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Educational management and its impact on school dropout at a school in Quito

Gestión educativa y su incidencia en la deserción escolar en una unidad educativa de Quito

Fernanda Isabel Haro-Ramos
fiharor@ube.edu.ec
Universidad Bolivariana del Ecuador. Durán, Guayas, Ecuador
https://orcid.org/0009-0007-9357-1142

Jonathan Andrés Valencia-Borja
javalenciab@ube.edu.ec
Universidad Bolivariana del Ecuador. Durán, Guayas, Ecuador
https://orcid.org/0009-0001-4699-8473

Guillermo Ricardo Grunauer-Robalino
rgrunauer@ube.edu.ec
Universidad Bolivariana del Ecuador. Durán, Guayas, Ecuador
https://orcid.org/0000-0002-7662-8270

Esther Lucrecia Carlín-Chávez
elcarlinc@ube.edu.ec
Universidad Bolivariana del Ecuador. Durán, Guayas, Ecuador
https://orcid.org/0000-0002-5262-1533

ABSTRACT

School dropout at the secondary level is not limited to the student, since it reaches the institutional practices of leadership and support. The study set out, as its central objective, to analyze educational management and its impact on mitigating school dropout at the Unidad Educativa 11 de Marzo in Quito. A quantitative, non-experimental, descriptive, cross-sectional approach was used, with 102 parents (census population) who answered a 14-item questionnaire with a five-level frequency scale. The “always” option ranged from 12.7% to 34.3%; resource allocation for vulnerable students was the least consistent practice (87.3% do not perceive it as permanent). Emotional factors (54.9%), economic factors (52.9%), and repeated absences (51.0%) were the frequent influences. It is concluded that management is intermittent, so an early-warning strategy, monitoring, and teacher training are required.

Descriptors: educational administration; dropping out; leadership; educational environment; secondary education. (UNESCO Thesaurus).

RESUMEN

La deserción escolar en el nivel medio no se limita al estudiante, pues alcanza las prácticas institucionales de liderazgo y acompañamiento. El estudio se planteó como objetivo central analizar la gestión educativa y su incidencia en la mitigación de la deserción escolar en la Unidad Educativa 11 de Marzo de Quito. Se empleó un enfoque cuantitativo, no experimental, descriptivo y transversal, con 102 padres de familia (población censal) que respondieron un cuestionario de 14 ítems con escala de frecuencia de cinco niveles. La opción siempre osciló entre 12,7 % y 34,3 %; la asignación de recursos a estudiantes vulnerables fue la práctica menos constante (87,3 % no la percibe permanente). Los factores emocionales (54,9 %), económicos (52,9 %) y las ausencias reiteradas (51,0 %) fueron las influencias frecuentes. Se concluye que la gestión es intermitente, por lo que se requiere una estrategia de alerta temprana, seguimiento y formación docente.

Descriptores: administración de la educación; abandono escolar; liderazgo; ambiente educacional; enseñanza secundaria. (Tesauro UNESCO).

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Research Articles

INTRODUCTION

Keeping adolescents in upper secondary school has become one of the most sensitive indicators of the quality of an education system, given that every student who leaves before completing this level carries with them reduced employment, civic and educational opportunities. In Latin America, Román (2013) examined dropout in seven countries of the region and found that school failure falls mainly on the poorest social groups, but that much of it takes shape within the school itself, in its practices, judgements and processes, affecting most strongly those who feel excluded or lose confidence in their ability to learn. This reading shifts the focus from the student to the institution, so that the question of dropout also becomes a question of management.

Recent research, however, has not always followed this shift, as Paitán-Ávila and Figueroa-Ángel (2025) show in a scoping review that selected 58 of 147 articles published between 2019 and 2024; Latin American countries lead the research on dropout, yet most studies concentrate on academic and individual factors, paying less attention to prevention and intervention strategies and very little to the role of the family. Chiarino et al. (2024) broaden this picture by reviewing 217 studies on dropout and retention in the region, organising the evidence into 67 variables across four ecological levels, namely the student, the institution, the education system and the macro-social context, with the individual level and quantitative approaches predominating. Although their review concerns higher education, the authors agree with Paitán-Ávila and Figueroa-Ángel that knowledge of institutional responses remains thinner than what has been accumulated on student characteristics.

