

## School-family duality: emotional intelligence and academic performance

### Dualidad escuela-familia: inteligencia emocional y rendimiento académico

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#### Abstract

The objective of this work was to identify the relationship between emotional intelligence and the academic performance of students at Margarita Masa de Juárez High School and Ignacio De Zaragoza School. The methodology used was quantitative, with a cross-sectional design, with a correlational and integrational methodical derivation. The collection of information was carried out through an instrument where the topics of emotional intelligence and academic performance were observed, the sample was made up of 120 students, the sampling method was non-probabilistic, through the strategy of sampling for convenience. The statistical techniques used were frequencies and percentages, comparative, correlational and integrational through factor analysis. The contribution of the study it is from the statistical empirical evidence that allows us to affirm that when there are teachers with willingness, responsibility and who understand the capacities and how young people learn, there is a security connection between the teacher - student; With this, emotions are recognized through the observation of the behavior of difficult situations and problems in an empathic way where the family environment plays an important supporting role; the school-family duality impacts the academic performance of adolescents.

**School, Family, Emotions, Academic performance, Adolescents**

#### Resumen

El objetivo de este trabajo fue identificar la relación que existe entre la inteligencia emocional con el rendimiento académico de los estudiantes de la secundaria Margarita Masa de Juárez y del Colegio Ignacio de Zaragoza. La metodología que se utilizó fue de enfoque cuantitativo, con diseño transversal, con derivación metódica correlacional e integracional. La recopilación de la información se realizó a través de un instrumento donde se observaron los tópicos de inteligencia emocional y el rendimiento académico, la muestra se conformó por 120 estudiantes, el método de muestro fue no probabilístico, mediante la estrategia de muestreo por conveniencia. Las técnicas estadísticas que se utilizaron fueron frecuencias y porcentajes, comparativo, correlacional e integracional a través del análisis factorial. La contribución del estudio radica en la evidencia empírica estadística que permite afirmar que cuando existen docentes con disposición, responsabilidad y que comprenden las capacidades y cómo aprenden los jóvenes se da una conexión de seguridad entre el docente – estudiante; con ello, se reconocen las emociones a través de la observación del comportamiento a situaciones y problemas difíciles de manera empática donde el ambiente familiar juega un papel importante de apoyo; la dualidad escuela-familia impacta en el rendimiento académico de los adolescentes.

**Escuela, familia, emociones, rendimiento académico, adolescentes**

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## Introduction

For Regader, B. (2018) emotional intelligence is a construct that helps us to understand how we can influence in an adaptive and intelligent way both our emotions and our interpretation of the emotional states of others. So it is understood that human beings not only act and understand the personal, they are also able to understand what happens to other people, showing empathy and solidarity with others. Emotional intelligence is not an innate trait; human beings can develop it throughout life.

Following this line Otero (2006), cited in Olvera and Ángeles (2022), shares his idea that emotions fulfill their function by being part of a complex regulation system, which is responsible for avoiding dangers, helping the organism to take advantage of opportunities, and indirectly to facilitate social relationships; on the other hand, Aguado (2019), also quoted by Olvera and Ángeles, explains that emotions result from a series of brain processes that arises before an external event, these emotions are composed of the: cognitive, which performs an evaluation with subjective experiences; and the reactive, which refers to physiological reactions, motor-expressive reactions and action tendencies.

Then, emotional intelligence is the management of what makes you feel an emotion, that is why it is so complicated to have such intelligence, because it is to have the ability to reason for the regulation of emotions. López Mero et al., (2019) in their research point out that the family presents important tasks in society, directly related to the preservation of human life, its development and well-being. Thus, there are characteristics in the family dynamics that drive students to maintain their level of academic performance or not, for example, dysfunctionality. In their work, they briefly address how dysfunctional families can be one of the causes of low academic performance in elementary school students and point out that its causes are very varied, of which the following can be mentioned: family disintegration, parenting styles, working parents, parental disinterest, addictions, favorite children, unwanted children. Therefore, the question "How is emotional intelligence related to the academic performance of the students of Margarita Maza de Juárez High School and Ignacio de Zaragoza School" was asked. With the working hypothesis.

H<sub>1</sub>. Emotional intelligence is related to the academic performance of the students of Margarita Maza de Juárez High School and Ignacio de Zaragoza School. The present work is carried out with the purpose of helping high school students to improve their academic performance.

## Theoretical reference

Emotional Intelligence is a construct that helps to understand how to influence in an adaptive and intelligent way both personal emotions and the interpretation of the emotional states of others (Regader, 2018). So it is understood that human beings not only act and understand the personal, they are also able to understand what happens to other people, showing empathy and solidarity with others.

Barrio affirms that emotional intelligence is not an innate trait, as he affirms that human beings can develop it throughout life. To train it, it is essential to educate and recognize emotions, this will increase emotional self-awareness; self-motivation; improve interpersonal relationships; develop empathic capacity (learning to put oneself in the other person's place in order to understand how he or she feels); and enhancing the ability of self-control to regulate the emotional state (Barrio, 2018).

