

Factors Influencing Student Retention in a Distance University in Mexico: A Case Study from the Students' Perspective

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Abstract

This research focuses on the analysis of the academic and socioeconomic factors involved in student retention. The study was conducted using a mixed approach that combines quantitative and qualitative methods, with a non-experimental design and exploratory scope. The aim was to identify the factors that have the most significant impact on the retention of students in the Bachelor's Degree in Public Administration and Management at the Universidad Abierta y a Distancia de México. For this purpose, a questionnaire was applied to students enrolled in the educational program.

The results obtained from this survey indicated that the most significant factors contributing to student retention are external to the educational institution itself. These factors include the student's motivation, expectations, work, and personal context. Additionally, the emotional state of the student has been found to have a substantial impact on their academic performance. The research concludes that in order to enhance retention rates, the University must adopt a comprehensive approach that addresses not only academic factors but also psychological and personal factors that encompass the students' environment. To this end, the implementation of a comprehensive student support website has been recommended, encompassing psychological guidance to enhance motivation, augment technological skills, and facilitate effective time management. This initiative is designed to assist students in achieving a healthy balance between their academic, professional, and personal endeavors.

Keywords: Student Retention, Higher Education, School Dropout, Nontraditional Students, Distance Education

1. Introduction

Technological advancements have resulted in a considerable expansion of online course offerings, thereby facilitating participation in a college or university experience for students who are unable to attend traditional seated courses. Online education courses have now been identified as one of the world's top industries (Bawa, 2016). Distance education has been found to be a key instrument for the development

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of a country. (Ngowari, 2025). Distance education is defined as the physical separation of teachers and students during instruction, with the utilisation of various technologies to facilitate communication between students and teachers, as well as between students themselves. These elements constitute the fundamental principles of distance learning, e-learning, and online learning. Virtual education or also known as online education for its associated learning methodology is defined as a process where students and teachers don't share a physical location and also there is a telematic connection. Notwithstanding the fact that distance education is not a recent phenomenon, the problematic aspect of retention remains an issue. Indeed, it has been demonstrated that this problem is very similar in nature to the problem experienced in the traditional, on-site educational environment. Through Internet connection, online education provides ubiquity to the learning process and allows learners to work from different locations and also at their own pace (Barrientos 2022, Mota, 2020).

The ubiquity of the internet has rendered the learning process accessible from any location and at a time that is convenient for the individual, thus allowing greater flexibility in the way learning takes place. As a non-presence type of learning, it involves various activities and tasks that cannot be done in traditional courses. However, students face a different set of challenges and limitations (Upadhyaya, Saha y Dutta, 2024). Vazquez (2021) identified several such challenges, including:

- Infrastructure requirements: virtual education depends on the availability of technological tools, with most institutions requiring only a device with a camera and microphone, a factor which can present a limitation for students.
- Increased distractions: With fewer time constraints than in face-to-face courses, it is easy for students to become distracted. Poor study habits: Lack of teacher guidance, success depending entirely on previous study habits. Less frequently, the wide availability of learning resources can be so conspicuous that students can acquire poor study habits. Use of new technology: The use of new technology can be influenced by the ability (or lack of ability) to use it.

Notwithstanding the aforementioned advantages, online programs have become a popular option for a significant number of students worldwide, particularly those in the non-traditional student population. This demographic includes adult or returning students, students from low-income households, first-generation students, and students from minority backgrounds (James, 2020). These students face a unique set of challenges, including parenthood, financial responsibilities, and limited access to resources. First-generation students, in particular, encounter difficulties choosing a career or navigating academic pathways due to a lack of family academic guidance or orientation.

A salient characteristic of distance learning is its capacity for flexibility, dynamism and adaptation to its environment. It is pragmatic, aligning its programmes with the requirements of remote learners, fostering self-esteem and creativity, and enhancing knowledge and learning. Prior mentioned the lack of preparation and access to traditional college campuses as one of the main reasons for high attrition and low grade point average for adult online college students (Park & Choi, 2018). However, as Park and Choi (2018) note, adult learners enrolled in online courses and programmes continue to drop out.

