UNIVERSITY DROPOUT INTENTION: ANALYSIS DURING COVID-19

INTENCIÓN DE ABANDONO UNIVERSITARIA: ANÁLISIS DURANTE LA COVID-19

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ABSTRACT

Dropout intention is critical information for universities to help them avoid the misuse of financial, social, and personal resources. COVID-19 has forced universities to adapt their face-to-face teaching-learning processes to distance education, something neither they nor their students were prepared for. Despite being digital natives, students are not used to the online teaching-learning model that has been imposed. Therefore, knowing the effects of this situation on significant variables for universities and students, such as university experience, motivation, satisfaction, and commitment, can help universities understand why students drop out. This preliminary empirical research with university students has three objectives. First, we ascertain students' perceptions about the possible causes of dropout intention after the outbreak of COVID-19. Second, we determine other variables affecting intentions to drop out, such as university experience, academic motivation, academic satisfaction, satisfaction with blended and distance education, and student commitment. Third, we examine whether these variables affect dropout intention in an exploratory way.

Through an online questionnaire, 191 responses from university students were obtained at a Spanish public university. Empirical analyses identify little practical

training, teaching methods that fail to motivate students, the absence of commitment to students on the part of the university, and a lack of information and support from the university as the main reasons students consider dropping out. These results are the same in the general sample and in the sub-sample of those who seriously considered leaving university. For the last group, other causes could be considered, such as students' emotions, assessment systems, and relationships with teachers. All the mean assessments of the variables used in this study are medium-low. Academic motivation is the best-valued (3.38 out of 5), whereas satisfaction with blended and distance education is the worst (2.31 out of 5). Dropout intention is estimated at 2.56 out of 5. Although this is not a low result, this and the rest of the results may have been affected by the pandemic. Additionally, the study justifies that the better the university experience, academic motivation, general academic satisfaction, and satisfaction with blended and distance education, the lower the dropout intention rate. Surprisingly, student commitment does not influence students' decisions to leave university.

The main contribution of this study is to offer guidelines to reduce dropout intention. Training courses for students and teachers seem to be the best way to reduce dropout rates, but other aspects, such as university experience, motivation, and satisfaction, which help to maintain student expectations even in difficult situations, are also important. Although more research is needed, the proposed model offers the possibility of applying and comparing it with other Spanish and European universities, or even high schools, with students who are about to graduate and enter university.

KEYWORDS

dropout intention; university experience; academic motivation; academic satisfaction; student commitment

RESUMEN

La intención de abandono es información fundamental para que las universidades las ayuden a evitar el mal uso de los recursos financieros, sociales y personales. El COVID-19 ha obligado a las universidades a adaptar sus procesos de enseñanza-aprendizaje presencial a la educación a distancia, algo para lo que ni ellas ni sus alumnos estaban preparados. A pesar de ser nativos digitales, los estudiantes no están acostumbrados al modelo de enseñanza-aprendizaje en línea que se ha impuesto. Por tanto, conocer los efectos de esta situación sobre variables significativas para las universidades y los estudiantes, como la experiencia universitaria, la motivación, la satisfacción y el compromiso, puede ayudar a las universidades a entender por qué los estudiantes abandonan sus estudios. Esta investigación empírica preliminar con estudiantes universitarios tiene tres objetivos. En primer lugar, averiguamos las percepciones de los estudiantes sobre las posibles causas de la intención de abandono tras el brote de COVID-19. En segundo lugar, determinamos otras variables que inciden en las intenciones de abandono, como la experiencia universitaria, la motivación académica, la satisfacción académica, la satisfacción con la educación semipresencial ya distancia y el compromiso de los estudiantes. En tercer lugar, examinamos si estas variables afectan la intención de abandono de manera exploratoria.

