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EMOTIONAL INTELLIGENCE IN UNIVERSITY STUDENTS

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Abstract: The objectives of this study were to determine the knowledge that university students have about emotional intelligence and how this is determined by gender, age and the semester/career being studied. The sample consisted of 137 students from a university located in the east of Mexico City. The *Trait Meta-Mood Scale-24 (TMMS-24)* was used. The results indicated that age is a factor that influences the emotional intelligence of university students according to their maturity, abilities and responsibilities.
Keywords: Emotional intelligence, perception, understanding, facilitation, regulation, academic performance.

INTRODUCTION

During adolescence, individuals undergo various changes ranging from physical, emotional, cognitive, and social, which will be influenced by the conditions of development, i.e. the cultural, economic and social scenario in which each individual grows up. Within this development, a transformation occurs that in most adolescents causes crises and conflicts.

During this stage, changes are experienced in the way of perceiving the world, the perspective on social, moral and family values is transformed, they will begin to have their own criteria, which helps to develop their identity and autonomy, the redefinition of all the above elements at this stage trigger endless emotional processes that significantly impact on the thoughts and actions of the adolescent, thus being emotional intelligence a subject of utmost importance.

Salovey and Mayer (1995) define emotional intelligence as the ability to perceive, value and express emotions accurately; the ability to access and/or generate feelings that facilitate thinking; the ability to understand emotions and emotional knowledge; and the ability to regulate emotions promoting intellectual growth. Five basic emotions will be addressed.

To understand the term emotional intelligence and the models that best explain the concept, we must begin by being clear about the basic emotions that are manifested in human beings, which are joy, anger, sadness, dislike/dislike and fear.

As for previous research on emotional intelligence in Mexico, Maya (2022) found that students with high academic performance have a low average emotional intelligence, in contrast to students with low academic performance who have a better average emotional intelligence.

Another study that stands out is that of Juárez and Fragoso who studied the relationship of emotional intelligence with the type of parental practices in high school students; their results were that if caregivers exercised communication and autonomy practices, there was a positive relationship with attention skills, clarity and emotional repair, and caregivers who exercised psychological control practices presented a null development of emotional skills in the students.

As for international studies, Azpiazu (2023), who concluded how important are the sources of support and their direct impact on emotional intelligence, stands out. Another study that is interesting is that of Fedorenko (2019), who in his interpretation of the data tells us that the greater the aggressiveness, the lower the emotional intelligence, self-motivation and empathy.

Currently, there are several programs on emotional regulation, among them the Co-Emotional Regulation program, the *CARE-Creative for Education* program, programs based on the GROP model, the RULER program and finally the SEP curricular program for emotional education.

The interest in addressing this research topic arises from the intrigue of knowing what level of knowledge students have about emotional intelligence, and if they include certain

variables such as gender, age, socioeconomic level, shift or average influence on whether they have more or less knowledge about EI.

The *Trait Meta-Mood Scale* (*TMMS-24*) was used to measure the level of emotional intelligence. The results indicated that the relationship between intelligence and gender, age, semester and course of study did not show significant differences; however, performance and emotional repair did show statistically significant differences.

EMOTIONAL INTELLIGENCE MODELS

As described in the previous chapter, there are two main conceptual currents for the study of emotional intelligence, the mixed models are characterized by contents that transcend the theoretical analysis towards direct and applicative knowledge (Bar-On 1997) and the ability models that focus on the analysis of the thinking process about feelings (Salovey and Mayer, 1990), both models are developed in this section.

According to Trigoso (2013), there are two main models for developing emotional intelligence, the ability models, which analyze the mental skills that allow us to use the information provided by emotions to improve cognitive processing; and the mixed models, which include mental skills, behavioral traits, personality and social competencies. Each of the models is developed in more detail below.

MIXED MODELS

These models conceive emotional intelligence as a summary of personality traits, socioeconomic competencies, motivational aspects and various cognitive skills, which are established according to the context in which they are developed (Lorenzo, 2017).

One of the main authors of this current is Bar-On (2006) who has a joint conception of emotional intelligence, which has an interrelation of social and emotional competencies that determine the effectiveness with which we understand ourselves and express ourselves, how we understand others, how we relate to them. This model contains five components:

- The intrapersonal component is the ability to generate self-knowledge, to be able to consciously perform an internal reading, the ability to handle strong emotions produced in others and by others.
- The interpersonal component.
- The stress management component is the ability to have an optimistic outlook in the midst of a problematic or stressful situation.
- The mood component.
- The adaptability and adjustment component is the ability to regulate moods by adapting to different situations, when solving contextual or personal problems.

The same author proposes two large groups in which he organizes the basic skills, which according to the model are fundamental for the existence of emotional intelligence. Self-assessment, emotional self-awareness, assertiveness, empathy, social relationships, coping with pressures, impulse control, reality testing, flexibility and problem solving are some of the skills that belong to this first group. In the second group called facilitating abilities are: optimism, self-realization, joy, emotional independence and social responsibility.

In this second group are skills with a higher degree of complexity at the intra- and interpersonal level, which are dependent on the basic skills, i.e., without the basic skills the facilitating capabilities could not exist. Another of the authors who are part of the mixed models is Cooper and Sawaf (1997), which has been developed mainly in the organizational area and is formed by:

- Emotional literacy: includes emotional honesty, energy, knowledge, feedback, intuition, responsibility and connection. These components enable personal effectiveness and prudence.
- Emotional agility: includes credibility, flexibility and personal authenticity, including the ability to listen, take on conflicts and obtain good results from difficult situations.
- Emotional depth: this is the harmonization of daily life with work.
- Emotional alchemy: is the ability to innovate, it is related to learning to flow with problems and pressures (Lugo, 2019).

SKILL MODELS

Ability models focus on the emotional context of information and the study of the capabilities related to such processing. Among these is the Extremera and Fernández-Berrocal model, which considers three variables: perception, comprehension and regulation. It is based on Salovey and Mayer's *Trait Meta-Mood Scale* in which emotional intelligence is assessed on the basis of a set of emotional and adaptive skills.

- Perception: Ability to feel and express feelings adequately.
- Understanding: The ability to understand emotional states.
- Regulation: Ability to manage emotional states correctly (Trujillo and Rivas, 2005).

The dimensions refer to the degree of attention that individuals pay to their emotions, how they believe they perceive them and the capacity they have to interrupt or prolong their emotional states. The following lines explain in detail the model on which Extremera and Fernández-Berrocal are based.

SALOVEY AND MAYER MODEL

This model belongs to the skill models. The authors Peter Salovey and John Mayer, who in 1990 defined emotional intelligence for the first time, describe it as the ability to perceive, value and express emotions accurately; the ability to access and/or generate feelings that facilitate thinking; the ability to understand emotions and emotional knowledge and the ability to regulate emotions promoting emotional and intellectual growth. Emotional intelligence involves the ability to perceive, appraise and express emotions accurately; the ability to access and/or generate feelings that facilitate thinking; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions promoting emotional and intellectual growth (Mayer and Salovey, 1997).

EMOTIONAL PERCEPTION

It is the ability to perceive emotions in oneself and others, as well as in objects, art, narratives, music and other stimuli.

EMOTIONAL UNDERSTANDING

It is the ability to understand emotional information, how emotions combine and evolve through interpersonal transitions and to appreciate emotional meanings.

EMOTIONAL FACILITATION

It is the ability to generate, use and feel emotions in the way necessary to communicate feelings or use them in other cognitive processes.

EMOTIONAL REGULATION

It is the ability to be open to feelings and to modulate oneself and others, as well as to promote personal understanding and growth.

While perceiving, understanding and managing emotions involves reasoning about them, emotional facilitation involves using emotions to enhance reasoning (Brackett and Salovey, 2007).

EMOTIONS

In order to understand the term emotional intelligence and the models that best explain the concept, we must begin by being clear about the basic emotions that manifest themselves in human beings. We will begin with the definition offered by Damasio (1996), which includes emotions and feelings as part of reason, arguing that they can have a negative influence on reasoning; however, they also have the function of directing decision making.

