

Factors Of Student Desertion And Its Relationship With The Development Of Virtual Classrooms In A Private University In Metropolitan Lima

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Abstract

The present research was developed with the purpose of determining if there is a significant relationship between student desertion factors in the development of virtual classrooms of a private university in Lima, 2020. The study is correlational, with a quantitative approach, with a sample of 100 students who dropped out of virtual courses during the academic period 2020-01 of different professional careers, of a university academic program aimed at people with work experience. The results showed that there is a positive ($\rho = ,375$) and significant ($p = 0.000 < 0.05$) relationship between the factors of student desertion in the development of virtual classrooms of a private university in Metropolitan Lima.

Keywords: student dropout, virtual classrooms, higher education, university.

Resumen

La presente investigación fue desarrollada con el propósito de determinar si existe una relación significativa entre los factores de deserción estudiantil en el desarrollo de las aulas virtuales de una Universidad Privada de Lima, 2020. El estudio es correlacional, con enfoque cuantitativo, con una muestra de 100 estudiantes desertores de cursos virtuales durante el período académico 2020-01 de diferentes carreras profesionales, de un programa académico universitario dirigido a personas con experiencia laboral. Los resultados mostraron que existe relación positiva ($\rho = ,375$) y significativa ($p = 0,000 < 0,05$) entre los factores de deserción estudiantil en el desarrollo de las aulas virtuales de una Universidad Privada de Lima Metropolitana.

Palabras Clave: Deserción estudiantil, aulas virtuales, educación superior, universidad.

1. INTRODUCTION

Efforts to increase the number of students in higher education are evident during each admission process. However, there are indicators that show high dropout rates as a result, so it is considered of great importance to analyze each factor that leads students to make such decision, the forced transition to virtual education made students restructure their academic habits, since a large number were enrolled in classroom courses in the academic period 2020-01, but according to the situation all courses were adapted for development through virtual classrooms, which generated the increase in the student dropout rate.

The year 2020 has been characterized by the spread of the coronavirus (COVID-19), which has made it necessary to rethink new ways of managing teaching in general and university teaching in particular, one of which is the use of virtual classrooms, a solution which, although it decentralizes traditional teaching, replaces it with the management of the teaching-learning process in a particular and individual way from a situation of isolation and confinement to ensure the prevalence of human life, and replaces it with the direction of the teaching-learning process in a particular and individual way from the situation of isolation and confinement to ensure the prevalence of human life, it is not an issue that all students have embraced as part of their training. The purpose of the study was to characterize the behavior of desertion in the university, under the premise of generating a permanent follow-up that should be assumed from the academic administration based on the results obtained.

Viera et al. (2020:586) mentions that student dropout is a phenomenon, which is not only related to institutions, but also to society and the impact it has on students. It also mentions that student desertion is the premature abandonment of a study program, before obtaining the degree and it is said that in Peru desertion reaches 30%, being motivated by a lack of vocational orientation and the economic factor. Gonzáles et al. (2018:405) determined that in Peru the main cause of student desertion is the economic factor and the lack of vocation for the career that the student chose. Low performance is also influenced by the lack of preparation for higher education.

According to Gonzáles et al. (2018:112) one of the risk factors for dropout is closely related to failing subjects in the first year. He considers that this is a very relevant aspect in deciding permanence in higher education. On the other hand Muñoz-Camacho et al. (2018:35) concluded that first-year students present a higher risk regarding student dropout, which is why early identification of these students is a crucial task that if well directed could avoid student dropout in several students.

Student dropout is a multifactorial problem that has been affecting mainly private sector institutions; however, it also affects companies and job opportunities, particularly in professions that demand a number of employees with professional education (Lázaro et al, 2020:106). The dropout of studies has as related factors, the perception of lack of integration, problems to socialize and adapt and the feeling of social isolation. When this feeling of isolation is present, the student plans academic disengagement (López-Aguilar, 2022:238). It is considered that student desertion is worrying, since it can damage the future of a country, since scientific and technological knowledge is one of the factors that promote the development of a country. (Castaño et al. 2008:255).

On the other hand, higher education and its relationship with online learning techniques have become increasingly concurrent, this learning has completely replaced the classical teaching methods. (Monroy et al. 2018:94) According to Magadán-Díaz et al. (2021:138) the use of mobile technology in the classroom creates the opportunity for teachers to adopt digital gamification in teaching. Martínez et al. (2020:82) mentions that virtual classrooms show great acceptance in higher education organizations, not only for the virtual modality, but in many face-to-face institutions they have been incorporated in order to diversify and broaden the educational offer.

