Determinants of University Dropout and Educational Quality Improvement

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Abstract. University dropout is a multifaceted phenomenon that affects students, educational institutions, and society. This study systematically analyzes the factors contributing to this phenomenon and their connection to educational quality through a multidisciplinary approach that includes educational, psychological, and sociological theories. Through a systematic mapping of recent literature, the main internal and external factors influencing dropout, as well as the strategies implemented to mitigate it, were identified. The results highlight factors such as lack of belonging, low academic performance, and economic difficulties, and propose retention strategies based on institutional strengthening and comprehensive support. This work aims to provide practical and sustainable solutions to reduce university dropout rates and improve educational quality.

Keywords: Educational quality · university dropout · retention strategies · systematic mapping

1 Introduction

University dropout is a significant issue that negatively impacts students' academic trajectories, institutional performance, and the social and economic development of communities. This phenomenon, defined as the definitive or temporary interruption of higher education studies, has multifactorial causes, including academic, personal, socioeconomic, and institutional aspects. According to recent studies, approximately 30% of university students in Latin America abandon their studies during the first year of training [1].

The effects of dropout are not limited to the individual; they also impact on the reputation of educational institutions, tuition revenue, and the overall efficiency of the education system. Additionally, dropout perpetuates social inequalities, as students from disadvantaged socioeconomic backgrounds face greater barriers to completing their studies [2]. In Europe, [3] pointed out that factors such as migrant background and parental education also influence the sense of belonging, exacerbating challenges for these groups. In the case of France, [4] found that the combination of work and study, rather than being a support mechanism, can hinder academic success. On the other hand, research

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in Ireland and Scotland highlights that inclusive admission policies can significantly improve retention rates, promoting greater equity [5]. This study aims to identify and analyze the factors influencing university dropout and its relationship with educational quality through a systematic literature review and a critical analysis of effective student retention strategies. The findings are expected to support the design of evidence-based interventions to reduce dropout and improve educational quality in higher education institutions.

2 Theoretical Foundations

2.1 University Dropout

University dropout is defined as the abandonment of studies before completing an academic program, representing one of the major challenges in higher education [6]. This phenomenon results from multiple academic, personal, economic, and institutional factors and can be classified as early or late dropout. Among the main influencing factors are financial difficulties, low academic performance, lack of institutional support, and mental health issues, whose interaction can determine student retention [7].

Educational quality in the university context encompasses teaching performance, infrastructure, program relevance, and academic support. The competence and adaptability of teachers play a crucial role in learning quality, while student satisfaction and the effectiveness of retention programs are key indicators of educational quality [8]. In Ecuador, educational quality has been a priority in educational policies, although scientific production on this topic has significantly declined (-85.71%) in the Web of Science. Recent research has focused on management strategies, educational assessment, and curricular adaptation, highlighting the need to strengthen studies aimed at improving the country's educational system [9].

2.2 Educational Quality Models

Tinto's Integration Model [6] is one of the most recognized approaches in the study of university dropout. This model suggests that students leave university due to a lack of both academic and social integration. Academic integration includes performance and satisfaction with study programs, while social integration relates to student life and the ability to form relationships within the university. Students who fail to integrate in these aspects are more likely to drop out. On the other hand, the Higher Education Quality Model [10] defines educational quality through five dimensions: exceptionality, consistency, fitness for purpose, transformation, and added value. This model emphasizes that educational quality is not limited to academic performance but also includes the institution's ability to transform students by providing support services, adapting to their needs, and continuously improving educational processes.

2.3 Relationship Between Factors and University Dropout

Economic factors are one of the main determinants of university dropout, as low-income students face difficulties in covering education costs. This often forces them to work

while studying, negatively impacting their academic performance and increasing the likelihood of dropping out [4]. [11] highlight that financial difficulties account for a significant proportion of dropout cases, particularly in the early years of university education.

Academic performance also influences dropout rates. Students who struggle to meet academic demands or lack adequate support often become demotivated and leave their studies [7]. However, access to tutoring and mentoring programs can significantly reduce this risk by providing students with the tools needed to overcome academic challenges.