In relation to this, intrapersonal emotions allow the coordination of physiological response systems that determine behaviors; behavioral systems that favor the processing of information, facilitating innumerable possibilities of action that allow the individual to adapt to the environment; and extrapersonal emotions that allow communicating the emotional state through control of facial expression, gestures, voice and posture, which informs and influences others, being so we can say that emotions are generated mainly from social interaction.

Emotions are the impulse and energy that makes people act, causing what they think to become reality and lived events. According to Fuentes (2014) they are considered as affective states or a spontaneous reaction that occur by presenting a response to some external stimulus, they are considered important elements for human beings that are not always valued, expected or even accepted. Emotions help subjects to adapt to the environment in which they develop. Although most of the time we are not aware of this influence, its purpose is to treat others with respect, in order to achieve a better relationship with all the people around us.

Emotions are important for the survival of human beings, since they allow them to adapt to the changing conditions of the environment. According to some research, Ekman and Oster (1979), there are basic emotions such as joy, fear, sadness, surprise and anger, which are necessary to face different situations. Thanks to technical advances in brain imaging and the analysis of some specialized studies, such as CT scans, it is now possible to know the neuronal and physiological circuitry of emotions. Getting angry, crying, feeling disgust or laughing are responses that start in the limbic system, are maintained by reverberation of information in neural structures crucial for memory and learning (in the basal ganglia, hippocampus and cerebrum), and are projected in neural regions related to the upper executive part of the brain, the prefrontal, parietal and temporal cortex (Calixto, 2018).

In general terms and without reaching biological determinisms, the brain structures in which emotions are initiated are involved with other basic activities and functions of the central nervous system. One of the most important structures of the limbic system, the cerebral amygdala, generates or initiates an emotional process immediately (300 milliseconds). This nucleus does not have much memory; in contrast, it generates the behavior of receiving attention or expressing anger or disgust. In parallel, brain areas related to the release of dopamine, the most important neurotransmitter to generate an emotion, are activated. If the release of dopamine happens abruptly, the behavior is related to negative processes such as anger, rage or fury; on the other hand, if the release of dopamine is slow, gradual and developed with very high levels of expectations, then the emotions that are generated are in function of obtaining a reward, motivation, happiness or even crying. In other words, in their origin, emotions share brain areas and the neurochemical component (Calixto, 2018).

IRA

One of the 5 basic emotions experienced by the human being is anger, an internal force that arises in situations of tension, discomfort or frustration, like other emotions, it is considered a natural way to react to circumstances of threat or perception of injustice. It would be considered an emotional state whose intensity varies from mild irritation to fury. In addition, according to Maldonado (2019) this emotion propitiates a high level of energy that would serve to deal with hostile responses or prevent aggressions coming from the environment. This emotion is presented through psychological and biological changes that can be seen in human behavior, learning and social interaction.

Anger, like other basic emotions, fulfills an adaptive function, which is determined by environmental stimuli in a way that allows survival, this occurs through various cognitive, physiological and behavioral reactions. Maldonado (2019) mentions that some cognitive elements that are expressed as a result of anger are the increase of energy, agitation and irruption of behavior, defensive attitudes to events that are interpreted in a provocative way or as obstacles that prevent achieving some goal, likewise stimuli considered immoral and unfair tend to affect behavior.

In a physiological way, Maldonado (2019) highlights the activation of the sympathetic system that would be shown in the increase of the heart rate, an increase in muscle tension, facial expressions such as low eyebrows, contracted, stiff lips and jaw, predominant or intense look. In relation to this, the author mentions that a constant activation of anger can be associated with the development of cardiovascular diseases, digestive diseases such as ulcers, chronic pain diseases such as rheumatoid arthritis, and autoimmune diseases, among others.

Anger is cited as one of the most difficult emotions to manage and regulate adequately, leading individuals to exhibit high levels of aggression and intimidation, in addition to other self-destructive behaviors such as the consumption of psychoactive substances. Therefore, it is understood that inadequate anger management leads to self-inflicted aggressive behaviors, physical harm to people in the environment, affecting social relationships in a timely manner.

Anger is considered one of the emotions whose regulation becomes complex due to the intensity of its nature. Maldonado (2019) mentions exercises to work on the emotion and reduce its intensity by means of images that favor relaxation, first in an isolated manner in non-stressful situations and then applied in scenarios where anger is present, with the intention of reducing the levels of activation by means of an approach to situations that propitiate the emotional state of anger.

Therefore, one of the methods of regulation for anger is Jacobson's progressive relaxation, which as described in Maldonado (2019) consists of progressive muscle relaxation, i.e. tensing and relaxing the muscles, in a conscious manner, i.e. perceiving bodily sensations, which would allow anxiety levels to decrease allowing a state of mental tranquility. Similarly, mention is made of relaxing breathing, which consists of a guided and controlled breathing, which is carried out in a comfortable posture, inhale air for 4 seconds, hold it for 7 seconds and exhale in 8 seconds, this would achieve a deep state of relaxation, since the proper oxygenation of the blood leads to a decrease in cardiac blood pressure.

SADNESS

Sadness is considered along with anger, fear, happiness and displeasure as primary emotions, it is classified within the negative emotions. Negative emotions tend to last longer and to be more common than positive emotions, since according to Cuervo and Izzedin (2007) in daily life there are more frustrating

situations that remain more marked in the individual than satisfactory situations. It is suggested that sadness fulfills an adaptive function when facing negative events and a social function when receiving support and help. It is an emotion that encompasses feelings such as loneliness, apathy, self-pity, grief, among others. Sadness usually originates when experiencing the rupture of affective relationships, failure to achieve significant goals, decreased self-esteem, social conflicts and other similar causes.

Generally, when there is a lack of interest and motivation for activities that were once rewarding, there may be sadness in an individual, reality tends to be perceived negatively. It may be reflected in reduced physical activity, changes in facial expression and posture. Sadness also comes to be expressed through tears or crying, moments of silence, alterations in the tone of voice, reduction in the length of sentences, aversion to food, fatigue or even violent behavior (Alvarez, 2013).

According to Cuervo and Izzedin (2007), adolescents experience sadness when they perceive an unfavorable outcome as permanent and believe they have no control over the situation, which leads them to feel powerless. In adolescence they experience high levels of sadness, which tend to experience greater difficulties in relation to themselves, school, family and society, manifesting their sadness in all aspects of their lives. In addition, they tend to have negative thoughts, experience fear and suffering, face internal conflicts and show a notable social aggressiveness, in comparison between men and women negative emotions such as sadness are mostly expressed by women, unlike men who tend to express positive ones.

Sadness can be perceived in different ways, facial features decay of eyebrows, eyelids and corners of the mouth, some physical features are also linked to stomach problems, low skin temperature, feeling of chills, feeling of lump in the throat, symptoms of muscle pain, posture of the shoulders and back are decayed, increased heart rate. On the other hand, at a psychological level, sadness generates moodiness and irritability, nervousness and feelings of nostalgia or melancholy, negative or pessimistic thoughts, and the way individuals express and communicate also changes when this emotion is present, the tone of voice lowers, people tend to speak very little or not at all, as they tend to isolate themselves. At the neuronal level, the neurotransmitters released modify the limbic system (hippocampus, amygdala and septum) and the cerebral hemispheres (Sánchez-Aragón and Sánchez-Ruiz, 2009).

Facilitating the development of strategies that help regulate negative emotions such as sadness can prevent it from becoming a psychopathological problem, that is why some regulation techniques are listed below:

- Seeking comfort: seek social support such as calling or being with someone to vent.
- Shift of attention from the provoking stimulus: try to see the feelings from another perspective.
- Self-distraction: engage in a hobby, physical exercise or some activity that is fun.
- Avoidance: avoidance of negative thoughts.
- Self-tranquilization: breathing, meditation and analyzing the situation looking for possible solutions (Extremera et al., 2012).

FEAR

Fear is a natural emotion that is characterized by experiencing an unpleasant and intense sensation when faced with the perception of a real or imaginary danger; it is one of the few basic emotions that we share by an evolutionary sense among animal species. In addition, it is considered one of the most primitive emotions, since its function is to prepare us

for survival, to give a quick and effective response to a threat. It is a defense mechanism, triggered by a wide range of events, stimuli or situations that are interpreted as dangerous and threaten the well-being of the person (Ressler and Maren, 2019).

