

## Emotions in the classroom: exploring the relationship between emotional development and learning

## Emociones en el aula: explorando la relación entre desarrollo emocional y aprendizaje

ESPERICUETA-MEDINA Marta Nieves\*†, SÁNCHEZ-RIVERA Lilia, VILLARREAL-SOTO, Blanca Margarita and RODRIGUEZ-GRAJEDA, Tania Marina

*Universidad Autónoma de Coahuila, Faculty of Science, Education and Humanities, Bachelor of Science in Education, México.*

ID 1<sup>st</sup> Author: *Marta Nieves, Espericueta-Medina* / ORC ID: 0000-0002-4924-7632

ID 1<sup>st</sup> Co-author: *Lilia, Sánchez-Rivera* / ORC ID: 0000-0001-9468-2599

ID 2<sup>nd</sup> Co-author: *Blanca Margarita, Villarreal-Soto* / ORC ID: 0000-0001-9314-8001

ID 3<sup>rd</sup> Co-author: *Tania Marina, Rodriguez-Grajeda* / ORC ID: 0009-0006-5621-8887

DOI: 10.35429/JESC.2023.18.7.26.30

Received: July 30, 2023; Accepted: December 30, 2023

### Abstract

Violence, identified as a public health problem, impacts diverse actors in society, from aggressors to bystanders, families, and school communities (Musalem & Castro, 2015). In this context, Pacompia Suaña and Peralta Rado (2020) explored the relationship between emotional intelligence and self-esteem in fifth-grade primary school students, finding a very strong positive correlation between both variables. Focusing on emotional development, crucial especially during adolescence, this research aims to answer the key question: How is emotional education linked to learning? The sample of 150 students from two schools was analyzed using an instrument with 60 variables, using the STATISTIC program. The conclusions highlight the importance of mental health for access to knowledge, advocating that the classroom be a space that teaches values and promotes emotional management, with the same emphasis as in the academic part. It is proposed the implementation of motivational programs, mandatory presence of psychologists in each campus and the integration of an educational model of intervention focused on emotional development. Together, these findings and proposals contribute to the understanding and improvement of the educational environment.

**Emotional development, Meaningful learning, Adolescents**

### Resumen

La violencia, identificada como un problema de salud pública, impacta a diversos actores en la sociedad, desde agresores hasta espectadores, familias y comunidades escolares (Musalem y Castro, 2015). En este contexto, Pacompia Suaña y Peralta Rado (2020) exploraron la relación entre inteligencia emocional y autoestima en estudiantes de quinto año de primaria, hallando una correlación positiva muy fuerte entre ambas variables. Centrando la atención en el desarrollo emocional, crucial especialmente durante la adolescencia, esta investigación se propone responder a la pregunta clave: ¿Cómo se vincula la educación emocional con el aprendizaje? La muestra de 150 alumnos de dos escuelas fue analizada mediante un instrumento con 60 variables, utilizando el programa STATISTIC. Las conclusiones resaltan la importancia de la salud mental para el acceso al conocimiento, abogando por que el aula sea un espacio que enseñe valores y promueva la gestión emocional, con igual énfasis que en la parte académica. Se propone la implementación de programas de motivación, presencia obligatoria de psicólogos en cada plantel y la integración de un modelo educativo de intervención enfocado en el desarrollo emocional. En conjunto, estos hallazgos y propuestas contribuyen al entendimiento y mejora del ambiente educativo.

**Desarrollo emocional, Aprendizaje significativo, Adolescentes**

**Citation:** ESPERICUETA-MEDINA Marta Nieves, SÁNCHEZ-RIVERA Lilia, VILLARREAL-SOTO, Blanca Margarita and RODRIGUEZ-GRAJEDA, Tania Marina. Emotions in the classroom: exploring the relationship between emotional development and learning. *Journal Education Sciences*. 2023. 7-18:26-30.

\* Author Correspondence (E-mail: lsr14712@uadec.edu.mx)

† Researcher contributing as first author.