Mental health has become a crucial factor in university dropouts. Stress, anxiety, and depression increase the likelihood of students abandoning their studies, especially if they lack psychological support networks [3]. Institutions that offer student wellness programs can significantly improve retention by creating a supportive and caring environment. Institutional support and retention policies play a key role in student retention. Strategies such as personalized tutoring, academic advising, and career counseling have proven effective in keeping students enrolled [12].However, a lack of coordination and resources in some universities limits the impact of these strategies, highlighting the need for reevaluation of retention policies to better address student needs.

A lack of financial, academic, and psychological support negatively affects students' perception of educational quality. Universities that fail to address these issues are often seen as lower quality, further reinforcing dropout rates. Conversely, institutions that implement comprehensive retention and student support strategies not only improve student retention rates but also enhance student satisfaction and academic commitment.

2.4 Factors Influencing University Student Dropout

Table 1 presents a structured classification of the primary factors associated with university dropout, organized into six comprehensive categories: socioeconomic, academic, personal, institutional, technological, and social. These categories emerged from a synthesis of the most recurrent themes identified in the reviewed literature, reflecting the multifactorial and systemic nature of student attrition in higher education. Each category encompasses specific variables that have shown significant influence on dropout decisions across diverse contexts. The factors are not only interconnected but also often cumulative, meaning that students affected by multiple vulnerabilities are at even greater risk of abandoning their studies. For each factor, a concise description is provided to clarify its impact, alongside bibliographic references that substantiate its inclusion. This classification aims to provide a holistic overview of the complexity surrounding the university dropout and serves as a foundation for designing targeted retention strategies and institutional policies.

3 Methods

This study was conducted using a systematic mapping review of scientific literature, applying the PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to ensure transparency and reproducibility in the search, selection, and analysis of sources. The review aimed to identify the main determinants

Table 1. Factors Influencing University Dropout

Category	Factor	Description	**References**
Socioeconomic	Financial difficulties	Economic difficulties affect academic performance and can lead to dropout	[2, 4, 7, 11, 13–15]
	Need to work	Many students must work while studying, affecting their performance	[2, 4, 5, 16–19]
	Lack of scholarships or financial support	The lack of scholarships and financial support limits student retention	[1, 2, 4, 5, 16–18]
	Family socioeconomic inequality	Students from low-income families have less access to educational resources	[3, 20]
Academic	Low academic performance	Students with low academic performance tend to become demotivated and drop out	[2, 7, 11, 14, 16, 21–24]
	Dissatisfaction with the study program	Lack of interest in the study program can lead to dropout	[7, 16, 17, 21, 22]
	Lack of tutoring	The absence of tutoring and academic support affects student retention	[5, 11, 14]
	Wrong vocational choice	The lack of adequate vocational guidance leads to early dropout	[4, 13, 16, 25]

(*continued*)

of university dropout, and the strategies implemented to improve educational quality, based on empirical and theoretical academic research. Searches were performed in three

Table 1. (*continued*)

Category	Factor	Description	**References**
	Excessive academic workload	An excessive academic workload can cause stress and dropout	[4, 7, 13, 16, 24–26]
Personal	Mental health problems (stress, anxiety, depression)	Stress, anxiety, and depression increase the likelihood of dropout	[1, 3, 16, 19, 24, 26, 27]
	Lack of motivation	Lack of interest and motivation contributes to university dropout	[16–18, 22, 28, 29]
	Low self-efficacy	Students with low confidence in their abilities tend to drop out	[16–18, 30]
Institutional	Lack of institutional support	The lack of tutoring, academic guidance, and counseling increases dropout rates	[5, 7, 11, 16, 31, 32]
	Deficient admission policies	Inadequate admission policies can lead to early dropout	[5, 23]
	Dissatisfaction with the university	A negative perception of the university influences the decision to drop out	[2, 16, 22, 33, 34]
	Inadequate infrastructure	Poor infrastructure affects educational quality and student retention	[2, 23, 31]
Technological	Difficulties with virtual education	Difficulties in virtual education can increase dropout rates	[19, 22, 25, 27, 33, 35, 36]

(*continued*)

major academic databases: Scopus, ERIC, and ProQuest, focusing on studies published between 2021 and 2024.