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The act of terminating one's involvement in a programme constitutes a societal failure, rather than merely an individual's personal shortcoming. This phenomenon can be considered a failure on the part of the education system and institutions. A disparity is often observed in the investment of resources between recruitment and enrolment, and retention. From a social perspective, the departure of a student from their programme results in the forfeiture of significant professional prospects, consequently leading to a diminution in social mobility. As previously mentioned, the majority of the online student population are non-traditional students. For many of them, the completion of a bachelor's degree is the only way to embrace equity. This is the true impact of retention.

More significantly however, there can be huge personal sacrifices and losses involved for individuals, their families and communities in entering a higher education programme, and not achieving anticipated goals. The personal price includes the costs and foregone income, but also confidence and self-belief, and the dashing of future hopes and dreams. It should be noted however that formal definitions of success, such as continuation, completion and on-time graduation, may obfuscate personal success, such as self-worth, academic validation, new skills, alternative ways of understanding the world and lifelong friendships. Here is clear evidence that even partial completion of a degree can, in some contexts, have real employment and career-related benefits for students that, for many, outweigh the costs of non-completion.

As Tinto (2006) asserts in his work cited by Tight (2019), the notion of student retention first emerged 40 years ago. Historically, the concept was predominantly understood through a psychological lens, with students' retention or the lack of it being seen as the reflection of their attributes, skills, and self-motivation. The prevailing thought at the time was that "Students fail, not the institutions" (Tinto, 2006). But it is important to add other factors, such as teachers' support for pupils' guidance (Mather y Sheepers, 2024).

However, as Chiecer (2019) points out, (cited in Carballo 2017), school dropout is a problem that affects all levels of higher education in a general way. Nevertheless, online or virtual modalities present more alarming numbers. That is why a great concern in the institutions is retain students, in other words, the students who enter are the same students who graduate. Retention is defined as the persistence of students in a university programme until they either complete their degree or graduate (Himmel, 2018). This definition can be limited to cases of students who graduate within the minimum time set by the university. However, it does not take into account students who may need more time because they need to retake courses, interrupt their studies or have a lower course load.

As Hagedorn (2006, cited in Terraza 2019) points out, there are four types of retaining:

- Institutional retention: refers to the proportion of undergraduates who remain enrolled at the same institution of higher education.
- System Retention: employs persistence as is defined as the use of persistence as a metric and, as such, considers students who drop out but subsequently enroll at another university.
- Retention within a major or discipline: refers to the retention of students within a specific major area of study, discipline or department. It is important to note that in this case, a specific major may not

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retain a student who opts to switch to another program within the same institution; however, the institution successfully retains the student.

- Retention within a course: This is the smallest unit of analysis of retention, as it refers to the completion of a designated course by a student. This analysis enables the identification of courses that a student has not completed, despite the institution's success in retaining them.

In light of the aforementioned considerations, it is imperative to acknowledge that each category or class of retention has a designated responsibility party. System or major retention falls under the purview of the education system, higher education, and even the state. Namely, these two categories are external to the institution. Instead, within a course or institutional retention are under the administration and the teachers' purview, that is, the institution.

Therefore, in order to achieve the objectives of this work, it is necessary that the retention be situated within the ambit of the institution. In turn, Muljana and Luo (2019) establish that the factors that influence retention can be classified as follows:

At the institutional level, two factors must be considered: institutional support and the programme's difficulty grade. At the level of the instructor, facilitation of participation, promotion and sense of belonging are key considerations. The level of the student comprises behavioural characteristics (e.g. self-regulation, metacognition, self-discipline, motivation and time management), demographic variables (e.g. gender, age, etc.), and other personal variables (e.g. familial responsibilities, employment, financial situation, and technological limitations).

In addition to the above, the retention factor has changed due to environmental factors and generational differences (Haverila, 2020), which is why colleges and universities need to adjust or even prioritise retention (Stoebe & Grebing, 2020). Because of all the differences mentioned above, there is a research gap in this area and a lack of consensus on best practice and best retention strategies.

Online retention rates are an issue for colleges and universities across the globe. Although this is an important topic, there is not a substantial amount of accumulated research in the area. With online courses and programs gaining in popularity, the need for additional research investigating online student retention is vital [...]. A lack of consensus has challenged the identification of common, effective strategies that help increase student retention strategies in the academic online setting. This, in turn, has delayed the ability to examine anticipated retention results. (Seery, 2021).