Boissy (1995) mentions that dangers are necessary for the evolution of the species and names the following: learning, intensity of stimuli, novelty and interaction with other individuals. Fear acts as an alarm signal, besides being the main form of social communication about some kind of danger (Retana and Sanchez, 2016).

In the same way that there are stimuli that will trigger fear, it manifests itself at four levels: Cognitive level: it is transformed into negative thoughts and images about the feared stimulus or situation; in addition, there is an interpretation that is made about it.

- Physiological level: bodily changes occur that cause unpleasant sensations, such as accelerated heart rate and breathing, muscle contraction, trembling of legs and hands, sweating, blocking, tics, facial expressions such as facial pallor and piloerection (the hair on the skin stands up). Ortony et al. (1996) point out that emotion includes a physiology, where many cerebral, endocrine and metabolic systems are activated which, according to Leventhal (1984) prepare the body for adaptive action, since they cause survival-oriented behaviors and provide information that facilitates the speed of behavioral reactions, there is an activation of the sympathetic and parasympathetic nervous system, i.e., they do not depend on the will.

The body prepares for an attack by increasing the production of glucose and oxygen for the muscles to use. The sweat glands are stimulated by the sympathetic branch of the autonomic nervous system to cool the body and help it keep cool in case of the need to escape at high speed In the face of emotion: blood is withdrawn from the face, which may explain the pallor, and flows to the long skeletal musculature - such as the legs - thus favoring flight; at the same time, the body seems to freeze, if only for an instant, to gauge, perhaps, whether hiding would be a more appropriate response. Nerve connections in the emotional centers of the brain also trigger a hormonal response that puts the body in a state of general alert, generates restlessness and predisposes for action, while attention is fixed on the immediate threat in order to assess the most appropriate response.

- Behavioral level: fear causes actions towards the feared stimulus or situation, such as freezing, running away or crying. An emotional state of aversive type is presented, which provokes an impulse to avoid or flee from the danger signals.
- Neural level: fear begins in a region of the brain called the amygdala, which is part of the limbic system; this system is responsible for regulating emotions and conversational functions of the individual (Louhau et al. 2021).

The autonomic fear response (the one we do not activate consciously) arises long before our reason decides anything about it. There are many brain areas related to fear. The important ones are:

a. Thalamus: decides where to send incoming sensory data (from eyes, ears, mouth, skin).

b. Sensory cortex: interprets sensory data.

c. Hippocampus: stores and retrieves conscious memories; processes sets of stimuli to establish context.

d. Amygdala: decodes emotions, determines possible threat, stores memories of emotions and fear.

With the above, it is possible to observe the influence of fear on the subject's behavioral response depending on its intensity, where according to Valderrama et al. (2014) fear is made up of the following phases:

a) Cautiousness: The subject is frightened, but is in control of his responses, although he is alarmed.
b) Distress: In this phase, the degree of fear increases and emotions intermingle, resulting in hopelessness.
c) Panic: The subject does not regulate his/her behavior and motor impulses occur.
d) Terror: Being the maximum degree of fear, with motor paralysis, conserving only the neurovegetative functions.

FEAR REGULATION STRATEGIES:

The first strategy to regulate the emotion of fear is known as systematic or progressive desensitization, this technique as mentioned by Vallejo-Slocker and Vallejo (2016) was a pioneer in behavior modification, mainly in the treatment of phobias. Although its use has decreased since the 1970s, it has not disappeared completely, it has only been integrated into other procedures, its appearance dates back to the work done by Wolpe in 1958 where he explained a method based on reciprocal inhibition, where relaxation and anxiety responses compete, as they cannot coexist at the same time.

It consists of training a response that is incompatible with anxiety (relaxation), so that gradually the person is exposed to stimuli that generate a high level of fear and anxiety with the aim of desensitizing the person, it is considered desensitized when the stimulus that produces fear is rated subjectively on a scale of 1 to 10, as the lowest, that is to say with the score of one as the lowest level of anxiety / fear (Reyes et al. 2019). Exposure to the stimulus can be done in different ways: imaginative, an enriched environment (favorable for the person to cope with the stimulus in a simple way), simulation of the stimulus / situation, through technological resources (such as virtual reality, videos and sound production).

This strategy can be criticized, however, its effectiveness and practicality are undeniable, within the clinical setting it is used as a treatment against phobias and anxiety through cognitive behavioral therapy and the techniques it uses. The second strategy to confront fear does it in a simple way, and concentrates on thoughts, which gives it its name: thought stopping. It was presented by Baín in 1928 in the book: thought control in everyday life, to be taken up and applied in the fifties by Joseph Wolpe in the treatment of phobias and obsessions, the thoughts that this strategy tries to stop are irrational and repetitive which causes anxiety or fear in the person (*Lozano et al. 2019*).

The objective of this strategy is to stop the negative thoughts that increase fear, this is done by reducing the stress and anxiety of the person, by concentrating on reducing the elaboration of unpleasant, inadequate and persistent thoughts. To reduce or stop the thoughts that provoke fear, a verbal cue is used in most cases, it is useful at times when the person cannot expose himself to the thought that generates the fear. As Barraca (2011) mentions, stopping the thoughts is done through a physical-verbal stimulus, such as shouting *stop* followed by hitting the wrist with a small bracelet with a good intensity, after using the key should be complemented with other activities that distract the person from the thought, such as enunciating positive phrases, making mental accounts, or talking to another person.

This strategy should not be used in excess, because it generates constant avoidance of stimuli, the opposite of what is expected and that is to confront the stimulus (Guerra and Plaza, 2009). It is recommended that this strategy be complemented with others such as the first one mentioned above. Finally there is a fear regulation strategy that is performed consciously, but, it is not recommended to teach it because this is presented as a way to empty all the stress and anxiety generated by fear (and other emotions) as a form of quick escape, when it exceeds the capacity of the

person, it is known as emotional venting. Reyes et al. (2019) mention that this strategy consists of releasing the tension caused by the emotion, in order to capture the attention of other people to get their help, this venting is manifested through crying, screaming, etc.

This occurs more commonly in women, it precedes the search for professional help to learn and better understand how to regulate emotions, this relief of not being expressed or regulated with other techniques can present in the person feelings of denial, mental disconnection, and substance use behaviors, in the best of cases and occasionally the use of humor to calm the situation of fear is presented, but it is not enough (Izquierdo, 2020). Therefore, it is recommended to seek help and learn other strategies such as those mentioned above, the emotion of fear is complex, but it is necessary to learn to regulate it with the right strategies, otherwise it will bring serious consequences for the person such as the presence of phobias, anxiety and emotional dysregulation that affects behavior and conduct. The following is a description of a completely opposite emotion belonging to the range of positive emotions: joy (Louhau *et al.* 2021).

JOY

Joy is an emotion that is found within the so-called positive emotions (love, gratitude, serenity, etc.). Joy is not commonly defined in most works, due to the fact that all people have experienced it throughout their lives, however, a characterization of positive emotions helps in a definition of joy, Bisquerra (2014) mentions that positive emotions are experienced before events that are valued as progress towards the complement of personal goals, basically ensuring survival and well-being, the concept of joy derives from the above, as an emotion that guarantees the survival and well-being of the person by achieving the fulfillment of personal goals, this emotion goes beyond an individual dimension, it has a social dimension, which makes it present in all people.

The above is reinforced by Sevilla (2016) where he defines joy as a positive feeling, a consequence of favorable events that impact us directly or indirectly, by generating a response to the achievement of a goal or by achieving to reduce discomfort. With the achievement of goals and objectives, meaning is given to life, so joy is something inherent to the events that occur in it. Joy is so common that it has a universal facial expression, regardless of culture, a place recognized by all people and immediately associated with this emotion (Ekman and Oster, 1979). This universal expression is based on the zygomatic major muscle, which is responsible for retaining obliquely the corners of the lips, a slight elevation of the back of the eyebrows, the elevation of the corner of the lips and the opening of the mouth, this is known as smile (Iglesias *et al.* 1989).

