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Inteligencia emocional y riesgo de abandono escolar en Educación Media Superior en el estado de Durango

Emotional Intelligence and School Dropout Risk in High School in the State of Durango

Inteligência emocional e risco de abandono escolar no ensino médio no estado de Durango

Frine Virginia Montes Ramos
Centro de Bachillerato Tecnológico Agropecuario No. 3 Instituto Universitario Anglo Español, México
frine_montes@anglodurango.edu.mx
https://orcid.org 0000-0001-8499-189X

Luis Fernando Hernández Jácquez
Universidad Pedagógica de Durango, Instituto Universitario Anglo Español, México
lfhj1@hotmail.com
https://orcid.org 0000-0002-6017-3267

Resumen

La presente investigación se centra en los estudiantes de nuevo ingreso en los planteles adscritos a la Dirección General de Educación Tecnológica Agropecuaria y Ciencias del Mar en el Estado de Durango, México, que son instituciones en las que se identifican tasas de abandono escolar por encima del promedio estatal (20.23%) en los recientes ciclos escolares. Partiendo de ello, los objetivos principales fueron determinar los niveles de inteligencia emocional y de riesgo de abandono escolar, así como la relación entre ambas variables. Los referentes teóricos se fundamentaron en las aportaciones de Mayer y Salovey para la inteligencia emocional y en el modelo de Hernández y Montes, para el riesgo de abandono escolar. Bajo un enfoque de investigación cuantitativo de alcance correlacional con una muestra de 1,529 sujetos, los principales resultados dejaron ver que los estudiantes tienen un

bajo nivel de inteligencia emocional para afrontar su vida académica y un nivel moderado de riesgo de abandono escolar, así como un relación negativa entre las variables. Estos resultados podrían ser utilizados para la generación de estrategias que fortalezcan ambas variables y contribuyan a una dismunición en el abandono escolar.

Palabras clave: abandono escolar, educación media superior, inteligencia emocional.

Abstract

The present research focuses on new students in the High School in the State of Durango, Mexico, in institutions with school dropout rates above the state average (20.23%) in recent school years. Based on this, the main objectives were to determine the levels of emotional intelligence and risk of dropping out of the school, as well as the relarionship between both variables. The theoretical references were based on the contributions of Mayer and Salovey for emotional intelligence and on the model of Hernández and Montes, for the risk of dropping out of school. With a quantitative research approach of correlational scope with a sample of 1,529 subjects, the main results showed that students have a low level of emotional intelligence to face their academic life and a moderate level of risk of dropping out of school, as well as a negative relationship between the variables. These results could be used to generate strategies that strengthen both variables and contribute to a decrease in school dropouts.

Keywords: school dropout, high school education, emotional intelligence.

Resumo

A presente investigação centra-se nos novos alunos das escolas vinculadas à Direção Geral de Educação Tecnológica Agrária e Ciências Marinhas do Estado de Durango, México, instituições nas quais as taxas de abandono escolar estão acima da média estadual (20,23%) nos últimos anos letivos. . Com base nisso, os principais objetivos foram determinar os níveis de inteligência emocional e risco de abandono escolar, bem como a relação entre ambas as variáveis. Os referenciais teóricos basearam-se nas contribuições de Mayer e Salovey para a inteligência emocional e no modelo de Hernández e Montes, para o risco de abandono escolar. Sob uma abordagem quantitativa de pesquisa de âmbito correlacional com uma amostra de 1.529 sujeitos, os principais resultados mostraram que os alunos apresentam baixo nível de inteligência emocional para enfrentar a vida acadêmica e um nível moderado de

risco de abandono escolar, bem como um relacionamento negativo entre as variáveis. Estes resultados poderão ser utilizados para gerar estratégias que fortaleçam ambas as variáveis e contribuam para a diminuição do abandono escolar.

Palavras-chave: abandono escolar, ensino secundário, inteligência emocional.

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Introduction

One of the concerns that has remained on the analysis table in Upper Secondary Education in Mexico in recent years is the phenomenon of school dropouts, a problem that has undoubtedly worsened with the confinement caused by the SARS-COV virus. 2 and that more than a year after returning to "normality", it has not been contained in institutions at this educational level.

Within the Mexican educational system, the General Directorate of Technological Education in Agriculture and Marine Sciences (DGETAyCM) is a department attached to the Undersecretariat of Upper Secondary Education of the Secretariat of Public Education that provides bivalent, comprehensive, social, and humanistic high school education services with technological study plans in agricultural (CBTa), forestry (CBTf), maritime (CETMAR), and inland waters (CETAC) areas. It also includes the Rural Development Training Units (UNCADER), the Natural Resources Research Centers (CIRENA), and the Rural Development Education Brigades (BEDR), which are institutions that provide training services to producers in the same areas and carry out research work (Government of Mexico, n.d.). The subsystem currently has 508 schools in the country, 20 of which operate in the state of Durango.

