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IMPACT OF SELF-EFFICACY AND ACADEMIC PERFORMANCE IN THE DROPOUT OF HIGHER EDUCATION STUDENTS

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ABSTRACT

Dropping out of Higher Education has implications for students and universities, and the identification of variables associated with dropout makes it possible to develop actions that reduce its occurrence. This study analyzes the direct and mediated impacts of self-efficacy, income, sex, age, receipt of social assistance grants and entry into a preferred option course in evasion. Data were collected from 346 university students through a Socioeconomic Questionnaire, the Self-Efficacy Scale in Higher Education, in addition to documentary information, and were analyzed using the AMOS software. The results identified that being a woman and manifesting high self-efficacy are associated with better academic performance, which are related to lower risks of dropping out. It was also found that being a woman and attending the preferred option course decreases the chances of dropping out. Such results reinforce the weight of personal, psychological, academic and career variables in dropout and suggest ways for interventions that promote student permanence.

Keywords: student dropout; academic performance, self-efficacy or cognitions; career choice

Impacto de la autoeficacia y del rendimiento académico en el abandono de estudiantes de la enseñanza universitaria

RESUMEN

La deserción de la enseñanza universitaria trae implicaciones a los estudiantes y a las universidades, y la identificación de las variables asociadas a la deserción posibilita desarrollar acciones que disminuyan su ocurrencia. En este estudio se analiza los impactos directos y mediados de la autoeficacia, del rendimiento, sexo, edad, recibimiento de becas de ayuda social e ingreso en curso de opción preferencial en la deserción. Los datos se recolectados con 346 universitarios por intermedio de un Cuestionario Socioeconómico, de la Escala de Autoeficacia en la Formación Universitaria, además de informaciones documentales, y se analizaron por el software AMOS. Los resultados identificaron que ser mujer y manifestar autoeficacia elevada se asocian a mejores desempeños académicos, los cuales, se relacionan a riesgos menores de abandono. También se verificó que ser mujer y frecuentar el curso de opción preferencial disminuye las oportunidades de abandono. Tales resultados refuerzan el peso de variables personales, psicológicas, académicas y de carrera en la deserción y sugieren caminos para intervenciones que promuevan la permanencia de los estudiantes.

Palabras clave: abandono escolar; desempeño académico, autoeficacia o cogniciones; escoja profesional

Impacto da autoeficácia e do rendimento acadêmico no abandono de estudantes do Ensino Superior

RESUMO

A evasão do Ensino Superior traz implicações para os estudantes e para as universidades, e a identificação das variáveis associadas ao abandono possibilita desenvolver ações que reduzam sua ocorrência. Este estudo analisa os impactos diretos e mediados da autoeficácia, do rendimento, sexo, idade, recebimento de bolsas de auxílio social e ingresso em curso de opção preferencial na evasão. Os dados foram coletados com 346 universitários por meio de um Questionário Socioeconômico, da Escala de Autoeficácia na Formação Superior, além de informações documentais, e foram analisados pelo software AMOS. Os resultados identificaram que ser mulher e manifestar autoeficácia elevada associam-se a melhores desempenhos acadêmicos, os quais relacionam-se a riscos menores de evasão. Também se

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verificou que ser mulher e frequentar o curso de opção preferencial diminui as chances de abandono. Tais resultados reforçam o peso de variáveis pessoais, psicológicas, acadêmicas e de carreira na evasão e sugerem caminhos para intervenções que promovam a permanência dos estudantes.

Palavras-chave: evasão escolar; desempenho acadêmico, autoeficácia ou cognições; escolha profissional

INTRODUCTION

The last decades have marked Brazilian Higher Education with changes linked to the different configurations of the degrees offered, with the growth in distance learning and expansion of access, stimulated by inclusive public policies. These public policies impacted the profile of students, which is more heterogeneous and differs in age, ethnic-racial origins, family and education background, socioeconomic level, specific needs, motivations and career projects (Araújo, 2017; Heringer, 2018; Neves, Sampaio, & Heringer, 2018).