A través de un cuestionario online se obtuvieron 191 respuestas de estudiantes universitarios de una universidad pública española. Los análisis empíricos identifican la poca formación práctica, los métodos de enseñanza que no logran motivar a los estudiantes, la falta de compromiso con los estudiantes por parte de la universidad y la falta de información y apoyo de la universidad como las principales razones por las que los estudiantes consideran la deserción. Estos resultados son los mismos en la muestra general y en la submuestra de quienes consideraron seriamente dejar la universidad. Para el último grupo, se podrían considerar otras causas, como las emociones de los estudiantes, los sistemas de evaluación y las relaciones con los profesores. Todas las valoraciones medias de las variables utilizadas en este estudio son medias-bajas. La motivación académica es la mejor valorada (3,38 sobre 5), mientras que la satisfacción con la formación semipresencial ya distancia es la peor (2,31 sobre 5). La intención de abandono se estima en 2,56 sobre 5. Aunque no es un resultado bajo, este y el resto de resultados pueden haberse visto afectados por la pandemia. Además, el estudio justifica que cuanto mejor es la experiencia universitaria, la motivación académica, la satisfacción académica general y la satisfacción con la educación semipresencial ya distancia, menor es la tasa de intención de abandono. Sorprendentemente, el compromiso de los estudiantes no influye en las decisiones de los estudiantes de dejar la universidad.

La principal contribución de este estudio es ofrecer pautas para reducir la intención de abandono. Los cursos de formación para estudiantes y profesores parecen ser la mejor manera de reducir las tasas de abandono, pero también son importantes otros aspectos, como la experiencia universitaria, la motivación y la satisfacción, que ayudan a mantener las expectativas de los estudiantes incluso en situaciones difíciles. Aunque se necesita más investigación, el modelo propuesto ofrece la posibilidad de aplicarlo y compararlo con otras universidades españolas y europeas, o incluso con institutos, con estudiantes que están próximos a graduarse e ingresar a la universidad.

PALABRAS CLAVE

intención de abandono; experiencia universitaria; motivación académica; satisfacción académica; compromiso estudiantil

INTRODUCTION

The emergence of COVID-19 has modified the academic rhythm of all educational institutions. In the case of Spain, the state of emergency imposed on March 15th, 2020, resulted in the physical closure of educational institutions and the suspension of face-to-face classes until the end of that academic year. Thus, educational centers of all levels tried to ensure that all students could continue their courses, and distance education was imposed. Neither teachers nor students were prepared for this teaching-learning model. A solution was offered in record time, demonstrating the commitment of teachers to this goal. The beginning of the 2020-2021 academic year (September 2020) continued with this distance education model.

In the case of universities, various formulas were proposed to minimize the effects of COVID-19, but, in many cases, distance education was in effect for extended periods. In addition, adapting face-to-face teaching-learning processes (Shu et al., 2019) to distance education was a challenge for teachers and students. We believe it is important to determine teachers' and especially students' perceptions of this situation. Authors such as Bliuc et al. (2011) indicate that students' perceptions about their faculty or school affect their university learning (Juárez and Silva, 2017), and this can also affect their intention to drop out.

Dropout intention should be taken as a warning sign (Schnettler et al., 2020; Jacobo-Galicia et al., 2021). It can be reflected in absenteeism, handing in work late, or not taking evaluation tests (Jacobo-Galicia et al., 2021). Therefore, negative class experiences, a lack of motivation, satisfaction, or commitment may cause students to consider dropping out. If it is finally made effective, dropping out entails economic and social losses for the universities due to misused resources (Law, 2007; Jacobo-Galicia et al., 2021) and, above all, a significant opportunity cost for society.

For this reason, educational authorities and society in all countries pay special attention to university dropout rates (Arce et al., 2015; Freixa et al., 2018) and try to reduce them through in-depth analyses of this phenomenon and its causes. The objective of this research is to empirically analyze why students consider dropping out of university, taking into account the effect of COVID-19 on their perceptions. A preliminary study about how the variables *university experience*, *academic motivation*, *academic satisfaction*, and *student commitment* can affect students' intention to drop out is also developed.

The importance of this issue lies in the educational policies that can be applied to minimize the effect of these unexpected circumstances. These same policies can provide specific indications and actions, allowing universities to be better perceived in general, and when they face extraordinary situations, in particular.

To reach our objectives, a review of the literature is developed, and hypotheses are justified. After that, the methodology to develop an empirical analysis is explained according to the sample, measures, and procedure followed. Results and discussion are offered, as well as the main conclusions and limitations of this study.

LITERATURE REVIEW

Students' experiences during their first years of university are critical to determining whether they have a successful or irregular educational trajectory. When academic results are not good, students may be forced to drop out (Vries et al., 2011), especially if their families have financial difficulties, they do not adapt to academic demands and do not have satisfactory results, or there is weak institutional commitment (Silva, 2011).

