RESEARCH REPORT
ARTÍCULO DE INVESTIGACIÓN

Academic Persistence and Retention in Higher Education: Insights from an English Language Teacher Education Program in Colombia

Persistencia y retención académica en la educación superior: perspectivas desde un programa de formación de docentes de inglés en Colombia

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ABSTRACT

Introduction: Understanding persistence and retention in higher education is essential, as it provides a basis for identifying opportunities to enhance institutional programs and for developing strategies that mitigate student dropout while promoting successful degree completion.

Objective: This study examines factors influencing academic persistence and retention among prospective English language teachers and their engagement with institutional support programs, aiming to identify gaps and strengthen student retention in higher education.

Methodology: A quantitative, survey design was employed. Four hundred forty-five students enrolled in the English language teaching program between semesters 2020-II to 2022-II. Complementary institutional data from the ADATAR system (Academic Data Analysis for Early Retention Alerts) were used to identify 118 students at low persistence risk. However, only 35 were selected for in-depth analysis, as they exhibited a persistent risk profile, with 60% categorized as low-persistence cases across five consecutive academic semesters (2020-II to 2022-II).

Results: The findings reveal a complex relationship between academic performance and persistence. Gender, age, and socioeconomic, personal, academic, and institutional factors contributed to lower persistence rates. Awareness of institutional support initiatives was widespread, yet engagement remained uneven, with many students not actively participating in available programs.

Conclusions: The study concludes that persistence and retention are shaped by the interplay of multiple factors, while institutional support programs are not always sufficiently known or utilized by students. These findings bridge a gap, linking institutional retention efforts with student-level engagement, underscoring the need for student-centered retention policies rather than generic interventions. By addressing these gaps, universities can design targeted action guidelines that strengthen student persistence and ensure successful completion of higher education programs.

Keywords: academic persistence, student attrition, retention strategies, at-risk students, ADATAR system.

RESUMEN

Introducción: Comprender la persistencia y la retención en la educación superior es esencial, ya que proporciona una base para identificar oportunidades de mejora en los programas institucionales y para desarrollar estrategias que mitiguen la deserción estudiantil, al mismo tiempo que promuevan la finalización exitosa de los estudios.

Objetivo: Este estudio examina los factores que influyen en la persistencia académica de los futuros docentes de inglés y su participación en programas de apoyo institucional, con el fin de identificar brechas y fortalecer la retención estudiantil en la educación superior.

Metodología: Se empleó un diseño cuantitativo basado en encuestas. Durante los semestres 2020-II y 2022-II, 445 estudiantes estaban matriculados en el programa de formación de profesores de inglés; entre ellos se identificaron 118 estudiantes en riesgo de baja persistencia gracias al sistema ADATAR (Análisis de Datos Académicos para Alertas Tempranas de Retención). Sin embargo, solo 35 fueron seleccionados

para un análisis en profundidad, ya que presentaban un perfil de riesgo persistente, con un 60 % clasificado como casos de baja persistencia a lo largo de cinco semestres académicos consecutivos (2020-II a 2022-II).

Resultados: Los hallazgos revelan una relación compleja entre el rendimiento académico y la persistencia. Factores como el género, la edad, así como las condiciones socioeconómicas, personales, académicas e institucionales, contribuyeron a menores tasas de persistencia. Aunque la conciencia sobre las iniciativas de apoyo institucional fue amplia, la participación resultó desigual, con estudiantes poco involucrados activamente en los programas ofertados.
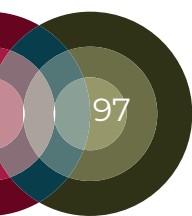
Conclusiones: El estudio concluye que la persistencia y la retención están determinadas por la interacción de múltiples factores, mientras que los programas de apoyo institucional no siempre son suficientemente conocidos o utilizados por los estudiantes. Estos hallazgos llenan un vacío al vincular los esfuerzos institucionales de retención con el compromiso estudiantil, y subrayan la necesidad de políticas de retención centradas en el estudiante en lugar de intervenciones genéricas. Al abordar estas brechas, las universidades pueden diseñar directrices de acción específicas que fortalezcan la persistencia estudiantil y garanticen la finalización exitosa de los programas de educación superior.

Palabras clave: persistencia académica, deserción estudiantil, estrategias de retención, estudiantes en riesgo, sistema ADATAR.

Introducción

University student persistence and retention gain importance in the context of higher education, not only because they ensure successful completion of tertiary programs within the official study period (Báez, 2011), but also because they serves as an indicator of students' academic progress, engagement, and overall educational experience (Fernández, 2009; Tinto, 2002). It is therefore relevant for institutions to identify factors that contribute to students' retention and persistence. In this line of thought, Tinto's model provides a useful lens to distinguish between the constructs of retention and persistence. While *persistence* refers to the student's decision to remain in higher education, *retention* is linked to the institution's responsibility to create the conditions that support students until graduation (Fernández de Morgado, 2012). Following Tinto (2002, p.2), students are more likely to persist when they find themselves integrated both socially and intellectually into the life of the institution. This conceptualization highlights that academic and social integration are fundamental to student persistence, whereas institutional retention depends on the capacity to provide effective structures and support systems (Fernández de Morgado, 2009).

However, retention has been consistently framed as a structural challenge, where academic, socioeconomic, and institutional factors converge and demand comprehensive strategies (Barrera & Gaviria, 2017). In Colombia, efforts to address student retention have included national initiatives from the Ministry of Education. One has been SPADIES, a platform designed for monitoring and addressing student dropout, and to identify risk factors and strengthen institutional strategies for permanence (MEN, 2009). Additionally, ICETEX, serves as a strategy which provides financial support to students without economic resources. However, their effectiveness depends on more than detection; they must be accompanied by strategies that foster student commitment and reduce barriers to access

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(Quintero, 2020). As Fernández (2012) suggests, retention-persistence requires an interdisciplinary approach that incorporates pedagogy, sociology, and economics to capture the multifaceted nature of the phenomenon.
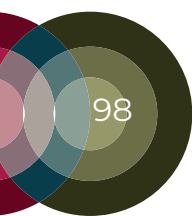
Recent studies have identified multiple factors linked to student persistence, including personal, socioeconomic, family, institutional, academic performance, as well as behavioral and psychological (e.g., Scheunemann et al., 2021; Fourie, 2020; Jeno et al., 2018; Bardach et al., 2020; Pino et al., 2021; Truta et al., 2018; Sosu & Pheunpha, 2019; Dos Santos et al., 2023; Vera Cala et al., 2020). Others have focused specifically on students' characteristics and personality (Díaz-Mújica, 2019; Bardach et al., 2020). These findings echo scholars who argue that the internal strategies formulated and implemented by schools are insufficient to address student's complex realities (Palomino & Ortega (2023; Castillo et al., 2020). The challenge, therefore, lies not only in designing policies but also in ensuring that students are aware of and actively engage with the resources available to them.

This study seeks to contribute to the debate by examining the factors influencing academic persistence among prospective English language teachers, while also analyzing their awareness of and engagement with institutional support programs. Teacher education programs in foreign languages represent a particularly sensitive case, as low persistence in these areas not only limits individual opportunities but also weakens national goals related to bilingualism and teacher training. By combining survey data from ADATAR, an early alert warning system designed by the University of Córdoba, which monitors persistence risk at the institutional level and complements broader policy frameworks, this research aimed at answering the following questions:

- What academic, socioeconomic, personal, and institutional factors contribute to low persistence and retention among prospective English language teachers at the University of Córdoba between 2020-II and 2022-II?

- To what extent are prospective English language teachers aware of and engaged with institutional support programs and strategies designed to foster persistence and retention?

Methodology

This study adopted a quantitative survey research design, which enabled the statistical analysis of data to identify trends and respond to the research questions (Creswell, 2012). Factors influencing academic persistence and the level of student awareness and engagement with institutional retention strategies at the University of Córdoba were explored. Also, it provided insights into the implementation of retention programs to promote persistence and graduation at the University of Córdoba.