With regard to management, Liebowitz and Porter (2019) reviewed 51 empirical studies on the behaviours of school principals and found associations with student achievement (between 0.08 and 0.16 standard deviations), teacher well-being (between 0.34 and 0.38), instructional practices (0.35) and, most markedly,

the organisational health of the school (between 0.72 and 0.81), while noting that almost all of this evidence is observational. This indicates that leadership does not act on the student directly but through the climate, the teachers and the organisation, which means that its effect on retention depends on these mediating channels working consistently. Along complementary lines, Berkovich (2025) surveyed 302 Israeli school leaders and found that about half are already at the early majority stage in the adoption of generative artificial intelligence, with instructional leadership as the area where its use is growing fastest, which poses an intrinsic challenge for institutions that still manage student information by hand.

Dropout, for its part, is rarely a sudden event, and Dupéré et al. (2015) agree on this point when they understand it as the outcome of a stress process accumulated over the life course, in which certain events act as turning points that precipitate leaving, while Samuel and Burger (2020) showed that negative life events raise both the intention to drop out and actual dropout, and that self-efficacy and social support operate as protective factors. Gubbels et al. (2019) reached a convergent conclusion from their meta-analysis of the risk factors for absenteeism and dropout, and Rodríguez-Manteca and Rodríguez-Bravo (2024), after reviewing 26 studies under the PRISMA statement, insist on the need for a holistic view of school failure and early leaving. Both works agree that the school has room for action in the phase before the break occurs, which is precisely where management can intervene.

Efforts have been made to use this room for action through early warning systems, such as the one tested by Psyridou et al. (2024), who followed a Finnish cohort for 13 years from kindergarten to Grade 9 and predicted upper secondary dropout with an area under the curve of 0.61 using data up to Grade 6 and 0.65 with data up to Grade 9, values the authors themselves consider insufficient without further causal analyses. In Brazil, Vasconcelos et al. (2023) developed the IAFREE relational model with 15,924 middle and high school students,

identifying five relational dimensions that group 12 risk factors, with the aim of covering what systems based on administrative data detect too late. This invites reflection on the quality of the information the school produces, because a warning system is only as useful as the regularity with which its data are recorded and read.

Another aspect that needs to be examined is the relational environment in which retention is decided. Wang and Degol (2016) organise school climate into four domains, academic, community, safety and institutional environment, and document its relationship with student outcomes; Quin (2017) adds to this by noting that teacher-student relationships are longitudinally associated with school engagement, and Smith et al. (2020) found in their meta-analysis that family-school partnership interventions improve academic and social-emotional functioning. On the economic side, García and Saavedra (2017) meta-analysed conditional cash transfer programmes in developing countries and reported favourable effects on enrolment and attendance, while Ishida and Sekiyama (2024), drawing on 84 studies published between 2017 and 2023, group the determinants of learning motivation into six interconnected factors ranging from psychological values to institutional interventions.

But how do families read the management the school deploys against dropout? Most of the studies cited favour the voices of students, teachers or school leaders, so that the perception of parents, who know at first hand the economic, emotional and attendance-related reasons that precede leaving, has received less attention, as Paitán-Ávila and Figueroa-Ángel (2025) point out. González-Barea et al. (2026) complement this observation by reviewing 28 studies on early leaving with a territorial perspective, selected from 1,316 records, and finding that students make up the majority of the samples, whereas families appear only in qualitative studies. At the "11 de Marzo" school in Quito, this perspective is particularly necessary to guide management decisions. In light of the above, the

central objective of the research is to analyse educational management and its impact on mitigating school dropout at the "11 de Marzo" school in Quito.

METHOD

The methodology is quantitative, with a non-experimental, descriptive and cross-sectional design, in line with Hernández-Sampieri and Mendoza (2018), since the variables were observed as they occur in the institution, without deliberate manipulation and at a single point in the 2026 school year. The population consisted of the 102 parents and legal guardians of the "11 de Marzo" school, all of whom were surveyed, making this a census study that did not require sampling procedures.

The instrument was a structured questionnaire of 14 items, seven on educational management (leadership, formal prevention strategies, communication, resource allocation, school climate, monitoring of indicators and teacher training) and seven on school dropout (identification of at-risk cases, economic conditions, motivation, absences, follow-up, community awareness and emotional factors). Each item was answered on a five-level ordinal frequency scale, always (A), almost always (AA), sometimes (S), almost never (AN) and never (N), which made it possible to examine how regularly parents perceive each practice or factor.