Table 1. (*continued*)

Category	Factor	Description	**References**
	Lack of access to adequate technology	Lack of access to technology affects learning and student retention	[7, 14, 19, 22, 27]
Social	Social isolation	Social isolation increases the risk of dropout	[3, 14, 16, 37]
	Lack of integration into the university community	Lack of academic and social integration increases dropout rates	[3, 7, 15, 23, 30]
	Mismatch between university life and personal life	The imbalance between university and personal life leads to dropout	[26, 38]

Source: Own elaboration.

3.1 Materials

The selected material consisted of peer-reviewed articles published in English or Spanish from 2021 to 2024, addressing factors related to university dropout, retention, and educational quality. Articles were managed with Mendeley for reference organization and processed using Microsoft Excel for thematic categorization.

The inclusion criteria for this review required articles to be focused on university-level dropout, student retention, or academic quality; they had to be peer-reviewed, published between 2021 and 2024, written in either English or Spanish, and available in full-text format. Studies were excluded if they constituted gray literature—such as these, reports, or editorials—or if they did not pertain to higher education, were duplicate records, or were inaccessible at the time of review.

There was no direct human intervention. However, the reviewed studies included diverse samples such as undergraduate students, faculty members, and academic authorities from various countries and regions, including Latin America, Europe, and Asia. All selected studies adhered to their own ethical protocols regarding participant protection.

3.2 Search and Analysis Procedures

The methodology employed in this study involved a rigorous, multi-stage process designed to ensure a comprehensive and transparent examination of the available literature on university dropout and educational quality improvement. This process followed the PRISMA 2020 guidelines and was divided into three main phases: data collection, thematic analysis, and evidence synthesis. Data Collection the initial phase consisted

of a systematic search of academic literature using three high-impact databases: Scopus, ERIC, and ProQuest. The search strategy was developed based on a combination of relevant keywords, including "university dropout," "student retention," "educational quality," and "higher education." Boolean operators (AND, OR) were used to refine results, and filters were applied to restrict the time range to publications from 2021 to 2024, and to peer-reviewed articles written in English or Spanish.

The selection process followed the four standard PRISMA phases: identification, screening, eligibility, and inclusion. A total of 493 records were initially identified across the databases. After removing duplicates, 430 unique titles and abstracts were screened for relevance. Of these, 65 full-text articles were reviewed in detail, and 12 studies met all eligibility criteria and were selected for the final synthesis.

Each article was analyzed in detail and coded according to these dimensions, allowing for the identification of cross-cutting themes, points of convergence, and divergences across cultural and geographic contexts. Patterns such as the prevalence of financial stress in Latin America, or the impact of social belonging in European universities, were systematically compared to understanding both global and regional challenges. Each study was categorized using a predefined codebook that included thematic tags (e.g., "financial strain," "academic integration," "self-efficacy," "institutional policy") and methodological dimensions (qualitative, quantitative, mixed). Additionally, effectiveness ratings were assigned based on the clarity of the intervention described, the presence of measurable outcomes, and statistical significance when reported.

This approach allowed for cross-contextual comparison while maintaining analytical consistency. In the final phase, the extracted data were synthesized through a narrative and comparative approach, combining qualitative insights and quantitative indicators where available. Studies were assessed in terms of the dropout-related variables they addressed, the methodology used (qualitative, quantitative, or mixed), and the effectiveness of the interventions proposed. Particular attention was paid to studies that included: Longitudinal tracking of student performance and persistence, evaluation of institutional programs aimed at increasing retention and predictive modeling using machine learning or survival analysis techniques.

This comparative summary supports methodological transparency and highlights the diversity of contexts and approaches present in the current literature. Figure 1 presents the PRISMA 2020 flow diagram illustrating this selection process, ensuring transparency and traceability in the methodology.