**Introduction**

Throughout history, emotional development has played a fundamental role in the human experience, becoming especially relevant during adolescence, a stage marked by significant transformations. In this transitional period, the understanding and proper management of emotions are crucial elements for the integral growth of individuals.

Cedeño-Tuarez et al (2021) mention that emotional education is becoming increasingly important as a valuable concept in the learning process of students. Its impact is reflected in the improvement of teamwork and leadership skills, as well as in the strengthening of interpersonal relationships, significantly influencing working life. The exploration of meaningful learning in the educational environment and its connection to emotional education is presented as a crucial aspect for a thorough understanding of future learning processes and experiences. In this context, this analysis can provide guidance to educators in creating courses that foster meaningful and emotionally relevant learning experiences.

Self-esteem, an essential component of emotional development, emerges as a determining factor in the educational process of adolescents. An adolescent with strong self-esteem not only learns more effectively, but also cultivates more rewarding relationships, is better prepared to take advantage of opportunities, perform productively and develop greater autonomy, while gaining a clearer awareness of his or her personal trajectory.

The main objective of this research is to explore the connection between emotional development and learning in students from two different contexts in Ejido and the City. Through this comparative analysis, we seek to understand how emotional experiences influence the acquisition of meaningful knowledge in these specific educational settings.

**Theoretical framework**

Currently, education is focused in a relevant way on the integral development of learners' emotions.

In this sense, Tufiño and Fierro (2023) mention an area of concern related to social interactions, where students with a low development of emotional intelligence experience a decrease in their performance and feel excluded from their daily study group. In adolescents, the fear of relating, especially with people of the opposite gender, distorts their realistic perception of emotional behaviour in the studied group. There is a need to implement evaluative scales in the educational system to identify the adversities faced by students and age-specific emotional situations.

It is crucial to highlight this author's observation on the influence of the environment on emotional development, pointing out that children raised in disadvantaged or unhealthy environments have difficulties in achieving optimal emotional development. This can result in individuals with low empathy and problems in their interpersonal relationships, even facing challenges as serious as suicide.

In this context, the population of adolescents between 12 and 15 years of age is addressed, considering that adolescence, which spans from 10 to 19 years, is commonly divided into early adolescence (12-14 years) and late adolescence (15-19 years). Each phase presents physiological, structural, psychological and adaptive changes, marking a stage of significant transformation.

Adolescence, characterised by physical and emotional changes, is a vulnerable period in which risky behaviours can emerge with health, economic and social consequences (Borras, 2014). It highlights the need for programmes that provide information and services, strengthening protective factors to mitigate such behaviours.

For their part, Angulo and Aybar (2023) mention that the stimulation of emotional intelligence in students generates a notable impact on educational processes, resulting in an improvement in academic performance, which is why they recommend that educational authorities introduce policies that recognise the relevance of emotional intelligence in the comprehensive education of students. In addition, it is suggested that researchers address applied studies to demonstrate the effects of emotional intelligence education on student learning, adopting an experimental perspective.

In terms of potentials, the importance of meaningful learning in the classroom is emphasised. Baque-Reyes and Portilla-Faican (2021) mention that the knowledge acquired throughout our lives is essential to contribute to the cultural capital of society. The work of teachers is a fundamental challenge for the development of a country, as an educated society is a productive one. The importance of innovative pedagogical approaches to improve teaching processes is highlighted, and meaningful learning is presented as a key strategy. This study is part of an investigation focusing on meaningful learning and its application through innovative teaching strategies to revitalise teaching and improve learning outcomes. It is based on a descriptive literature review that highlights the relevance of meaningful learning to achieve meaningful, enduring and renewable knowledge over time through the use of innovative teaching strategies.

The variables to be worked on include awareness, emotions, self-esteem, empathy, changes, harmony, affection, qualities, stages, formation, problems, susceptibility, family environment, parental support, environment, childhood, life, behaviours, conflicts, identity, shame, joy, fear, anger, sadness, love relationships, addictions, humour, hormones, education, competences, memorisation, information, motivation, organised knowledge, mental models, strategies, assimilation, feedback, logic, association, process, concepts, connection, teaching, evaluation, autonomy, teams, dialogue, educational materials, stimuli, ideas, retention and meaning.

