younger age groups, particularly up to 24 years of age. In relation to gender, it is observed that dropout is also more prevalent among male students, regardless of age group, as corroborated by studies by Silva *et al.* (2022).

It was found that, during the period analyzed, the highest number of dropouts occurred among male and white students, representing 44.79% of the total number of dropouts. Among the dropout students who entered undergraduate courses between 2014 and 2020, 32.94% were male and completed high school in private schools. In relation to the variables gender and type of high school completion school, there is a balance in the number of dropouts by type of education, although in a greater proportion for male students. These data are in line with studies carried out by Davok and Bernard (2016).

We also analyzed student dropout according to the admission system adopted in the entrance exam. The approved HEI project established that, over a period of five years, 50% of the places offered in the entrance exam would be allocated to the Universal System (SU) with students from private schools, while the other 50% would be reserved for students who fully studied the secondary education in Public Schools (EP).

Within the vacancies allocated to public school students, 65% would be reserved for self-declared white or yellow (SU) students, and 35% would be allocated to self-declared Black, Brown and Indigenous (PPI) students. The HEI had a period of five years to reach the target of inclusion of 50% of students from public schools, with specific percentages to be achieved each year (Vasconcelos; Galhardo, 2016).

With the gradual increase in places reserved in the entrance exam for public school students, from 15% to 50%, between 2014 and 2018, there was also an increase in the dropout rate in the place reservation systems for public school students (EP and PPI). In 2014, 43.57% of the 15% of places allocated to incoming students who fully completed secondary education in public schools (EP and PPI) abandoned the course. In 2020, this percentage increased, reaching 51.51% of dropouts among the 50% of vacancies reserved for EP and PPI.

A large portion of students who dropped out of college courses declared, when registering for the entrance exam, that they had a monthly family income between 2.0 and 4.9 MW, with 16.58% of students reporting that four people lived on this declared income. Furthermore, we identified that the majority of students who dropped out did not have any paid activity when they entered the course and their expenses were paid by their family. We observed

that the dropout rate is higher among students who worked and were primarily responsible for supporting the family, especially those admitted through vacancy reservation systems aimed at candidates from public schools (EP), compared to students who entered through the universal system (SU).

Finally, in relation to how the students intended to support themselves during the course, the majority of students who dropped out of the courses indicated their intention to work, with percentages of 50.13% (EP), 49.80% (PPI) and 41.96% (SU). It is worth mentioning that 37.41% of students in the universal system stated that they planned to pay for their studies with resources provided by their parents or guardians. In the place reservation systems for public school students (EP and PPI), this percentage was lower, reaching 23.04% in EP and 15.38% in PPI. On the other hand, a significant portion of students in the place reservation systems (EP and PPI) indicated their intention to stay in college through scholarships, with 22.28% in EP and 28.34% in PPI. In the case of students in the universal system, the percentage related to this option was 14.65%.

Based on these data, and considering works by authors such as Lobo (2012) and Silva *et al.* (2022), it is concluded that, in general, students admitted through the universal system tend to have a more favorable family financial situation compared to those who entered through public affirmative action quota policies.

The causes of evasion

The final part of this research was to organize the data from the institutional online questionnaire, composed of four closed questions, which was prepared and applied by the Dean of Undergraduate Studies of the HEI, with the purpose of collecting the causes of dropout from the HEI (Massini-Cagliari *et al.*, 2020). Of a total of 1,345 students who abandoned undergraduate courses at the college analyzed and who entered through the entrance exam between 2014 and 2020, 144 students chose to voluntarily answer the four questions on the form.

Regarding the first question, which addressed whether the choice to study at this HEI was the student's first option, it was observed that, for the majority of students who abandoned the Computer Science, Physical Education – Evening and Psychology courses – Full-time, the HEI was not the first choice.

The second question focused on the main reasons why students chose to study at the university, with the majority indicating that the choice was motivated by the fact that it is a recognized and quality university. An exception to this pattern was identified among students of the Biological Sciences Course – Evening Period, in which the majority of students who dropped out indicated that they had chosen the institution because it is located in the city where they live (38.5%).