The data were tabulated as absolute and percentage frequencies based on the 102 cases. For the management items, the option always was taken as the expression of a consistent practice, so that the sum of the remaining four options indicates the proportion of parents who do not perceive it as permanent; for the items describing dropout factors, always and almost always were grouped as a frequent influence, and almost never and never as an infrequent one. This twofold criterion, set out in advance, avoids reading the answer almost always as a shortcoming and allows the items to be compared with one another on a diverging scale centred on the option sometimes (Figure 1).

RESULTS

The distribution of responses on educational management is presented in Table 1, which shows that none of the seven institutional practices reaches a majority of parents who perceive it as consistent.

Table 1. *Parents' perception of educational management (n = 102).*

No.	Item	A f (%)	AA f (%)	S f (%)	AN f (%)	N f (%)
1	The leadership of the school authorities is effective in making decisions aimed at student retention.	35 (34.3)	19 (18.6)	28 (27.5)	8 (7.8)	12 (11.8)
2	The school has formal strategies to prevent dropout and retain students.	19 (18.6)	25 (24.5)	33 (32.4)	14 (13.7)	11 (10.8)
3	There are effective communication channels between teachers and legal guardians to deal with risk situations.	19 (18.6)	24 (23.5)	37 (36.3)	9 (8.8)	13 (12.7)
4	The administration allocates teaching and human resources to support vulnerable students.	13 (12.7)	33 (32.4)	27 (26.5)	14 (13.7)	15 (14.7)
5	The school climate favours students remaining in the education system.	19 (18.6)	26 (25.5)	34 (33.3)	12 (11.8)	11 (10.8)
6	The authorities periodically monitor and evaluate dropout indicators.	21 (20.6)	28 (27.5)	25 (24.5)	16 (15.7)	12 (11.8)
7	Teaching staff receive ongoing training in student retention strategies.	20 (19.6)	24 (23.5)	29 (28.4)	18 (17.6)	11 (10.8)

Source: Own elaboration (2026).

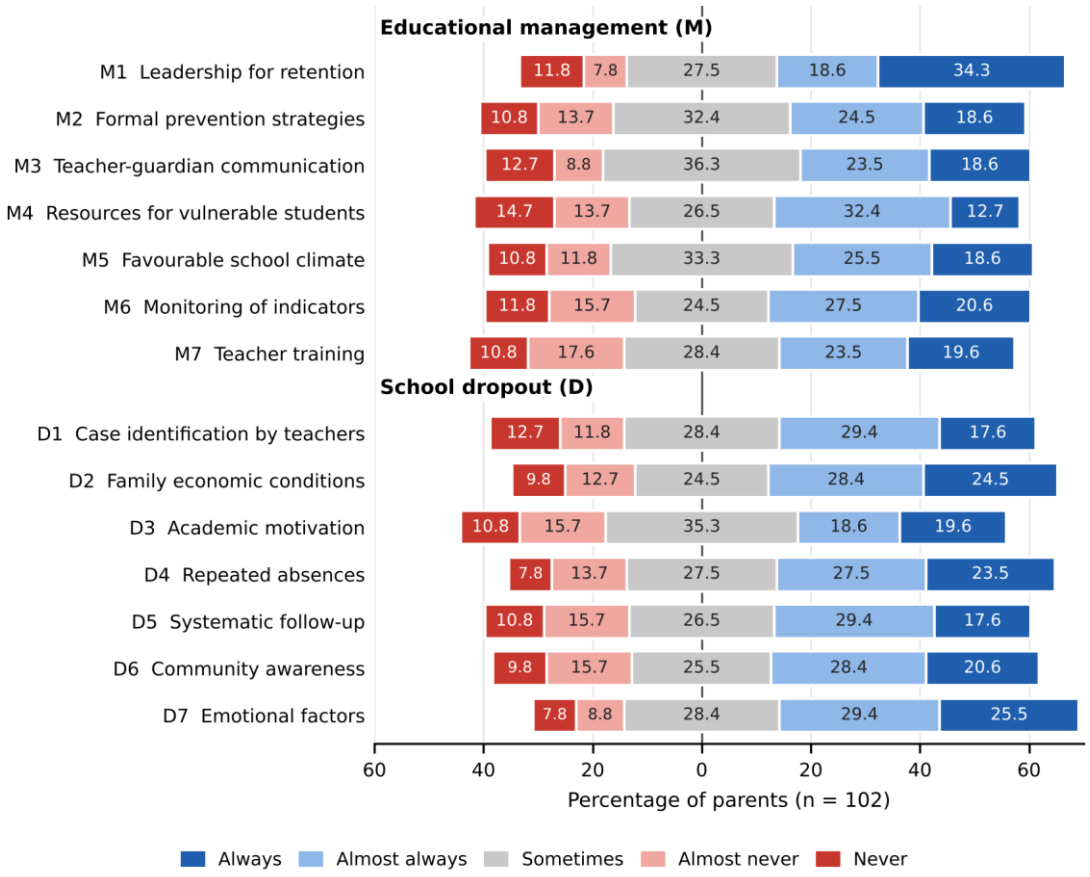
As Table 1 shows, the leadership of the authorities is the most highly rated practice, with 34.3% of parents considering it always effective in deciding in favour of retention and 52.9% placing it between always and almost always; even so, 65.7% do not perceive it as consistent. At the opposite end is the allocation of teaching and human resources for vulnerable students, where the option always reaches only 12.7%, so that 87.3% of parents do not recognise this support as permanent and 28.4% consider it practically non-existent by answering almost never or never, the same proportion recorded for teacher training in retention strategies.