Marín-Díaz et al. (2022:226) determines that elements such as physical and virtual space are variables that impact positively and negatively on digital learning. Also, the use of different innovative technologies has become determinable for virtual classes, and should allow different functionalities that contribute to the achievement of the students' learning objectives (Peña et al. 2021:3).

ICTs are variables that have totally changed the traditional processes for teaching, processes that formerly only took place in person, but now most educational institutions, due to audiovisual media and technological tools, have managed not to harm the learning process and continue with virtual classes. Even the social sciences and related courses have been able to have an effective transmission of the knowledge that these courses provide, through the virtual environment and without damaging the teaching process (Wardropper et al, 2021).

2. METHODOLOGY

Regarding the methodology to be used, it is based on a quantitative approach, where the development of the research is through stages, such as the identification of a problematic situation, the analysis of the theories, the basis of the variables analyzed, the determination of a methodology, the design of the instrument to collect information, the application of the instrument and the processing of the data obtained, developing research skills and complying with the objectives for the verification of the hypotheses proposed.

This is a quantitative and descriptive research. The study has a descriptive-correlational level, this type of study aims to identify and understand the relationship between two variables. This research is non-experimental of applied type and descriptive-transactional designs.

The population considered in this research consisted of 280 students who dropped out of courses developed in the virtual modality during the 2020-01 academic period of the professional careers of the academic program aimed at people with work experience in a private university in Metropolitan Lima. The study took into consideration only the dropout students of courses developed in the virtual modality during the academic period 2020-01 of the professional careers of business administration, administration and finance, communication and advertising, accounting, business and systems engineering, industrial engineering, marketing and commercial management; and international business of an academic program aimed at people with work experience in a private university of Metropolitan Lima, forming a total of 100 dropout students. Due to the size of the population, non-probabilistic purposive sampling was used.

The research used the survey as a data collection technique, a questionnaire with a Likert scale was used as an instrument to study the variable student desertion factors, which consisted of 28 questions referring to the dimensions: psychological factor, social factor and institutional factor, and to study the variable virtual classrooms, a questionnaire with a Likert scale consisting of 40 questions referring to the dimensions: informative, practical, communicative, tutorial and evaluative was used. SPSS (Statistical Package for Social Sciences)

was used to process the data, Microsoft Excel was used for the statistical graphs and simple linear regression analysis was used to test the hypotheses.