As previously outlined, numerous factors exhibit marked similarities to those inherent in face-to-face education. Nevertheless, it is important to note that the strategies employed in these contexts cannot be considered analogous.

Research with online students over the past decade clearly indicates that, in a climate of continued rapid growth of online learning, institutions need to move beyond the conventional methods of external education that have been relied upon in the past. Instead of essentially trying to replicate the face-to-face learning experience at a distance, higher education institutions need to embrace the digital communication advances of the twenty-first century, to

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deliver online education differently and in more creative ways. (Stone, 2021)

Educational institutions are confronted with the challenge of meeting their social, educational and technological obligations. The issue of retention is of particular concern. While each college or university has its own particular weakness and strength (Perazzo, 2020), it is recommended that experiences and case studies be shared.

2. Purpose of the Study

The purpose of this study was to explore students' understanding and perceptions of the factors that may lead to retention or dropout. This study aims to analyse the economic, social, motivational and academic factors that influence student retention. By identifying these factors and ranking them hierarchically, it may be possible to develop more effective retention strategies.

The objective of this study was to address the following key research questions:

1. Have the students considered withdrawing at any point during the programme?
2. Which factors have influenced this decision?
3. Which factors have contributed to the students' decision to remain enrolled in the programme?
4. Among the factors that favour retention, which are most significant?

3. Method

The research was conducted on the students of the Public Administration and Management programme at the Universidad Abierta y a Distancia de México. The research was approached via a mixed methodology, with a non-experimental design and exploratory scope.

3.1. Participants

In consideration of the total population of students, which is 1,254, the Slovin method was employed to determine the requisite sample size. This was determined to be 303, thus ensuring the 440 informant responses are representative. A total of 440 students (N=440) enrolled in the educational programme completed the questionnaire, with the age range of the participants ranging from 31 to 50 years. With regard to gender, 62% of the participants identified as female, 38% as male, and one participant identified as non-binary. With respect to marital status, 54% of students are currently married or in a registered partnership, while 14% are divorced, separated or widowed, and the remaining 31% are classified as single. It is noteworthy that 72.27% of survey respondents have children, a proportion that is especially high among married or partnered respondents. In consideration of the data pertaining to first-generation students, constituting 83% of the student body, in conjunction with additional data sets including parental status and age, it is noted that the profile of the majority of the student body is non-traditional. As was previously mentioned

Academically, 11.82% are in their first year, 61.13% are in their second year, 11.37% are in their third year, and 15.68% are in their final year. In addition, 74% are students with no failed courses. And 29% reported that they had previously dropped out of another program. It is important to note that 82.5% are first-generation students, meaning that they are the first member of their family to attend a higher education.

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In the context of the analysis, which encompassed a range of socio-demographic factors, it was observed that a significant proportion of the student population resides in various states across the Mexican Republic. The State of Mexico and Mexico City stand out as particularly notable concentrations of student populations, with 68% of students residing in these states. A further 23% of students are employed without receiving economic compensation, while 72% of students are employed. Furthermore, 27% of the students surveyed reported having children, which consequently reduced the time they could dedicate to their academic and extracurricular pursuits at UnADM, such as university meetings. Consequently, they opted for a distance learning modality that offered them greater flexibility, a necessity to balance their personal, family, and professional responsibilities.

3.2. Data Collection and Analysis

A questionnaire was designed with the purpose of facilitating the recollection of data. The questionnaire encompassed six distinct categories, namely: socio-demographic aspects, academic habits, technological skills, teacher support, the learning environment, and motivation. The instrument utilised for the aggregation of data encompassed 72 items, of which 32 were set for multiple answers. Another 33 items incorporated four categories of response on a Likert scale (Alfa Cronbach $\alpha=0.95$). The response was forced because it did not include a neutral option. The Likert scale is a useful tool for the measurement of attitudes, perceptions and opinions among study participants. The data can also be compiled and statistically analysed to explore relations or patterns of the variables.

In order to obtain more detailed information and enable the participants to respond in their own words, a set of seven questions was posed to the surveyed students. These questions allowed the students to express their feelings and thoughts, and to provide unexpected answers.

The distribution of the questionnaire was conducted through the utilisation of the Microsoft Forms platform. This was made accessible to students via their institutional email accounts. The questionnaire was distributed to students via email and to their virtual classrooms in Moodle, with a two-week timeframe allocated for completion. During this period, reminders were dispatched and the collaboration of the teaching faculty was requested in order to encourage participation and emphasise its importance.