Different variables have been detected in the literature that influence students' intentions to drop out of university. Some of them are: *university experience*, *academic motivation*, *academic satisfaction*, and *student commitment*. Below, a conceptualization and analysis of their influence on dropout intention are provided, and five research hypotheses are proposed.

University experience refers to the experience of being a university student (Juárez and Silva, 2017). This experience, shared with others, normally occurs during a decisive period in young people's lives. This is why the university experience is "a collective construction within an interrelated system of shared meanings" (Causa, 2020). For proper conceptualization, Juárez and Silva (2017) identified four basic indicators for their study: a) entry into the university environment (emotions and experiences), b) adjustment to the university environment (personal mechanisms, perceived support, integration, and adaptation to the environment), c) psychosocial factors (family, friends, financial situation, difficulties in going to university), and d) school factors (individual difficulties in organizing time, socializing with teachers and other students, or the university organization). All of them affect students' social and academic integration into the university.

This experience is critical during the first years of university, especially at the beginning, since this is when a new order of symbolic recognition begins (Pierella, 2014). With classes taught online (as a consequence of COVID-19), the university experience becomes especially important for students (Causa, 2020). Students' perceptions of the university experience can have a significant impact on their well-being and health, as well as on their academic quality of life (Juárez and Silva, 2017). These factors decisively influence their development (Juárez and Silva, 2017). Traditionally, social and academic integration enhances students' satisfaction (Tinto, 1975), collective performance, and intention to continue. In addition, the university experience, through the perception of social support, decisively influences academic performance (Feldman et al., 2008). Consequently, a positive university experience may favor student retention. For all the ideas presented above, the following research hypothesis is proposed:

H1: The university experience during COVID-19 is negatively associated with students' intention to drop out.

Motivation can be defined as a psychological process that determines the execution of certain human actions with interest and diligence, according to internal and external social, cognitive, and emotional factors (Huertas, 1997). *Academic motivation* is defined as students' desire for academic achievement (Campbell, 1973). It involves "achievement motivation, oriented towards learning goals in line with the attributional belief of each student regarding their skills to perform a task" (Acevedo et al., 2017). Motivation includes psychological, social, and material forces that drive students to make an effort in training and curricular activities (Oñate et al., 2020). Moen and Doyle (1978) state that academic motivation affects university students' satisfaction and progress, as it significantly influences their learning (Rusillo and Arias, 2004). Therefore, we understand that when academic motivation generates enthusiasm and the intrinsic desire to know more, along with students' interest and enjoyment in studying and learning, better academic results are achieved. Consequently, academic motivation is a critical factor in academic performance (Linnenbrink and Pintrich, 2002), and it significantly reduces students' intention to drop out. That is why we propose the following research hypothesis:

H2: Academic motivation is negatively associated with students' intention to drop out.

Academic satisfaction is defined as "the appreciation that students make of the results and experiences associated with their education, based on the attention to their own needs and the achievement of their expectations" (Gento and Vivas, 2003). It arises from a dynamic process, influenced, among other factors, by the type of education (face-to-face or distance education) (Zambrano, 2016), the motivational climate in the classroom (Tomás and Gutiérrez, 2019), the satisfaction of basic psychological needs (autonomy, competence, and relationships) (Tomás and Gutiérrez, 2019), and the characteristics of the educational center or how students perceive their learning environment (Medrano et al., 2014). Therefore, academic satisfaction is the result of the effective appreciation of the university experience and consists of a unique response with different degrees of intensity (Giese and Cote, 2000). It is a key aspect when evaluating the two versions of educational quality (face-to-face or distance).

Academic satisfaction is a critical element because it is related to social integration, academic adjustment, and students' academic persistence (Lent et al., 2007; Lent et al., 2009; Lent et al., 2013). Positive satisfaction decisively influences students' intention to stay at university (Figueroa, 2019; Barrientos-Illanes et al., 2021), as their academic performance may improve (Antaramian, 2017; Wilkins-Yel et al., 2018). This is why the possibility of evaluating general satisfaction with a course and specific satisfaction with blended and distance education is proposed, given the special situation of the 2020-2021 university course due to COVID-19. Therefore, the following two research hypotheses are proposed:

H3: General academic satisfaction is negatively associated with students' intention to drop out.
H4: Satisfaction with blended and online education is negatively associated with students' intention to drop out.