### Methodology to be developed

The present research is framed within a national strategic line focused on emotional education. It is approached through a comparative and differential focus carried out in both a rural and an urban secondary school student population, for which an instrument designed to measure the relative frequency of the data to be analysed was elaborated and applied on a single occasion.

In the application of the law of large numbers, the aforementioned instrument will be used on a sample of 150 subjects to ensure the reliability of the results. In addition, questions, questions and hypotheses are posed that will be fundamental to guide the research. The results obtained will be carefully considered in the formulation of intervention proposals aimed at addressing the problems identified.

The study population comprises 75 students in Secondary School in a rural context and 75 in Secondary School in an urban context.

In terms of the conceptualisation of the research axes, "Emotional Development" refers to the set of emotions, both positive and negative, that learners experience in the school environment and their relevance in this context. On the other hand, "Learning" focuses on the acquisition of new knowledge related in a meaningful way to what has already been learned, facilitating its assimilation by being clearly present in the cognitive structure.

Furthermore, the concept of "Adolescence" is addressed, understanding it as a stage of significant changes, both physical and emotional, in which individuals acquire new capacities and develop specific objective and subjective needs determined by their age. This period of transformation is essential and must be addressed in a holistic manner.

### Results

In the characterisation of the data, it is observed that in relation to the Mean ( $\bar{X}$ ), the high values on the scale are in the range of (8, 7 and 9). This indicates that most of the variables fall in the high values of the scale, covering aspects such as education ( $\bar{X} = 8.10$ ), childhood ( $\bar{X} = 7.34$ ), family environment ( $\bar{X} = 7.87$ ), motivation ( $\bar{X} = 8.67$ ) and affection ( $\bar{X} = 7.34$ ). It can be inferred that the secondary school students surveyed have received a strong background from their families.

Regarding the mean mean statistic, it is observed that the variables identity ( $\bar{X} = 2.73$ ) and hormones ( $\bar{X} = 2.88$ ) are below normal ( $n = 3.08$ ), ( $\bar{X}_x = 6.18$ ), ( $n_+ = 9.28$ ). This suggests that adolescents are in a process of searching for their identity, of discovering themselves.

**Correlation**

At this statistical level, we will focus on the total variance in order to provide more detailed explanations of the phenomenon under study, based on existing relationships.

*Correlation of the variable "Competences"*

It is observed that students fulfil all their school obligations when they are in a good mood ( $r=0.46$ ), and show a remarkable effort in the subjects they find most attractive. It is inferred that, if a student does not feel comfortable with his or her teacher or experiences embarrassment when raising a concern, his or her grades may be negatively affected.

*Correlation of the variable "Process"*

It is denoted that parents who visit educational institutions do so mainly due to problems of understanding on the part of the pupil or hormonal situations ( $r=0.24$ ), either because of moments when the pupil feels sad ( $r=0.27$ ). It is therefore inferred that it is crucial for parents to visit the school at least once a month to find out about the performance and educational situation of their children.

*Correlation of the variable "Evaluation"*

It is observed that pupils are being evaluated adequately, receive support from their parents ( $r=0.38$ ), have a good education since childhood ( $r=0.39$ ), compete to excel ( $r=0.25$ ), and are acquiring knowledge ( $r=0.42$ ). However, it is noted that this cannot be achieved if the student experiences sadness ( $r=-0.20$ ) or allows anger ( $r=-0.21$ ) to influence their emotions. It is inferred that teachers need to be informed about the personal situation of adolescents, not only academically, in order to address factors that may affect their attention and learning.

**Comparison**

A comparative analysis of the variables that make up the study phenomenon is presented below, using a statistical processing of the T-test for independent samples and analysing the results of the application of the instrument to 100 students. It is important to note that the probability level is  $p=0.05$ .