4. Findings

The collected data provides insights into the students' perceptions. Figure 1 demonstrates a positive correlation between the number of weekly study hours devoted by students and their subsequent grade point average. Consequently, students who have accumulated more study hours comprise the larger group, as indicated by the absence of failed courses.

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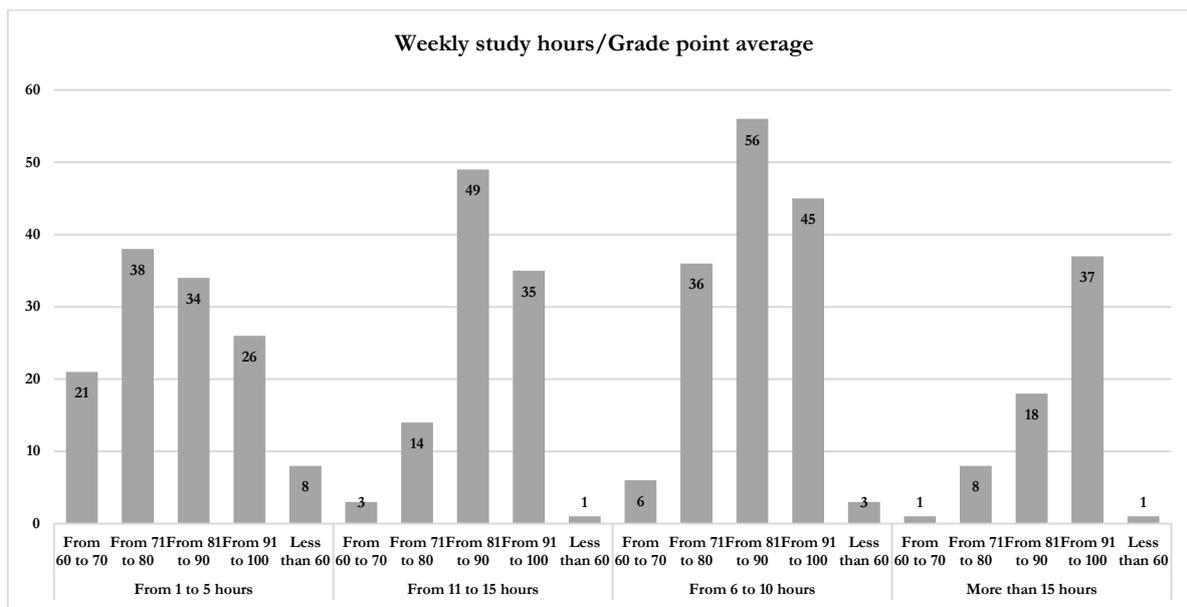


Figure 1. Weekly study hours/Grade point average

Of the 363 students classified as first-generation, 39.12% have considered withdrawing from their studies at UnADM, and 26.45% of this same group of first-generation students have left without completing their studies at another educational institution.

On the Likert scale (Alfa Cronbach $\alpha=0.95$), the data show that 68.7% of the informants consider their study habits to be "excellent" or "very good", on the other hand, 31.3% consider their study habits to be "poor" or "very poor". In terms of technological skills, the tools at which they consider themselves excellent or very good are searching the Internet, using the computer, and working with word processors. In contrast, the tools at which they consider themselves to be poor or very poor are using spreadsheets, working with presentation applications, using cloud storage, creating and editing video, social networking, and, most importantly, working with artificial intelligence.

As far as the academic guidance is concerned, it can be generally observed that about 90% of the students feel satisfied, since their answers are in the ranges of always and almost always, only 10% of the students indicate that there is almost never a constant communication with their teacher or that their activities are not graded and fed back in time and form, on the other hand, 11.6% of the students indicate that their teachers are not receptive to the problems they express. It is also noteworthy that the results obtained regarding the difficulties of the virtual classroom, 96% of the students indicated that they almost never or never have difficulties both to enter the classroom and to upload their activities.