In a physical way, joy is expressed with laughter, with slight shouts, also with a state of pleasant activation such as relaxation, the sensation of being more energetic, such as jumping, talking a lot and transmitting/saying positive things, besides having the intention of giving hugs because of the great emotion (Fernandez *et al.* 2000). Physiologically, joy generates reactions such as excitement, increased temperature (heat) and muscle relaxation (when the emotion is temporary and does not impact with too much intensity), when the emotion reaches high levels and becomes euphoria, Fernandez *et al.* (2000) mention reactions such as excitement, nervousness, increased psychomotor activity (tremors, desire to cry; what is known as tears of happiness and accelerated breathing), there are also sudden changes in breathing, high heart rate and blushing.

In a hormonal and neuronal way, joy has implications in the activation of the autonomic nervous system (ANS) and the hypothalamus pituitary adrenal (HPA), when endorphins

are generated, this activation of endorphins generates behaviorally the acquisition of healthy practices and search for social bonds, this has an impact on the immune and cardiovascular system, so that joy directly influences health (Oroz, 2016). Endorphins are synthesized in the hypothalamus and pituitary gland, with an effect similar to opioids, with analgesic (pain reduction), sedative (relaxation) and anxiolytic (calms anxiety) functions, to generate a sense of well-being, in addition to influencing appetite, release of sex hormones and strengthen the immune system, also adds the release of serotonin, a neurotransmitter, which is related to relaxation, well-being and concentration.

Serotonin, together with high levels of oxytocin, and dopamine, give high states of joy / euphoria, but if they are low it is related to the opposite emotion, sadness. Joy can be triggered by different causes, depending on each person, with the achievement of achievements / goals that generate well-being, pleasant situations, or laughter itself. It can also be triggered according to its functions, López-Martínez *et al.* (2021) mention three main functions: 1) Basic, it is related to the adaptive (achievement of accomplishments). 2) Socializing, it is related to interactions with others, its expression or sensation facilitates openness to establish links and relationships. 3) Motivational, it guides our behavior, with the repetition of activities that generate joy, or that make us feel an improvement. Another function that can detonate joy is creativity, for this to develop and flow, joy and motivation are needed.

Joy also has negative effects on the person, mainly in the decision-making process. Reasoning without the presence of emotions, causes errors and serious consequences, the presence of emotions is vital in this process by allowing to form, predict and plan judgments and actions (Sarmiento-Rivera and Ríos Flores, 2017); but the presence of emotions must be regulated and with a balance, it is recommended to do it in a conscious way and stop to think and choose the best alternative, meditating the possible consequences of making a decision, whether little or very important. When joy is overflowing and becomes euphoria, decision making is hasty, impulsive without prior reflection, increasing the risks and probable consequences, also, hasty decision making can be related to joy and the search for immediate satisfaction (Bárez and Fernández-Guinea, 2007).

Joy, not being classified within the negative emotions (fear, anger and displeasure), does not have its own strategies to regulate, since being positive it should not be managed, however, it has been previously mentioned that it does have negative consequences, in addition, the strategies that will be described below focus on contextualizing it, i.e., regulating when and where to express it and prevent it from becoming a euphoric state. The first strategy is identification, identifying when joy is very intense and can turn into euphoria plus the consequences it can have such as poor decision making and an expression of it that breaks the social balance or interactions with other people, in students it is common to teach in which situations it is not correct to show joy through laughter (such as at a funeral), or in the classroom: "to laugh with" and "not at" to avoid ridiculing and making fun of others (Jiménez-García & Fernández-Vallejo, 2006).

The second strategy is the non-distinction of emotions, previously described, that emotions can be classified into negative and positive, this technique of regulation, is not only to recognize the joy and emotions as positive or negative, rather as pleasant and unpleasant, as they bring / teach us something, joy is not the only emotion that gives meaning to our life the others are also present and are part of it, they are so complex that experiencing a single emotion would be a fragmented expe-

rience as Bericat (2012) explains: the emotional experience of a subject depends on several factors such as: the valuation of the facts, the expectations of the situation, attribution of causes, social and group identity, etc. Therefore, recognizing other emotions is an integral part of regulating and understanding them.

Finally, the flagship strategy of emotion regulation and mainly of joy is breathing, although there are a multitude of breathing strategies to avoid reaching a euphoric state, the strategy is diaphragmatic breathing (also known as deep breathing), is to inhale slowly through the nose and bring the air to the bottom of the lungs by inflating the abdomen, The benefits are the decrease of euphoria by counting the thoughts with the concentration of the breath, a more peaceful mental state and decrease of the heart rate (Vivas *et al.* 2007). Now, the next emotion also has an adaptive function, but it is considered as negative: displeasure.

DISGUST

This emotion is of a natural and adaptive type, and is one of those considered as "negative" (fear, sadness and anger), or aversive. These are characterized by reflecting something known as negative affectivity: a transitory emotional state, where there is a tendency to experience negative emotions over time and in specific situations (Piqueras *et al.* 2009). This negative affectivity makes disgust (this is how this emotion will be referred to from now on) socially not well perceived, however, this emotion has a great importance, despite not being as investigated as joy or anger, it has a solid theoretical body dedicated to its study. To define this emotion and give its characteristics, we should mention the great evolutionary influence of disgust, which arises as a defense mechanism against contaminating and potentially dangerous elements for our body, focusing on the rejection of foods related to the sense of taste (León, 2014).

What makes it universal is its adaptive and survival function, as a reaction of rejection towards that which can harm us, nowadays it is not only a response to elements such as food or chemicals, this emotion is also presented as a protection against sociocultural and psychological components. Despite its negative conception, this emotion helps us to protect ourselves. Like any other emotion, disgust generates many types of reactions, which can be divided into two main groups: those that occur internally (organism), and those external ones that help us to identify this emotion (non-verbal language). Physiological. For disgust, physiological type reactions are very noticeable and easy to distinguish by their nature, Fonseca (2019) mentions that there are three physiological components of disgust: facial expression, nausea and behavioral tendency.

The first are the facial gestures, these are recognized by all people and it could be said that the facial expression of disgust is universal and its description would be as follows: Movements around the mouth and nose, the lower jaw is decreased, the tongue may or may not be extruded, in addition, the nose is wrinkled and the upper lip is increased. The wrinkles in the nose and mouth are related to the elaborated displeasure, that is to say, a stimulus that provokes us to make these gestures. When the expression is provoked by a stimulus, there is a tendency to close the nostrils to avoid the threatening (such as odors) and generates wrinkles in the nose, in addition, by avoiding to open the mouth and the entrance of odors, salivation increases in case that unpleasant thing has entered the mouth.

Along with salivation, other physiological characteristics are associated, Rozin *et al.* (2000) mention the following: the increase in gastrointestinal reactivity and muscular tension, as a result of which nausea occurs, which is the most important manifestation of dis-

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gust. These are aimed at avoiding ingestion, and when they become very strong they generate the expulsion of what is ingested (vomit), this can be produced not only by threatening objects, but also certain moral violations have been added, which are palpable and generate disgust, and are described as offenses (such as constant threats to a person). Now, in a neuronal and hormonal way, there is very little research in this regard, in the case of disgust, the contribution made by Choliz (2005) on cognitive processes such as the subjective experience of short-lived repulsion and humor reactions in certain contexts that incite feelings of disgust is recognized.

Physically, the most common reactions are, as already mentioned, gastrointestinal discomfort, muscle tension and in cases related to gustatory or olfactory aspects of the stimulus, elevated respiratory rate and a moderate elevation of the heart rate. Understanding this emotion is not something complicated, since it is an emotion that is experienced on a daily basis, many times unconsciously or naturally, previously, it was mentioned that disgust is an emotion of adaptive character before stimuli that are a threat or cause us repulsion. Therefore, its triggers are unpleasant stimuli (mainly chemical), potentially dangerous or annoying. Aversive conditioned stimuli (such as avoiding eating an unpleasant food), and unconditioned stimuli, which are usually olfactory or gustatory (smell of rotten fruit), lack of hygiene, strong odors, body fluids of other people or animals, some animals such as rats, etc. (Choliz, 2005).