In relation to the variable "stages", when analysing the mean, it is observed that students from an urban environment have an average above normal ( $x=9.08$ ). This suggests that they are students whose parents have assumed the responsibility of informing and advising them about the changes they will experience during adolescence, preventing them from possible concerns. On the other hand, in rural secondary school students, the mean is ( $x=7.10$ ), indicating that these young people are not as informed about these changes and tend to have questions that, in many cases, are not addressed. It can be inferred that adolescents who receive clear information about hormonal changes are more likely to develop greater self-confidence in the future.

**Acknowledgements**

Universidad Autónoma de Coahuila (Unfunded)

**Conclusions**

Analysis of the results reveals that the most significant degree of confidence is 39%, indicating that adolescents have a strong preference for going for walks during their free time. In addition, it is noted that most of the variables have a 95% confidence level, suggesting that the results obtained can be extrapolated to other populations with similar characteristics. In this context, the importance of teachers using a variety of strategies to encourage student motivation is highlighted, recognising that students who excel in their grades often do so because of their enjoyment of lessons and the effectiveness of the teacher, who motivates them both to excel individually and to surprise their peers. In addition, the crucial role of the brain as the part of the human being that controls thoughts, emotions, learning and memories is highlighted. This underlines the importance of maintaining good mental health in order to nurture positive experiences and enhance emotional well-being.

**Proposals**

Several initiatives are proposed to strengthen the emotional well-being and holistic development of students in the educational environment.

Firstly, it is suggested that motivational workshops and programmes be implemented on a compulsory basis in secondary schools, seeking to foster a positive and stimulating environment for young people. It also advocates the integration of an intervention model specifically focused on the emotional development of students, recognising the importance of this aspect in their personal and academic growth.

In addition, it is proposed to offer training courses to teachers with the aim of equipping them with the necessary tools to address risk situations and deal appropriately with the emotional needs of young people. In turn, there is a need to establish an educational policy that actively promotes emotional development in secondary school students, supporting and consolidating these initiatives at the institutional level.

Another key proposal involves the revision and adjustment of the educational curriculum, incorporating approaches that prioritise and promote the emotional well-being of students, recognising its direct influence on the learning process. Finally, it is proposed to have a mental health professional, such as a psychologist, in each school, in collaboration with a support teacher. This measure would allow for individualised attention to each student, understanding their emotional and mental health needs, thus strengthening comprehensive support within the educational environment.

## References

Borrás Santisteban, Tania. (2014). Adolescencia: definición, vulnerabilidad y oportunidad. *Correo Científico Médico*, 18(1), 05-07. Recuperado en 23 de noviembre de 2023, de [http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S1560-43812014000100002&lng=es&tlng=es](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1560-43812014000100002&lng=es&tlng=es)

Baque-Reyes Gabriela Rebeca y Portilla-Faicán Gladys Isabel (2021) El aprendizaje significativo como estrategia didáctica para la enseñanza – aprendizaje. *Polo del Conocimiento* (Edición núm. 58) Vol. 6, No 5, Mayo 2021, pp. 75-86, ISSN: 2550 - 682X DOI: 10.23857/pc.v6i5.2632 <https://polodelconocimiento.com/ojs/index.php/es/article/view/2632>

Tufiño Guaicha, M. M., & Fierro Garofalo, G. M. (2023). Inteligencia emocional para mejorar la capacidad cognitiva en los estudiantes de la Unidad Educativa 30 de abril. *Ciencia Latina Revista Científica Multidisciplinar*, 7(3), 1690-1708. [https://doi.org/10.37811/cl\\_rcm.v7i3.6308](https://doi.org/10.37811/cl_rcm.v7i3.6308)

Angulo Legua Lucinda Ceyda y Aybar Bellido Leoncio (2023) Inteligencia emocional y rendimiento académico en estudiantes de educación secundaria. *Revista de Climatología* 23:2585-2594 DOI: <https://doi.org/10.15517/ap.v32i125.32123A>

Cedeño-Tuarez Javier, Geovanny Miranda Katty Yadira, Saltos-Intriago Claudia. EDUCACIÓN EMOCIONAL PARA APRENDIZAJES SIGNIFICATIVOS. Red de revistas científicas de Acceso Abierto diamante DOI: <https://doi.org/10.46296/yc.v6i10.0150>