3. RESULTS

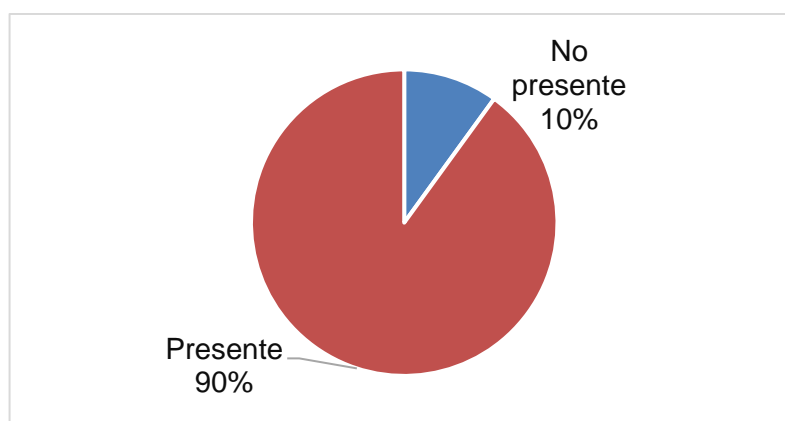
3.1 Descriptive results

Table 1: Frequency distribution of the psychological factor dimension levels

Levels	Frequency	Percentage
Not present		10,0
Present	90	90,0
Total		100,0

Source: Own elaboration

Figure 1: Levels of the psychological factor dimension



Source: Own elaboration

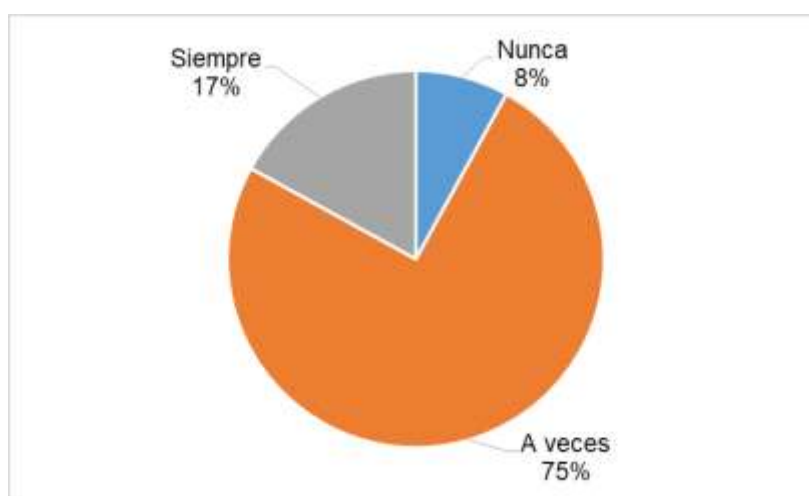
Table 1 and Figure 1 show the levels of the psychological factor dimension of the students who dropped out of the professional careers of a program aimed at people with work experience in a private university in Metropolitan Lima. It was observed that 10.0% of the dropouts did not present the psychological factor as a reason for dropping out and 90.0% did present the psychological factor as a reason for dropping out. These results indicated that the majority of dropout students consider the psychological factor as a reason for dropping out of university studies developed in virtual mode.

Table 2: Distribution of frequencies of the levels of the social factor dimension

Levels	Frequency	Percentage
Never		8,0
Sometimes		75,0
Always		17,0
Total		100,0

Source: Own elaboration

Figure 2: Social factor dimension levels



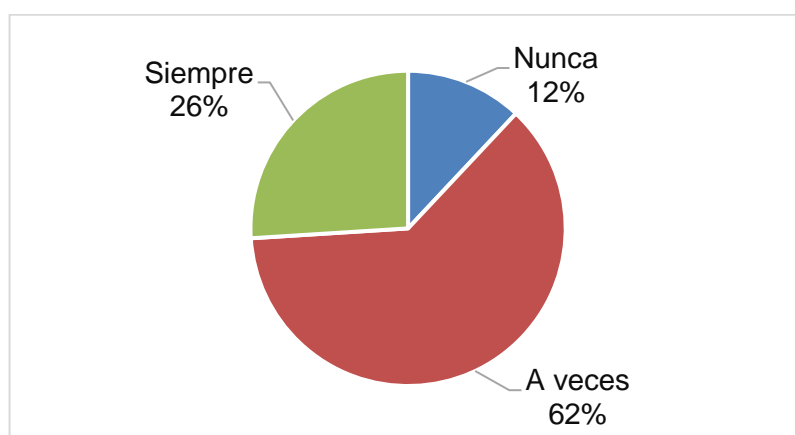
Source: Own elaboration

Table 2 and Figure 2 show the levels of the social factor dimension of the dropout students of the professional careers of a program aimed at people with work experience in a private university in Metropolitan Lima. It was observed that 8.0% of the dropout students do not consider the social factor as a reason for dropping out; while 75.0% indicate that they have sometimes considered the social factor as a reason for dropping out, and 17.0% present the social factor as a reason for dropping out. These results indicated that most of the students who dropped out had some social reasons for dropping out, which prevented them from continuing with their university studies in the virtual modality.

Table 3: Frequency distribution of the levels of the institutional factor dimension

Levels	Frequency	Percentage
Never		12,0
Sometimes		62,0
Always		26,0
Total		100,0

Source: Own elaboration

Figure 3: Levels of the institutional factor dimension

Source: Own elaboration

Table 3 and Figure 3 show the levels of the institutional factor dimension of the dropout students of the professional careers of a program aimed at people with work experience in a private university in Metropolitan Lima. It was observed that 12.0% of the dropout students do not consider the institutional factor as a reason for their desertion; while 62.0% indicate that they have sometimes considered the institutional factor as a reason for desertion, and 26.0% present the institutional factor as a reason for student desertion. These results indicated that most of the students who dropped out had institutional reasons that prevented them from continuing their university studies in the virtual modality.