On the other hand, Trufino (2022) comments that adolescence is a time of greater reaction to stress, which makes them more vulnerable to emotional disorders. Parental education, accompaniment and closeness, the acquisition of social skills and emotional intelligence and self-regulation, will help prevent drug use, sexual promiscuity, eating disorders, behavioral addictions, antisocial activities and suicidal tendencies, as well as to face life's challenges safely and effectively and to take responsibility for their own actions.

For Universidad Privada del Norte (UPN, 2019), a student who has the emotional support of his or her family, in addition to economic support, will experience an intense desire to want to excel in studies. Likewise, he/she will be more motivated and willing to continue studying and to overcome the difficulties he/she faces in the academic scenario and in life.

On the contrary, a student who does not have the emotional support of his family, or faces conflicts at home, will lose motivation and interest in his studies. In addition, these types of problems may impair their memory or concentration, as well as their emotional health. When we talk about academic performance, we generally refer to the grades that a student obtains by means of the evaluations, therefore, the need arises to distinguish the functions of the of the evaluation, distinguishing the formative function and the certifying function. Both functions, formative and certifying are by no means exclusive but complementary (Fernández, 2018). In the academic environment, evaluation usually tries to complement the formative function with a pedagogical treatment by the teacher from whose results he/she tries to feedback the teaching-learning process, however, the other function arises at the end of the process, the certifying one that enables and/or sanctions the absence of achievements, this function is the most criticized when it shows signs of its lack of objectivity.

Academic performance is closely related to the evaluation of learning, since it is the reflection of the grades obtained in each of the subjects of the school curriculum. This assessment involves many factors that are intertwined, including the individual perception of teachers and that make evaluation a complex process, which in the daily life of the institutions involves differential positions among the various members of the educational community and sometimes generate conflicts between the actors involved in the process (Quintero, 2013).

The Mexican Institute of youth, mentions that the concept of youth is a term that, on the one hand, allows identifying the period of life of a person that is located between childhood and adulthood which, according to the Law of the Mexican Institute of Youth, is between the ages of 12 to 29 years (IMJ, 2017). Youth is an arduous issue to decipher completely, insofar as it depends on aspects such as physical maturity, psychological maturity, training, the interweaving of social relations, the possibility of joining the labor market.

### **Methodology to be developed**

This research was conducted through the national strategic line called emotional education, considering that the topic was emotional intelligence.

An opinion survey was applied to 120 subjects made up of 60 students from Margarita Maza de Juárez High School and 60 students from Ignacio de Zaragoza School in the city of Saltillo, Coahuila.

Now, once the research question was established, we proceeded to investigate the bibliography that supported the main proposal of this work, the research objectives, questions and hypotheses were developed. The research instrument was elaborated; with a total of 57 variables, 8 of them general data: sex, favorite subject, average, hours dedicated to study, another language, religion, hobby; 3 variables that represent the phenomenon under study: expression of emotions, suicide and exclusion.

The scale used in the instrument is 0 - 10, where 0 indicates zero frequency and 10 indicates the highest frequency. A pilot test is carried out to make adjustments to the items, and the final application of the questionnaire is carried out in one session. The data are obtained with the analysis of frequencies and percentages, comparative, correlation and integration through factor analysis, and are given statistical treatment to explore the results.

The approach of the present research is quantitative since:

The order is rigorous, although of course we can define some phases. It starts from an idea that is being delimited and, once delimited, objectives and research questions are derived, the literature is reviewed and a framework or theoretical perspective is constructed. From the questions, hypotheses are established and variables are determined; a plan is drawn up to test them (design), the variables are measured in a certain context; the measurements obtained are analyzed using statistical methods, and a series of conclusions are drawn with respect to the hypothesis or hypotheses.

By design it is trans-sectional or cross-sectional since it is a research that collects data at a single point in time. Its purpose is to describe variables and analyze their incidence and interrelation at a given time (Hernández, Fernández & Baptista, 2014).

By implication and methodical derivation it is correlational and integrational, for defining the existing relationships and denotes the relevance between the factors of the study phenomenon.

The population was 740 high school students from the Margarita Maza de Juárez school and of the 180 high school students from the Ignacio de Zaragoza School, only 60 high school students from the Margarita Maza de Juárez school and 60 high school students from the Ignacio de Zaragoza School participated, being a sample of 120 students.

The conceptualization of variables:

**Emotional intelligence:** is the capacity and innate trait that all human beings have for showing affection to others, understanding their emotions and those of others, being able to build their identity, self-esteem, security and confidence.

**Academic performance:** level of knowledge that a student shows in class, where different elements are involved, as well as the attitude, disposition and personality of the students in each class.

**High school students:** young adolescents ranging from 12 to 15 years old who are studying the last level of basic education, being this time where young people are in constant change and time to form bonds of friendship.

## Results

In order to explain the research axes, the relative frequencies obtained from the application of the research instrument were processed through statistical analysis with the purpose of characterizing both the population and the study phenomenon through: frequencies and percentages, correlation, comparative and integrative.