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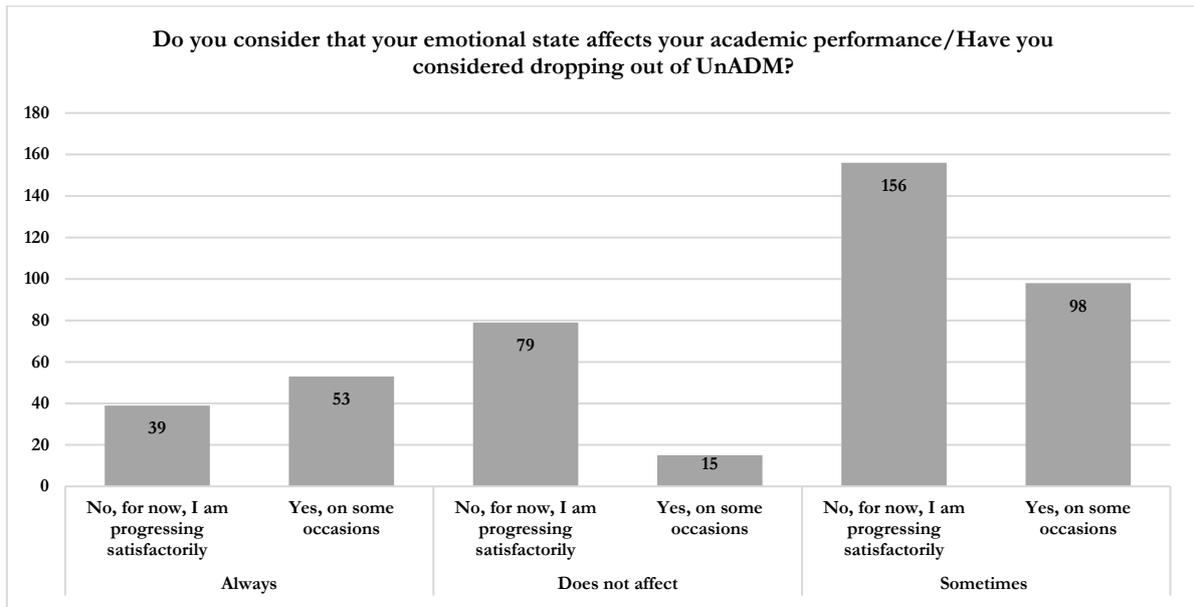


Figure 2. Impact of emotional state on academic performance/ Students who have considered dropping out of their studies at UnADM

According to the data shown in Figure X, students who always feel that their emotional state affects their academic performance are the class that is more likely to think about dropping out of university. Furthermore, regarding motivational aspects, about 75% consider that their different occupations, as well as their professional and/or personal activities, influence their learning process. Regarding the support they receive from their teachers, about 90% feel always or almost always supported, in contrast to the support they receive from the different areas of the UnADM, where 23% almost never or never feel supported. Regarding the support they receive from their families, while 85% feel supported, 15% say they do not have any support, as well as in the workplace, where about 40% of students do not feel supported in their workplace.