National Higher Education is in transition from an elite to a mass system, with 19.2% of young people between 18 and 24 years old enrolled in public and private institutions (Almeida, Marinho-Araújo, Amaral, & Dias, 2012; MEC, INEP, 2018; Heringer, 2018; Trow, 2007). Despite the growing appreciation of higher education, there are high failure rates, described by low academic performance, the dropping out courses (Araújo, 2017; MEC, INEP, 2018; Neves et al., 2018). In this sense, dropout has financial implications and makes management difficult for the institutions. (Saccaro, França, & Jacinto, 2019). In addition to wasting income, students' dropout is experienced with different feelings, such as sadness and shame in the face of unrealized training projects, or as relief and satisfaction in dealing with the possibility of making new major choices (Bardagi & Hutz, 2005; Saccaro et al., 2019). This reality highlights the urgency of more in-depth investigations into the paths of promoting academic success to support policies aimed at students' permanence and completion of higher education, with emphasis on those who have historically been excluded from this level of education (Almeida et al., 2012; Heringer, 2018).

Permanence in higher education refers to situations in which students continue until the end of the degree, completing the qualification for which they admitted. (Casanova, Cervero, Núñez, Almeida, & Bernardo, 2018a). In turn, the understanding of dropout is complex and is linked to the transfer of institutions and/or courses or the dropout the degree the student was enrolled at the university or higher education (Casanova et al., 2018a). This work considers that students who remain are those who are committed to the course and dropouts are those who leave the course without completing it, motivated by their own initiative or by institutional rules.

The theoretical understanding of a dropout student presupposes that the relationships between the students' personal characteristics, such as previous academic background and experiences, and the institutional context impact the goals and expectations of university students, which, mediated by other psychological variables, such as motivation and self-efficacy, influence learning, performance and the decision to dropout (Bean & Eaton, 2001; Stinebrickner & Stinebrickner, 2014; Tinto, 2012; Tinto, 2017). The literature is quite consensual in pointing out that students with lower academic performance are more likely to dropout (Bernardo et al., 2016; Casanova et al., 2018a; Ferrão & Almeida, 2019; Stinebrickner & Stinebrickner, 2014; Tinto, 2012; Red, 2017). Academic performance is defined by professor feedback, passing course subjects, and completing the required credit hours to get an undergraduate degree in the desired concentration study area. This combined information provides critical information about the student's progress throughout the course. (Araújo, 2017; Casanova et al., 2018a; Schneider & Preckel, 2017).

The students who have better academic performance show more favorable perceptions about the university experience (Hailikari, Kordtsk-Freudinger, & Postareff, 2016). Good academic performance gives support to motivation and self-efficacy beliefs, leading students to new cycles of success and greater self-regulation of learning (Bandura, 1997; Hailikari et al., 2016). At the same time, high academic performance is associated with satisfaction with the course (Biner, Barone, Welsh, & Dean, 1997), understood as the subjective assessment that the student makes about his experience. Because of this, it interferes with motivation and engagement, with impacts on goals and permanence (Ferrão & Almeida, 2019; Santos, Zanon, & Ilha, 2019; Tinto, 2017). Academic performance is, therefore, one of the determinants of intentions and decisions to remain in the career, as it influences students' goals and leads them to consider the risks of dropping out (Casanova et al., 2018a; Díaz Mujica, Pérez, Bernardo Guiérrez, Cervero Fernández-Castañón, & González-Pienda, 2019; Stinebrickner & Stinebrickner, 2014). It is known that personal characteristics, background and previous schooling experiences, study habits, relation between

students and teachers, curriculum organization and retention policies impact academic performance (Araújo, 2017; Heringer, 2018), justifying the focus of this study in understanding the role of personal variables.

Regarding gender, women have higher academic performance than men. Male students show less commitment to the course, dedicate themselves to study with less time and effort, in addition to missing classes more often when compared to women, who receive more support from teachers and have better study habits (Alfarhan & Dauletova, 2019; Cotton, Joyner, George, & Cotton, 2016; Voyer & Voyer, 2014). The impact of the gender variable on performance is mediated by social gender stereotypes associated with academic and professional careers that are still assumed to be more masculine or feminine (Almeida, Guisande, Soares, & Saavedra, 2006). In any case, data from the Higher Education Census point to higher dropout rates in male students when compared to women (MEC & INEP, 2018). In turn, women are more likely to drop out in the face of low academic performance, and men are more likely to drop out in spite of passing a greater number of credits (Casanova et al., 2018a).