For the development of this research, we started from the knowledge that some of the consequences of the confinement caused by the SARS-COV-2 virus are mainly the impact on the global economy, the ravages on mental and emotional health, and the delay in students' schooling. In this sense, Martínez (2021) refers to the fact that in Mexico, 2.3 million people between 3 and 29 years old no longer enrolled in the 2020-2021 school year and 2.9 million did not attend due to lack of money or resources. In the subsystem, statistics from the DGETAyCM in the State of Durango (table 1) show that during the 2019-2020 school year the percentage of school dropouts in the state reached 15% and for the following cycle it stood at a historical high of 21.4%.

Table 1. Dropout rates in DGETAyCM schools in the State of Durango .

Squad	2021-2022	2020-2021	2019-2020	2018-2019	2017-2018	2016-2017
CBTA 3	21.79	26.16	16.64	19.70	17.52	17.95
CBTF 4	21.47	23.43	15.74	15.58	17.68	19.35
CETAC 7	21.21	16.92	22.67	17.54	No data	No data
CBTA 28	12.83	18.36	13.30	23.21	15.27	11.44
CBTA 47	18.92	23.72	17.54	20.06	20.74	19.84
CBTA 63	9.83	12.24	4.84	9.90	5.47	7.78
CBTA 64	14.29	12.84	12.33	16.81	11.16	9.83
CBTA 101	24.91	17.54	13.51	17.96	20.38	17.53
CBTA 104	24.31	24.90	15.18	27.17	18.75	14.22
CBTA 149	11.76	16.25	9.09	8.65	1.87	7.92
CBTA 171	18.86	28.84	13.54	17.49	23.76	13.71
CBTA 172	21.09	20.10	12.86	24.02	18.32	16.30
CBTA 173	25.45	18.55	16.21	15.55	13.03	7.58
CBTA 215	20.67	3.37	4.25	11.06	13.48	14.15
CBTA 216	28.23	23.33	20.20	20.37	13.03	17.77
CBTA 217	17.48	25.63	8.19	21.02	11.34	13.65
CBTF 1	21.76	30.37	21.46	22.40	14.36	15.66
CBTF 2	15.01	15.15	13.83	12.38	8.74	11.57
CETAC 8	24.82	25.00	13.43	25.25		
CBTA 295	18.24	8.61	14.00	9.15	10.69	10.47
State average	20.23	21.40	15.00	18.26	15.46	14.89

Source: Prepared by the authors using statistics from DGETAyCM .

For the purposes of this study, it is important to highlight that the target population was adolescents between 15 and 18 years of age, that is, young people who are in mid-adolescence, a stage that according to Rubio (2021) is characterized by being the one of maximum conflict with parents since they have a desire for contradiction, they become more independent and with their own personality and interests; although parents are still very important. Precisely in this age population, the survey carried out internationally by the United Nations Children's Fund (UNICEF, 2020) showed that the crisis derived from confinement had a significant impact on the mental health of young people in Latin America and the Caribbean. It was indicated that 46% of young people reported having less motivation to carry out activities that they normally enjoyed and 36% felt less motivated for usual activities. Regarding the perception of the future, 43% of women and 31% of men participants felt pessimistic about the future. An alarming fact is that 73% had felt the need to ask for help regarding their physical and mental well-being, but despite this, 40% did not do so.

Once again at the state level, in the educational institutions participating in the study, activities are carried out in line with the implementation of the ConstruyeT program , which seeks to directly impact the comprehensive education of high school students and indirectly to prevent risk behaviors for dropping out, such as violence, addictions, or unwanted pregnancy, which can truncate their educational path (SEP, 2015); however, it does not contemplate evaluation activities or management of emotions, which could be an essential element for the permanence of students.

The above suggests a critical situation related to the high dropout rates, which is the lack of specific knowledge of the emotional condition of students at this educational level. In relation to this, Fumero (2019) warns of a gap in the state of knowledge regarding considering emotional intelligence as a determining factor for school dropout; a situation that is reflected at the local level, since no joint research was found on these two study variables.

Considering the above, the main objective of this research was to identify the relationship between the level of emotional intelligence and the level of risk of dropping out of school in new students entering the DGETAyCM schools in the State of Durango. Three specific objectives emerged from it:

- Determine the level of emotional intelligence of the study population.
- To determine the level of risk of dropping out of school in the study population.
- Identify the relationship of both variables with other sociodemographic variables such as: sex, family structure, school facility and sociodemographic area.