The third question aimed to identify whether, during the period in which they were enrolled at the university, the students participated in activities related to teaching, research or university extension projects. The majority of the 144 students who dropped out of courses reported that they were not involved in teaching, research or university extension activities. The percentage distribution of responses from students who dropped out in each course at the institution was as follows: Computer Science (100%), Biological Sciences – Evening Period (83.3%), Physical Education – Full Time (100%), Physical Education – Night Time (66.7%), Physics (86.1%), Mathematics (81%), Meteorology (71.4%), Pedagogy (66.7%), Psychology – Full Time (100%), Psychology – Night shift (100%), Chemistry (75%) and Information Systems (87.5%).

Among the students who dropped out and participated in activities during their enrollment, the majority were involved in monitoring, extension projects and research. Analysis of this data highlights the clear urgency for the university to increase financial investments, as well as to more effectively encourage students' direct participation in teaching, research or university extension initiatives.

In the fourth and final question of the virtual questionnaire, the answers were grouped into internal, external and personal factors, according to the categorization proposed by Coimbra, Silva and Costa (2021). Internal factors are associated with institutional infrastructure conditions; external ones refer to socio-political and economic aspects; and personal issues involve financial issues, choice of profession, health and course performance.

In general, the factors categorized as personal were those with the highest incidence, with the main reasons given by the majority of students who abandoned each course: dissatisfaction with their professional choice, dissatisfaction with academic performance and family and health problems.

With regard to factors classified as external, the reasons most frequently mentioned by students on most courses were difficulties in reconciling work with studies, financial issues and the distance between the city of origin and the university campus.

Regarding factors classified as internal, the reasons most mentioned by students who abandoned most courses were: lack of time for extracurricular academic activities, difficulty in following the content of the subjects, insufficient time to participate in training activities, such as research, internships and courses, lack of practical activities and infrastructure problems. It is worth mentioning that one of the elements also identified as an internal factor for dropout was the excess of theoretical classes, associated with the lack of use of new Information and Communication Technology (ICT) tools as a teaching methodology.

On the form, there was also an option "Others" with space to describe free text. Based on the content of these responses, we grouped this reason as a personal factor. Many students who dropped out of the course selected this option and provided diverse texts that we were unable to quantify. However, the most common themes were categorized by keywords. The reasons for dropping out most cited by students who dropped out were: changing to another course at another university, transferring to other campuses or courses at the same higher education institution closer to the city of origin, problems related to mental and psychological health, participation in strikes, difficulties in relationships with teachers and lack of work opportunities.

It is important to highlight that in undergraduate courses offered at night, the reasons associated with lack of time for extracurricular academic activities and difficulties in reconciling work with studies were the most frequently mentioned by students who dropped out.

Action planning aimed at preventing evasion

Based on the results obtained, the urgency for the HEI to allocate more financial resources and actively promote student participation in teaching, research and university extension activities becomes evident. Furthermore, it is imperative to invest in the preparation of teaching staff to receive these new "digital" generations of students who are entering universities in a contemporary era that is highly dynamic and highly connected to the technological world. Furthermore, it is crucial to invest in innovative classrooms, providing teaching materials and technological resources, as suggested by Hashimoto (2023).

As for the elements categorized as internal evasion factors (Coimbra; Silva; Costa, 2021), it is up to the HEI to design initiatives to reformulate the Political-Pedagogical Projects

of the courses, making them more attractive, contemporary and modern, with a reduction in theoretical classes and a greater emphasis on practical and extracurricular activities.

To deal with the reasons for dropout linked to external factors (Coimbra; Silva; Costa, 2021) identified by students who dropped out, the HEI will need to seek, together with the Rectory, to allocate more financial resources. This aims to ensure various forms of support for student permanence, including financial aid, investments in student housing and the expansion of meals offered by the university restaurant on campus.

Considering that the HEI budget may not be sufficient to fully meet the investment needs for student retention, it will be necessary for the HEI to actively promote and support the participation of students, especially those from public and low-income schools, in paid extracurricular activities, such as: teaching projects, university extension, research, exchanges and internships. Students can be encouraged to apply for these opportunities through the institution's own internal and external notices, which are regularly published and often have unfilled vacancies due to a lack of candidates.