Commitment is individuals' degree of identification with an organization and their desire to continue belonging to it (Robbins, 2005). As students can experience positive and negative feelings that make them feel more or less committed to their academic activity (Parra and Pérez, 2010), *student commitment* is studied. It is defined as an affective-cognitive state of psychological well-being based on three intrinsic dimensions of study: vigor, absorption, and dedication (Parra and Pérez, 2010; Oriol-Granado et al., 2017). Student commitment is the emotional bond, identification, and involvement students have with their university and its activities (Meyer and Allen, 1991; Joo and Park, 2010). This commitment positively influences: a) acceptance and understanding of institutional rules (care of facilities, class schedules, etc.), enabling students to adapt to their studies (Paradnikė and Bandzevičienė, 2016); b) levels of stress, depression, and psychosomatic disorders (Mostert et al., 2007); c) academic satisfaction (Urquijo and Extremera, 2017) and, above all; d) learning, since students feel safe in their educational center (Gaxiola-Romero et al., 2020), which positively influences their current (Schaufeli et al., 2002) and future (Salanova et al., 2010) academic performance.

In addition, other organizational factors (the way contents are organized, the relationship with teaching staff, or the characteristics of the tasks), social factors (support from teaching staff, family, and friends), and individual factors (personal

skills) contribute to student commitment (Salanova et al., 2010; Bakker et al., 2015; Ouweneel, et al., 2011; Alcántara López, 2019).

All the benefits of student commitment have a positive influence on the intention to stay at university. It is a very useful tool to achieve curricular objectives (Gutiérrez et al., 2017). That is why we propose the following research hypothesis:

*H5: Student commitment is negatively associated with **students' intention to drop out**.*

METHOD

Sample

To achieve the objectives of this research, an online survey was distributed among university students between April and May 2021. Students were selected among those studying subjects in the business organization area during the 2020-2021 academic year at a public university made up of several technology schools and one business school. Therefore, it is a convenience sampling (non-probability sampling method) where the sample is taken from students that are easy to contact. 191 responses were obtained from a total of 759 students (25.16% response rate). The sample comprises 55.5% male students and 44.5% female students, with an average age of 21.8 years. 47.1% were studying engineering degrees (industrial, telecommunications, mechanics, agri-food, among others), 46.1% were studying social science degrees (Business administration and management and Tourism), and 6.8% were studying master's degrees. Regarding the course they were taking, 33.3% were in their 1st year, 15.1% were in their 2nd year, 21.5% in their 3rd year, and 23.1% in their 4th year.

Measures

In the online questionnaire, all the study variables were evaluated with a 5-point Likert scale (1 totally disagree; 5 totally agree).

The *university experience* variable is evaluated with 15 items (Appendix), following qualitative studies such as that by Soto (2016) and quantitative studies such as those by Díaz et al. (2013), Alegre et al. (2016), and Juárez and Silva (2017). All of them were adapted to students' experiences during the pandemic.

To study the *academic motivation* variable, there are different widely used measures, but the so-called Achievement Goals Questionnaire (AGQ) has been considered the most adequate (Hayamizu and Weiner, 1991; Durán-Aponte and Arias-Gómez, 2015). This scale is made up of 20 items about learning goals (8 items), academic achievement/performance (6 items), and social reinforcement (6 items). However, the pretest of the questionnaire with four experts recommended eliminating two items, leaving 18 items (one fewer in learning goals and social reinforcement).

Two measures have been considered with the *satisfaction* variable: a general one with 7 items (Lent et al., 2007) and a specific one about satisfaction in blended and distance education environments with 8 items (Fernández-Pascual et al., 2013). This last measure was included to find out students' perceptions about the modification of the teaching-learning processes brought about by the pandemic.

For the *student commitment* variable, the 8-item measure proposed by Kareva (2011) is used, which is based on the affective commitment scale by Allen and Meyer (1990) and Meyer and Allen (1991).

Finally, the variable *dropout intention* was evaluated with 19 items about the possible reasons students would consider leaving university, following Cabrera et al. (2016) and Figuera et al. (2015).

Procedure

First, a detailed study of the perception of dropout intention is carried out to determine the causes of this situation, keeping in mind that the data has been collected during the pandemic (Table 1).