Among the advantages of picking up and expressing disgust are the generation of escape or avoidance responses to unpleasant or potentially harmful situations, the promotion of healthy, hygienic and adaptive habits, and the modulation of our social behaviors. In the educational field, disgust could also play a relevant role in the professional choice, and it seems to be associated with vocational interests. Among the disadvantages of not expressing and recognizing disgust are suffering states of tension and experiencing unpleasant situations that can put us in danger or illness (either by food or by not avoiding a stimulus), in addition to the fact that our behaviors would not be regulated, by not detecting these potentially dangerous stimuli, people would be more vulnerable and would run a greater risk of suffering harm (either physical such as an illness or social such as a bad decision).

Below we will explain three strategies to regulate this emotion, most of the strategies focused on this have to do with recognizing the stimulus that generates us aversion / disgust, being aware of what generates us aversion is something fundamental to try to regulate this emotion. The first strategy is one applicable to all emotions and is breathing, most of the time it is related to *mindfulness,* by controlling and focusing on breathing it helps to maintain attention as an anchor in the present moment, that is, through breathing we can focus on the here and now (Moscoso, 2018). In this way we can focus our attention and cope with the stimulus that causes us aversion. Now, the second strategy consists of relaxation before an aversive stimulus, this technique is useful when disgust becomes a type of anxiety or the stimulus causes too strong an impact.

Jacobson's progressive relaxation is a strategy developed in 1928, which consists of progressively tensing and relaxing the most important muscle groups of the body, with the objective of provoking mental tranquility by suppressing muscular tensions (Mosconi *et al.* 2008). The strategy is divided into seven steps (Jacobson, 1987). The first step consists of inhaling air and bringing it into the abdomen and exhaling, to initiate relaxation. The second step consists of the arms and chest, clenching the fists, squeezing the forearms, biceps and pectorals, maintaining this ten-

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sion for seven seconds and loosening them. The third step focuses on the forehead and neck, first the forehead is wrinkled and held for seven seconds, in parallel the head is rotated from one side to the other. The fourth step consists of frowning between the eyebrows, eyes and lips, tightening the jaw and hunching the shoulders, for seven seconds.

The fifth step is the back, inhale deeply, and arch the back gently for another seven seconds. The sixth step requires inflating the abdomen and letting it swell as much as possible for the air, using seven seconds again. The last two steps require flexing the feet and toes, plus tensing the thighs, calves and buttocks. To finish with flexing the feet and tensing the muscles mentioned (thighs, calf and buttocks). It should be noted that this technique can be applied for different stimuli, and for other emotions.

Finally, there is the strategy of progressive exposure, also known as systematic desensitization, Vallejo- Slocker and Vallejo (2016) explain it as follows: it consists of exposing the person to the aversive stimulus, constantly until the disappearance of the displeasure is obtained, this technique is recognized for its use in phobias, and in the treatment of post--traumatic stress disorder (PTSD).

It can be applied to disgust in a very simple way, such as tasting certain unpleasant breath every so often to lose that aversion, or in the case of unmoral behaviors that cause displeasure, exposing oneself to a simulation of them on a continuous basis.

Having addressed the basic emotions and their most important elements such as perception, understanding and regulation, it is necessary to talk about how these emotions impact on a very important stage of the life cycle, which is of interest for this project: adolescence.

EMOTIONAL INTELLIGENCE IN ADOLESCENCE

During adolescence, individuals undergo various changes ranging from physical, emotional, cognitive and social, which will be influenced by the conditions of development, i.e., the cultural, economic and social scenario in which each individual grows up. Within this development, a transformation occurs that in most adolescents causes crises and conflicts. The crisis experienced by young people in adolescence is due to uncertainty about their future, anguish, being accepted in the group of friends, having a pleasant physical appearance, in general, not knowing what direction they should take in life and feeling understood (Papalia, 2009).

Barcelata and Rodriguez (2021) state that adolescents face pressures that can alter their lifestyles according to the demands of the environment, perhaps one of the most critical or vulnerable stages of the human life cycle in the face of such pressures is adolescence. During this period, both qualitative and quantitative changes are experienced in various dimensions of life. According to experts, the most abrupt changes faced by the individual in a short period of time occur during adolescence, precisely when conditions are less favorable due to the lack of experience and biological, emotional and social maturity. These various changes in different aspects of life can be perceived as challenging, giving rise to emotional conflicts and difficulties of adaptation in general. It could be said that adolescence is a process influenced by cultural, social, family and individual issues, which makes it different depending on the context.

According to Silva (2022), the crisis during adolescence prevents the establishment of goals, which serve the adolescent as an organizational tool for setting life objectives. There are commonly three categories of development that the adolescent establishes within his or her goals, which are listed below:

- Academic development.
- Occupational development.
- Personal development.

During this stage, changes are experienced in the way of perceiving the world, the perspective on social, moral and family values is transformed, they begin to have their own criteria, which helps to develop their identity and autonomy, the redefinition of all the above elements at this stage trigger endless emotional processes that significantly impact on the thoughts and actions of the adolescent, thus being Emotional Intelligence a very important topic. In addition, it plays an important role in supporting risk behaviors that occur during this period of human development. Currently, there is a growing interest in all those studies related to well-being in general; psychology is no exception. Since the last three decades there has been a boom in research related to emotions, and given the growing wave of youth problems, the conjunction of both was inevitable (Sánchez *et al*., 2020).

EMOTIONAL INTELLIGENCE IN ADOLESCENCE: STUDIES IN MEXICO

Maya (2022) correlated the variable of academic performance with emotional intelligence in adolescents, where he found that students with high academic performance have a low average emotional intelligence, while students with low academic performance have a high average emotional intelligence. There is a difference between genders, where females tend to be more emotional and with low control, so that they deal with academic tasks more effectively, but do not possess high emotional intelligence.

Sanchez *et al.* (2020) determined that adolescence is the period when anxiety is most prevalent and intense, so they studied the factors related to its presence and created an intervention program that provides adolescents with tools to manage their emotions in the face of difficulties they may encounter during this stage. The main objective was that this intervention program would improve the social-emotional skills of the adolescent and create awareness of the importance of emotional intelligence in dealing with crises, unsatisfactory moods that can trigger anxiety. The intervention program lasted 9 weeks in which skills such as assertiveness, empathy and decision making were developed and strengthened.

Juarez and Fragoso (2019) studied the relationship of emotional intelligence with the type of parental practices in high school students, their findings were, when caregivers exercise practices of communication and autonomy, there was a positive relationship with attention skills, clarity and emotional repair, whereas, caregivers who exercise practices of psychological control and imposition found a negative relationship with emotional intelligence, that is, a null development of emotional skills in students.

EMOTIONAL INTELLIGENCE IN ADOLESCENCE: INTERNATIONAL STUDIES

International psychological problems will clearly show different behavioral, emotional, social and affective patterns depending on the region. It is therefore important to analyze different cases and try to find some common psychological patterns.

Recently in the international arena we have some studies relevant to emotional intelligence in adolescents, among them we can highlight some of those that will be briefly mentioned.

The research by Azpiazu *et al.* (2023) was carried out with 1,397 high school students in a Spanish school. The objective was to determine the relationship between two factors that promote life satisfaction in adolescents. The first one of main relevance is the social support factors, composed of close social ne-

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tworks such as family, friends and, in specific cases, a role model who can take on a guiding role, such as a teacher. The second key factor is emotional intelligence, characterized by emotional attention, clarity and repair.

To mention some of the conclusions obtained, we have the importance of the sources of support and their direct impact on the components of emotional intelligence; the role played by parents for the adolescent. These adults are the ones young people would look to in case they need advice, guidance or to clarify their emotions (this only applies if there is a bond of trust between both parties). Likewise, we have the clear reference that during this stage of youth, the most trusted social source is the adolescents' own peers. And therefore, the influence that exists between them will depend on the social and psychological factors of each individual.

Finally, we have that teachers can be an important source of support for well-being when adolescents perceive that thanks to their advice they are able to manage their emotional skills intelligently. The authors propose as a possible solution to the emotional problems of young people a holistic creation of positive environments for young people, necessarily requiring the teamwork of adults, constant monitoring of adolescents and work focused on highlighting the importance of feeling cared for and loved by the social network.