In relation to the reasons for dropping out classified as personal factors (Coimbra; Silva; Costa, 2021), the HEI must implement strategic actions to contribute to the psychosocial conditions of students. This will include establishing inclusion and diversity policies, ensuring that all students have equitable access to learning and development opportunities. Furthermore, it will be necessary to promote improvements in mental health in a comprehensive manner, encouraging dialogue, expanding discussions in a democratic way, strengthening interpersonal relationships and reducing conflicts between teachers and students, as well as between colleagues themselves.

To combat evasion resulting from personal issues linked to academic performance, a necessary measure to be implemented in collaboration with the university's IT department would be to propose the development of a system equipped with artificial intelligence algorithms. This system would aim to track the academic performance of students who have already dropped out and those who are in the process of dropping out. This approach aims to identify possible cases before they materialize, allowing the implementation of preventive actions and pedagogical guidance, through tutoring, monitoring, mentoring and offering leveling subjects in basic training (Hashimoto, 2023). In this way, it would be possible to mitigate the problem highlighted in this research, related to high dropout rates in the first years of the course, expanding opportunities for students to fully develop and remain in college.

It will be essential to intensify efforts to promote courses and the HEI through monitored visits to the campus, events with successful graduates in the job market and participation in career fairs. These initiatives aim to provide the internal and external community, especially students completing high school, with the opportunity to learn about the distinctive characteristics of the courses offered. This approach seeks to assist in decision-making regarding the choice of career to be followed, helping to avoid evasion motivated by dissatisfaction with the professional choice.

Finally, in order to ensure the permanence of already enrolled students who express dissatisfaction with the choice of entry course, it is necessary to seek legal alternatives with the HEI to simplify and facilitate the exchange of places, in addition to promoting internal transfer between courses. This effort involves reducing bureaucracy in the process, providing viable options so that students can find an area that best matches their interests and skills, as already mentioned by Hashimoto (2023).

Final remarks

This study covered classes entering university entrance exams from 2014 to 2020, which limited the analysis of the direct impact of the Covid-19 pandemic on dropout rates from HEI courses. Considering the significant changes in the educational scenario resulting from the pandemic, it is recommended to continue the research with the classes that entered during and after this pandemic period. Recent studies indicate that social isolation and some adaptations implemented in the teaching methodology of subjects that were extremely necessary during the pandemic, may influence the current rates and causes of dropout, especially in aspects related to students' mental health.

The results presented in this study revealed that the highest dropout rate occurred in evening-time undergraduate courses, bachelor's degrees with afternoon/evening-time degrees and full-time bachelor's degrees. When analyzing dropouts by area and course period, it was observed that courses in the exact sciences area had the highest dropout rates, both full-time and night-time. Among courses in the exact sciences area, those in the bachelor's degree category had the highest dropout rate.

It was also identified that the majority of students who dropped out were male, aged between 19 and 24 years old, with a predominance of other age groups as well. Female students, likewise, showed a significant number of dropouts in the 19 to 24 age group. Therefore, it can

be concluded that there is a greater tendency to drop out among male students, regardless of age.

We observed a gradual increase in the number of students enrolled through places reserved for students who attended high school in public schools and also for self-declared black, brown and indigenous students. However, an increase in the dropout rate in these vacancy reservation systems was also found in relation to the universal system. This scenario was especially evident in courses in the exact sciences area, with emphasis on dropouts in the vacancy reservation system for self-declared black, brown and indigenous students.

We also found that the highest percentage of dropouts occurs among students who do not live in their home municipality, with the majority coming from other cities in the state of São Paulo, further revealing the complexity and challenges of combating dropout rates.

We conclude, therefore, that dropout in higher education is a problem that demands attention and we hope that this study contributes to reflection on this phenomenon, providing support for future research and implementation of effective public policy strategies for student retention to minimize the problem. It is essential to promote a welcoming academic environment, invest in psychosocial support and adopt new teaching methodologies, providing greater access to learning opportunities.

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