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The population consisted of 445 students enrolled in the English Language Teaching Program at the University of Córdoba between the semesters 2020-II and 2022-II. Using ADATAR, Academic Data Analysis for Early Retention Alerts, 118 students were identified as low persistence risk. However, only 35 were selected for in-depth analysis, as they exhibited a persistent risk profile, with 60% categorized as low-persistence cases across five consecutive academic semesters (2020-II to 2022-II).

Data came from the division of the number of courses enrolled per semester by the number of courses students failed in the same semester.
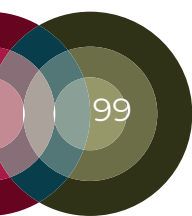
$$Semestral\ Failure\ \% = \frac{Total\ courses\ Enrolled\ per\ Semester}{Courses\ failed\ per\ semester}$$

Formula 1.

Data Collection Techniques

Two techniques were employed. First, a document analysis technique was employed (Bowen, 2009, p.27) to examine institutional documents such as Agreement 207 (2017) and Agreement 040 Bis (2018), which establish attrition policies and the creation of the ADATAR, the *Academic Data Analysis for Early Retention Alerts*, an institutional early warning system to monitor student performance and identify individuals at risk of retention. This platform integrates information from the University's academic management system (*Power Campus*), processing students' enrollment and grade data at the end of each semester. By generating automated reports, ADATAR provides a classification of students who demonstrated persistent risk profiles between semesters 2020-II and 2022-II. Specifically, students with a failure rate equal to or greater than 60% across five consecutive semesters were flagged as *low-persistence cases*. These data provided the basis for selecting the final group of participants and for triangulating institutional records with self-reported information on academic, socioeconomic, personal, and institutional factors.
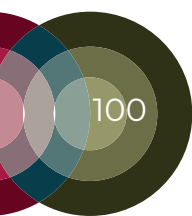
Second, a structured online survey administered to students identified as at risk of retention showed (a) academic, socioeconomic, and personal risk factors, as well as (b) students' awareness of and participation in institutional persistence and retention programs. Closed-ended questions on Likert scales and multiple-choice items were used. Content validity was ensured through expert review by three faculty members including a specialist in educational research and student attrition from the Welfare Office at University of Córdoba. In addition, a pilot test with five students not included in the final sample was done. Adjustments were made to improve clarity and relevance of the questions.

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Descriptive statistics was used to present the data analysis, since it offers a summary of the properties and value distribution over one or more datasets (Lee, 2020), including frequencies, percentages, and cross-tabulations, to identify patterns of risk factors and levels of student engagement with support programs. Additionally, Orange Data Mining software (https://orangedatamining.com) was employed to systematize the dataset and generate visual representations, facilitating the identification of patterns in students´ persistence and retention and the assessment of the students' familiarity and participation with existing retention strategies, providing a comprehensive understanding of the persistence phenomenon within the context of the English Language teaching program.

The research followed the stages suggested by Giraldo et al. (2020):

- **1st - Data Source**: The statistical unit analysis from the University of Córdoba generates a full report about students' academic performance at the end of each semester, grades are transferred from the Power Campus Platform, a grade management system, to the ADATAR platform to generate an academic report.

- **2nd - Data Acquisition**: The ADATAR platform organizes data based on the grades of students (Academic Performance). It displays who and how many students failed or approved subjects according to their grades in the semesters.

- **3rd - Data Extraction and Integration**: Students at dropout risk were identified. Students from the English Language Teaching Program, number of courses students were enrolled during the semesters (2020-II to 2022-II), final grades obtained in these semesters, and courses passed and failed, all this to calculate each one of the students' percentages of failure per semester (Formula 1.). Then, an online survey through Google Forms was conducted. Students' answers were downloaded on an Excel document so it could be processed and analyzed.

- **4th - Data Analysis**: During this stage, the Orange software was used to group the data collected. The data analysis stage was carried out visually, with a large and diverse toolbox used to create data visual processes.

- **5th - Data Description**: Data was described and presented using reports in Word and PowerPoint presentations.

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Findings

To start, students' academic performance from 2020-II to 2022-II is described, followed by key factors contributing to the low retention rate in the English language teaching program. Finally, students' knowledge and engagement with the University's persistence strategies are addressed.

Students' Academic Performance from 2020-II to 2022-II

Institutionally, the persistence and retention trends observed during the semesters covered by the study included the COVID-19 pandemic and suggest that students may have encountered challenges impacting their academic performance. Using the software ADATAR a total of 118 students were identified as potentially needing additional academic support. However, no linear pattern was observed across these semesters (Figure 1):

Figure 1. Students at Low Resistance Risk between 2020-II and 2022-II
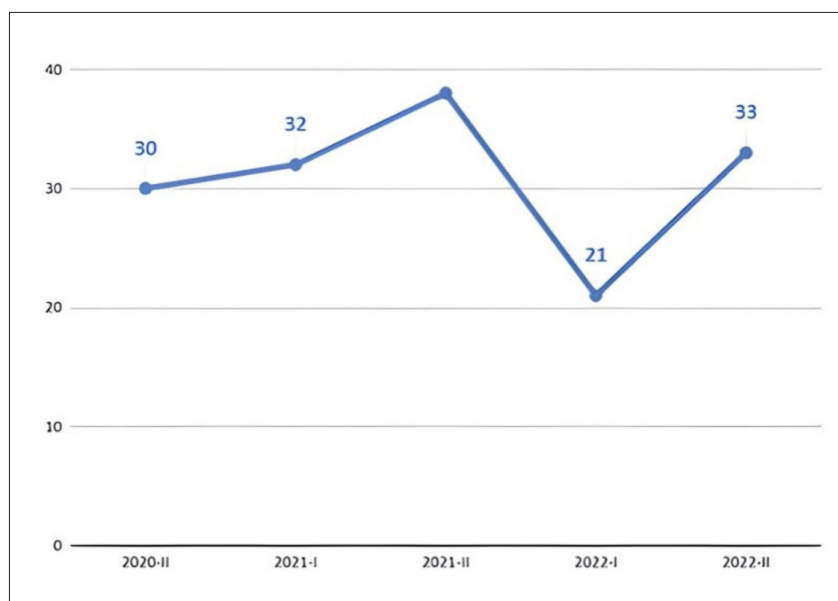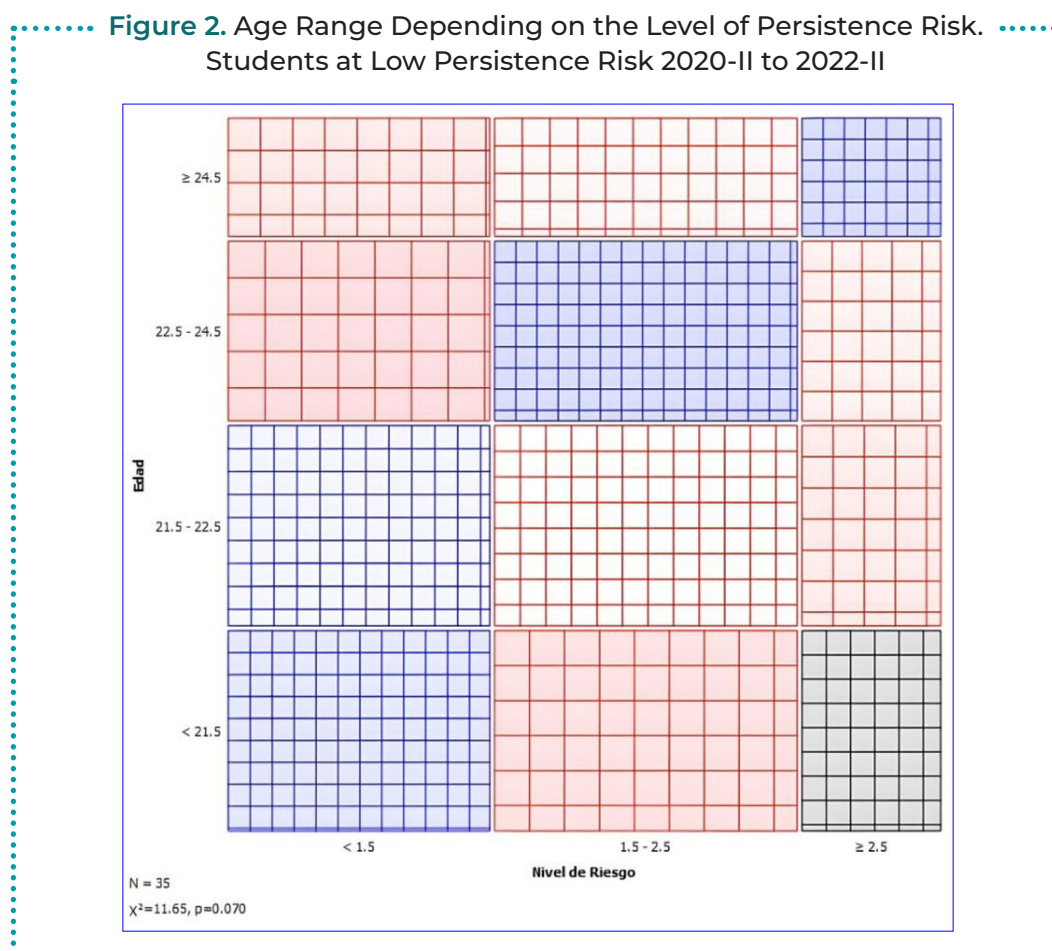