To contextualize the findings, impact indicators such as reported dropout rates, institutional satisfaction, or policy outcomes were used. For example, study [11] demonstrated that perceived institutional support had a statistically significant effect on the intention to remain enrolled, highlighting the importance of non-academic variables in student persistence. A comprehensive overview of the studies included in the review, detailing authorship, methodology, country, and thematic focus, is presented in Table 2.

3.3 Limitations of the Method

While this systematic review provides a comprehensive overview of the determinants of university dropout and educational quality, it is not without limitations. First, the

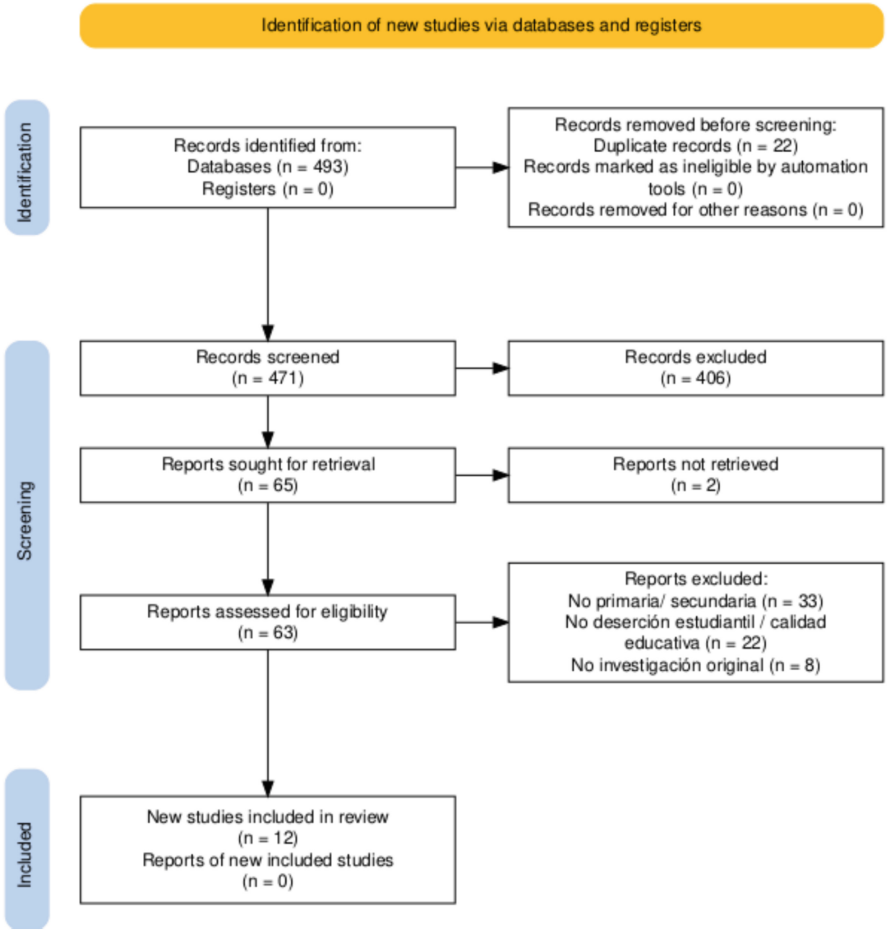

Fig. 1. Prisma Flow Diagram

heterogeneity of the studies included—in terms of methodology, geographical scope, and target populations—limits direct comparability and generalizability of the findings.

Second, most of the included studies are cross-sectional, which restricts the ability to identify long-term trends or causal relationships between the variables examined. The lack of longitudinal or experimental designs is a limitation frequently noted in literature itself.

Third, although a robust search strategy was implemented using high-quality academic databases, some relevant studies may have been excluded due to language restrictions, limited access to full texts, or publication outside the 2021–2024-time frame. Finally, due to the diversity in research designs and variables, no statistical meta-analysis was conducted. As a result, the synthesis was primarily qualitative, which,

Table 2. Summary of Selected Studies.