The hypotheses raised were the following:

- H_1: "There is a relationship between the level of emotional intelligence and the level of risk of dropping out of school in new students entering DGETAyCM schools in the State of Durango."
- H_0: "There is no relationship between the level of emotional intelligence and the level of risk of dropping out of school in new students entering DGETAyCM schools in the State of Durango."

With the results, the schools affiliated with the DGETAyCM of the state could design strategies that aim to guarantee a healthy academic career for their students, through an adequate management of their emotions. The study has clear practical implications in knowing which elements of emotional intelligence represent areas of opportunity for urgent attention and the risk factors for dropping out of school that are the responsibility of the institutions.

By providing data to contribute to the reduction of school dropouts, the indirect social impact of the research lies in that students who remain and complete their upper secondary education must have the knowledge, skills and values necessary to enter higher education, level which enables them to practice their profession in a qualified manner, thus contributing to increasing the country's competitiveness.

In another sense, an individual who remains within the educational institution has greater tools to avoid falling prey to the country's social problems, such as crime, violence or drug addiction, because in schools, in addition to the academic function, there are means of comprehensive training such as access to and practice of culture and sports, to mention a few.

Even so, those who, out of necessity, must enter the workforce after completing their secondary education, are more suitable and have better incomes than those who dropped out of school.

Empirical background and theoretical foundation

When analyzing emotional intelligence in relation to different variables of interest for this study, it was found that with respect to sex there is no consensus on the results found, since Bar-On and Parker (2000, as cited in Bermejo *et al.*, 2018), Goleman (2018) and Medina (2020), reported that emotional intelligence is not influenced or defined by sex; but in the opposite sense, Saucedo et al. (2019) concluded that attention to emotions is very different between men and women; and Brizendine (2023) pointed out brain differences between men and women, including aspects related to emotions and emotional communication.

Taramuel and Zapata (2017) analyzed emotional intelligence and the influence of sex in university students, showing that women have an adequate perception of emotions, men and women have excellent understanding of feelings, and women surpass men in regulation.

Regarding school dropout, Miranda (2018) explained the tendency of public policies to address risk factors mainly of a socioeconomic nature, but ignores fundamental aspects such as the environment and school integration. Therefore, he proposed some recommendations to strengthen public policy in the educational field that recognize the heterogeneity of the causes of dropout. De Vries and Grijalva (2021) agree with Miranda (2018), but found that young people's motivations are not primarily academic, but rather social, and this aspect of youth culture is often incompatible with school organization, causing failure and dropout.

Regarding the above, it can be mentioned that in Mexico there is currently the Benito Juárez Universal Scholarship for Upper Secondary Education, which is a support that benefits all students who study this educational level. The Government of Mexico (2022) ensures that this benefit contributes to young people who study high school or professional technical high school in a public school in a school or mixed modality, to be able to continue and complete their studies. Paradoxically, there is evidence that the The phenomenon of school dropout persists despite these efforts, and that is why Guzmán and Moctezuma (2023) explain that Mexico has a great challenge to guarantee this important right of access to higher secondary education, providing in the study a multifactorial interpretation between dropouts, the school climate and perhaps other elements that underlie the individual and the social fabric.

Regarding the relationship between both variables, Ibarrondo (2024) pointed out that one of the main problems related to dropping out is absenteeism due to emotional difficulties that are not addressed by the school structure. Hernández and Alcaraz (2018) reported that in the review of previous studies on the phenomenon of school dropout related to emotional aspects, 41.5% confirmed the existence of a greater tendency for men to drop out of school, a situation similar to that found by Suberviola (2024).

In another order of ideas related to the theoretical meaning of this research, emotional intelligence was approached from the perspective of Mayer and Salovey (2007, p. 23) for whom:

> It is the ability to perceive, assess, and express emotion appropriately and adaptively; the ability to understand emotion and emotional knowledge; the ability to access and/or generate feelings that facilitate cognitive activities and adaptive action; and the ability to regulate emotions in oneself and in others.

Goleman (2018), on the other hand, considers that emotional intelligence is knowing oneself, being aware of one's own emotions, understanding the feelings of others, tolerating pressures and frustrations; while Fernández-Berrocal *et al.* (2004, p. 2) conceptualize the dimensions of emotional intelligence as follows:

- Attention -perception: being able to attend to feelings appropriately.
- Clarity-understanding: understanding one's own emotional states well.
- Repair-regulation: being able to regulate emotional states appropriately.