Source: own elaboration..

The analysis of student performance between semesters 2020-II and 2022-II revealed a non-linear pattern in the number of students in need of academic support. For instance, the number of students

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increased from 30 to 32 between 2020-II and 2021-I but then decreased to 21 in semester 2022-I, only
to rise again to 38 in semester 2022-II. This indicates fluctuations in the persistence and retention
trends across different semesters.

Moreover, further analysis of the 35 students in need of support revealed that age and gender signifi-
cantly influence the student's persistence rate. The persistence and retention metric, assessed using
the software Orange, categorizes students on a scale of ≤ 1.5 (low risk), 1.5 to 2.5 (medium risk), and
≥ 2.5 (high risk). The graphical data presented in Figure 2 shows the age range of students in relation
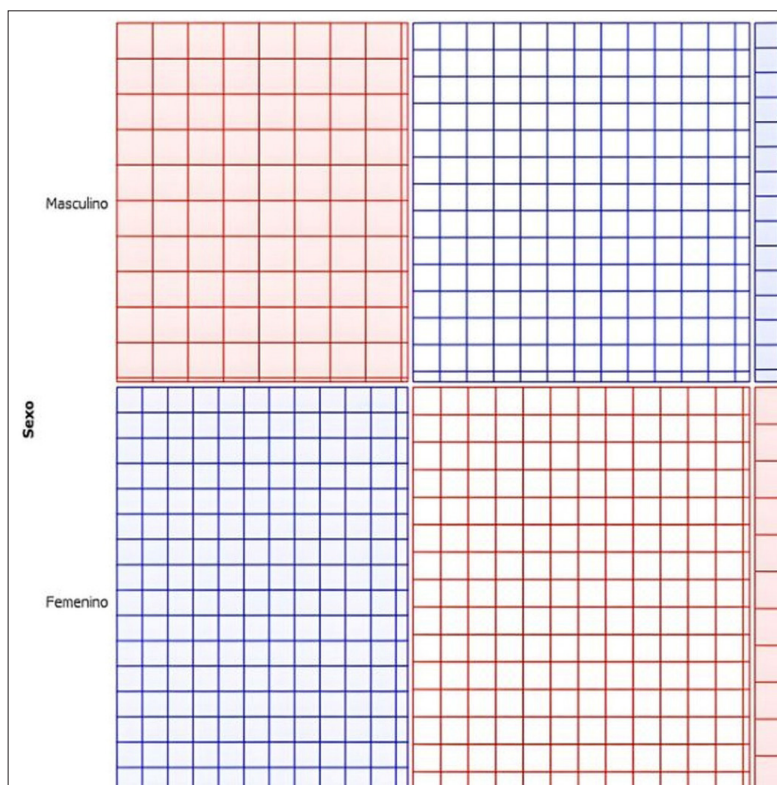to their level of academic persistence.

Figure 2. Age Range Depending on the Level of Persistence Risk.
Students at Low Persistence Risk 2020-II to 2022-II

Source: own elaboration..

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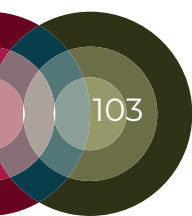Juan Carlos Giraldo Cardozo

Figure 2 illustrates the relationship between age and the level of academic persistence. The intensity
of shading and color in the figure indicates whether the divergence from independence is positive
(blue) or negative (red), while the size of the shapes within each column represents the number of
students in each category. The data in Figure 2 indicates that students aged 22.5 to 24.5 are more
frequently associated with lower levels of academic persistence (≥ 2.5), a pattern also seen among
students aged 24.5 or older. Interestingly, students aged 21 or younger and those in the 22.5 to 24.5
range show stronger persistence (≤ 1.5), as represented by less intense red shading and larger squa-
res on the graph. Despite variations in age, a trend emerges: older students appear to require more
academic support to maintain their enrollment. This indicates a correlation between age and per-
sistence levels. suggesting that students' academic situations may deteriorate as they grow older.
Additionally, it was found that women demonstrate stronger academic persistence while men appear
more frequently among those requiring higher levels of intervention to support retention (Figure 3):

Figure 3. Gender Depends on the Level of Persistence.
Students at Low Persistence Risk 2020-II to 2022-II

Source: own elaboration..

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The data reveal that more males were associated with lower levels of academic persistence (≥ 2.5), which is portrayed in dark blue, with numerous little shapes in the square. Meanwhile, a minor number of females depicted in light red and large squares were in the same persistence level. Conversely, more females demonstrated higher persistence (≤ 1.5), depicted in dark blue and small squares, and fewer males were at the same level, these are depicted in light red with large squares.

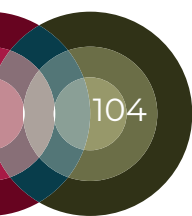## Key Factors Contributing to Students' Dropout Risk

There were key factors that could trigger students' persistence rates. The interest group answered a total of multiple-choice questions in relation to their academic situation at the time. According to the survey responses, students said they were impacted, first by socioeconomic factors, second, by personal factors, third, by academic factors, and finally by institutional factors. These are explained below:

Socioeconomic Factors

According to students, the socioeconomic factors were the ones that most affected them. Within the list of aspects this included, 60% of students answered that the economic dependency issues affected them, while 57% of students said they were unemployed; 43% of students' parents had employment difficulties or were unemployed, and finally, 31% of students answered that their social stratum were a key aspect. The data implies that students had low income between the semesters 2020-II to 2022-II. This might have affected their daily life sustainability since many of them relied on someone else's economic support, be it parents, relatives, or any other person or organization at the time. In other words, students reported to usually have economic support from other sources, and these were in crisis, hence it became a cycle of economic issues.

Personal Factors

Regarding the Personal Factors, 54.29% of students were affected the most by their familiar environment, 48.57% had health issues; 45.71% had schedule incompatibility with extracurricular activities, and 34.29% had household disasters. Many of the issues that affected students in the Personal Factor during the Pandemic and still when they came back to face to face classes were related to familial issues. It seemed students had misunderstandings with their families, and this could have created a tense familiar environment. While students were at home, they may have been assigned more household tasks, considering most of them were from a low social stratum. At the same time, some students suffered from different illnesses bearing in mind the COVID-19 health emergency, which also could be one reason for the household disruptions.