Formal prevention strategies, communication channels with guardians and school climate share the same pattern, since in all three cases the answer always stands at 18.6% and the modal option is sometimes, with 32.4%, 36.3% and

33.3%, respectively, which puts the proportion of parents who do not perceive these practices as regular at 81.4%. Periodic monitoring of dropout indicators obtained 20.6% for always and 27.5% for almost never or never, so that 79.4% do not identify it as a consistent task of the authorities, while teacher training gathered 19.6% for always, placing at 80.4% those who do not perceive it as ongoing.

Figure 1 places the 14 items on the same diverging scale centred on the option sometimes, which shows that the higher-frequency segments (always and almost always) exceed the lower-frequency ones in every item, although none reaches a distribution clearly shifted towards consistency.

Figure 1. *Distribution of parents' responses across the 14 questionnaire items.*



Source: Own elaboration (2026).

Figure 1 shows that the option sometimes ranges between 24.5% and 36.3% across the questionnaire, being the modal category in five of the fourteen items and tied in one more, a feature that characterises management perceived as intermittent rather than absent. Table 2 details the results for school dropout.

Table 2. *Parents' perception of school dropout (n = 102).*

No.	Item	A f (%)	AA f (%)	S f (%)	AN f (%)	N f (%)
1	Teaching staff regularly identify students at risk of leaving their studies.	18 (17.6)	30 (29.4)	29 (28.4)	12 (11.8)	13 (12.7)
2	Family economic conditions contribute to rising dropout at the school.	25 (24.5)	29 (28.4)	25 (24.5)	13 (12.7)	10 (9.8)
3	Levels of academic motivation influence the decision to continue or leave school.	20 (19.6)	19 (18.6)	36 (35.3)	16 (15.7)	11 (10.8)
4	Repeated and unjustified absences negatively affect performance and anticipate dropout.	24 (23.5)	28 (27.5)	28 (27.5)	14 (13.7)	8 (7.8)
5	The school systematically follows up students at risk of dropping out.	18 (17.6)	30 (29.4)	27 (26.5)	16 (15.7)	11 (10.8)
6	The school community shows active awareness of the dropout problem.	21 (20.6)	29 (28.4)	26 (25.5)	16 (15.7)	10 (9.8)
7	Emotional and psychological factors such as stress or low self-esteem influence dropout.	26 (25.5)	30 (29.4)	29 (28.4)	9 (8.8)	8 (7.8)

Source: Own elaboration (2026).

Table 2 reveals two groups of items, the first of which gathers the factors parents associate with dropout; among these, emotional and psychological factors such as stress or low self-esteem reach the highest frequency, being named as an influence always or almost always by 54.9% of respondents, followed by household economic conditions with 52.9% and by repeated and unjustified absences with 51.0%. Academic motivation behaves differently, since only 38.2% recognise it as a frequent influence and the modal option is sometimes (35.3%), which suggests that families perceive it as a more variable or less visible factor than the previous ones.