For school dropout, the contributions of Van Dijk (2012) were reviewed, who defines it from the subjectivity of the actors and gives it a more emotional connotation. He points out that understanding the phenomenon from this perspective allows us to consider that the

school system expels, consciously or unconsciously, students who do not "fit in." He then speaks of when the subject cannot learn at the established pace, has difficulty staying still for many hours, does not meet the expectations of the teacher or the regulations unilaterally established by the school, gets bored and loses interest in acquiring knowledge that is not significant to him; he regularly begins to have problems of acceptance, discrimination, abandonment, exclusion, both from teachers and directors of the institutions, as well as from his peers.

In addition, the predictive model designed by Hernández and Montes (2020) was taken, who consider that by establishing mechanisms to improve or increase study planning skills, note-taking and self-efficacy for learning, it would be possible to reduce the risk of dropping out to a certain extent. The model calculates, using a logistic function, the probability that a student will drop out.

Materials and methods

The study was developed under the guidelines of the quantitative research approach, since it “used data collection to test hypotheses based on numerical measurement and statistical analysis, in order to establish behavioral patterns and test theories” (Hernández *et al.*, 2014, p. 4). It was conducted under a non-experimental and cross-sectional design, since there was no intervention or deliberate manipulation of variables, the phenomenon was only observed in its natural environment to analyze it and information was collected at a single time.

The technique for information retrieval was the survey, which “is a quantitative technique that allows obtaining essential information from the people involved in the research process” (Castillo and Reyes, 2015, p. 128). With the prior consent of the institutions, the instruments were administered through a Google form via the WhatsApp groups of the tutoring activities for new students, emphasizing the relevance of their complete response; to subsequently process the data in the SPSS software version 25.

The form consisted of three sections. The first section collected information on gender, family structure, school, and demographic area where the informant resides. The second section collected data on the emotional intelligence variable using the TMMS-24 instrument (Fernández-Berrocal *et al.*, 2004), which achieved a reliability of .939 in the Cronbach's Alpha indicator. The instrument consists of 24 items divided into three

dimensions that are answered using a five-point Likert scale: do not agree at all, somewhat agree, somewhat agree, strongly agree, and totally agree. Some examples of items that make up each dimension are:

- Perception: "I pay a lot of attention to my feelings," "I think about my mood constantly," and "I usually worry a lot about how I feel."
- Understanding: "I am clear about my feelings," "I can always say how I feel," and "I can come to understand my feelings."
- Regulation: "Even when I feel bad, I try to think about pleasant things," "I try to have positive thoughts even when I feel bad," and "When I am angry, I try to change my mood."

To assess the scores achieved by the subjects, the scale defined by Fernández-Berrocal *et al.* (2004, p. 3) was followed, as shown in Table 2.

Table 2. Scores for the dimensions of emotional intelligence.

Dimension	Men's scores	Women's scores
Perception or attention	Up to 21: you need to improve your attention, you pay little attention	Up to 24: You need to improve your attention, you pay little attention
	From 22 to 32: proper care	From 25 to 35: adequate care
	Over 32: You need to improve your attention, you pay too much attention	Over 35: You need to improve your attention, you pay too much attention
Understanding or clarity	Up to 25: You need to improve your understanding	Up to 23: You need to improve your understanding
	From 26 to 35: adequate understanding	From 24 to 34: adequate understanding
	Over 35: excellent understanding	Over 34: excellent understanding
Regulation or repair	Up to 23: It must improve its regulation	Up to 23: It must improve its regulation
	From 24 to 35: proper regulation	From 24 to 34: proper regulation
	Over 35: excellent regulation	Over 34: excellent regulation

Source: Fernández-Berrocal *et al.* (2004, p. 3).

In the third section, the instrument for measuring the risk of dropping out of school was included using the questionnaire resulting from the model designed by Hernández and Montes (2020), which showed a reliability of .880 in the Cronbach's Alpha indicator. It consists of 16 items divided into three dimensions: study planning, note-taking, and self-efficacy for learning, and are answered using a seven-value Likert scale, from "does not

describe me at all" to "describes me completely." Some examples of items from each of the dimensions are:

- Study planning: "I usually plan the time I am going to spend studying", "I finish my work on time" and "when I study, I have all the material I am going to use at hand".
- Note-taking: "I take notes in class", "I fulfil my academic commitments" and "I follow the professor's explanations in class without any problem".
- Self-efficacy for learning: "I believe I will receive an excellent grade in the courses," "I am confident that I can understand the more difficult readings in the courses," and "I am confident that I can learn the basic concepts in the courses."