Ref.	Authors	Year	Country	Type & Design	Objective	Limitations	Results
[11]	Barrientos-Illanes et al.	2021	Chile	Quant., Path analysis	Autonomy & self-efficacy	Single private university	Satisfaction mediates
[4]	Béduwé & Giret	2021	France	Quant., Regression	Student employment impact	French context only	Work during exams raises failure risk
[3]	Janke et al.	2024	Germany	Quant., Survey	Migration and social ostracism	Cross-sectional design	Minorities show lower belonging
[40]	Llauró et al.	2023	Spain	Quant., Statistical analysis	Dropout-related variables	No personal/family data	Perf. And satisfaction affect dropout
[25]	Vega-Martínez et al.	2023	Spain	Quant., Exploratory	Learning patterns and stress	Single institution	Patterns link to stress and performance
[2]	Valencia-Arias et al.	2023	Colombia	Quant., Predictive model	Dropout prediction model	Not generalizable globally	Identifies key dropout factors
[18]	Morelli et al.	2023	Italy	Quant., Moderation analysis	Self-efficacy and friendships	Italian-only sample	Friendships affect dropout intention
[41]	Galve-González et al.	2024	Spain	Quant., Longitudinal	Transitions and uncertainty	Early years focus only	Career doubts lead to dropout
[5]	Iannelli et al.	2024	Ireland & Scotland	Quant., Comparative	Admission policy effects	Two-country scope	Inclusive policies boost retention
[39]	Cobo-Rendón et al.	2023	Chile	Quant., Cross-sectional	Academic emotions	No longitudinal data	Positive emotions reduce dropout
[31]	Bernardo et al.	2022	Switzerland	Quant., Path model	Satisfaction and engagement	Regional sample	Both reduce dropout
[1]	Reyes-González & Meneses-Báez	2024	Colombia	Qual., Systematic review	Psychosocial adjustment	Possible study omissions	Support and motivation aid retention

Source: Own elaboration.

while rich in contextual interpretation, may reduce statistical precision. These limitations should be considered when interpreting the results and their implications for institutional decision-making and policy development.

4 Discussion and Interpretation of Results

4.1 Main Patterns and Cross-Contextual Findings

This study has analyzed the key factors influencing university dropout and its relationship with educational quality, contributing to the understanding of a complex and multifaceted phenomenon. The obtained results confirm and expand upon previous research findings, highlighting common patterns and discrepancies across different contexts. Findings indicate that factors such as lack of belonging, economic difficulties, and dissatisfaction with the study program are key elements that increase the risk of dropout. Additionally, self-regulation strategies and institutional support emerge as protective variables that promote student retention. These results align with the conclusions of [1], who emphasized that learning self-regulation and institutional commitment are essential for improving student persistence.

[11] demonstrated that perceived autonomy support, self-efficacy, and academic satisfaction are crucial factors in students' intention to persist. These findings coincide with the results of this study, which underscores the importance of educational environments that foster satisfaction and intrinsic motivation as key measures to reduce dropout rates.

Similarly, the findings of [28]in Italy reinforce this relationship, showing that students with high self-efficacy exhibit lower dropout intentions, highlighting the value of academic empowerment.

[4] argued that intensive work during studies hinders academic success, increasing dropout rates and extending graduation times in France. This finding is also reflected in the analysis by [37], who studied cases in South Africa, observing that economic and work-related pressures disproportionately affect students from disadvantaged backgrounds, limiting their ability to meet academic demands.

[31] identified that academic commitment, and the use of self-regulated learning strategies are key predictors of dropout intention. This resonates with the findings of [39], who analyzed the impact of a peer mentoring program and found that such approaches significantly reduce dropout rates by fostering social and academic engagement in the early years of university.

[40] emphasized that positive emotions such as hope, and enjoyment facilitate adaptation to the university environment and reduce dropout intention. This result is consistent with the study by [17], who analyzed how the pandemic affected students' mental health and concluded that negative emotions, such as stress, exacerbate dropout risks among students with prior vulnerabilities.