The second group describes the responses of the school and the community to risk. Regular identification of cases by teachers and systematic follow-up of at-risk students share the same value for always (17.6%), so that 82.4% of parents

do not perceive either action as consistent; for follow-up, moreover, 26.5% answer almost never or never. Active awareness in the school community obtained 20.6% for always and 49.0% when almost always is added, leaving 79.4% who do not recognise it as permanent. This indicates that families clearly identify the causes of dropout, whereas the institutional actions to detect and address it are perceived as less regular.

PROPOSED EDUCATIONAL MANAGEMENT STRATEGY

Based on the diagnosis above, the Technology-Supported Educational Management Strategy for School Retention (EGE-AT, from its Spanish acronym) is put forward, with the aim of implementing technology-supported management processes that make it possible to identify at-risk students in good time, coordinate the pedagogical response and mitigate dropout at the "11 de Marzo" school. The direct beneficiaries are upper secondary students, who would receive support tailored to their circumstances, and the indirect beneficiaries are the leadership team, teachers, administrative staff and families.

The strategy responds to the items with the lowest perceived consistency, so that, in view of the 87.3% who do not perceive a permanent allocation of resources for vulnerable students and the 82.4% who do not recognise systematic follow-up, it adopts the logic of the tiered support systems proposed by Kearney and Graczyk (2020) for school attendance, in which universal actions for all students are complemented by targeted and intensive interventions according to the level of risk. Teacher training, perceived as ongoing by only 19.6%, is conceived as in-class support, in keeping with the meta-analytic evidence of Kraft et al. (2018) on the effects of coaching on instruction and achievement, and communication with guardians is oriented towards the family-school partnership supported by Smith et al. (2020).

Table 3 organises the proposal into four phases, with their actions, those responsible and resources, and the expected outcome of each.

Table 3. *Phases of the Technology-Supported Educational Management Strategy (EGE-AT).*

Phase	Actions	Responsible parties and resources	Expected outcome
Diagnostic	Profile each student's sociodemographic, academic and attitudinal characteristics on entry using digital forms; consolidate attendance, grades and behaviour records into a single database.	Leadership team, Student Counselling Department and tutors; online forms and institutional spreadsheet.	Baseline of risk by class and single information record.
Coordinated design	Define warning indicators (repeated absences, falling grades, emotional signs) and action thresholds; plan across subject areas to balance independent workloads.	Class boards and pedagogical coordination; curricula and institutional regulations.	Early warning protocol with universal, targeted and intensive levels.
Implementation	Activate weekly alerts and assign a responsible tutor to each case; provide in-class support for teachers and hold regular meetings with guardians.	Tutors, teachers, support professionals and families; cloud-based monitoring platform and stable connectivity.	Timely detection of cases and a coordinated school-home response.
Evaluation	Review attendance, achievement and retention indicators every term; adjust actions according to the results and administer the family questionnaire again.	Leadership team and evaluation committee; platform reports.	Data-based management decisions and improved perception of consistency.

Source: Own elaboration (2026).

The proposal described does not require costly infrastructure, since it relies on widely used tools and on reorganising functions that already exist in the institution, such as tutoring and student counselling. Its condition for success, however, lies in regularity, given that the diagnosis showed that the practices exist but are perceived as occasional, which is why each phase includes defined responsibilities and timing.

DISCUSSION

The first finding of the study is that the institution's educational management is perceived as intermittent rather than absent, since the option sometimes was the most frequent in four of the seven management items and the answer always did not exceed 34.3% in any of them. This result is consistent with the reading of Román (2013), for whom dropout is largely generated within the school, in

practices that are not sustained over time, and with that of Liebowitz and Porter (2019), whose data show that the strongest association of principal behaviour is with the organisational health of the school. In view of the above, it is naive to think that retention can improve through isolated actions when what parents miss is, precisely, consistency.

Secondly, the allocation of resources for vulnerable students and the systematic follow-up of at-risk cases were the practices with the lowest perceived permanence (87.3% and 82.4%, respectively). These data are in dialogue with the proposal of Kearney and Graczyk (2020), who argue that attention to attendance and risk should be organised in tiers of support of increasing intensity, and with the review by Freeman and Simonsen (2015) of policy and practice interventions aimed at reducing dropout and raising secondary completion, to which can be added the synthesis by González-Barea et al. (2026), according to which institutional climate, school management, guidance strategies and the absence of personalised support are among the school-level factors of dropout, while individualised support, tutoring, the inclusion of families and inter-institutional collaboration report the best results. This invites reflection on the gap between having resources and distributing them in good time, because a student who is not identified early is unlikely to receive the support the institution could in fact provide.