Second, a study of the perception of the other variables that may affect dropout intention has been developed. A global value for each of the variables is obtained by averaging their items to conduct a descriptive analysis (mean and standard deviation). In addition, a study of their reliability using Cronbach's alpha and bivariate correlations has been calculated (Table 2). SPSS 22 has been used to perform these analyses.

Finally, a hierarchical linear regression analysis has been performed with SPSS 22 to contrast the proposed hypotheses. This method involves estimating the regression successively according to the models included (in this case, 5, one for each variable that is introduced into the model). In addition, it allows the multicollinearity of the variables to be analyzed through the variance inflation factors (VIF).

Common method bias or common method variance could result from using the same instrument to collect information (survey and 5-point Likert scale). We followed the recommended measures to minimize this bias. We indicated in the questionnaire that (Podsakoff et al., 2003): a) the responses would be anonymous and treated globally; b) there were no correct or incorrect answers, and; c) the sections of the survey were clearly differentiated. Furthermore, when applying the Harman one-factor test (Podsakoff et al., 2003), no factor explains most of the covariance between the dependent and independent variables, so common method bias does not appear to be a problem.

RESULTS AND DISCUSSION

The analysis of the possible reasons why university students would consider dropping out of university has been carried out based on the mean, standard deviation, and percentage of those participants who gave the highest rating (4 and 5) to each item (Table 1). Likewise, given that 38.2% of the participants in the sample seriously considered dropping out, the same analysis as the previous one was carried out (mean, standard deviation, and percentage of maximum evaluation), but only with those students (Table 1).

Table 1 shows the results of the sample in general and of those who seriously considered dropping out of university. The more and less probable causes for dropping out coincide in both groups. Among the least likely are: a) pressure from the family to drop out and go to work, and; b) having bad relationships with classmates. The following are less likely causes from the perspective of the participants who considered dropping out: c) not being able to renew their scholarship, and; d) having to work and not being able to continue studying for financial reasons.

Among the most likely reasons for dropping out of university in the general sample are: a) lack of practical training; b) unmotivating teaching methods; c) lack of commitment to students on the part of the university, and; d) little information and support from the university during the course. From the point of view of the participants who seriously considered dropping out, we add to the previous reasons: e) students are not able to control their emotions (mainly stress) during evaluations; f) assessment systems are not suitable for students, and; g) teachers are distant, and the treatment is impersonal.

Table 1. Dropout intention – Causes

Items	General (N=191)		38,2% who seriously considered dropping out (N=73)	
	Average (SD)	% Maximum rating (4 to 5)	Average (SD)	% Maximum rating (4 and 5)
1. I do not see the usefulness of the contents of my subjects.	2.40 (1.31)	18.9%	2.48 (1.41)	14.7%
2. My academic results are not what I expected.	2.60 (1.39)	25.7%	2.73 (1.33)	24.7%
3. My previous training was not enough.	2.25 (1.40)	19.9%	2.21 (1.42)	19.2%
4. I have not been able to control my emotions (stress) in the evaluations.	2.74 (1.35)	29.9%	**3.23** (1.33)	43.9%
5. I have not been able to manage the pressure from my family to achieve good results.	2.14 (1.30)	16.3%	2.19 (1.24)	16.5%
6. My family has pressured me to drop out and go to work.	**1.53** (1.02)	8.4%	**1.36** (0.87)	4.1%
7. I have not been able to renew my scholarship.	2.17 (1.48)	19.9%	**1.77** (1.18)	8.2%
8. I must work, and I cannot continue studying for financial reasons	2.01 (1.36)	16.7%	**1.70** (1.18)	11.0%
9. The teaching methods used have failed to motivate me.	**3.24** (1.35)	44.5%	**3.85** (1.29)	67.1%
10. The evaluation system is not suitable for me.	2.70 (1.29)	15.7%	**3.18** (1.36)	45.2%
11. The teachers are distant and the treatment is impersonal.	2.77 (1.31)	31.4%	**3.07** (1.26)	41.1%
12. I have not integrated into the university (I do not feel that I am part of it).	2.45 (1.22)	18.4%	2.70 (1.28)	24.6%
13. I have not seen a commitment to students on the part of the university.	**3.22** (1.38)	45.1%	**3.71** (1.28)	64.3%
14. My experience in class has not been satisfactory.	2.60 (1.26)	27.1%	2.93 (1.34)	32.8%
15. The learning tasks and activities are very demanding.	2.82 (1.23)	15.7%	3.14 (1.31)	32.9%
16. There was little information and support from the university during the course.	**3.03** (1.31)	36.6%	**3.53** (1.36)	50.7%

17. I don't have good relationships with my classmates.	1.82 (1.05)	8.9%	1.90 (1.18)	11.0%
18. There is little practical training.	3.37 (1.36)	49.2%	3.81 (1.27)	64.4%
19. The studies are not what I expected.	2.75 (1.31)	27.7%	3.19 (1.20)	34.2%

SD: Standard deviation.