[5] in Ireland and Scotland highlighted that inclusive admission systems improve retention and reduce social inequalities. Similarly, [24] observed that, in Chile, equitable access and institutional support are critical to ensuring educational continuity, especially for students from rural regions.

[29] addressed course transitions and how uncertainty during the early years affects student retention. This complemented the findings of [16], who demonstrated that appropriate workload distribution per course in STEM programs improves academic outcomes and reduces dropout rates. This study presents some important limitations. The systematic review methodology may exclude relevant studies not included in the selected

databases. Additionally, the absence of longitudinal analysis limits the ability to observe how risk and protective factors evolve over time.

Given these considerations, future research should conduct longitudinal studies to examine the temporal dynamics of dropout factors, as well as experimental investigations to evaluate the effectiveness of specific interventions. Moreover, it would be valuable to explore how cultural and contextual differences impact the effectiveness of retention strategies.

The results highlight that:

1. Internal factors, such as low academic performance, lack of self-regulation, and mental health difficulties, are directly related to university dropout [31]. These factors affect students' ability to meet academic demands and adapt to the university environment.
2. External factors, such as economic difficulties and limited institutional support, worsen dropout rates, especially among students from disadvantaged socioeconomic backgrounds [2]. [25] found that surface learning patterns are linked to higher academic stress and lower performance.
3. The most effective retention strategies include mentoring programs, financial support, and the creation of inclusive environments that foster a sense of belonging [40]. In a related study, [29] highlighted that academic engagement mediates the relationship between self-regulation strategies and students' intention to persist.
4. Dropout prediction models based on data analysis have proven to be valuable tools for identifying students at risk and developing personalized interventions. In countries like Spain and Colombia, these models have enabled better management of institutional resources [5].
5. The perception of social and academic support also plays a crucial role in student retention [18]. Found that students with broader support networks exhibit lower dropout intention rates, even in contexts of low self-efficacy.
6. The interaction between institutional policies and student profiles is key to designing effective interventions. For example, inclusive admission policies in Scotland have significantly reduced dropout gaps among students from different socioeconomic backgrounds [5].
7. Finally, emotional factors such as anxiety and intrinsic motivation are related to academic performance and students' intention to continue their studies, as evidenced [40]. These variables highlight the need for a comprehensive approach that considers both academic and emotional aspects in retention strategies.

4.2 Evidence-Based Strategies for Student Retention

The analysis of the selected studies reveals a wide range of strategies aimed at improving student retention and mitigating university dropouts. These strategies vary not only in their focus—academic, psychosocial, institutional, and economic—but also in their contextual effectiveness depending on region, discipline, and student demographics.

Academic strategies are among the most common and effective interventions. These include learning skills workshops, tutoring programs, and the implementation of adaptive curricula. Several studies [18] emphasize the importance of self-regulated learning,

academic self-efficacy, and performance monitoring systems. In STEM fields, restructuring course loads to balance academic demand has shown positive effects on reducing stress and dropout intentions [1]. Moreover, early warning systems based on performance indicators, such as grades or attendance, have been successfully deployed to identify at-risk students and provide targeted academic support [29, 31].

Psychosocial Strategies are interventions that address the emotional, motivational, and relational dimensions of the student experience. Peer mentoring, counseling services, and initiatives that strengthen the sense of belonging are fundamental components in this area. Studies such as [31] show that students who feel emotionally supported and connected to their peers are significantly more likely to persist in their studies. This is especially important for minority and first-generation college students [3], who often report feelings of isolation. The promotion of mental health awareness, combined with access to professional psychological support, is also crucial, especially considering the rising prevalence of anxiety and depression among university students [15].

Institutional strategies that promote student engagement, community building, and meaningful interactions with faculty have a proven impact on retention. These include structured onboarding programs, co-curricular learning communities, and student-centered pedagogical models. In contexts like Ireland and Scotland, as shown by [31] inclusive admissions policies that consider non-academic factors have improved retention among disadvantaged groups. In Latin America, holistic retention programs that combine tutoring, financial support, and academic advising—such as those analyzed by [2] demonstrate the value of integrated institutional responses.