Table 4: Frequency distribution of student desertion factors

Levels	Frequency	Percentage
Sometimes	86	86,0
Always		14,0
Total		100,0

Source: Own elaboration

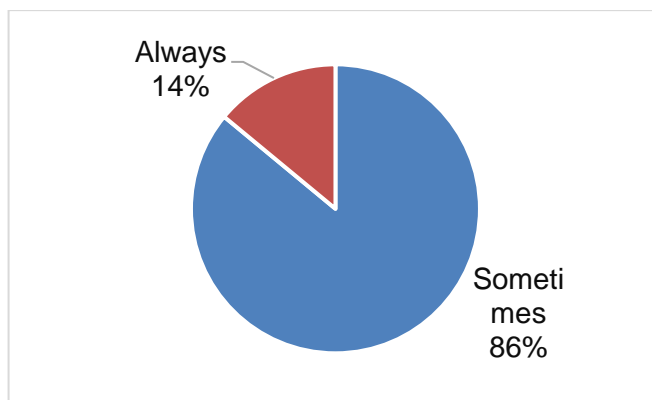


Figure 4: Levels of student attrition factors

Source: Own elaboration

Table 4 and Figure 4 show the levels of student desertion factors by dropout students in the professional careers of a program aimed at people with work experience in a private university in Metropolitan Lima. It was observed that 86.0% of the dropout students consider that they sometimes present student desertion factors; while 14.0% indicate that they always present student desertion factors. These results indicated that the majority of dropout students present some reasons related to student desertion.

Table 5: Description of the relationship between student attrition factors in the development of virtual classrooms.

			Virtual classrooms			Total
			Under	Medium	High	
Student attrition factors	Sometimes	n	1			86
		%	1,0%	66,0%	19,0%	86,0%
	Always	n	0			
		%	0,0%	4,0%	10,0%	14,0%
Total		n	1			
		%	1,0%	70,0%	29,0%	100,0%

Source: Own elaboration

In Table 5, it was observed that most of the students who indicated a medium development of virtual classrooms (66.0%) sometimes have student desertion factors present. Similarly, students who indicated a high development of virtual classrooms (19.0%) sometimes have student desertion factors present.

Table 6: Spearman's correlation between student attrition factors in the development of virtual classrooms.

		Student attrition factors	
Spearman's Rho	Virtual classrooms	Correlation coefficient	,375**
		Sig. (bilateral)	0,000
		N	

Source: Own elaboration

Table 6 showed a correlation ($\rho = ,375$) and significant ($p = 0.000 < 0.05$) between the factors of student desertion in the development of virtual classrooms. Therefore, it was decided to reject the null hypothesis; that is, it is concluded that there is a significant relationship between the factors of student desertion in the development of the classrooms of a Private University of Metropolitan Lima, 2020.

4. DISCUSSION

The results showed that there is a positive and significant relationship ($p = 0.010 < 0.05$) between the psychological factor in the development of virtual classrooms in a Private University of Metropolitan Lima, 2020. Correlation ($\rho = ,375$) and significant ($p = 0.000 < 0.05$) was shown between the variable student desertion factors and the variable virtual classrooms, there being significant relationship between the student desertion factors in the development of virtual classrooms of a Private University of Metropolitan Lima, 2020.

The structure of the virtual classroom as a central axis in the teaching process should promote learning by discovery, synchronous and asynchronous communication and, above all, the organization of information, establishing a learning path. Correlation ($\rho = ,375$) and significant ($p = 0.000 < 0.05$) was shown between the factors of student desertion in the development of virtual classrooms, since there is a significant relationship between the factors of student desertion in the development of virtual classrooms of a Private University of Metropolitan Lima, 2020.

When they state that students may be oriented to drop out of virtual education for various reasons such as social integration and institutional commitment, intellectual capacity and the socioeconomic factor, a significant correlation ($\rho = ,512$) was found ($p = 0.000 < 0.05$) between the institutional factor and the development of virtual classrooms. Correlation ($\rho = ,512$) and significant ($p = 0.000 < 0.05$) was shown between the institutional factor in the development of virtual classrooms, there being significant relationship between the

institutional factor in the development of virtual classrooms in a Private University of Metropolitan Lima, 2020, features that indicate that the institutional factor of student desertion is always present.

Similarly, the results of Lopez-Aguilar et al. (2022:250) coincide with those of Lopez-Aguilar et al. (2022:250) between the factor of mastery of career adaptability competencies and student dropout, which have a strong relationship. In other words, we are talking about a psychological factor, which has a strong relationship with student dropout. It is said that it affects more premature students. It is also questioned, the abilities of each student to face different difficulties, which enter to carve in the psychological factor.