## Frequencies and percentages

Of the total sample of 120 students, half were students from Margarita Maza de Juárez High School and the other half from Ignacio de Zaragoza High School, 50% of the respondents were female, 41.7% were male, while 8.3% did not answer. The average of the students ranged between 8 and 9 with 34.2% respectively.

## Correlation analysis

At the present statistical level, the total variance is worked with the objective of presenting explanations of the study phenomenon based on the relationships that exist. It should be noted that the operationalization of these relationships is based on a lower  $p < 0.05$  and an  $r \geq 0.30$ .

- Correlation of the variable family problems

When students are distracted at school by their family problems, they are young people who attend therapy ( $r=0.32$ ); obtain low grades in their evaluations ( $r=-0.32$ ) and lack self-confidence ( $r=-0.30$ ).

- Correlation of the variable grades

When young students obtain outstanding grades in their evaluations, they manage to understand the emotions of the people around them ( $r=0.33$ ), respect the rules of the place where they are ( $r=0.31$ ) and do not attend therapy ( $r=-0.34$ ). Therefore, it is inferred that the outstanding grades obtained by the subjects have a positive relationship with mentally healthy adolescents.

## Comparative analysis

The following is a comparative analysis of the variables that make up the study phenomenon, carried out through the T-test procedure for independent samples. This analysis explains the significant differences in the suicide variable between Margarita Maza de Juárez High School and Ignacio de Zaragoza High School. With the purpose of accepting or rejecting the working hypothesis, highlighting that the probability level is less than  $p < 0.05$ .

According to the analysis of means, it is observed that those who have thought about suicide have gone to therapy ( $x=4.04$ ), are considered to have ease of conversation with strangers ( $x=6.16$ ), however, those who have not thought about suicide are adolescents with more confidence ( $x=8.53$ ), self-esteem ( $x=8.24$ ), and that they sleep 8 hours a day ( $x=6.38$ ).

It is inferred that suicidal thoughts in young people are triggered by different causes such as low self-confidence and low self-esteem, in addition to sleep disturbances; although adolescents have social skills, this does not prevent them from thinking about suicide.

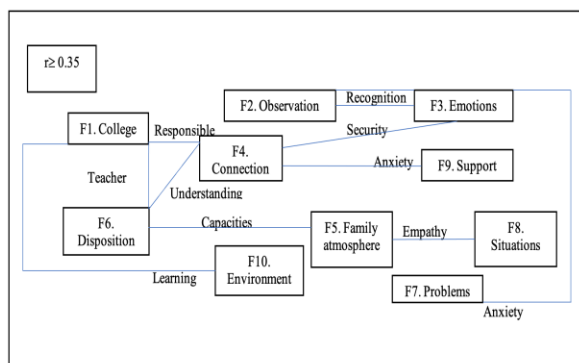
**Integrational analysis**

**Factor analysis**

To identify the factors that describe emotional intelligence and academic performance in high school students, an exploratory factor analysis was performed and evidence was found to prove the concurrence of 10 factors. The  $r^2$  multiple communalities method was used as extraction method; with normalized varimax rotation since it is integrated with variables that support the proposal of the article. It works with an  $r$  value of  $\geq 0.35$ .

There were 10 factors, which are called

Factor 1, School; factor 2, Observation; factor 3, Emotions; factor 4, Connection; factor 5, Family environment; factor 6, Disposition; factor 7, Problems; factor 8, Difficult situations; factor 9, Support and finally, factor 10, Environment, in which the most outstanding variables are observed according to their factorial load for their reading. (Figure1)



**Figure 1** Factorial statistical analysis

It is observed that when there are teachers in the school who are willing, responsible and who understand the capabilities and how young people learn, there is a safe connection between the teacher and the student; with this, emotions are recognized through the observation of behavior in difficult situations and problems in an empathetic way where the family atmosphere plays an important supportive role; the school-family duality impacts the academic performance of adolescents.

**Conclusions**

It is concluded that the outstanding grades obtained by the subjects have a positive relationship with mentally healthy adolescents. Continuous attendance to therapy strengthens social skills and in the long run will be a support for adolescents to control and manage their emotions and come to believe in themselves.

The healthy relationships that young people have with their families trigger a continuous communication between them, which is a way to improve their relationship with others.

It is essential for young people to have self-esteem and the support of their families so that their emotions are recognized and managed.

The dual school-family relationship has an impact on the academic performance of adolescents.

Therefore, it is important to create an educational policy that promotes a psycho-pedagogical department with a greater number of professionals to meet the demand of all young people in school, prioritizing students with different problems.

Also, encourage activities for parents to attend (socialization of the activities of the institution, school for parents, meetings, festivals) to be involved in the academic development of students.

Equally important, there should be a cross-cutting subject in the secondary school curriculum, where students are provided with strategies to communicate ideas, feelings, problems and disagreements in a timely and accurate manner, which will have an impact on their academic performance.

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