Mature undergraduate students have fewer passes and a higher risk of dropping out than younger students (Korhonen & Rautopuro, 2019). Family responsibilities and work commitments oblige mature students to consider roles, reducing the time and availability to perform academic tasks and impacting the decision to drop out of the course.

There is no consensus on the impact of university students' socioeconomic aspects on performance. There are investigations that indicate academic disadvantages among low income students (Rodríguez-Hernández, Cascallar, & Kyndt, 2019), despite other authors have already pointed out that, controlling for entrance grades, there are no differences between groups (Chang, Sharkness, Hurtado, & Newman, 2014; Stinebrickner & Stinebrickner, 2014). In addition to the cultural capital typically valued in Higher Education System, the frequent requirement of balancing job with academic activities increases the probability of dropping out activities increases the probability of dropping out (Korhonen & Rautopuro, 2019; Li & Carroll, 2019). When students receive financial aid, dropout rates are lower (Bernardo et al., 2016; Felicetti & Fossatti, 2014), as financial support embraces a unique role in building equity in the university environment and in overcoming inequalities arising from social capital. It is highlighted that the load of experiences lived during the graduation is greater than the socioeconomic issues (Kahu & Nelson, 2018; Rodríguez-Hernández et al., 2019; Stinebrickner & Stinebrickner, 2014).

Regarding to the influence of major choices on success, students enrolled in their first-choice courses have higher academic performance, as they experience a better transition into Higher Education and are more engaged in activities, which help to develop the student's commitment to the university (Casanova et al., 2018a). Tinto (2012) had already announced that the commitment to graduating is a relevant variable for staying at university as students who are not academically successful have less defined educational and career projects (Belloc, Maruotti, & Petrella, 2011; Casanova et al., 2018a). Students who do not enter the courses of their first choice and who do not develop such engagement are more likely to drop out, explained by the decrease in goals, motivations and commitments to the course, which makes them ponder about remaining in the face of challenges (Bernardo et al., 2016; Rodrigo, Gabriel Molina, García-Ros, & Pérez-González, 2012).

The role of non-cognitive variables and motivational constructs in academic performance and permanence is added (Araújo, 2017; Tinto, 2017). Of these mentioned, self-efficacy, which refers to students' beliefs in the ability to organize and execute courses of action necessary to produce achievements (Bandura, 1997), is a predictor of academic achievement (Al-Sheeb, Hamouda, & Abdella, 2019; Huang, 2013; Robbins et al., 2004). This is because students with higher levels of self-efficacy set goals, invest more time and effort in tasks, choose more challenging activities, have higher levels of regulation in their study, which influences well-being, satisfaction with the university experience, and performance (Casanova, Cervero, Núñez, Bernardo, & Almeida, 2018b; Costa, Araújo, & Almeida, 2016; Santos et al., 2019; Tinto, 2017).

Investigations describe that women and older students have higher self-efficacy beliefs (Bandura, 1997; Huang, 2013). Other investigations indicate that students in situations of greater social vulnerability had lower levels of self-efficacy (Majer, 2009). In a recent investigation, these results have not been maintained and point out that the previous history of university students contributes to the development of other psychological resources, such as resilience, which help them to overcome adversity (Thompson & Verdino, 2019).

About self-efficacy, meta-analysis results describe contributions of more specific measures to educational consequences when compared to more general measures (Bandura, 1997; Multon, Brown, & Lent, 1991). Correlations were found between academic self-efficacy and performance (Martins & dos Santos, 2019; Multon et al., 1991); moderate correlations between academic self-efficacy and academic engagement (Costa et al., 2016), with engagement as the variable that predicts performance and permanence (Kahu & Nelson, 2018); in addition to moderate correlations between

self-efficacy in higher education (SEHE) and learning strategies (Martins & dos Santos, 2019). The SEHE anticipates satisfaction with the university experience that impacts the intention and decision to remain at the university (Casanova et al., 2018b; Santos et al., 2019).