The results of Gonzáles et al. (2018:428) determine that the virtual infrastructure both as general should provide facilities for students and avoid a desertion, since the lack of certain resources complicates university life, which could lead to desertion. On the other hand, what was concluded by Lázaro et al. (2020:122) relates student desertion with student motivation, in addition, it identifies that desertions are more common in the first year. This is determined after following psychological, sociological, interactionist, organizational and economic approaches to identify variables that explain the problem.

Muñoz-Camacho et al. (2018:41) determine that due to different psychological factors, women are less likely to drop out of school than men. Thus, the impact of psychological factors on the dropout that could be caused in students, especially students who are just starting their studies, is reflected. According to Gonzáles et al. (2018:134) mention that student desertion has to have an action plan to avoid it, which must be accompanied by programs to decrease the costs and increase the benefits of staying in college. In this way also influence the motivation that the student has.

The contribution of Viera et al. (2020:590) states that the individual factor, i.e. the psychological factor, is significantly related to student dropout and has a significant impact. Thus, it is a factor of consideration, since the factors of student dropout correspond to a multidisciplinary problem. According to, Monroy et al. (2018:101) mentions that virtual classrooms have as a benefit to combat educational lag. That is, students with failed subjects have the opportunity to correct their deficiencies through the use of virtual classrooms. Thus eradicating the possibility of truncating their studies. Consequently, universities should train teachers to make proper use of the audiovisual media provided.

On the other hand, Martínez et al. (2020:88) mention that technological infrastructure has a high impact on the student, that the incorporation of virtual classrooms has to be well executed, due to the fact that, all this has an impact on the student body of higher institutions, which can lead to undesired

academic dropouts, which generate an unstable economy in private institutions.

On the other hand, according to Vargas-Cubero & Villalobos-Torres (2018) it is concluded that the use of virtual classrooms in university careers is a benefit for students at the time of learning. It is important to mention that an optimization of resources and means for learning is needed. It is also necessary to train teachers on a frequent basis for an adequate use of audiovisual media and contribute to the stay of university students who are at risk of dropping out.

According to Fernández-Quero (2021:215) the different audiovisual technologies diversify the multiple options of the teacher and the students, thus reducing the difficulties caused in the models of transmission and acquisition of knowledge. In addition, he mentions that the fact of not solving these difficulties causes demotivation in students and even in some cases causes the abandonment of the subject or university. In other words, the tools provided by the audiovisual media generate a certain impact on the student and thus reduce the likelihood of these difficulties.

Pons (2022) concludes that digital practice as such has a significant impact on our lives, which must be analyzed by individuals. As for university students, it is important to maintain a balance and be aware of its implications. Valero et al. (2022) found that one of the most recurrent risk factors for university dropout is low academic performance, which is a determining factor for students to abandon their studies, since they commonly feel that they cannot resume their studies due to the difficulties experienced.

5. CONCLUSIONS

There is a positive ($\rho = ,375$) and significant ($p = 0.000 < 0.05$) relationship between the factors of student desertion in the development of virtual classrooms of a Private University of Metropolitan Lima, 2020. Evidenced in the results that show that there is a positive and significant relationship ($p = 0.000 < 0.05$) between student desertion in the development of virtual classrooms in a Private University of Metropolitan Lima, 2020.

Likewise, a probability value of (0.010) was obtained, being less than the significance level (0.05) between the psychological factor in the development of virtual classrooms, it was decided to reject the null hypothesis; that is, it is concluded that there is a significant relationship between the psychological factor in the development of virtual classrooms in a Private University of Metropolitan Lima, 2020.

There is no significant relationship between the social factor in the development of virtual classrooms in a Private University of Metropolitan Lima, 2020.

Correlation ($\rho = 0.106$) and significant ($p = 0.295 < 0.05$) was shown between the social factor in the development of virtual classrooms. Therefore, it is concluded that there is no significant relationship between the social factor in the development of virtual classrooms in a Private University of Metropolitan Lima, 2020.

There is a significant relationship between the institutional factor in the development of virtual classrooms in a Private University of Metropolitan Lima, 2020. Correlation ($\rho = .512$) and significant ($p = 0.000 < 0.05$) was shown between the institutional factor in the development of virtual classrooms. Therefore, it is concluded that there is a significant relationship between the institutional factor in the development of virtual classrooms in a Private University of Metropolitan Lima, 2020.

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