There is a growing proliferation of problems with cases of youth violence, even in Europe we can see this type of conflicts reflected. The studies of Fedorenko *et al.* (2019) concentrate their efforts on investigating about emotional intelligence, anxiety and aggression as predictors of destructive behaviors in adolescents in the nation of Russia. Specifically, they compare the levels of emotional intelligence, anxiety, and aggression in adolescents with suspension for contempt of law with those who showed respect for the law.

The interpretation of the results showed that the higher the aggressiveness, the lower the emotional intelligence, self-motivation and empathy; that is why disruptive youths are not able to distinguish or understand the emotions of other subjects. In the discussion, mention is made of the relevance of the family environment in early childhood, since it is at this stage where the neglect of infants leads to an increase in emotional maturity and disconnection with the social environment, which is a direct cause of poor self-control in adolescents in the future.

This study allows contributing with some tentative solutions, the most relevant being the promotion of psychological corrective development, the prevention of illegal behaviors, and above all emphasizing efforts in emotional intelligence as a basis for the development of assertiveness, socially healthy behaviors, reduction of incidence risks and a joint work between authorities and family members.

Recent evidence on emotional intelligence in the country of Indonesia shows similar conclusions with Western theories. As an example, the correlational research of Permatasari *et al.* (2021) discusses the relationship between perceived emotional intelligence and adolescent autonomy. The statistical analysis showed a positive correlation between both factors, i.e., the higher the emotional intelligence, the higher the autonomy in young people. During the discussion and conclusions, it is possible to observe the global advantages that adolescents can benefit from if they are able to have the ability to reflect and manage their emotions adequately.

Emotional intelligence is even an element that can be used to greater advantage in the juvenile stage, since this is characterized by a period of diverse physical, hormonal, neurological and psychological changes; new experiences and unusual situations are experienced that provoke different emotional reactions. That is

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why those adolescents who control and regulate their emotions are socially competent, assertive, able to easily overcome frustration, show greater security, have greater self-confidence and positive self-esteem and thanks to their management and control of the internal *locus* of control can reason more logically in situations with high levels of pressure.

The work of Wang *et al.* (2023) provides valuable information in the context of the pandemic experienced in the recent decade by COVID-19. It highlights once again the usefulness of an adequate emotional intelligence for adolescents to be competent when facing difficult situations. This study was conducted in China during the world pandemic of COVID-19, where the aim was to study emotional intelligence as a predictor of life satisfaction and whether the validity of friendship and optimism were able to mediate this relationship. The research product showed that optimism and friendship quality could partially mediate the relationship between emotional intelligence and life satisfaction.

The relevance of the study lies in pointing out the influence of quality friendships and optimism on the emotional intelligence of young people and how, in turn, this leads to greater satisfaction with life. This in spite of being in a depressing, desolate and isolating environment such as the confinement due to the world pandemic.

A traditional approach to the implications of the family in the development of emotional intelligence is the one carried out in Romania by Rufa, V. (2023), in which a theoretical analysis was conducted on the implications of the family in raising and educating adolescents. In this work, the central character of adolescents was left aside, as it is an approach focused on explaining how adolescent behaviors are nothing more than a product of the education received in childhood and early childhood. It is made clear that the parental educational style leaves its mark (really, for a large part of life) on the psychic development and personality formation of the infant and future adolescent. Parental interest, a good educational style and enriching family relationships are essential and have positive effects on the formation of emotional skills and regulatory mechanisms.

In spite of this, the social factor is not simply reduced to that, since it must be taken into account that there is a context and environment prior to the birth of the infant; this environment implies a situation in favor or against the development of a correct emotional intelligence.

According to Arrivillaga (2022), men have higher scores in intrapersonal perception and emotional regulation as opposed to women who only obtained higher scores in interpersonal perception, which indicates that there are gender differences in EI within the dimensions of perception and emotional regulation; however, no similarities were found with other research, so it is recommended that future research should resume the analysis of these differences.

Cano (2024) states in his research that men tend to suppress their emotions more, which indicates a lower level of emotional regulation. On the contrary to women who tend to dialogue among themselves when they are facing a situation of stress or emotional crisis, thus generating a way to regulate their emotions through cognitive reevaluation. Therefore, it is indicated that there is a difference in how emotional regulation is presented in men and women. This is evidence that gender has a different influence on the emotional domain.

While Rodriguez *et* al. (2019) mention in their research about Emotional Intelligence in relation to gender in university students, that women are able to pay more attention to their emotions so that in the dimension of understanding their scores are higher, unlike men who have greater difficulty in managing their

emotional state, while in knowing how to regulate these emotions men predominate with a higher percentage than women. Despite the differences in these scores, the authors state that there are no significant differences in EI taking into account all the dimensions in relation to the gender of the students.

This review of various international antecedents, allows us to broaden the general vision that exists in emotional intelligence and enriches the baggage of global knowledge. We have then that, in spite of containing similar visions and treatments in the emotional intelligence factor throughout the planet, it is the cultural, social, economic, political and psychological factor itself what will characterize and differentiate the phenomenon in the different countries.

ACADEMIC PERFORMANCE AND EMOTIONAL INTELLIGENCE IN COLLEGE STUDENTS

ACADEMIC PERFORMANCE

Academic performance can be understood as the achievements that a student reaches within his or her school studies, such achievements can be grades, learning obtained or goals achieved (Cervantes *et al.* 2020). According to Vivas *et al.* (2019), academic performance is influenced by a group of both internal and external factors, internal factors include motivation, prior knowledge, attitudes, beliefs, personality and learning styles of the student, while external factors encompass aspects such as the quality of teaching, access to educational resources, the infrastructure of the institution and the support of the family and social environment. With the factors that impact academic achievement, an academic culture can be developed with profound and positive effects that propitiate greater student learning; however, the factors that are essential for some students may be secondary for others.

For their part, Tacca *et al.* (2019) indicate that academic performance is the measure of an individual's response capacity, expressing painstakingly what is learned as a result of an instruction or training process. Likewise, they mention that from the students' perspective, it is the capacity to respond to previously established stimuli, objectives and educational purposes. The levels of emotional intelligence influence the mental health of students, psychological balance is related to academic performance, it could be believed that people with low emotional skills are more likely to experience stress and difficulties during their studies, however, according to the results obtained from Artnz (2018) in his research, a relationship between the levels of emotional intelligence and academic performance or curricular advancement of university students is not observed. Therefore, it is important to contrast these findings with those obtained in this research.

EMOTIONAL EDUCATION PROGRAMS

EMOTIONAL CO-REGULATION

Emotional regulation is defined as the proper management of emotions, this includes having good coping strategies to deal with emotions such as anger, sadness or happiness; having the ability to self-generate positive emotions. All this is possible, but first, it is necessary to recognize emotions from an early age, where the concept of emotional co-regulation. It is defined as all those actions performed by parents or primary caregivers (aunts, uncles, grandparents) of young children, which support all the efforts they make to regulate and recognize their emotions whether in intensity, duration and sensation (Martínez and Pichardo, 2018).

In emotional co-regulation, children and parents influence each other throughout the

process, self-regulation is considered internal and co-regulation external (Olhaverry and Sieverson, 2022). Thus, parents act as a role model for their children, who rely on their parents when difficulties arise. Within the strategies of emotional co-regulation there are two types: those that limit how (ignoring, making fun of the child, lying and not recognizing emotions), these cause harm, they are a quick solution that seeks to avoid the problem of facing the emotion; this will cause children to repress their emotions and not be able to express them.

On the contrary, there are the strategies that promote, those that should be worked in the programs, and that make it easy to manage emotions such as distraction, verbal and physical consolation, explaining and cataloguing the emotion, encouraging and motivating; these strategies do not avoid the emotion, on the contrary, they seek to understand it and try to explain it to the child, if these strategies are applied and worked successfully, the child can recognize, feel and express his emotions in an adequate way in his interactions.