In summary, self-efficacy has a direct impact on variables that are predictors of performance and on domains that help explain the student's permanence at the university, such as academic performance, satisfaction with the course and the intention to continue their training experience. At the same time, personal variables influence both self-efficacy and student performance and persistence at university. Furthermore, in view of the expansion in access to higher education in the Brazilian context, with the increase in the heterogeneity of the students' profile and the need to understand variables associated with success, it is proposed to carry out the present study with the objective of investigating the impact direct and mediated assessment of self-efficacy, academic performance, gender, age, receipt of social aid grants and enrollment in a preferred course in higher education evasion.

METHOD

Participants

A non-probabilistic convenience sample was used, with the inclusion criterion being a university student enrolled in an elective course on self-regulation of learning, offered every six months from 2014 to 2018, on two of the campuses of a public, free university, located in the interior of São Paulo. The sample consisted of 346 students, enrolled in this institution and, despite being a longitudinal study, there were no sample losses since the documentary information regarding the academic performance of the students and the academic situation: enrolled or dropped out, were collected through of documentary data.

The participants came from 59 undergraduate courses, with 71.4% attending courses in the areas of Exact and Technological Sciences, and of the entire sample, 36.2% of students were enrolled in Engineering careers. Still regarding university students, 18.8% attended courses in the areas of Humanities and Arts, and 9.8% were linked to careers in Biological Sciences and Health Professions.

Regarding the sample, 68% of the students were enrolled in the two initial years of the course, 50% were women, 35.5% received financial support to carry out higher studies, 82.5% were admitted in courses considered to be their first choice, and 52.1% had at least one of the parents with complete Higher Education degree. The age of the participants ranged from 18 to 58 years, with a mean of 21.20 and a standard deviation of 4.16.

Instruments

Sociodemographic Questionnaire. This questionnaire collected information about gender, age, course, semester attended, parents' education, receipt of social assistance grants and whether or not they were enrolled in a preferred course.

Higher Education Self-Efficacy Scale (HESES). Self-efficacy was assessed using the Higher Education Self-Efficacy Scale (HESES) (Polydoro & Guerreiro-Casanova, 2010). It is a scale composed of 34 questions, which must be answered using *a Likert*-type format as a reference, from 1 (not very capable) to 10 (very capable), about the perception of their ability to perform the different activities present in Education. Higher. This scale assesses five dimensions of Self-Efficacy in Higher Education which are: Academic, Regulation of Education, Social Interaction, Proactive Actions and Academic Management, exemplified by the items: *How much am I able to motivate myself to do the activities related to the course*? and *How much am I able to use cognitive strategies to facilitate my learning?* The internal consistency of the scale is 0.94, and in the dimensions Cronbach's alpha ranged from 0.80 to 0.88 (Polydoro & Guerreiro-Casanova, 2010). We worked with the total score of the scale, calculated by adding the answers to all items, dividing by the number of items. Higher scores are associated with a higher level of self-efficacy in higher education.

Procedures

Data collection, with the application of the socioeconomic questionnaire and the Higher Education Self-Efficacy Scale was carried out at the beginning of the semester. In the years 2014 to 2015, it took place collectively, in the classroom, with the use of paper and pen. In the years 2016 to 2018, it took place in digital format, through the *Moodle* Platform. The study followed the ethical guidelines involving research with human beings and was approved by the Ethics Committee (CAAE: 27112414.9.0000.5404). Participants were informed about the objectives of the study, instructed on the procedures related to data collection, were assured of confidentiality and secrecy of information, and expressed free and informed consent to participate in the study. Academic performance was obtained through the average of grades obtained by students in the semester of application of the instruments, from consultation of institutional documents. The academic situation of the student, whether enrolled or dropped out, was collected in the four semesters following the application of the instruments, through documents provided by the university.