The study participants totaled 1,529 young people out of a total of 3,376 who entered upper secondary education in the period from August to December 2023, stratified by institution as shown in Table 3.

Table 3. Distribution of participants by campus.

No.	Squad	Participants
1	CBTa 3	288
2	CBTa 28	125
3	CBTa 47	352
4	CBTa 63	212
5	CBTa 64	38
6	CBTa 104	20
7	CBTa 149	40
8	CBTa 173	93
9	CBTa 217	168
10	CBTa 295	61
11	CBTF 2	62
12	CETAC 7	35
13	CETAC 8	35
	Total	1,529

Source: own elaboration.

Results

Of the 1,529 participants, 812 (53.1%) were women and 717 (46.9%) were men; 1,031 students (67.4%) maintained a traditional family structure (living with their mother, father, and siblings), but single-parent families were also identified: 270 young people (17.7%) lived only with their mother and siblings, 30 young people (2%) lived only with their father and siblings, 134 (8.8%) lived with their mother and grandparents, and 64 (4.2%) lived with other people, such as uncles, aunts, partners, etc. It was identified that 898 (58.7%) of the participants reported coming from rural areas, 368 (24.1%) from urban areas, and 263 (17.2%) from semi-urban areas.

The Kolmogorov-Smirnov normality test allowed us to see that the dimensions and the general result of both variables followed a non-normal distribution (all with a bilateral asymptotic significance of .000) so they were performed nonparametric statistical analysis.

As for emotional intelligence (Table 4), the “perception” dimension had a mode of 20 and 16 points for women and men, respectively, both of which were at the lowest level of assessment. For the “understanding” (clarity) dimension, the mode for both women and men was 16 points, which also placed them at the lowest level. Finally, the “regulation” dimension obtained 16 points for women, while it reached 22 points for men, both of which were at the lowest level of assessment. From the above, the need to pay more attention to their emotions and improve their understanding and regulation is recognized for both men and women.

Overall, the emotional intelligence variable obtained values of 19 points in women and 24 in men, so it can be said that students lack emotional skills to cope with academic life at this educational level, which can be attributed to the effect of the confinement derived from the pandemic caused by the SARS-COV-2 virus, an issue that undoubtedly shows urgency in need of attention.

Table 4. Measures of central tendency of the emotional intelligence variable and its dimensions

Sex	Extent	Dimension			Emotional Intelligence
		Perception	Comprehension	Regulation	
Female	N	812	812	812	812
	Average	24.07	22.57	25.14	23.93
	Median	24.00	21.00	24.00	23.33
	Fashion	20.00	16.00	16.00	19.33
Male	N	717	717	717	717
	Average	22.03	23.43	26.17	23.88
	Median	21.00	23.00	26.00	23.67
	Fashion	16.00	16.00	22.00	24.00

Source: own elaboration.

The analysis of the variable of risk of dropping out of school allowed to identify that 70 (4.5%) of the participants presented a high risk of dropping out and 1,459 (95.5%) presented a moderate risk of dropping out. Regarding the dimensional analysis (table 5) , the students have a good level of planning and note-taking with a mode of 4 and 3 points respectively, while in the dimension of self-efficacy for learning they remain at a medium-low level with a mode of 2.75 points. The general value for the variable was located at 0.07 and considering the criterion derived from the Hernández and Montes model (2020), "if the result is less than 0.5 it means that the student would be predicted to have a moderate risk level of dropping out, otherwise, they would be considered to have a high risk of dropping out"; it can be concluded that the majority of young people in the schools participating in the study have a moderate risk of dropping out of school.

Table 5. Measures of central tendency by dimension of the school dropout risk variable

Extent	Dimension		
	Study Planning	Note Taking	Self-efficacy for learning
Average	3.37	2.63	4.16
Median	4.00	3.00	4.25
Fashion	4.00	3.00	2.75

Source: own elaboration.

Within this variable, some interesting academic practices were identified:

- In the study planning dimension, the result of the item “sleep and tiredness do not prevent me from studying” can be pointed out as an important area of opportunity, since it presented a mode of zero. The rest of the items in the dimension presented a mode of 1, which represents academic strengths in students; they plan their time to

study, finish their work on time and usually have their materials available when they go to study.

- The note-taking dimension represents a strength in students since the values for the mode were 1, so it can be argued that they take notes in class, fulfill their academic commitments and follow the teachers' explanations in class without any problem.
- In the dimension of self-efficacy for learning, the item “I am confident that I can understand the most complex material presented by teachers” was identified with a mode of 2, and the item “I am confident that I can learn the basic concepts taught at school” with a mode of 3; both represent areas of opportunity for this dimension. In the opposite sense, the items “ If I want, I can get the best grades and outperform my classmates” were identified with a mode of 7, and “I am confident that I can do an excellent job on assignments and tests at my school” with a mode of 6. Both represented strengths.