For the study of the different variables that may affect dropout intention, Table 2 shows a descriptive, correlation, and reliability analysis (with Cronbach's alpha results greater than 0.8), from which a series of conclusions can be drawn.

Table 2. Descriptive statistics and bivariate correlations of the variables

	Media	SD	Alfa de Cronbach	1	2	3	4	5	6
1. University experience	2.85	0.87	.922	-					
2. Academic motivation	3.38	0.85	.933	.588**	-				
3. General academic satisfaction	2.83	0.96	.928	.809***	.568***	-			
4. Blended and distance education satisfaction	2.31	1.20	.958	.516***	.282***	.428***	-		
5. Student commitment	2.39	0.94	.906	.714***	.536***	.722***	.348***	-	
6. Dropout Intention	2.56	0.75	.887	-.060	-.320***	-.075	-.071	-.003	-

SD: Standard deviation / Significance: ***$p<.001$.

In particular, in Table 2, we can see that the average assessment of the variables considered is medium-low, especially for satisfaction with blended and distance education, general academic satisfaction, and student engagement. These results are consistent with the pandemic occurring during the 2020-2021 academic year, which radically modified teaching-learning methods. Thus, satisfaction with blended and distance education has the lowest score, maybe because it was adopted practically overnight, was not chosen by students, and involved an effort on the part of teachers and students to gain the necessary skills to manage this type of learning.

Among the variables studied, academic motivation is the best valued (3.38), although with an average score that could be improved, mainly by showing students the practical applications of their studies and the different professional opportunities they could have. Furthermore, academic motivation is the only variable that is significantly and negatively correlated with the intention to drop out (the higher the motivation, the less intention there is to drop out). The non-incidence of the rest of the variables on dropout intention could be the consequence of possible mediations between the variables.

In any case, a hierarchical linear regression is proposed to analyze the effect of the different variables on students' intention to drop out. These results are shown in Table 3.

Table 3. Linear regression on dropout intention

Variables	Regression (N=191) Standardized Coefficients				
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**
University experience	-.060	-.379***	-.211**	-.292**	-.300**
Academic motivation		-.543***	-.575***	-.581***	-.578***
General academic satisfaction			-.231**	-.237**	-.247**
Satisfaction online education/ distance				-.159**	-.160**
Student commitment					.024
Maximum VIF value	1.000	1.528	3.118	3.465	3.749
Significance of F-value	.408	.000	.042	.036	.808
R²	.060	.196	.214	.232	.233
Adjusted R²	.004	.188	.201	.216	.212
Δ R²	-	.184	.013	.015	-.004
***p<.001, **p<.05, *p<.10 / Dependent variable: dropout intention					

Table 3 shows that model 4 explains the highest percentage (21.6%) of the variation in the intention of university students to drop out since model 5 does not imply a significant improvement. In addition, university experience is not significant (model 1) until academic motivation enters into the regression (model 2). In this way, "online" university life, integration, and academic rhythm reduce students' intentions to drop out provided they are motivated academically in terms of learning goals, academic performance, and social reinforcement.

In any case, all the variables, except student commitment, have a significant and negative effect on students' intention to leave university. That is, the better the university experience, academic motivation, general academic satisfaction, and satisfaction with blended and distance education (variable considered as a consequence of the pandemic), the less likely university students are to drop out. Therefore, hypotheses 1, 2, 3, and 4 are accepted.

The university experience, or feeling and living university life in a shared and collective way (Causa, 2020), creates student well-being and improves academic performance (Tinto, 1975), thereby reducing dropout intention. Likewise, academic motivation generates enthusiasm and the desire to learn more, which increases students' academic performance (Linnenbrink and Pintrich, 2002) and their intention to stay at university. Complementarily, academic satisfaction reduces the gap between students' expectations and their academic results (Gento and Vivas, 2003), favoring learning and reaffirming their choice of degree, reducing the intention to drop out.