Statistical analyzes were performed using the *SPSS* statistical package, version 25.0. The study of the fit of the data to the theoretical model was carried out by the

Table 1. *Characterization of Participants, Based on Academic Status: Enrolled or Dropped.*

			Enrolled		Dropped		
	N	**%**	**N**	**%**	**N**	**%**	
Sex							$\chi^2 = 9.7$
Male	173	50	123	71.1	50	28.9	gl = 1
Female	173	50	147	85	26	15	p=0.002
Preference Course							χ^2=12.62
Yes	283	82.5	233	82.3	50	17.7	gl = 1
No	60	17.5	37	61.7	23	38.3	p<0.001
Social Assistance Scholarships							χ^2=1.19
Yes	223	64.5	100	81.3	23	18.7	gl = 1
No	123	35.5	170	76.2	53	23.8	p=.276
Total	346		270	78	76	22	
Age			M	SD	M	SD	t=-.127
			21.18	4.53	21.25	2.40	gl=344
			Min	Max	Min	Max	p=0.899
			18	58	18	27	
Higher Education Self-Efficacy Scale			M	SD	M	SD	t = 3.59
			6.68	.09	5.95	0.21	gl=344
			Min	Max	Min	Max	p<0.001
			2.71	10	1.35	9.5	
Semester Average Grades			M	SD	M	SD	
			6.41	0.102	4.31	0.24	t = 9,14
			Min	Max	Min	Max	gl = 344
			0.68	9.7	0	8.87	p<0.001

AMOS software, using the indicators described in the literature and critical for good fit: χ^2 (Chi-Square), CFI (Comparative Fit Index), NFI (Fit Index Normalized), IFI (Corrected Fit Index) and RMSEA (Root Mean Squared Approximation Errors) (Hu & Bentler, 1999). 0.5 was considered as a criterion for the significance of the results.

RESULTS

Regarding the academic situation of the investigated sample, 270 (78%) remained enrolled and 76 (22%) dropped out of the institution without completing the course. Table 1 details information about the variables analyzed.

scores between the studied genders, with higher rates for men (M = 6.53, SD = 1.61) compared to women (M = 6.50, SD = 1.58), among students who attend courses of interest (M = 6.58, SD = 1.57) with reference to their peers (M = 6.19, SP = 1.68) and among university students who do not receive scholarships (M = 6.60, SD = 1.73), in relation to scholarship holders (M = 6.46, SD = 1.51). Weak correlations were also observed between self-efficacy in higher education and age (r = -.079, p = .668). However, none of these results had statistical significance.

Regarding the main objective of the study, the impact of self-efficacy in Higher Education and academic performance of the semester in higher education dropout, the model was tested in which the direct influence of such variables, and the students' personal characteristics (gender, age, receiving financial support and staying enrolled in first choice course), about university evasion. The mediated effects of self-efficacy and academic performance on the student's success trajectory were investigated.

The proposed theoretical model presented the

following adjustment coefficients: χ^2/gl = 1.53, NFI= 0.934, IFI= 0.976, CFI = 0.971, RMSEA = 0.039]0.00 – 0.087[and explained 24% of the variance of the student's situation, that is, whether you are enrolled or dropped out. The indices obtained indicated that there was a good fit of the empirical data to the proposed model and that it has adequate explanatory power for the student's academic situation (Hu & Bentler, 1999). In turn, the analyzes also measured the direct impact of gender, age, enrollment in a preferred option course, receipt of a social aid grant, and self-efficacy in higher education on academic performance, and this set of variables explained only 8 % of variance in income. Such results indicate that the personal aspects analyzed in the present study have a greater impact on the decision to drop out than on income. Figure 1 describes the weights and meaning of the impact obtained in relation to the variables under analysis in the face of dropping out.

From Figure 1, it can be seen the significant direct impact of academic performance on dropout (β = -.40), with higher performance implying a lower risk of dropout. In addition, gender (β = -.13) and attendance of preferred courses directly influence permanence (β = -.15). Women have a lower risk of dropping out when compared to men. As well, students who attend the university in courses that are their preferred option have lower risks of dropping out, having as a reference their peers enrolled in courses that were not first option.