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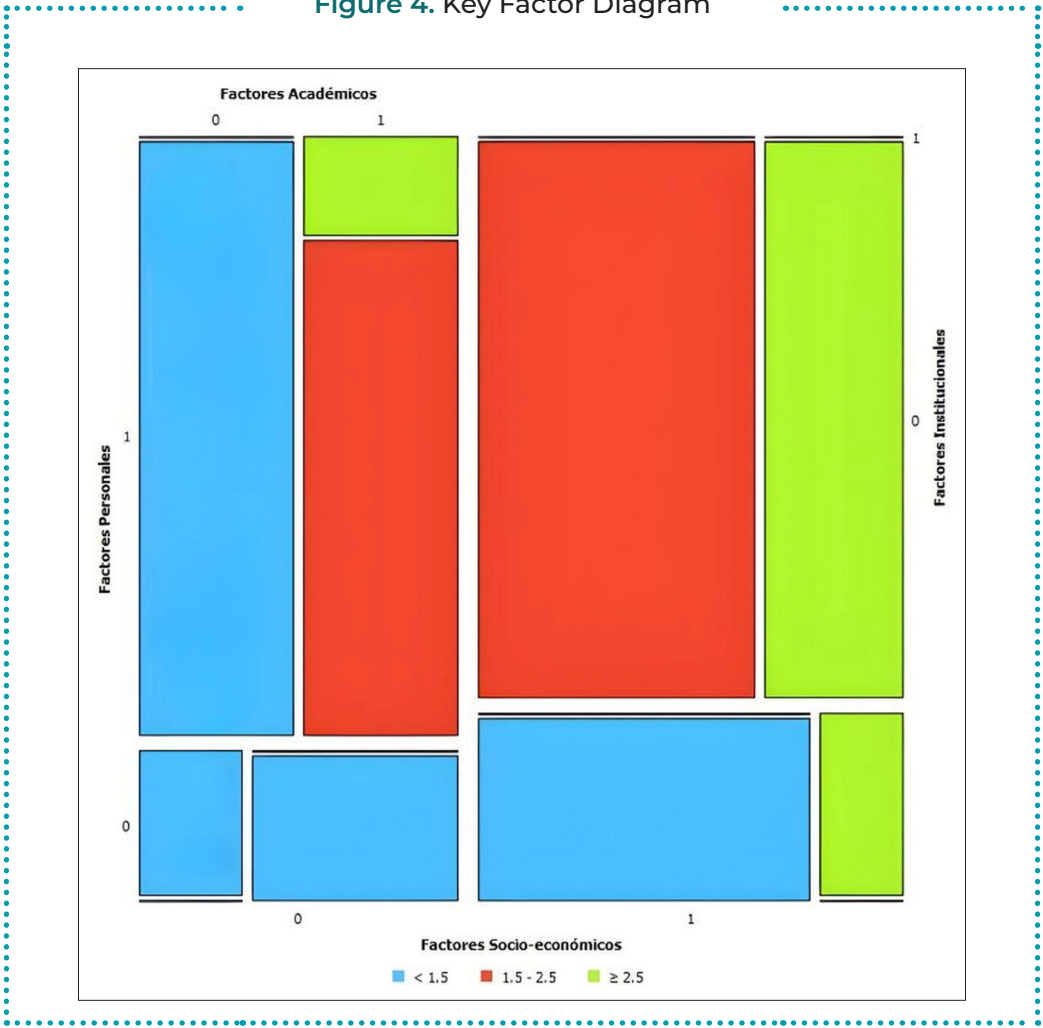
Academic Factors

In terms of academic factors, 54% of students reported having a poor academic performance; 40% reported problems with teachers' methodologies; 34% reported a lack of internet access as well as ineffective study methods; and 31% reported a lack of professional orientation. As previously indicated, students had low academic performance between semesters 2020-II and 2022-II, this suggests that students were concerned about their grades and academic process during these five semesters.

Furthermore, many of them may have not felt aligned with their instructor's teaching methods, which may not have been the most suitable during the online classes, which were mandatory during three semesters. In addition, many of them may have not had a completely functional internet connection to attend online classes. Moreover, students appeared to not have a good self-study strategy to meet class objectives, and students who were facing academic challenges may have felt lost and without professional support. All these related factors contributed to an array of academic difficulties that affected students.

Institutional Factors

In accordance with the Institutional factors, 74% of students rated academic anomaly as the most influential issue, followed by 49% reporting insufficient psychological assistance, 26% reporting a lack of social services, and 23% reporting a lack of professional support from the English Language Program. Accordingly, students were affected by a variety of events (semester suspension, strikes on campus, among others.) especially during the second semester in 2022. In addition, students reported they had little support from psychologist's assistance services, aligned with this, students manifested not many welfare support services, neither professional support from the Program. Based on the previous findings there is a key factor diagram (Figure 4) which displays the interaction of the four critical factors on students from semesters 2020-II to 2022-II.

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Figure 4. Key Factor Diagram

Source: own elaboration..

During the five semesters, students reported being impacted by one or more factors. The blue color in the visual diagram indicates students at risk of dropping out at level less than 1.5, the red color represents students at danger of dropping out at levels 1.5 to 2.5, and the green color represents students at risk of dropping out at level greater than or equal to 3/4. In sum, students had the same factors influencing them, some others had similar ones, but one or two were different, or all of them were different.

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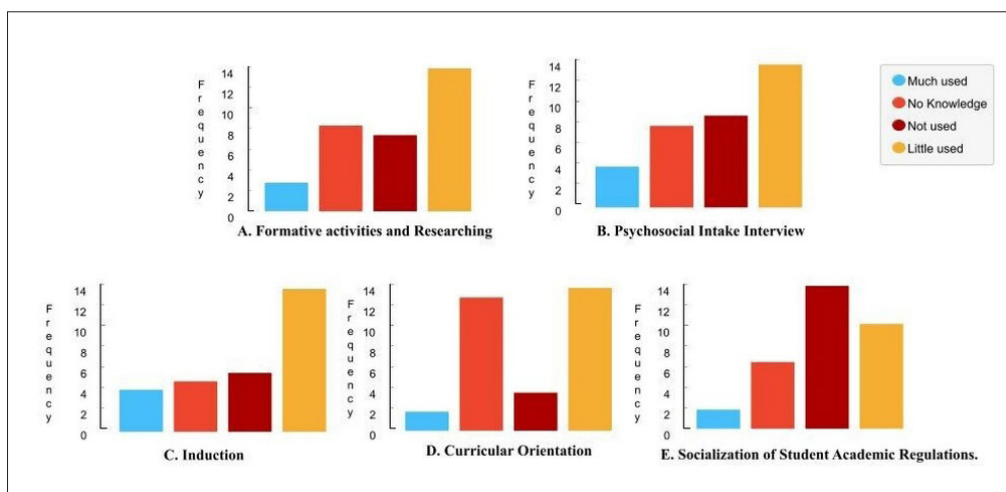
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Students' Knowledge and Engagement with the Strategies to Foster Persistence and Retention at the University

This section delves into students' knowledge and engagement with the strategies the University implements to foster persistence and retention. It is separated into the four programs: Early Warning and Career Guidance Program, Academic Support Program, Strengthening Program with Family Nucleus, and Incentives & Services Program. Within this survey section, students were presented with the strategies that the Office of Welfare promotes persistence and retention for each program in the Agreement 207 of 2017. The descriptive analysis of the graphics was carried out in accordance with the different patterns discovered among the strategies, despite the organization they have in the graphics.
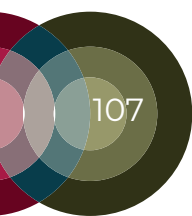
Early Warnings and Career Guidance Program

A set of five strategies conform to this program: Formative activities and research, Psychosocial Intake Interview, Induction, Curricular Orientation, and Socialization of Student Academic Regulations. In order to find out about students' knowledge and engagement with these strategies, students reported the following (Figure 5):

Figure 5. Early Warning and Career Guidance Program - 35 Students at Dropout Risk (2020-2 to 2022-2)

Source: own elaboration..

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The findings revealed that students exhibited a limited awareness of most of the strategies presented by the Early Warning and Career Guidance Program. This lack of knowledge may have contributed to the non-utilization of these strategies. Consequently, students may have overlooked the various institutional processes implemented by the University, which have been designed to mitigate students' early dropout from the English Language Program.