CARE-CREATIVE FOR EDUCATION PROGRAM

This program was developed in the United States, and is based on the prosocial Classroom model developed by Patricia Jennings and Mark Greenberg, in 2007. Its acronym: *Cultivating Awareness and Resilience in Education*, is a program that is applied in several states. This program is based on two principles: emotional regulation and achieving higher educational performance (Terzi *et al.* 2016), the program has undergone modifications over time, but has shown favorable and very promising results. It focuses on four main objectives: improving teacher well-being, improving teacher effectiveness in providing behavioral and instructional emotional support to students, improving teacher-student relationships and classroom climate, and finally increasing prosocial behaviors in students (Mañas *et al.* 2014).

Among the activities carried out for this program are the management and recognition of emotions (self and others), stress reduction practices based on *mindfulness*, focusing on meditation and breath control, conscious listening and compassion practices to help teachers optimize opportunities for healthy emotional contact and understanding with students and others. The duration of the program varies, if the intensive mode is applied, 30 hours divided into four one-day sessions lasting 4 to 6 weeks, with telephone counseling between sessions, this program has had results in showing improvements in well-being, self-efficacy and *mindfulness* in teachers, in the classroom have improved organization, emotional support and instructional support. In students, improvements have been identified in relationships with their teachers, behavior and academic achievement (Jennings *et al.* 2013). This makes this program very effective.

PROGRAMS BASED ON THE GROP MODEL

The GROP model (*Grup de Recerca en Orientació Psicopedagògica*), developed at the University of Barcelona in 1997 by Rafel Bisquerra, has as its main point the emotional competences, which are defined as: the set of knowledge, abilities, skills and attitudes necessary to become aware of, understand, express and regulate emotional phenomena appropriately. These skills are useful for a healthy well-being and coexistence. The model classifies social competencies into five major groups: emotional awareness, emotional regulation, personal autonomy, interpersonal intelligence and life skills and well-being (Bisquerra and Pérez, 2007).

This model was based on that of Salovey and Mayer, being a novel model and expan-

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ding the definition of what emotional competencies are, many other programs have emerged such as the one developed by Soldevilla designed an intervention for teacher training in emotional education carried out under the modality of counseling and, specifically, of the collaborative consultation model (Cabello *et al.* 2010). In addition to the development of materials, aimed at various aspects, as mentioned by Bisquerra and Hernandez (2017): materials and resources have been developed for early childhood education; primary for ESO; for post-compulsory secondary; resources for the practice of emotional education in general; the methodology of the design and evaluation of emotional education programs; proposals for educators and families; activities for the development of emotional intelligence in children, etc.

This program has influenced many other programs, this is due to the versatility and objectives set by the GROP, having included concepts and research related to positive psychology, well-being in the classroom and the importance of emotional competencies for life and interaction in general.

RULER PROGRAM

This program was developed by Mark Brackett, and has been one of the most successful with respect to emotional intelligence, so much so that it has been replicated and applied in countries such as Mexico, Australia and Great Britain (Fernández and Cabello, 2021). The acronym RULER (*Recognizing, Understanding, Labeling, Expressing, and Regulating*), refers to the Salovey and Mayer model on which it is based and takes its dimensions: recognition, understanding, labeling, expression and regulation of emotions, important skills for teaching and positive development of adults and young people.

Its objective, according to Patti *et al.* (2011), is to develop the skills of the adults responsible for the education of students (teachers, parents, administrators, and other school personnel) as well as those of the students themselves. The model proposes that adults should be educated first, as they are responsible for influencing their students and fostering improved relationships among them. In addition, one of its most important concepts is socioemotional learning, which is defined as: the processes involved in the development of self-awareness and self-regulation, plus responsible decision-making and relationship management (Nathanson *et al.* 2016).

This program uses four techniques to teach and identify emotions, *Charter*, Emotional Meter, Meta-moment and *Blueprint* / Emotional Plane. The first two are theoretical, and relate to the recognition and planning of emotions, the last two are much more practical and interesting as they relate to stressful, tense situations and those in which unpleasant events occur. This program has shown good evidence and advances in emotional intelligence, results in areas such as interpersonal relationships, general wellbeing and health, demonstrating its effectiveness and impact in the world.

SEP CURRICULUM PROGRAM FOR EMOTIONAL EDUCATION

In the case of Mexico, there is a program aimed at the development of socioemotional skills, implemented by the Ministry of Public Education (SEP), which was first implemented in 2008, but did not have a significant change and impact until 2014. Ruelas and Villarreal (2021) mention that the objective of the program is to strengthen the school's capacities to develop socioemotional skills in their students, improve the school environment in the public high school campuses that participate in the program. It is divided into twelve lessons of six sessions with a duration of twenty minutes each.

The main themes of the program focus on six aspects: self-awareness, self-regulation, social awareness, collaboration, responsible decision making and perseverance; each of these is composed of the learning and recognition of several skills such as: self-efficacy, emotion recognition, self-regulation, emotion management, delay of gratification, frustration tolerance among others. Despite being a well-structured program, there is little research on its effectiveness, so its results cannot be generalized, an interesting case is the one found by Ramirez-Ayona *et al.* (2019) where there were trends in the growth of interest and effort for the achievement of objectives and ability before the contents and subjects. This, thanks to the improvement in their emotional skills worked on in the program, does show favorable results, but more research is needed on the effectiveness of the program.

METHOD

PROBLEM STATEMENT

The purpose of this research is to find out if the young university students of the Facultad de Estudios Superiores Zaragoza recognize their emotions and if they are able to understand and regulate them according to the Emotional Intelligence model of Mayer and Salovey, thus having an adequate level of emotional intelligence.

JUSTIFICATION

In youth, there is often a lack of ability to adequately manage emotions experienced in different situations or contexts due to several factors (Schoeps et al. 2019).

- Rapid physical, hormonal and cognitive changes are experienced, which can hinder their ability to regulate their emotions (Viejo & Ortega, 2015).
- Lack of experience and emotional immaturity can lead to exaggerated or inappropriate emotional responses to everyday situations (Barcelata & Rodriguez, 2021).
- Social pressure and the desire to fit in can also lead to impulsive behaviors or poor decisions based on momentary emotions (Fernandez, 2014).
- Lack of education, role models or techniques to use on how to identify and manage emotions appropriately (Caceres et. al 2020).

Therefore, it is considered crucial for young people to develop skills to manage their emotions, as it allows them to make more informed decisions that may be useful to them at some point, thus avoiding making decisions influenced by impulse. In addition, good emotional management helps them build stronger interpersonal relationships, as they can communicate effectively and resolve conflicts constructively. Better mental health and overall well-being is promoted from adolescence onwards, if they learn to manage emotions from an early age, it lays the foundation for healthy emotional, academic and social development throughout life (Alatriste 2017).

OBJECTIVES

OVERALL OBJECTIVE

To determine if the level of emotional intelligence of university students is adequate.

SPECIFIC OBJECTIVES

- It will be analyzed whether there are differences between men and women with respect to emotional perception.
- We will analyze whether there are differences between men and women with respect to emotional understanding.
- We will analyze whether there are differences between men and women with respect to emotional regulation.

- It will be analyzed if there are differences between the different careers of this faculty with respect to emotional perception.
- It will be analyzed whether there are differences between the different careers of this faculty with respect to emotional understanding.
- We will analyze whether there are differences between the different careers of this faculty with respect to emotional regulation.
- It will be analyzed if school performance is related to any of the areas of emotional ability.
- Differences in perception will be analyzed with respect to the different age groups.
- Differences in comprehension will be analyzed with respect to different age groups.
- The differences between the regulation with respect to the different age groups will be analyzed.

TYPE OF RESEARCH

A comparative descriptive research was carried out in order to determine the level of emotional intelligence in three dimensions: attention, clarity and repair. We sought to compare the results obtained among the participants by sex, career and age group in order to know if there are differences in their emotional intelligence. Cross-sectional, i.e., a single measurement was made over time, ex-post facto, since the level of emotional intelligence already possessed by the participants was taken into account for their analysis (Hernández-Sampieri *et al.* 2013).

RESEARCH DESIGN

The research design is considered non-experimental because the variables were not manipulated, they were only measured. In a non-experimental design a situation is not generated, only existing situations that are not caused by the researcher are observed, the variables occur and it is not possible to: manipulate them, have a direct control or influence them, the variables have already happened as well as their effects (Hernández-Sampieri *et al.* 2013).