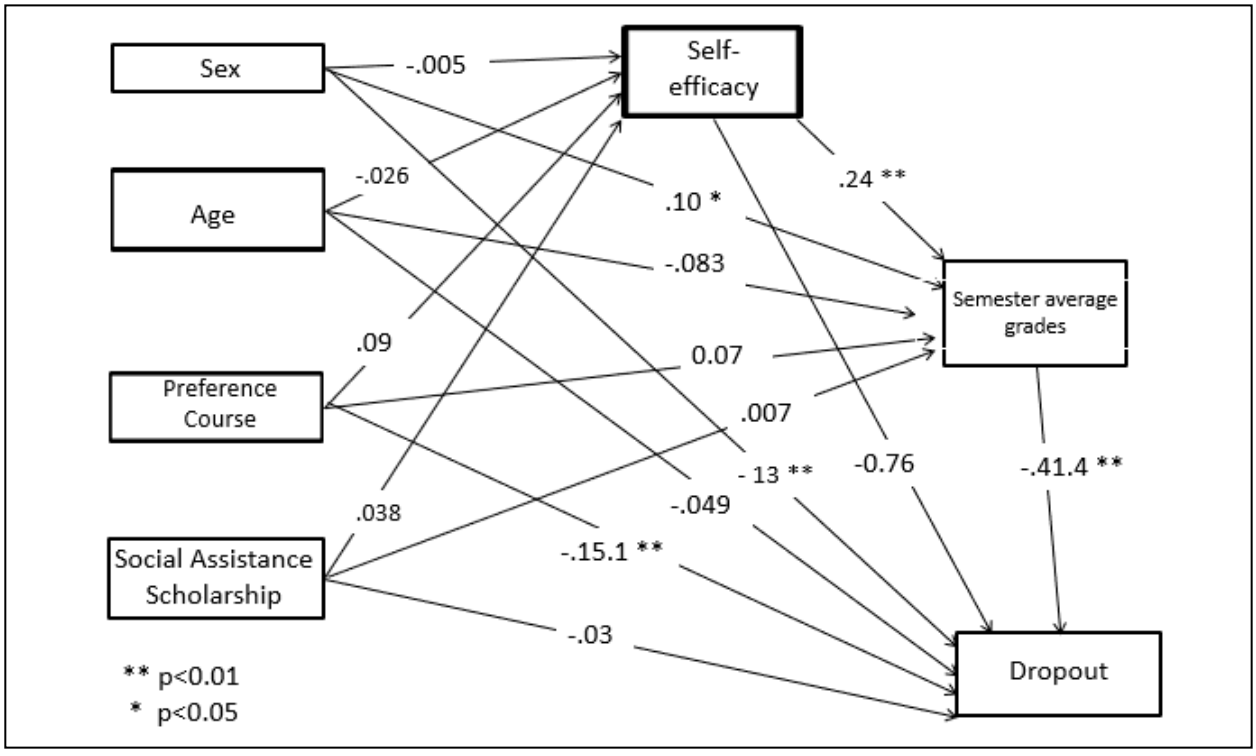
Higher Education self-efficacy in has a direct and significant influence on semester grade averages, with higher beliefs being associated with higher academic performance (β =.24, p < 0.01). Gender also has a statistically significant direct impact on performance (β = .10, p < 0.05), with women showing better achievements. These results indicate that the impact of self-efficacy on permanence is mediated by students' grades, that is, beliefs influence performance, which impacts permanence. Gender, in turn, impacts the decision to continue training directly, as already described, and indirectly, since in the present study, women had higher academic performance, and this variable proved to be a strong predictor. of permanence.

A low and non-significant impact of personal variables is described: gender, age, enrollment in a preferred course and receipt of financial aid on self-efficacy for higher education. With the exception of sex, there is also a small and non-significant impact of the other variables on academic performance and age and receipt of scholarships on dropout.

DISCUSSION

Academic success is a complex concept and its measures are linked, in addition to income results, to training processes, student well-being and personal development. The authors also involve other indicators such as insertion in the world of work and employability,

Figure 1. *Structural Equations Model on the Impact of Variables on Academic Situation (Remaining or Dropping Out).*



course completion rates, persistence and course degree (Araújo, 2017; Casanova et al., 2018a; Jackson & Bridgstock, 2018; Kahu & Nelson, 2018). Institutions take care of such indicators because they are used in the recognition and regulation of course offerings, in the elaboration of classifications that direct prestige, institutional selectivity and the resources allocated to universities (Araújo, 2017; Kahu & Nelson, 2018; Pereira, Carneiro, & Gonçalves, 2015). The indices linked to academic success, persistence and performance are unique, as in addition to being indicators of success in the academic trajectory, they enable other achievements (York, Gibson, & Rankin, 2015). When the university student does not advance in the course and does not remain, his scientific training or entry into the job market, among other achievements associated with measures of success in higher education, become difficult.