In short, this variable suggests that students feel that if they set their minds to it, they can achieve satisfactory results, but they admit that sleep and fatigue limit them, and on the other hand, they see some content as too complex to be acquired or mastered. The institutional task lies in empowering students so that they feel safe at all times and that teaching staff design and implement teaching strategies that strengthen meaningful learning as well as the feeling of learning achievement in students.

Regarding the analysis to define whether there were significant differences between the study variables and the social and demographic variables considered, it was identified that the sex of the students did not show a statistically significant difference with the risk of dropping out of school or with its dimensions, but it did with the dimensions of the emotional intelligence variable (Table 6), with women having a higher average range than men in the perception dimension (821.25 and 701.29, respectively); while in the dimensions of understanding and regulation, it was men who registered higher average ranges (791.83 and 741.31; 795.48 and 738.09, respectively).

Table 6. Mann-Whitney U test of the study variables regarding the sex of the student.

Dimension	U value	Asymptotic significance (bilateral)
Study planning	275893.500	.062
Note taking	279125.000	.076
Self-efficacy for learning	277780.500	.122
Risk of school dropout (global)	275766.500	.075
Perception	245423.000	.000
Comprehension	271863.000	.025
Regulation	269248.000	.011
Emotional intelligence (global)	288725.000	.783

Source: own elaboration.

Regarding the variables family structure, school and sociodemographic area, Table 7 shows the results of the Kruskal Wallis H test for the difference between groups with respect to the study variables. The family structure variable only showed a statistically significant relationship with the study planning dimension of the dropout risk variable, and it was shown that students whose family structure is single-parent with the mother have a higher level of study planning compared to the other types of family structure (average range of 808.11 points for the family structure "mother only", 768.70 for the structure "mother and father", 732.90 for the structure "mother and grandparents"; 667.98 for the structure "others" and 600.27 for the structure "father only").

Table 7. Kruskal Wallis H test of the study variables regarding the student's family structure, school where he/she is enrolled and sociodemographic area of origin

Dimension	Family structure		Squad		Area	
	Xi ^{2}	Next.	Xi ^{2}	Next.	Xi ^{2}	Next.
Study planning	11.87	.018	26.55	.022	5.80	.055
Note taking	4.09	.394	49.25	.000	7.28	.026
Self-efficacy for learning	1.79	.773	44.80	.000	9.63	.008
Risk of school dropout (global)	7.98	.092	30.92	.006	1.35	.509
Perception	3.81	.432	33.06	.003	6.16	.046
Comprehension	3.67	.452	11.83	.619	2.34	.309
Regulation	6.03	.197	27.42	.017	3.06	.217
Emotional intelligence (global)	4.83	.305	22.19	.075	4.75	.093

Source: own elaboration

The variable campus (in which the student is enrolled) showed a statistically significant difference in relation to the variable risk of dropping out of school (global) with a significance of .006 in all its dimensions. The range test showed that CBTf 4 showed the lowest level in the study planning dimension (597.57 points), while in the note-taking dimension CBTa 295 had the lowest rank (578.43 points). In the learning self-efficacy dimension, CETAC 7 obtained the lowest rank (511.30 points).

In contrast, and for the same dimensions, the highest scores were obtained by CBTa 64, CETAC 8 and CBTa 64 with 921.75, 927.4 and 919.13 points. In general, the school with the lowest risk of school dropout was CBTa 64 (596.61 points) and, in contrast, the institution with the highest risk was CBTf 4 (921.79 points).

A statistically significant difference was also found in the staff regarding emotional intelligence in the perception and regulation dimensions. Regarding the former, CETAC 08 showed the lowest level (647.80 points), while CBTa 173 showed the highest level (924.96 points). Regarding the regulation dimension, CBTa 64 had the lowest level (623.41 points) and CBTa 217 the highest level (861.61 points).

Regarding the sociodemographic area variable, a significant statistical difference was found in the dimensions of note-taking and self-efficacy for learning (of the risk of dropping out of school), with students living in the semi-urban area having a higher level in the first dimension (average range of 782.64, compared to 769.79 and 718.16 in the rural and urban areas, respectively) and those in the urban area assuming they have a higher self-efficacy for learning (average range of 801.16, compared to 800.49 and 730.06 in the semi-urban and rural areas, respectively). Regarding the dimension perception of emotions (of the emotional intelligence variable), the range test showed that students from the rural area perceive themselves as having a higher level compared to those from the other areas (780.78 points, compared to 751.44 and 713.97 in the semi-urban and urban areas, respectively).