However, it is surprising that student commitment does not have a significant and negative effect on dropout intention (rejection of hypothesis 5). This may be due to the lack of psychological well-being caused by students not physically attending classes. Additionally, some of the dimensions of commitment (vigor,

absorption, and dedication) may have been affected during the pandemic. Students' absorption may be one of the most affected areas because they had less interaction with teachers and their classmates. This decreases students' ability to absorb new knowledge. Moreover, student isolation results in a loss of vigor, interest, and attractiveness. However, dedication may have increased as a consequence of lockdown, which has reduced face-to-face social interaction and time spent traveling.

These results are important for the objectives of this paper because they show that the main issues influencing students' intention to drop out of university have more to do with the university and its teachers than with students' personal and social situations.

In addition, some significant variables in dropout intention are considered: university experience, academic motivation, general academic satisfaction and satisfaction with blended and distance education, and student commitment. University experience, academic motivation, general academic satisfaction, and satisfaction with blended and distance education reduce the intention to drop out. Academic motivation is the most influential variable (the greater the motivation, the less likely students are to drop out). The second in importance is university experience, which has half the weight of the previous variable. Satisfaction with blended and distance education is the variable that least reduces the intention to drop out. This shows that the pandemic does not seem to have affected students' intention to drop out, since satisfaction with blended and distance education has a minimal effect on their decision to leave university.

CONCLUSION

The concern of educational authorities, universities, and society about the impact of COVID-19 on university dropout rates and other variables has increased during the last year. The pandemic has provoked an important, unexpected, and immediate change in traditional university education, modifying teaching-learning systems.

This research has achieved its three proposed objectives: 1) to study the possible reasons why university students consider dropping out after the outbreak of COVID-19; 2) to determine how students perceive other variables closely related to dropping out and; 3) to examine how these variables affect students' intention to drop out in a preliminary way. All of this will make it possible to identify where universities and faculty should focus their attention to reduce dropout rates after COVID-19.

Thus, based on an empirical study, a series of conclusions have been drawn. Firstly, when analyzing the most probable reasons students consider dropping out, the lack of practical training, the use of unmotivating teaching methods, the lack of commitment to students on the part of the university, and the little information and support students receive from the university have been pointed out.

In fact, the variable *dropout intention* reaches a score of 2.56 out of 5, which has led to a special focus on students who have seriously considered leaving university. This group has pointed out that they must learn to control their emotions (mainly stress) during evaluations, try to adapt evaluation systems to their skills and requirements of their future jobs, and see if it is possible to improve

treatment by teachers, who seem distant and impersonal, in addition to the previously mentioned reasons. Therefore, universities play a crucial role in preventing student dropout since they could improve their relationship with students by showing greater commitment and support and strengthen bonds with them through better information and communication. Social networks could be a great ally, disseminating news and events to integrate the student community, bringing them closer to their university. Likewise, universities could offer psychosocial and psychological support services to students to improve their emotional management, especially during evaluation periods. Similarly, the range of action is extended to teachers, who should make use of more practical training (limited by online teaching), more motivating teaching methods (despite virtual teaching), evaluation systems more appropriate to the skills and abilities the labor market demands, and more personalized and closer treatment to students.

Secondly, this study has considered four variables that can influence university dropout intention. They are *university experience*, *academic motivation*, *academic satisfaction* (at a general level and for blended and distance education), and *student commitment*. Considering that the maximum score for each variable was 5, the ratings are not very high (Table 2), perhaps due to COVID-19. Academic motivation is the highest-valued variable (3.38), followed by university experience (2.85), and general academic satisfaction (2.83). Student engagement is quite low (2.39), not even reaching 50% of the maximum score, while satisfaction with blended and distance education is the worst-valued variable (2.31). From these results, we can deduce that universities should develop teachers' skills through training courses on: online teaching methodology, enhancing motivation in the classroom, and adjusting subject contents to professional needs. In addition, although academic motivation is the most highly-assessed variable, orientation to learning goals and developing the skills linking what has been learned to practical applications should continue to be fostered.

From the organizational perspective, universities can increase student commitment by providing psychological services to students and teachers. In addition, whenever possible, policies should be developed to improve and intensify students' university experience through activities that promote group spirit and collective cohesion.