Knowledge of the paths that promote academic success is crucial for institutions to format policies and actions that enable students to learn and remain. In this study, the impact of sex on dropout and academic performance is highlighted, with women having greater academic achievements and lower risk of dropping out. The existence of a *gap* between genders is documented in the literature and it is suggested that study habits and investments in tasks in the university context are different between men and women, and female students better organize academic tasks that result in higher grades, even when controlling for students' previous performance (Al-Sheeb et al., 2019; Cotton et al., 2016). Male students engage more frequently in extracurricular activities and, as a result, have less time for study, otherwise such experiences are associated with greater employability (Ever & Rush, 1996; Pinto & Ramalheira, 2017). In addition, unlike other investigations, the results of a literature review point to higher self-efficacy beliefs in male students, when compared to women who attend courses in the areas of technologies (Fisher, Thompson, & Brookes, 2020). Gender stereotypes help to understand such differences, since men are the majority in these careers and social perceptions of higher income favor them (Almeida et al., 2006). Overconfidence leads men to more procrastination behaviors, putting off academic activities, which results in worse performance (Graff, 2019).

The strength of career development projects is evident in the impact of attending the first choice course in order to minimize the risks of dropping out, with the likelihood that they will stay when they are in the chosen careers (Bernardo et al., 2016; Casanova et al, 2018b). Since students present better adjustments, they are motivated and engaged with activities and satisfied with the university experience, which leads them to persist in the face of challenges and difficulties (Bernardo et al., 2016; Larose, Duchesne, Litalien, Denault, & Bovin, 2019; Santos et al., 2019).

Still about drop out, it is understood as a process that reflects a history of decisions influenced by variables, with emphasis on academic performance (Stinebrickner & Stinebrickner, 2014). High achievements indicate a reduction in the risk of drop out and such results are justified because the performance impacts the student's motivation, goals and the decision to drop out (Stinebrickner & Stinebrickner, 2014; Tinto, 2017). In addition, low performance leads the student to progress slowly throughout the course, which culminates in an evasion due to institutional norms that do not allow the students to complete in a higher number of years (Stinebrickner & Stinebrickner, 2014).

Given the importance of academic performance in permanence, it is crucial to identify variables or experiences that predict good performance. From this study, the impact of self-efficacy on income is pointed out, with high beliefs associated with greater achievements, which is in line with the results of other investigations (Graff, 2019; Schneider & Preckel, 2017). This means that the student's judgment about their ability to organize courses of action in order to achieve their goals influences performance, as they are associated with the time and effort spent on academic tasks, the ability to overcome challenges, stay involved activities and self-regulate learning (Costa et al., 2016; Criollo, Romero, & Fontaines-Ruiz, 2017; Tinto, 2017).

In turn, as already described, the weight of higher education self-efficacy on permanence was small, differing from other findings (Multon et al., 1991). The low influence can be explained by the dynamism of the construct, as Bandura (1997) already warned, some methodological care must be taken into account in research about beliefs. Conceived as a state of the individual and not as a trait of his personality, beliefs are not intended to maintain stability over the undergraduate years and, therefore, would not have a predictive power for temporally distant achievements. In this study, with a longitudinal design, the student's academic situation was measured in the semesters after the self-efficacy had been collected, which explains the small impact on permanence. Furthermore, as added by Bernardo et al. (2016) the influence can be indirect, mediated by student achievements.

Regarding beliefs, self-efficacy changes as a result of students' experiences and, in a cyclical process, success or failure in academic activities, the students perception of their own results and the performance of their colleagues, the influence they receive from the social context and how they try out physically and emotionally such experiences are sources of self-efficacy (Bandura, 1997; Zientek, Fong, & Phelps,

2019), which reaffirms the relevance of institutions planning actions and activities aimed at improving such judgments in university students. This is because academic success is not the exclusive responsibility of students, but institutions have a unique role through actions that impact the best judgment that students make of their abilities to face challenges (Bandura, 1997; Kahu & Nelson, 2018).