For example, only two students reported using the Formative Activities and Research strategy (A), while 14 reported hardly using it, nine reported not using it at all, and 10 reported having no knowledge of it. The results for the Psychological Intake Interview (B) were similar, with 14 students reporting hardly using it, nine reporting not using it at all, four reporting using it, and eight reporting having no knowledge of it. The Socialization of Student Academic Regulation (E) saw even lower engagement, with only two students reporting using it, while 15 reported not using it at all, 11 reported hardly using it, and seven reported having no knowledge of it. The Induction strategy (C) saw slightly higher engagement, with five students reporting using it, while 17 reported hardly using it, seven reported not using it at all, and six reported having no knowledge of it.
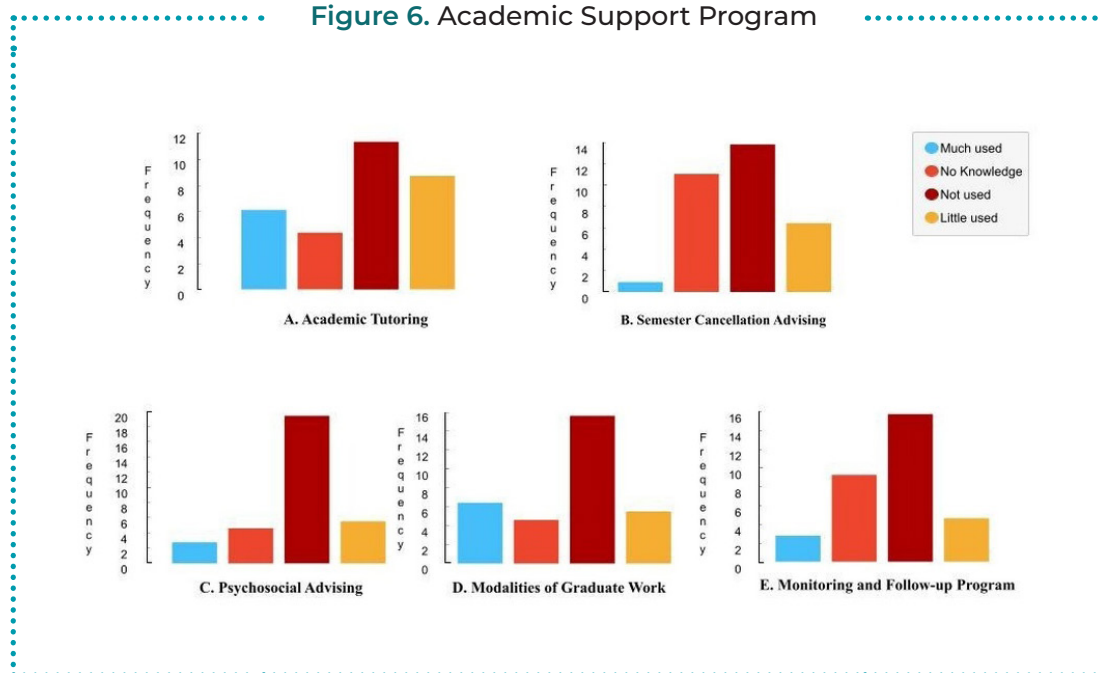
The Curricular Orientation strategy (D) was the least known, with only two students reporting knowing it, while 15 reported not using it at all, four reported hardly using it, and 14 reported having no knowledge of it. These findings suggest that students have limited awareness of most of the strategies within this program, which may have contributed to their non-utilization. This lack of knowledge may have led students to overlook the various institutional processes designed to mitigate early dropout from the English Language Program.

Program for Academic Support

The Program for Academic Support is a response to students' academic challenges. The following strategies constitute this program: academic tutoring, advising on semester cancellation, psychosocial advising, modalities of graduate work, and the monitoring and follow-up program. The following graphic (Figure 6) provides the necessary information in this regard:

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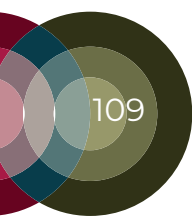
Figure 6. Academic Support Program

Source: own elaboration..

The Academic Support Program, designed to address students' academic challenges, also showed limited engagement despite some awareness. While five students reported having knowledge of the Academic Tutoring strategy (A), only seven reported using it frequently, with 13 reporting never using it and 10 reporting hardly using it. This pattern of awareness without engagement was also evident in the Psychosocial Advising strategy (C), where five students reported having no knowledge of it, 21 reported never using it, six affirmed hardly using it, and only three used it. The Modality of Graduate Work (D) saw similar results, with five students reporting no knowledge of it, 16 reporting never using it, six reporting hardly using it, and seven reporting using it.

In contrast, the Semester Cancellation Advising strategy (B) and the Monitoring and Follow-Up strategy (E) had significantly lower awareness and engagement. For the Semester Cancellation Advising strategy (B), 12 students reported having no knowledge of it, while 15 stated never using it, seven reported hardly using it, and only one confirmed using it. The Monitoring and Follow-Up strategy (E) saw similar results, with 10 students revealing no knowledge of it, 17 asserting never using it, five reporting hardly using it, and only three affirmed using it.

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Overall, These findings suggest two key trends: first, while students had some knowledge of strategies like Academic Tutoring (A), Psychosocial Advising (C), and Modality of Graduate Work (D), they were not actively engaging with them. Second, the lack of knowledge about the Semester Cancellation Advising (B) and Monitoring and Follow-Up (E) strategies led to minimal use of these resources.

Family Nucleus Strengthening Program

The Family Nucleus Strengthening Program is a strategic initiative fostering collaboration between the University of Córdoba and students' parents. The aim is to combine efforts in offering comprehensive support, guidance, and monitoring throughout the students' professional training journey. The primary component of this program involves meetings with parents from first-semester students. Regarding this strategy, 18 Students reported having no knowledge about its existence, 12 students reported not having used it at all, three students admitted hardly using it, meanwhile, just two students confirmed having used it. The evidence points out that many students seemed not to have knowledge of this program and its strategy. Therefore, since little is known about it not many of them have used it. Hence, this signals the scarce relationship between the English Language Program and students' parents and students' familial environment.

Incentives & Services Program

The program is divided into two strategies: Incentives and Services program, both designed to address the specific demands and challenges faced by students during their professional training. Beginning with the Incentives program, it encompasses three key strategies: Exemption or Discounts on Tuition Fees for Membership in Artistic or Sports Groups, Tuition Exemption for the Best Academic Average During the Semester, and Admission and Exemption of the Highest ICFES Score of the Public Schools in the Department of Cordoba. Data presented in the accompanying Figure 7 reveals that while many students are aware of these strategies due to information received, they acknowledged infrequent utilization:
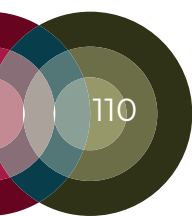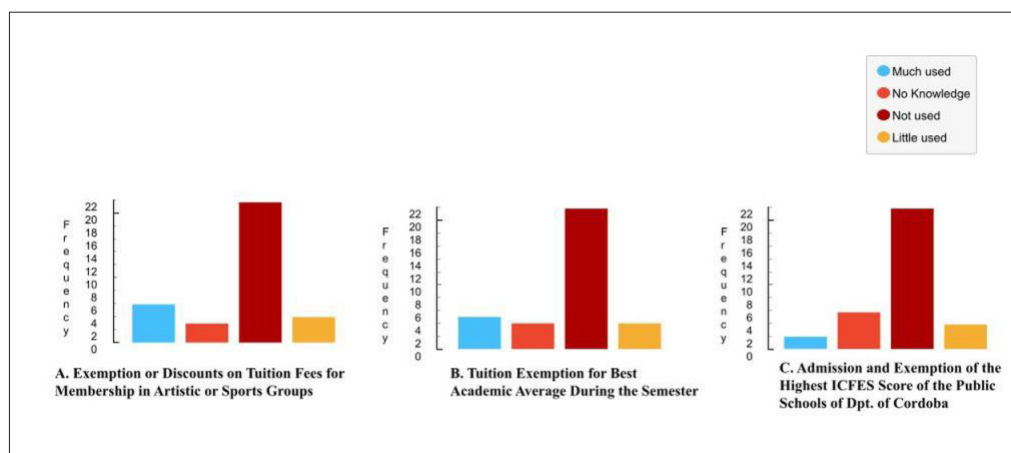
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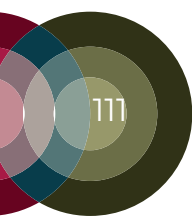**Figure 7.** Incentives and Strategies Program / Incentives Strategies

Source: own elaboration..