Finally, the third objective was to develop a preliminary study on the influence of the previous variables on dropout intention, and this was achieved through a hierarchical linear regression. It shows that the university experience, academic motivation, and academic satisfaction (general and with blended and distance education) are negatively associated with students' intention to drop out. However, student commitment is not significantly associated with dropout intention. Therefore, since dropout intention is quite high at the institution studied, management could be improved through the variables previously described (university experience, academic motivation, and academic satisfaction).

Although the results should be taken with caution since students may refer to the academic year in which they experienced the consequences of COVID-19, they point to a series of measures that universities could consider to minimize dropout intention from a threefold perspective:

- Students: offer courses in stress management, time management, or adaptation to different assessment systems.

- Teachers: offer courses on how to provide more practical training, better motivate students, or treat students in a more personal way without losing authority in class.
- Institution: develop communication actions that show the university's commitment and support to its students.

This work has some limitations. The first one is to identify the profile of the students who have participated, since perhaps gender, age, type of degree (engineering, architecture, social sciences, etc.), or the year students are in could also influence the intention to drop out. Likewise, a study should be carried out annually to analyze the evolution of the variables and to observe if the policies developed by the universities are reflected in students' perceptions, especially in their intention to drop out. The sample should be expanded to improve understanding and knowledge of students' situations. The empirical study was developed during April and May of 2021, when students and teachers had received some feedback on their efforts from the first student evaluations. It is possible the views reflected are affected by these assessments. It would be interesting for different universities to participate in this research, maintaining the identification of each university to facilitate an objective and comparative analysis.

Despite the previous limitations, this work offers a preliminary study of how universities can analyze certain variables that affect their performance as institutions, especially during situations as challenging as COVID-19.

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APPENDIX

Variable	Items
University experience	I have adapted to online teaching easily.
	I have adapted to participating online with the rest of the students well.
	I have adapted to the online relationship with teachers well.
	The university has given me support at all times with the different technical and administrative problems that I have had.
	Teachers have supported me with the different problems I have had with the courses.
	I feel like I belong to the university community.
	I have organized my study time properly.
	I like the contents that I am learning in my classes.
	I have attended class regularly (half or more).
	I have regularly submitted the continuous evaluation work and activities (half or more).
	I like the methodology that teachers have applied to energize online classes.
	I am doing well at university.
	I have made new friends at university.
	I still have time to do what I like.
	My experience at the university is positive.

Variable	Items
General academic satisfaction	I am satisfied with the decision to study my degree.
	I am comfortable with the educational environment.
	For the most part, I am enjoying my subjects.
	In general, I am satisfied with my academic life.
	I have a high level of intellectual stimulation in my courses.
	I am excited about the subjects of my degree.
	I like how much I have learned in my classes.

Variable	Items
Satisfaction with blended and distance education	The blended / distance training is stimulating.
	I prefer blended / distance training to face-to-face training.
	The blended / distance training is interesting.
	The time I spend on blended / distance training is worth it.
	I like to study with blended / distance training.
	I look forward to learning with the blended / distance training.

	I would like my training more if all my courses were blended / distance learning.
	I am satisfied with the blended / distance training used by the courses of my degree.

Variable	Items
Academic motivation	It is interesting to solve problems / tasks.
	I like to increase my knowledge.
	I like the challenge of difficult problems / tasks.
	I feel good when I overcome obstacles and/or failures.
	I am very curious.
	I like to apply my knowledge.
	I feel great when I solve difficult problems/tasks.
	I want to finish my degree.
	I want to get good grades.
	I want to be praised by my parents and teachers.
	I want to get a good job in the future.
	I want to pass the final exams with good grades.
	I want to get a good social position in the future.
	I want to be valued by my friends.
	I want to be recognized by my teachers.
	I want people to see how smart I am.
	I want to avoid teasing from my colleagues.
	I want to get better grades than my peers.

Variable	Items
Student commitment	I am proud to be a student at this university.
	I highly recommend my university to my friends.
	I will continue my studies at this university to do a master/doctorate.
	I am satisfied with the quality of teaching at my university.
	I feel happy when I am at university.
	I get angry when someone speaks badly or criticizes my university.
	I could describe my university with all its staff and students as one big family.
	I feel responsible for the image of my university.

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