Finally, a statistically significant weak negative correlation (Hernández *et al.*, 2014, p. 305) was identified between the level of emotional intelligence and the level of risk of dropping out of school (Table 8), which means that a student with a high level of emotional intelligence has a lower risk of dropping out of school, and vice versa. With this, H_1 was accepted : "there is a relationship between the level of emotional intelligence and the level of risk of dropping out of school in new students at DGETAyCM schools in the State of Durango."

Statistically significant and positive relationships are identified in all cases between the dimensions of the risk of abandonment and the level of emotional intelligence, which

means that the higher the level of emotional intelligence, the greater the use of study planning techniques, note-taking techniques and self-efficacy for learning; and vice versa. The relationships are considered very weak or weak (Hernández *et al.* , 2014, p. 305), but ultimately significant.

Table 8. Correlation coefficients* Spearman's rho of emotional intelligence and risk of dropping out of school and its dimensions

Emotional intelligence	Risk of dropping out of school			
	Study planning	Note taking	Self-efficacy for learning	Global
Perception	.125	.120	.352	-.226
Comprehension	.163	.124	.393	-.268
Regulation	.152	.150	.407	-.272
Global	.170	.154	.449	-.297

*All significant at .000

Source: own elaboration.

Similarly , the dimensions of emotional intelligence showed weak and very weak negative relationships (Hernández *et al.*, 2014, p. 305) statistically significant with the risk of dropping out of school (table 8), that is, a student with the ability to perceive his or her emotions, understand them and regulate them, is a student whose risk of dropping out tends to decrease.

Discussion

The results of the study allowed us to identify how the phenomenon of study occurs in the context of the schools affiliated to the DGETAyCM in the State of Durango. The evidence showed that there is a statistically significant and negative relationship between the level of emotional intelligence and the level of risk of dropping out of school, which is interpreted as a student with a higher level of emotional intelligence has a lower risk of dropping out of school, a result that is consistent with what was found by Ibarrondo (2024) and that represents an access route to favor school permanence and therefore terminal efficiency.

In relation to the analysis of the emotional intelligence variable, it is identified that students who entered the 2022-2023 school year lack emotional intelligence skills to face their academic life at this educational level, a result consistent with the UNICEF survey

(2020), which shows that the crisis derived from the pandemic caused by the SARS-COV-2 virus had a significant impact on the mental health of young people in Latin America and the Caribbean. However, the analysis of the different dimensions of this variable shows that both men and women need to strengthen their skills to perceive, understand and regulate their emotions, since failure to do so is clearly linked to a potential risk of dropping out of school.

On the other hand, in relation to the variable risk of dropping out of school, it is seen that the students participating in the study showed moderate risk, and in this regard Hernández and Montes (2020) consider that with the establishment of mechanisms to improve or increase the dimensions contemplated in the study planning model, note-taking and self-efficacy for learning, it would be possible to reduce the risk of dropping out of school to a certain extent; thus, the route to strengthening these dimensions lies in the generation and implementation of strategies from different actors in the educational service at this level, for example:

- Aspects of the tutorial dynamics can be aimed at strengthening the task of planning academic activities: starting with a weekly schedule that indicates class times, hours for doing homework, complementary activities such as sports or recreation and the management of a semester agenda that allows them to identify important dates such as: exams, delivery of projects, etc.
- As teachers, we should promote the integration of notes in a clear, structured and systematic way, based on reflection and analysis of what is written, perhaps even based on the premise that "a good note is worth more than a bad memory."
- For those responsible for implementing the Construye T Program, focus on developing activities during the sessions scheduled for teachers and/or academic tutors towards those that are linked to strengthening self-efficacy for learning.

On the other hand, correlation analyses with sociodemographic variables show that sex is not linked to the risk of dropping out of school, unlike what Hernández and Alcaraz (2018) and Suberviola (2024) reported, who identified a greater tendency for men to fail at school and drop out of school; however, it is identified that sex is linked to the emotional intelligence variable: women perceive and regulate their emotions better, but men understand them better.

The above differs with Bar-On and Parker (2000, as cited in Bermejo *et al.*, 2018), Goleman (2018) and Medina (2020), who consider that emotional intelligence is not influenced or defined by sex; but these are results that agree with Brizendine (2023), who

attributes differences in emotional intelligence from a biological perspective of sex and with Saucedo *et al.* (2019) who identified that women have greater clarity and pay more attention to their emotions than men and; with Taramuel and Zapata (2017), who found that women have an adequate perception of emotions, men and women have excellent understanding of feelings; and women outperform men in regulation.