Figure 7 shows that while most students indicated having knowledge of the Incentive Program strate-gies, their utilization was significantly lower. Specifically, 22 students stated not using any of the three strategies, with four students per strategy admitting hardly using them and less than six students per strategy confirming having knowledge of them. In contrast, only two to six students per strategy affirmed using them. This suggests that while students are aware of these strategies, their stringent requirements, such as being part of an artistic or sports group, maintaining a high academic perfor-mance, or achieving a high score in the ICFES exam, limit their widespread adoption.

The Services Program, on the other hand, provides a diverse range of strategies aimed at enhancing student well-being and supporting their academic journey. These services include "*Jóvenes en Ac-ción*", financial assistance, medical and dental care, workshops addressing various health concerns, subsidized lunch services, job grants, university housing, a training and competitive sports program, accident insurance, emergency care, first aid, gym activities, Career Champions, tuition discounts facilitated through ICETEX and the Equity Component, the Godfather Plan, dance, music, and theater groups, and a vibrant Cultural Agenda.

The data presented in Figure 7 suggests that students possessed an understanding of the diverse service strategies offered by the program similar to the incentive strategies. However, a small number

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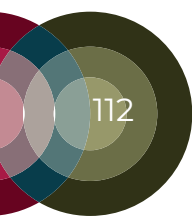
of students per strategy (from one to six students) reported having no knowledge about these ones. Moreover, most of the students did not use them at all and a few of them hardly used them.

Likewise, students exhibited a heightened interest in strategies that provided economic support and did not request many requirements to get access to them, exemplified by "Jovenes en Acción" (A) and Subsidized Lunch Services to Students (D), which were reported to be the most used by students. In contrast, strategies lacking financial assistance, but focused more on students' well-being with health support, and competitive or recreational sports (Strategies: C, E, F, G, H, I, J, K, L) and that required students to have high academic performance and other requirements to benefit them showed little or no utilization. In line with this, the Cultural Agenda strategy (M), although it aims at strengthening the cultural identity of students, did not report having students participate at all or hardly participate in it. Therefore, students from the English Language Program rarely take part in cultural events even though they have knowledge about them. Consequently, although students acknowledged the existence of the strategies in the Services program and their intended purpose, they were not very engaged unless they provided financial aid.

Discussion

The analysis of student trajectories between 2020-II and 2022-II demonstrates that persistence is not a static phenomenon but a dynamic and fluctuating process shaped by multiple and changing conditions, echoing Tinto's (2002) argument that persistence is the result of ongoing interactions between students and their institutional environments. By combining ADATAR monitoring data with survey responses, the present study highlights that risk levels oscillated across semesters, a finding that broadens earlier approaches focused solely on course repetition or failure (Portillo et al., 2017; Acevedo, 2020; Castillo et al., 2020).

The Orange software used with data coming from ADATAR revealed that age and gender significantly shape persistence risk. To start, age emerged as a relevant predictor of persistence: younger students tended to sustain enrollment, while those over 22.5 years showed greater vulnerability. This suggests that persistence deteriorates as students advance in age, echoing the findings of Portillo et al. (2017) and Kocsis & Molnar (2024), who also documented declining academic performance among older cohorts. However, our results diverge from Martín-Arbós et al. (2024), who found no significant relationship between age and dropout risk. These differences may be explained by contextual conditions, particularly the pandemic, which affected older students balancing work, family, and study responsibilities.

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Similarly, gender differences were evident: male students were at the highest risk, while female students demonstrated stronger persistence. This aligns with Rodríguez (2019) and Aina et al. (2022), whose research strengthens the assertion that there is a relationship between gender and student educational success. The persistence gap suggests that interventions should not only be generalized but also sensitive to demographic subgroups.

Persistence was shaped by four categories of factors: socioeconomic, personal, academic factors, and institutional. Among these, financial vulnerability was the most critical determinant of retention, confirming that it continues to be the primary predictor in Colombia (MEN, 2009; Espinosa et al., 2018; Rodriguez, 2019). Our findings also align with Canales and De los Ríos (2007) and Dos Santos et al. (2023), who reported that economic instability, combined with family crises such as unemployment or illness of household providers, generate a cycle of disengagement from the educational system. Also, economic situation of families and health conditions, further complicated persistence (Castro-López et al., Jeno et al., 2018; Respondek et al., 2017), echoing CEDE (2014) and Rodríguez & Londoño (2011), who underscored the centrality of family conditions.

Academic issues added another critical layer. Students expressed dissatisfaction with online teaching methodologies, poor self-regulated learning strategies, absence of professional orientation, and difficulties accessing online classes which reflected structural inequities intensified by the pandemic. These findings align with Castillo, et. al (2020) and Acevedo (2020), who highlight the fragility of persistence when pedagogical models fail to adapt to students' needs. Additionally, institutional disruptions, such as semester suspensions, strikes, and insufficient psychological and welfare support, revealed gaps in the institutional capacity to safeguard persistence. This corroborates early work from Canales and De los Ríos (2007) and Castillo et al. (2020), which point to the institutional environment and quality of services as determinants of student retention.

Taken together, these factors illustrate the multifactorial nature of persistence (Canales & De los Ríos, 2007; Palomino & Ortega, 2023). Students were rarely affected by a single factor; instead, overlapping vulnerabilities accumulated over time, confirming the dynamic complexity of persistence described by Castaño et al. (2004, 2008) and Palomino & Ortega (2023). Moreover, Bardach et al. (2020) found a significant correlation between context-related problems and students' intentions to interrupt their professional learning process. Taken together, these results illustrate how the interaction of diverse conditions exerts a compounded impact on students' academic situations.

Another relevant finding concerns the limited utilization of institutional retention programs and strategies. While students were generally aware of programs such as Early Warning and Career Guidance, Academic Support, and Family Nucleus Strengthening, actual engagement was minimal. Even when

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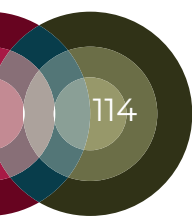Juan Carlos Giraldo Cardozo
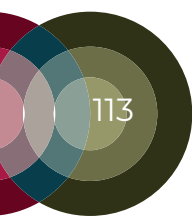
awareness was high, as in the Incentives and Services Program, participation was concentrated in financial aid strategies such as *Jóvenes en Acción* or subsidized meals. This indicates a preference regarding economic assistance above those that supported academic development and health integrity. This finding resonated with the findings of Murillo-Zabala and Jurado (2021), who found that Colombian students tend to engage more with programs offering direct economic benefits, while overlooking those focused on academic or psychosocial support.

The study reveals a critical gap between early detection and effective intervention. ADATAR identified at-risk students, but retention gaps persisted since detection was not matched with follow-up actions. This limitation aligns with Guerrero et al. (2021) and De Vasconcelos et al. (2023), who note that Early Warning Systems (EWS) are necessary but additional actions and follow-up are needed. For the English Language Teaching Program, the stakes are particularly high, since low persistence not only diminishes individual opportunities but also undermines national efforts aimed at strengthening bilingualism and teacher preparation. Addressing this challenge requires context-sensitive strategies that integrate financial, academic, and psychosocial interventions, while adopting differentiated strategies for student populations with elevated risk profiles.