The third finding concerns the factors of dropout, and here the fact that 54.9% of parents regard the influence of stress and low self-esteem as frequent is consistent with the framework of Dupéré et al. (2015), which explains dropout as an accumulated stress process with turning points, and with Samuel and Burger (2020), who identified self-efficacy and social support as protective factors. Economic conditions, cited by 52.9%, point to the evidence gathered by García and Saavedra (2017) on conditional transfers, whose effect on enrolment and attendance confirms the weight of family income in school continuity, while the

51.0% who associate repeated absences with dropout matches the risk factors common to absenteeism and dropout synthesised by Gubbels et al. (2019).

Academic motivation, in turn, was the only factor whose modal response was sometimes, which could be explained by its being a trait less observable from home than stress, lack of resources or absences. Ishida and Sekiyama (2024) note that motivation depends on psychological, cognitive and social factors and on school interventions themselves, so that reading it requires the joint view of families and teachers. In addition, as Quin (2017) and Wang and Degol (2016) show, teacher-student relationships and school climate are linked to engagement, so the 81.4% who do not perceive a consistently favourable climate is a signal that management should not overlook.

With regard to early detection, the results show that families identify the causes of dropout more clearly than the school's actions to anticipate it. Psyridou et al. (2024) and Vasconcelos et al. (2023) agree that warning systems gain accuracy when they incorporate relational and longitudinal information, and Berkovich (2025) documents that generative artificial intelligence is beginning to be integrated into instructional leadership; no tool, however, makes up for the absence of regular records. This indicates that the first step for the institution is organisational rather than technological, since it involves producing reliable data and assigning people responsible for reading them, as foreseen in the diagnostic phase of the proposal.

The study has limitations that should be borne in mind when interpreting its results, beginning with the fact that the descriptive design and the aggregation of the data into frequencies do not allow statistical relationships between management and dropout to be established, so the impact analysed corresponds to parents' perceptions and not to a demonstrated effect. Likewise, the questionnaire does not report validation procedures or reliability coefficients, and some items, such as those on teacher training or the monitoring of indicators, refer to internal practices that families know only indirectly. Future research could

incorporate institutional dropout rates, the voices of students and teachers, and correlation or regression analyses with individual data.

CONCLUSION

Educational management at the "11 de Marzo" school is perceived by parents as present but intermittent, with the leadership of the authorities receiving the highest rating (34.3% for always) and the allocation of resources for vulnerable students the lowest (12.7%), so that its impact on mitigating dropout depends less on the existence of the actions than on the regularity with which they are carried out.

The factors that families most frequently associate with dropout are emotional, economic and attendance-related, whereas the identification of cases and the follow-up of at-risk students are perceived as unsystematic, which places the institution’s main challenge in early detection and in the socio-emotional support of those showing signs of disengagement.

The EGE-AT strategy offers the institution a four-phase route for turning the available information into preventive decisions, based on early warning, in-class teacher training and partnership with families; its implementation and evaluation, together with the measurement of actual dropout rates, will make it possible to test in later studies the impact described here from the perspective of parents.

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CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest of any kind in relation to this research.

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To the UBE

REFERENCES

Berkovich, I. (2025). The rise of AI-assisted instructional leadership: Empirical survey of generative AI integration in school leadership and management work. *Frontiers in Education, 10*, 1643023. https://doi.org/10.3389/feduc.2025.1643023

Chiarino, N., Rodríguez Enríquez, C., Curione, K., Machado, A., Bonilla, M., Aspirot, L., Garófalo, L., & Olveira, B. (2024). Abandono y permanencia estudiantil en universidades de Latinoamérica y el Caribe: Una revisión sistemática mixta. *Actualidades Investigativas en Educación, 24*(2), 1-37. https://doi.org/10.15517/aie.v24i2.57306

Dupéré, V., Leventhal, T., Dion, E., Crosnoe, R., Archambault, I., & Janosz, M. (2015). Stressors and turning points in high school and dropout: A stress process, life course framework. *Review of Educational Research, 85*(4), 591-629. https://doi.org/10.3102/0034654314559845

Freeman, J., & Simonsen, B. (2015). Examining the impact of policy and practice interventions on high school dropout and school completion rates: A systematic review of the literature. *Review of Educational Research, 85*(2), 205-248. https://doi.org/10.3102/0034654314554431