Economic Support Strategies are consistently identified as critical contributors to student attrition, particularly in developing countries. Strategies such as merit-based scholarships, need-based grants, and flexible part-time study options are essential for supporting economically vulnerable students. Several studies [15] highlight that students who receive sustained financial support show higher persistence rates. However, the mere existence of aid is not sufficient; its continuity and alignment with students' real costs of living and studying are essential.

It is important to note that the effectiveness of retention strategies is highly context dependent. For example, while early alert systems are widely effective in technologically advanced environments, in rural or resource-limited settings, the focus should shift toward personalized academic support and socio-economic assistance. Cultural attitudes toward failure, help-seeking, and university identity also influence how interventions are received. Therefore, a one-size-fits-all model is not feasible. Instead, universities should adopt evidence-based, yet adaptable retention frameworks tailored to the specific needs and vulnerabilities of their student populations.

Effective student retention is not the result of isolated interventions, but rather the outcome of coherent, multidimensional strategies embedded in institutional culture. The literature affirms that when academic, emotional, economic, and structural supports align, the likelihood of persistence increases significantly, especially for students at the greatest risk of dropout.

4.3 Implications for Institutional and Policy Development

The evidence gathered in this review has substantial implications for the design and implementation of institutional practices and higher education policies aimed at improving student retention and educational quality. While much research focuses on individual-level predictors of dropout, a key contribution of this synthesis is its emphasis on the need for systemic and structural responses that transcend individual responsibility. First, universities must move from reactive to preventive approaches. This implies developing early warning systems that use real-time data to identify students at risk of dropout before academic failure becomes irreversible. Institutions should also implement comprehensive onboarding and mentoring programs for first-year students, which are especially beneficial for vulnerable populations, such as first-generation students or those with limited social support networks.

Second, curricular flexibility and relevance are critical. Academic policies that allow students to explore different disciplines before formal specialization, or to personalize their learning paths based on interests and aptitudes, have been associated with lower dropout rates in systems such as those in Ireland, the Netherlands, and Canada. This is particularly important for students who experience vocational dissonance, those who feel misaligned with their chosen field of study, one of the most frequently cited predictors of dropout in the reviewed literature.

From a governance perspective, institutions must recognize that student wellbeing and mental health are not peripheral issues but central pillars of academic success. Investment in counseling services, peer support structures, and mental health literacy campaigns should be institutional priorities. Furthermore, policies must ensure that psychological support is accessible, non-stigmatizing, and proactive, rather than merely reactive to crises.

Third, policy makers at the national and regional levels should address the structural inequalities that exacerbate dropout risk. This includes guaranteeing financial aid continuity throughout the entire academic journey—not just at the point of entry—and aligning support with actual living and study costs. In countries where economic hardship is a dominant cause of attrition, such as in Latin America and parts of Eastern Europe, targeted need-based grants and work-study programs can serve as effective buffers.

At the intersection of institutional autonomy and state oversight, policy frameworks must incentivize retention as a quality indicator. This includes accountability mechanisms that go beyond completion rates to assess student satisfaction, engagement, and development. National quality assurance systems can integrate retention-based indicators into funding formulas or accreditation processes, thus aligning incentives with student-centered outcomes.

At the policy level, governments should integrate student retention as a core indicator of educational quality. National accreditation systems can incorporate dropout rates, student satisfaction, and psychological wellbeing as evaluative metrics. Furthermore, funding formulas could be aligned with student-centered outcomes to incentivize institutions to invest in early detection systems and holistic support structures. Collaborative networks among universities, especially in Latin America and underserved regions, should be encouraged to facilitate the sharing of effective retention practices.

These initiatives would contribute to reducing educational inequalities and promoting sustainable academic success across diverse populations.

4.4 Limitations and Future Research

While this review offers a comprehensive synthesis of the factors influencing university dropouts and the strategies used to promote student retention, several limitations must be acknowledged. These constraints also provide fertile ground for future research that can extend and deepen the understanding of this critical issue in higher education.