Conclusions

This study fulfilled its purpose of examining the factors influencing persistence and retention among prospective English language teachers at the University of Córdoba and their engagement with institutional support programs. The findings confirmed that persistence is shaped by different factors: academic, socioeconomic, personal, and institutional, with financial vulnerability and academic difficulties as the most decisive ones. Age and gender also played a role, with older and male students showing higher risk of lower persistence. These results highlight the dynamic and multifactorial nature of persistence and underscore the need for comprehensive and differentiated interventions.

Beyond identifying these factors, this study makes two additional contributions. First, the use of longitudinal data monitoring over five semesters captures the dynamic nature of persistence and underscores the importance of complementing early detection with individualized improvement plans and systematic follow-up, rather than one-time assessments. Second, it underscores that institutional responses should be proactive, linking early identification of students at risk with individualized support plans, systematic follow-up, and collaboration with the Welfare Office to secure effective and lasting outcomes.

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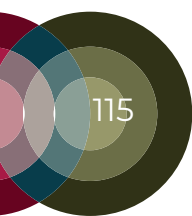Neuder Javier López Bedoya, Sonia Jerez Rodríguez, Juan Carlos Giraldo Cardozo

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Finally, the analysis of students' limited awareness and engagement with institutional support programs suggests the need to reassess communication strategies to ensure that students are well-informed about the available support mechanisms during their academic trajectory. By addressing this gap, the University can enhance its efforts, fostering a more inclusive and effective approach to student support. In this sense, the research bridges the gap between institutional strategies and student-level engagement, contributing evidence that persistence and retention in higher education are not determined by isolated factors but by cumulative and dynamic interactions that require holistic, context-sensitive responses.
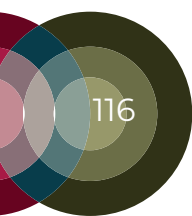
References

Aina, C., Baici, E., Casalone, G., & Pastore, F. (2022). The determinants of university dropout: A review of the socio-economic literature. *Socio-Economic Planning Sciences*, *79*, 101102. https://doi.org/10.1016/j.seps.2021.101102

Acevedo Calamet, F. (2020). Explanatory factors for dropout from higher education in unfavourable socio-academic contexts. Revista española de Pedagogía, 78(276), 253–270. https://doi.org/10.22550/REP78-2-2020-02

Álvarez Pérez (ULL-España), P. R., & López Aguilar (ULL- España), D. (2017). Estudios sobre deserción académica y medidas orientadoras de prevención en la Universidad de la Laguna (España). *PARADIGMA*, *38*(1), 48–71. https://doi.org/10.37618/PARADIGMA.1011-2251.2017.p48-71.id600

Babbie, E. (2010) The practice of social research. 12th Edition, Wadsworth, Belmont.

Bardach, L., Lüftenegger, M., Oczlon, S., Spiel, C. and Schober, B. (2020) 'Context-related problems and university students' dropout intentions — The buffering effect of personal best goals', European Journal of Psychology of Education, Vol. 35, No. 2, pp. 477–493. https://doi.org/10.1007/s10212-019-00433-9

Bañeres, D., Rodríguez-González, M. E., Guerrero-Roldán, A. E., & Cortadas, P. (2023). An early warning system to identify and intervene online dropout learners. *International Journal of Educational Technology in Higher Education*, *20*(1), 3. https://doi.org/10.1186/s41239-022-00371-5

Bowen, G.A. (2009), «Document Analysis as a Qualitative Research Method», *Qualitative Research Journal*, Vol. 9 No. 2, pp. 27-40. https://doi.org/10.3316/QRJ0902027

Casanova, J., Gomes, C., Bernardo, A., Núñez, J., & Almeida, L. (2021). Dimensionality and reliability of a screening instrument for students at-risk of dropping out from Higher Education. *Studies in Educational Evaluation*, 68,100957. https://doi.org/10.1016/j.stueduc.2020.100957

Canales, A., & De los Ríos, D. (2007). Factores explicativos de la deserción universitaria. *Calidad en la Educación*, (26), 173-201. https://doi.org/10.31619/caledu.n26.239

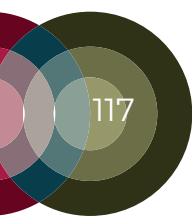Neuder Javier López Bedoya, Sonia Jerez Rodríguez,
Juan Carlos Giraldo Cardozo

Castaño, E., Gallón, S., Gómez, K., & Vásquez, J. (2004). Deserción estudiantil universitaria: una aplicación de modelos de duración. *Lecturas de economía*, (60), 39-65. https://doi.org/10.17533/udea.le.n60a2707

Castaño, E., Gallón, S., Gómez, K., & Vásquez, J. (2008). Análisis de los factores asociados a la deserción estudiantil en la Educación Superior: un estudio de caso. *Revista de educación*. (Madrid)., No. 345 (2008),255-280, DOI: 10.4438/1988-592X-0034-8082-RE

Castillo H.G., Ariza H.M., Pereira M.P. Case study: Analysis of dropout, repetition and academic risk by higher education students at the universidad distrital Francisco José de Caldas (2020) International Journal of Engineering Research and Technology, 13 (11), pp. 3943 - 3949, DOI: 10.37624/IJERT/13.11.2020.3943-3949 https://www.scopus.com/inward/record.uri?eid=2-s2.0-85097906246&partnerID=40&md5=d1f47e37affab43c05d77aae38934859

Castro-Lopez, A., Cervero, A., Galve-González, C., Puente, J. and Bernardo, A. B. (2022) 'Evaluating critical success factors in the permanence in Higher Education using multi-criteria decision making', Higher Education Research & Development, Vol. 41, No. 3, pp. 628–646. https://doi.org/10.1080/07294360.2021.1877631

Centro de Estudios Económicos —CEDE—, Universidad de Los Andes. (2014). Determinantes de la deserción. [Informe mensual sobre el soporte técnico y avance del contrato para garantizar la alimentación, consolidación, validación y uso de la información del spadies]. Bogotá: Universidad de los Andes. Recuperado de https://www.mineducacion.gov.co/sistemasdeinformacion/1735/ articles 254702_Informe_determinantes_desercion.pdf

Colpo, M. P., Primo, T. T., & de Aguiar, M. S. (2024). Lessons learned from the student dropout patterns on COVID-19 pandemic: An analysis supported by machine learning. British Journal of Educational Technology, 55(2), 560-585. https://doi.org/10.1111/bjet.13380

Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.). Boston, MA: Pearson.

Díaz-Mújica, A., Pérez Villalobos, M. V., Bernardo Gutiérrez, A. B., Cervero Fernández-Castañón, A. and González-Pienda García, J. A. (2019) 'Affective and cognitive variables involved in structural prediction of university dropout', Psicothema, Vol. 31, No. 4, pp. 429–436. https://doi.org/10.7334/psicothema2019.124

De Vasconcelos A.N., Freires L.A., Loureto G.D.L., Fortes G., da Costa J.C.A., Torres L.F.F., Bittencourt I.I., Cordeiro T.D., Isotani S.

Advancing school dropout early warning systems: the IAFREE relational model for identifying at-risk students (2023) Frontiers in Psychology, 14, art. no. 1189283, Cited 2 times. DOI: 10.3389/fpsyg.2023.1189283 https://www.scopus.com/inward/record.uri?eid=2-s2.0-85168120596&doi=10.3389%2ffpsyg.2023.1189283&partnerID=40&md 5=a5c35e-2f788e09030afefa3c1f143874

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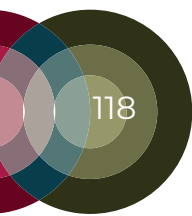Neuder Javier López Bedoya, Sonia Jerez Rodríguez,
Juan Carlos Giraldo Cardozo

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Dos Santos A., Corbari E., Borges L.F.P., Azevedo P.R. The dropout at the State University of Western Paraná: analysis through administrative records [Evasão na Universidade Estadual do Oeste do Paraná: análise através de registros administrativos] (2023) Educacao e Pesquisa, 49, art. no. e248553, Cited 0 times. DOI: 10.1590/S1678-4634202349248553 https://www.scopus.com/inward/record.uri?eid=2-s2.0-85161483039&doi=10.1590%2fS1678-4634202349248553&partnerID=40&md5=adf0c6c4f8fbcde3b31ad6764536f698

Espinosa-Castro, J.-F., Leydi, ▪, & Mariño-Castro, M. (2018). Estrategias para la permanencia. https://doi.org/10.5281/zenodo.4065045 http://bonga.unisimon.edu.co/bitstream/handle/123456789/2330/

Fourie, C. M. (2020) 'Risk factors associated with first-year students' intention to drop out from a university in South Africa', Journal of Further and Higher Education, Vol. 44, No. 2, pp. 201–215, https://doi.org/10.1080/0309877X.2018.1527023

Fraenkel, J., Wallen, N., & Hyun, H. (2012). *How to Design and Evaluate Research in Education 10th ed*. Mc-Graw-Hill Education.