García, S., & Saavedra, J. E. (2017). Educational impacts and cost-effectiveness of conditional cash transfer programs in developing countries: A meta-analysis. *Review of Educational Research, 87*(5), 921-965. https://doi.org/10.3102/0034654317723008

González-Barea, E. M., Moreno-Yus, M. A., Cutanda-López, M. T., & Cutillas-Fernández, I. M. (2026). Territorial dimension of early leaving from education and training (ELET). A systematic review. *Espiral. Cuadernos del Profesorado, 19*(39), 17-35. https://ojs.ual.es/ojs/index.php/ESPIRAL/article/view/10927

Gubbels, J., van der Put, C. E., & Assink, M. (2019). Risk factors for school absenteeism and dropout: A meta-analytic review. *Journal of Youth and Adolescence, 48*(9), 1637-1667. https://doi.org/10.1007/s10964-019-01072-5

Hernández-Sampieri, R., & Mendoza, C. P. (2018). *Metodología de la investigación: Las rutas cuantitativa, cualitativa y mixta*. McGraw-Hill Interamericana.

Ishida, A., & Sekiyama, T. (2024). Variables influencing students' learning motivation: Critical literature review. *Frontiers in Education, 9*, 1445011. https://doi.org/10.3389/feduc.2024.1445011

Kearney, C. A., & Graczyk, P. A. (2020). A multidimensional, multi-tiered system of supports model to promote school attendance and address school absenteeism. *Clinical Child and Family Psychology Review, 23*(3), 316-337. https://doi.org/10.1007/s10567-020-00317-1

Kraft, M. A., Blazar, D., & Hogan, D. (2018). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research, 88*(4), 547-588. https://doi.org/10.3102/0034654318759268

Liebowitz, D. D., & Porter, L. (2019). The effect of principal behaviors on student, teacher, and school outcomes: A systematic review and meta-analysis of the empirical literature. *Review of Educational Research, 89*(5), 785-827. https://doi.org/10.3102/0034654319866133

Paitán-Ávila, L. C., & Figueroa-Ángel, M. X. (2025). Tendencias investigativas en deserción escolar de 2019 a 2024. *Pedagogía y Saberes*, (63), 71-85. https://doi.org/10.17227/pys.num63-22045

Psyridou, M., Prezja, F., Torppa, M., Lerkkanen, M.-K., Poikkeus, A.-M., & Vasalampi, K. (2024). Machine learning predicts upper secondary education dropout as early as the end of primary school. *Scientific Reports, 14*, 12956. https://doi.org/10.1038/s41598-024-63629-0

Quin, D. (2017). Longitudinal and contextual associations between teacher–student relationships and student engagement: A systematic review. *Review of Educational Research, 87*(2), 345-387. https://doi.org/10.3102/0034654316669434

Rodríguez-Manteca, F. A., & Rodríguez-Bravo, A. E. (2024). Etiología y metodología de intervención en los procesos de fracaso y abandono escolar. Una revisión sistemática y metaanálisis. *Revista Complutense de Educación, 35*(3), 609-622. https://doi.org/10.5209/rced.86047

Román, M. (2013). Factores asociados al abandono y la deserción escolar en América Latina: Una mirada de conjunto. *REICE. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación, 11*(2), 33-59. https://doi.org/10.15366/reice2013.11.2.002

Samuel, R., & Burger, K. (2020). Negative life events, self-efficacy, and social support: Risk and protective factors for school dropout intentions and dropout. *Journal of Educational Psychology, 112*(5), 973-986. https://doi.org/10.1037/edu0000406

Smith, T. E., Sheridan, S. M., Kim, E. M., Park, S., & Beretvas, S. N. (2020). The effects of family-school partnership interventions on academic and social-emotional functioning: A meta-analysis exploring what works for whom. *Educational Psychology Review, 32*(2), 511-544. https://doi.org/10.1007/s10648-019-09509-w

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. (2023). Advancing school dropout early warning systems: The IAFREE relational model for identifying at-risk students. *Frontiers in Psychology, 14*, 1189283. https://doi.org/10.3389/fpsyg.2023.1189283

Wang, M.-T., & Degol, J. L. (2016). School climate: A review of the construct, measurement, and impact on student outcomes. *Educational Psychology Review, 28*(2), 315-352. https://doi.org/10.1007/s10648-015-9319-1

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