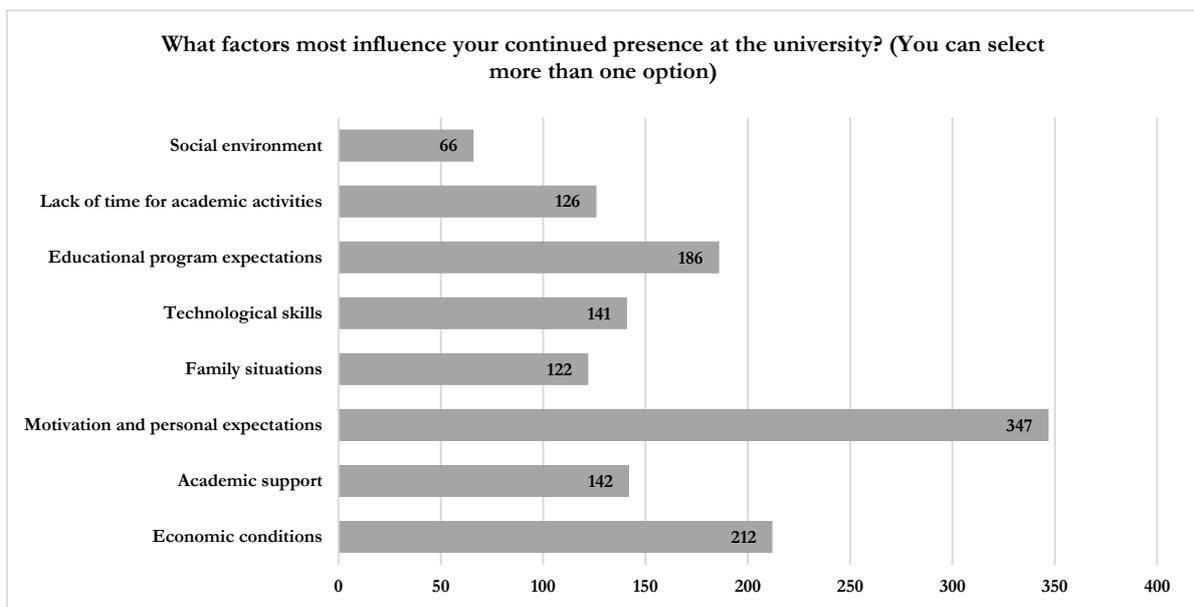


Figure 3. Factors that influence student retention

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Students were asked directly about the factors they felt were important to their retention; they could select more than one option. As shown in Figure X, "Motivation and personal expectations" is by far the most frequently selected factor.

5. Discussions and Conclusion

It has been observed that a significant proportion of students who have considered withdrawing from their studies or have had incomplete studies at other institutions are first-generation students. This demographic faces a range of challenges, including the absence of relatives who can provide guidance and support, as well as a lack of academic resources and support systems.

A multitude of factors have been identified as contributing to student retention, with those related to motivation being of particular significance. Within this overarching category, students have indicated that the availability of time to continue their academic endeavours, coupled with the presence of support from their familiar and work environments, are pivotal factors in maintaining their engagement in the program.

Another important finding is that 78.86% of the students who think that their emotional state affects their academic performance are the class in which the majority have requested psychological support. As can be seen in Figure X, 61.42% of the students who answered "Doesn't affect" are engaged in the programme, as well as the 84.04% of the students who answered "Sometimes" are more likely to remain in the programme, but the trend changes for the students who answered "Always" to the statement that their emotional state affects their performance, with 57% who have considered dropping out.

In the context of the virtual classroom management, students report no difficulty in navigating the platform or uploading their assignments. They possess fundamental technological skills that enable them to perform their academic activities. However, they demonstrate limitations in the advanced utilization of tools such as spreadsheets, video editing, and artificial intelligence. Notwithstanding these constraints, the mastery of fundamental skills and the accessibility of the virtual classroom contribute to the establishment of a dynamic and effective learning environment.

Concerning teacher support, students report feeling constant support from their instructors, addressing their inquiries, grading, and providing feedback on their learning activities, as well as sharing materials to enhance their knowledge of the subjects. However, they deem teacher support to be imperative for their learning and advocate for the enhancement of aspects such as the provision of more detailed explanations of the academic activities to be performed and the scheduling of more frequent synchronous sessions to facilitate real-time interaction and promote collaborative work.

5.1. Conclusions

The objective of this study is to ascertain the primary factors that influence the retention of students at this online institution, with the factors ordered from those with the least influence to those with the greatest influence. The data show that there is no issue with technological skills and no gap in the use of the platform. In addition, both teachers and students have good communication using the formal media of communication provided by the school and also communicate using informal media. The evidence suggests that both formal

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and informal communication demonstrate proficient technological skills.

Teacher support, student guidance, and feedback on activities and homework are more important than technological factors, but, despite their theoretical importance, they are no more important than motivational aspects. In general, students felt well-guided and supported. As previously discussed, all the factors mentioned above are within the responsibility of the school, meaning they are institutional retention factors. This observation does not imply that students' efforts or capacity are the sole contributors to retention; in this case, they are significant factors, though not critical ones.

The direct answers of the students and the comments mentioned in the discussion section demonstrate that the more important factor is the emotional state and motivation. Motivation is a key driving force that propels commitment and dedication for students. In the same way, a positive emotional state encourages grit to face academic challenges. Ensuring an optimal learning environment is therefore paramount. When students feel supported and motivated by their families, work, and school, they are more likely to thrive. The aforementioned highlights the importance of creating and promoting learning environments that not only promote academic learning but also strengthen emotional well-being and personal motivation.

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