Gallón, Santiago & Vasquez, Johanna & Castaño, Elkin. (2008). Análisis de los factores asociados a la deserción estudiantil en la Educación Superior: un estudio de caso. Revista de educación, ISSN 0034-8082, Nº 345, 2008 (Ejemplar dedicado a: De inmigrantes a minorías: temas y problemas de la multiculturalidad), pags. 255-280. DOI: 10.4438/1988-592X-0034-8082-RE.

Garbanzo Vargas, G. M. (2012). Factores asociados al rendimiento académico en estudiantes universitarios, una reflexión desde la calidad de la educación superior pública. *Revista Educación*, *31*(1), 43–63. https://doi.org/10.15517/revedu.v31i1.1252

Giraldo, C. J. C., Muñoz, V. C. I., Gil, H. R. J. (2020). *Learning analytics model to determine the validity of learning path planning*. International conference on Engineering, science and technology.

Guerrero-Roldán, A. E., Rodríguez-González, M. E., Bañeres, D., Elasri-Ejjaberi, A., & Cortadas, P. (2021). Experiences in the use of an adaptive intelligent system to enhance online learners' performance: a case study in Economics and Business courses. *International Journal of Educational Technology in Higher Education*. https://doi.org/10.1186/s41239-021-00271-0

Jeno, L. M., Danielsen, A. G. and Raaheim, A. (2018). 'A prospective investigation of students' academic achievement and dropout in higher education: A Self-Determination Theory approach', Educational Psychology, Vol. 38, No. 9, pp. 1163–1184. https://doi.org/10.1080/01443410.2018.1502412

Kocsis, Á., & Molnár, G. (2024). Factors influencing academic performance and dropout rates in higher education. Oxford Review of Education, 1–19. https://doi.org/10.1080/03054985.2024.2316616

Jay Lee, (2020). Statistics, Descriptive. International Encyclopedia of Human Geography (Second Edition), Elsevier, 2020, Pages 13-20, ISBN 9780081022962, https://doi.org/10.1016/B978-0-08-102295-5.10428-7.

Academic Persistence and Retention in Higher Education: Insights from an English Language Teacher Education Program in Colombia

Neuder Javier López Bedoya, Sonia Jerez Rodríguez,
Juan Carlos Giraldo Cardozo

Martín-Arbós S., Castarlenas E., Morales-Vives F., Dueñas J.-M. Students' thoughts about dropping out: Sociodemographic factors and the role of academic help-seeking (2024) Social Psychology of Education, DOI: 10.1007/s11218-024-09903-5 https://www.scopus.com/inward/record.uri?eid=2-s2.0-85186865118&doi=10.1007%2fs11218-024-09903-5&partnerID=40&md5=0cc90851ee-46f71bb212cad7954da31e

MEN. (2009). Deserción estudiantil en la educación superior colombiana. Metodología de seguimiento, diagnóstico y elementos para su prevención. Bogotá: Imprenta Nacional de Colombia.

Portillo Tarragona, M. P., Marín Vinuesa, L. M., & Scarpellini, S. (2017). *La edad y el rendimiento académico universitario [Age and Academic Performance of College Students]* (No. COMPON-2017-0002). DOI: 10.26754/CINAIC.2017.000001_002

Porto, A., & Di Gresia, L. (2004). Rendimiento de estudiantes universitarios y sus determinantes. Revista de Economía y Estadística, 42(1), 93–113. https://doi.org/10.55444/2451.7321.2004.v42.n1.3800

Respondek, L., Seufert, T., Stupnisky, R. and Nett, U. E. (2017). 'Perceived academic control and academic emotions predict undergraduate university student success: Examining effects on dropout intention and achievement', Frontiers in psychology, Vol. 8, 243. https://doi.org/10.3389/fpsyg.2017.00243

Rodríguez Núñez, L. H., & Londoño Londoño, F. J. (2011). Estudio sobre deserción estudiantil en los programas de Educación de la Católica del Norte Fundación Universitaria. *Revista Virtual Universidad Católica Del Norte*, *33*, 328–355. SSN 0124-5821 http://www.redalyc.org/articulo.oa?id=194218961018%0ACómo

Rodríguez, M. (2019). La investigación sobre deserción universitaria en Colombia 2006-2016. *Tendencias y resultados. Pedagogía y Saberes*, (51). 49–66. https://doi.org/10.17227/pys.num51-8664

Roopa, S., & Rani, M. S. (2012). Questionnaire designing for a survey. *Journal of Indian Orthodontic Society*, *46*(4_suppl1), 273-277. DOI:10.5005/jp-journals-10021-1104

Scheunemann, A., Schnettler, T., Bobe, J., Fries, S. and Grunschel, C. (2021). 'A longitudinal analysis of the reciprocal relationship between academic procrastination, study satisfaction, and dropout intentions in higher education', European Journal of Psychology of Education, Vol. 37, No. 4, pp. 1141–1164. https://doi.org/10.1007/s10212-021-00571-z

Sistema para la Prevención y Análisis de la Deserción en las Instituciones de Educación Superior -SPADIES. (2021). *Estadísticas de Deserción*. SPADIES. https://www.mineducacion.gov.co/sistemasdeinformacion/1735/w3-article-357549.html?_noredirect=1

Sosu, E. M., & Pheunpha, P. (2019, February). Trajectory of university dropout: Investigating the cumulative effect of academic vulnerability and proximity to family support. In *Frontiers in Education* (Vol. 4, p. 6). Frontiers Media SA. https://doi.org/10.3389/feduc.2019.00006

Tinto, V (1989). Definir la deserción: una cuestión de perspectiva. Revista de Educación Superior N° 71, *ANUIES*, México. http://publicaciones.anuies.mx/pdfs/revista/Revista71_S1A3ES.pdf

Truta, C., Parv, L., & Topala, I. (2018). Academic Engagement and Intention to Drop Out: Levers for Sustainability in Higher Education. *Sustainability*, *10*(12), 4637. https://doi.org/10.3390/su10124637

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from an English Language Teacher Education Program in Colombia

Neuder Javier López Bedoya, Sonia Jerez Rodríguez,
Juan Carlos Giraldo Cardozo

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Universidad de Córdoba. (2017). Acuerdo 207 el cual se adopta para la mitigación de la deserción académica

Véliz Palomino J. C., Ortega A. M. (2023). 'Dropout Intentions in Higher Education: Systematic Literature Review', Journal on Efficiency and Responsibility in Education and Science, vol. 16, no. 2, pp. 149-158. http://dx.doi.org/10.7160/eriesj.2023.160206

Vera Cala, L. M., Niño García, J. A., Porras Saldarriaga, A. M., Durán Sandoval, J. N., Delgado Chávez, P. A., Caballero Badillo, M. C., & Rueda Pablo, J. N. (2020). Salud mental y deserción en una población universitaria con bajo rendimiento académico. Revista Virtual Universidad Católica Del Norte, 60, 137–158. https://doi.org/10.35575/rvucn.n60a8

Villamizar Acevedo, G., & Romero Velásquez, L. C. (2011). Relación entre variables psicosociales y rendimiento académico en estudiantes de primer semestre de psicología. *Revista Educación Y Desarrollo Social*, *5*(1), 41–54. https://doi.org/10.18359/reds.891