One notable limitation is the heterogeneity of the selected studies. The research included span of diverse countries, academic disciplines, and methodological approaches. While this enriches the comparative perspective, it also complicates direct comparability and weakens the ability to generalize findings universally. Additionally, many of the studies relied on self-reported data, which can be subject to bias and limitations in accuracy.

A second limitation is the prevalence of cross-sectional designs among the reviewed articles. Although useful for identifying correlations, such studies lack the longitudinal perspective required to assess how dropout risk and protective factors evolve over time. Consequently, the causal pathways between variables—such as academic stress, institutional support, or financial strain—and student attrition remain insufficiently understood.

Third, due to the diversity in study objectives and outcomes, a meta-analytical synthesis was not feasible. While this review provides a rich thematic overview, future work should aim to quantify effect sizes and statistical relationships across comparable contexts through meta-analysis or longitudinal modeling.

Additionally, the geographic distribution of the literature reveals a concentration of research in Europe and Latin America, with fewer studies emerging from African or Southeast Asian contexts. Given the cultural and systemic differences in those regions, there is a clear need for more inclusive, globally representative research.

Future investigations should also explore institutional and cultural mediators of dropout and retention. For example, how organizational climate, pedagogical models, or faculty engagement influence student persistence remains underexplored. Moreover, qualitative research can provide deeper insight into student narratives and lived experiences, particularly for marginalized or underrepresented populations.

Finally, as educational systems increasingly adopt digital and hybrid learning environments, future research must address how online modality, digital infrastructure, and remote student engagement affect retention. This includes evaluating how interventions that are effective in face-to-face settings translate (or fail to translate) into virtual contexts. By addressing these limitations and building on the foundations laid by existing literature, future research can inform more nuanced, context-sensitive, and effective strategies to support student success and reduce attrition in higher education.

Future research should focus on the development of longitudinal studies that trace students' trajectories from enrollment to graduation, to capture causal relationships between dropout determinants and protective factors. Mixed-method designs combining quantitative indicators with in-depth qualitative interviews can provide richer insights, especially into vulnerable populations. Additionally, exploring how interventions operate across

cultural contexts—such as indigenous communities, remote rural areas, and online universities—remains an urgent research gap. Lastly, the integration of AI-driven predictive models should be investigated not only for early alerts, but also for adaptive resource allocation and personalized academic guidance.

5 Conclusions

University dropout is a complex challenge that negatively impacts both students and higher education institutions. This study has addressed the key factors influencing this phenomenon, analyzing their relationship with educational quality.

The research objective, which was to identify and analyze the key factors determining university dropout and their connection to educational quality, has been successfully met. This was achieved through a systematic review of recent literature and a critical analysis of the strategies implemented to address this issue.

The theoretical framework has been relevant and appropriate, integrating educational, psychological, sociological, and management theories. This multidisciplinary approach has allowed for a comprehensive understanding of the problem from various perspectives, providing a solid foundation for the conclusions.

The systematic literature review, based on qualitative and quantitative approaches, enabled the identification of key variables associated with dropout and the evaluation of the effectiveness of retention strategies. Limitations such as the heterogeneity of the included studies do not compromise the overall validity of the findings.

The results reveal that internal factors such as motivation, self-efficacy, and learning regulation, along with external factors such as socioeconomic background, lack of institutional support, and admission policies, are key determinants of university dropout. Academic support programs, financial aid, and the promotion of inclusive environments have proven effective in reducing dropout rates and improving educational quality.

Among the study's limitations, the lack of longitudinal analysis prevents the establishment of more robust causal relationships. Future research should explore in greater depth the impact of specific interventions and their adaptability to different educational and cultural contexts. Additionally, it would be valuable to develop predictive models to identify students at risk of dropout at an early stage.

This study contributes to academic discourse by offering a multidimensional framework that links university dropout to educational quality. It advocates for evidence-based interventions that address both structural and emotional determinants of student attrition. By implementing comprehensive retention strategies that are grounded in research and sensitive to local realities, higher education institutions can fulfill their role as agents of personal and social transformation.

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