In the present study, the low impact of age and receiving assistance grants on persistence and academic performance may be linked to the practices developed by the institution, with the objective of seeking equity in Higher Education (Araújo et al., 2019; Heringer, 2018). With an inclusive policy that allows minority groups access to post-secondary education, Australian studies highlight that although students arrive with different *backgrounds*, the institution's care for them allows the students to overcome initial inequalities (Kember, Leung, & Prosser, 2019). The results of the present investigation remind us of the importance of looking beyond personal variables in understanding academic success, bringing the institutional context, the didactic-pedagogical organization and teacher-student relationships as central to the promotion of learning and student permanence. A meta-analysis about the impact of problem-based pedagogy on performance found a stronger influence of problem-based pedagogy, to the detriment of more traditional proposals, on the predictive role of student success (Chen & Yang, 2019). Leonhard, Joni and Chris (2007) emphasize that some areas of knowledge maintain structure rigid curriculum that create barriers for the student to advance during the years of the course. In this sense, it is urgent that new investigations broaden the look at the academic environment, with emphasis on pedagogical proposals and evaluation practices.

In this context, some fronts of institutional investment are necessary, such as the continued training of Higher Education teachers and the innovation of the pedagogical projects of the courses (Boruchovitch, 2014; Cunha, 2018). Considering the influence of self-efficacy on students' academic achievements, the proposition of differentiated pedagogical actions that allow students to exercise agency, the establishment of goals and actions to monitor and control the learning process itself, through the process of self-regulation, constitute essential experiences for strengthening university students' self-efficacy (Bandura, 1997; Bean & Eaton, 2001; Salgado, Polydoro, & Rosário, 2018).

In addition, the relevance of activities developed through subjects in the initial years of training, through complementary and extracurricular practices, mentoring actions or student support services, which provide opportunities for exploring careers, especially for young people who have enrolled to courses that are different from their preferred options. Such actions are fundamental for building the student's commitment to the course, for recognizing the relevance of the curriculum and for developing a sense of belonging to the university (Casanova et al., 2018b; Dias, Toti, Sampaio, & Polydoro, 2020; Tinto, 2017).

Since the proposition of these activities involves teacher mediation, Educational Psychology has much to contribute to the pre-service and post-service training of Higher Education teachers. It is recognized that Psychology can support the development of self-reflection and self-regulation of the teacher about the learning process itself, a key condition to promote the learning of its students (Boruchovitch, 2014). In addition, Psychology is able to support the improvement of pedagogical mediation, encouraging dialogue between teacher and students and the planning of teaching conditions that tend to favor active learning on the part of students (Boruchovitch, 2014; Moura & Facci, 2016).

The role of Psychology in working with student support services is rescued, which can help in the proposition of projects that promote self-regulation of learning, the development of career plans, among other actions that prevent academic failure (Bernando et al. al., 2016; Dias et al., 2020; Moura & Facci, 2016). It should be noted that the role of Psychology in Higher Education can take place directly with students, but also through teacher development programs. The political commitment of Psychology in the management of the university is rescued, with the help in the proposition and implementation of pedagogical projects that meet the new audiences that access tertiary education, committing to the promotion of academic success and that dialogue with training conceptions university that prioritize the full development of students, aimed at social inclusion and the promotion of human dignity (Fior & Polydoro, 2021; Moura & Facci, 2016; Pereira et al., 2015).

The fact that the present study was carried out from a local reality, constituted by a single institution, with different history, culture and policies is a limitation of this investigation, with difficulties in generalizing the results. In turn, the importance of studies that dialogue with particular realities is highlighted, especially in the current historical context, in which different groups access higher education and the knowledge of local realities is key for the development of new actions and establishment of institutional objectives, to promote the necessary inclusive movement in Higher Education (Kember et al., 2019). New investigations on the variables that impact the learning, development and retention of students are crucial and should focus on academic and institutional actions, as a way of not focusing solely on the student the responsibility for the

success of democratization in higher education.

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