The family structure variable is related to the planning dimension of the study of the variable risk of dropping out of school, where the Young people from single-parent families with the mother showed a significantly higher range for this dimension. In this sense, the role of the mother in the alignment of students in their academic life can be seen, as pointed out by Díaz and Osuna (2017) when highlighting the importance of support and supervision in schoolwork and communication guidelines; therefore, they recommend that schools implement strategies aimed at addressing the family context.

The variable campus was related to the variable risk of dropping out of school and its dimensions, so as a subsystem it is important to adhere to the strategies proposed from the tutor's task The CETAC 07 has a strong academic approach to strengthen study planning, citing for example the CBTa 149 campus where this dimension is significantly lower. In CBTa 295 it is important that the teaching work promotes the integration of notes in a more conscious and reflective sense; and CETAC 07 must strive to increase activities that promote self-efficacy for learning in students. The implementation of these actions is especially urgent in campuses such as CBTa 295 where the risk of dropping out of school was significantly higher. On the other hand, talking about strengthening the dimensions of emotional intelligence will undoubtedly result in school permanence, especially in CETAC 08 and CBTa 64 which showed the lowest level for the regulation dimension.

Finally, it can be said that this research shows the very relevant role that emotional intelligence plays in academic achievement at this educational level where authors such as Sánchez and Fragoso (2018) mention the importance of the emotional factor of high school students, since it is a significant aspect for prevention and development in an educational system where, by tradition, cognitive development is considered the most important and emotional development is left behind.

Conclusions

This article represents a substantial effort to contribute to the state of knowledge of the phenomenon of school dropout in the State of Durango, where statistics show a worrying situation for the DGETAyCM subsystem from the point of view of young people who drop out of school and the deficiencies they present in terms of emotional intelligence.

This is a study that was able to identify the link between the level of risk of dropping out of school and the level of emotional intelligence of adolescents, so the proposed research hypothesis was accepted: "there is a relationship between the level of emotional intelligence and the level of risk of dropping out of school in new students entering the DGETAyCM schools in the State of Durango". The students showed a low level of emotional intelligence because they indicated that they lacked skills that help them to positively face this educational level and also, they show a moderate risk of dropping out of school.

On the other hand, sex does not It is linked to the risk of dropping out of school but it is linked to emotional intelligence and family structure. It is linked to the risk of dropping out of school, students from single-parent families with the mother plan their studies better; the school and the sociodemographic area are linked to both emotional intelligence and the risk of dropping out of school.

The study showed that there is a clear path to contribute to reducing the risk of dropping out of school, promoting activities from school that strengthen students' perception, understanding and regulation of emotions, without forgetting or underestimating the impact of the style of socialization of emotions that persists culturally in Mexican families, therefore it is essential to do so. parents, guardians and family units participate in this training in emotions.

Future lines of research

Given the results of this research, it would be interesting to continue the work in relation to these two variables, considering other agents within this process such as parents, teachers and academic tutors. It could also be addressed in relation to other variables such as family functionality and academic performance. In particular, studies could be generated that relate more than one pair of these. aspects such as:

a) Student emotional intelligence, academic performance and risk of dropping out.
b) Student emotional intelligence, parental involvement in academic activities and risk of dropping out of school.
c) Student emotional intelligence, teacher emotional intelligence and risk of dropping out of school.
d) Student emotional intelligence, tutorial support and risk of dropping out of school.
e) Emotional intelligence, family functionality and risk of dropping out of school.

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Contribution Role	Author(s)
Conceptualization	Phryne Virginia Montes Ramos
Methodology	Phryne Virginia Montes Ramos Luis Fernando Hernandez Jacquez
Software	NOT APPLICABLE
Validation	Phryne Virginia Montes Ramos Luis Fernando Hernandez Jacquez
Formal Analysis	Phryne Virginia Montes Ramos Luis Fernando Hernandez Jacquez
Investigation	Phryne Virginia Montes Ramos
Resources	Phryne Virginia Montes Ramos Luis Fernando Hernandez Jacquez
Data curation	Phryne Virginia Montes Ramos
Writing - Preparing the original draft	Phryne Virginia Montes Ramos
Writing - Review and editing	Phryne Virginia Montes Ramos Luis Fernando Hernandez Jacquez
Display	Phryne Virginia Montes Ramos Luis Fernando Hernandez Jacquez
Supervision	Phryne Virginia Montes Ramos
Project Management	Phryne Virginia Montes Ramos
Acquisition of funds	Phryne Virginia Montes Ramos Luis Fernando Hernandez Jacquez