VARIABLES

THEORETICAL DEFINITION

INDEPENDENT

Four socio-demographic variables were considered for the analysis of differences:

- **Sex**

Theoretical definition: It refers to the biological and physiological characteristics that differentiate men and women, mainly the primary sexual characteristics (internal and external genital organs) and the secondary ones (broad shoulders in men, mammary glands in women).

- **Career**

Theoretical definition: Series of studies that a person must take in order to obtain a degree and be able to practice professionally.

- **School performance**

Theoretical definition: The degree or level of scholastic knowledge and skills demonstrated by students in a given subject or area through a curriculum and through an evaluation process expressed in a ranking or percentage.

- **Age**

Time a person has lived expressed in years or a range of years.

DEPENDENTS

- **Emotional intelligence**

Conceptual definition: The ability to manage feelings and emotions to direct actions and thoughts in a given situation, this ability includes: perceiving, valuing and expressing emotions accurately; generating and accessing feelings when facilitating thoughts; understanding and regulating emotions in order to achieve intellectual and emotional growth in daily life situations (Salovey and Mayer, 1997).

- **Emotional perception**

Theoretical definition: It consists of how emotions are identified, valued and expressed in oneself and in others such as: language, behavior, art, music, etc. In perception one is able to identify false/true or accurate/vague expressions and gestures and associate them with an emotion (Salovey & Mayer, 1997).

- **Emotional understanding**

Theoretical definition: Refers to being able to understand and reason about emotions in order to interpret them, from their meanings, what triggers them, and why one or another person feels in a specific way. This level includes the transition from one emotion to another and understanding complex (simultaneous) feelings towards a person (Salovey & Mayer, 1997).

- **Emotional Regulation**

Theoretical definition: It is the highest level of emotional intelligence, it encompasses the ability to perceive, facilitate and understand emotions, to manage them in oneself and in others to reduce the negative ones and increase the positive ones without reaching a level of repression or exaggeration of them (Salovey and Mayer, 1997).

OPERATIONAL DEFINITION

INDEPENDENT

- **Sex**

Operational definition: Value expressed by the participants in the socio-demographic questionnaire corresponding to one of the two categories (male or female).

- **Career**

Operational definition: Value expressed by the participants in the socio-demographic questionnaire corresponding to one of the nine categories (Medicine, Psychology, Nursing, Dental Surgeon, Biology, Nutrition, Pharmaceutical Biological Chemistry, Community Development for Aging and Chemical Engineering).

- **School performance**

Operational definition: Value expressed by the participants in the socio-demographic questionnaire in numerical form.

- **Age**

Operational definition: Value expressed by the participants in the socio-demographic questionnaire in numerical form.

Dependents

- **Emotional intelligence**

Operational definition: score obtained by participants on the *Trait Meta-Mood Scale-24* (*TMMS-24)* developed by Fernadez-Berrocal *et al.* (2004), validated in Mexico by Zuñiga *et al.* (2019). It has 24 items divided into three scales: Attention, Clarity and Repair.

- **Emotional perception**

Operational definition: Score obtained by the participants in the Emotional Attention dimension of the *Trait Meta-Mood Scale-24* (*TMMS-24)* developed by Fernadez-Berrocal *et al.* (2004), composed of 8 items (1 to 8).

- **Emotional understanding**

Operational definition: Score obtained by participants in the Emotional Clarity dimension of the *Trait Meta-Mood Scale-24* (*TMMS-24)* developed by Fernadez-Berrocal *et al.* (2004), composed of 8 items (9 to 16).

- **Emotional regulation**

Operational definition: Score obtained by participants in the Emotional Repair dimension of the *Trait Meta-Mood Scale-24* (*TMMS-24)* developed by Fernadez-Berrocal *et al.* (2004), composed of 8 items (17 to 24).

CONTEXT

The intervention was carried out in a university located in the Iztapalapa district, with a total of 13,400 students enrolled in the 9 careers that are taught within the faculty (Biology, Dental Surgeon, Community Development for Aging, Nursing, Chemical Engineering, Medical Surgeon, Psychology, Pharmaceutical Biological Chemistry and Nutrition). Located in the east of Mexico City, it has an area of approximately 117 square kilometers, which represents almost 8% of the CDMX, and is divided into 293 neighborhoods. According to INEGI (2020) it has a population of 1,835,486 inhabitants, making it the most populated district. It borders simultaneously with other districts of the CDMX, to the south with Xochimilco and Tláhuac, to the north with Iztacalco and to the west with Coyoacán and Benito Juárez; as well as with municipalities of the State of Mexico such as Nezahualcóyotl to the north and to the east with Los Reyes La Paz and Chalco Solidaridad.

According to CONEVAL, it is the fourth municipality with the highest level of poverty, 35% of its inhabitants live in poverty, that is, one third of the inhabitants of Iztapalapa.

SCENARIO

The application of the instrument was carried out in person with students from the university's multiple careers at campuses 1 and 2.

INSTRUMENT

An ad hoc sociodemographic data questionnaire was prepared for this research, where variables such as career, semester, age, sex, shift, average, among others, were measured. Some variables were allowed to be answered openly, and others under a previously elaborated classification.

The *Trait Meta-Mood Scale-24* (*TMMS-24)*, developed by Fernández-Berrocal *et al.* (2004), is a Spanish adaptation of the original 48-item *Trait Meta-Mood Scale (TMMS-48)* by Salovey *et al.* (1995).

The scale has 24 items such as: 10. "Frequently, I can define my feelings", with a 5-point Likert-type scale ranging from 1= I do not agree at all to 5= I totally agree, divided into three dimensions:

Emotional attention: it is the equivalent to the perception of emotions and consists of the ability to feel and express emotions appropriately in oneself, it is composed of eight items (1 to 8).

Emotional clarity: is the equivalent of emotion understanding and consists of understanding one's own and others' emotional states, including the recognition of triggers, what causes and the importance of the emotion, it consists of eight items (9 to 16).

Emotional repair: It is equivalent to the regulation of emotions, constant in the management of emotions according to the situation without the need to over exaggerate or repress them, it is composed of eight items (17 to 24).

The scores for analysis can be obtained through the cut-off points established by the authors for men and women, which go for each dimension by adding the scores in three levels: must improve, adequate and excellent, and are as follows:

Campus 1 has 17 buildings which are used as classrooms, laboratories, a library, an auditorium, a parking lot, a cafeteria, a university clinic, a dental unit and a government building.

Campus 2 has 14 buildings with classrooms and laboratories, a sports center, a government building, medical services, a research unit, a library, a Botero, a greenhouse and herbarium, a parking lot and a field.

Attention

Women. Must improve care: <24, Adequate care: 25 to 35, Excellent care: >36.

Men. Must improve care: <21, Adequate care: 22 to 32, Excellent care: >36.

Clarity

Women. Must improve clarity: <23, Adequate clarity: 24 to 34, Excellent clarity: >35.

Men. Must improve clarity: <25, Adequate clarity: 26 to 35, Excellent clarity: >36.

Repair

Females. Must improve repair: <23, Adequate repair: 24 to 34, Excellent repair: >35.

Men. Must improve repair: <23, Adequate repair: 24 to 35, Excellent repair: >36.

Such cut-off points were modified for the research due to the context and cultural and geographic differences with the original sample. It is also important to note that the scale is not intended to obtain a score of the general intelligence level, besides not considering the facilitation factor of Salovey and Mayer's model.

PROCEDURE

The data collection for this research was carried out during 3 days in periods of 2 hours per day, first each participant was asked if he/she wanted to be part of the research, if the participant accepted, he/she was given paper and pen so that he/she could sign the informed consent form (see appendix 1). Subsequently, the Meta-knowledge Scale on Emotional States-24 *TMMS-24* was applied (see appendix 2), the participant was given a period of time of approximately 15 minutes, and once the participant finished answering the questionnaire, he/she was thanked for his/her participation.

With the data obtained, a statistical analysis was performed with the SPSS V.25 program, with which the following results were obtained.

RESULTS

First, a descriptive analysis of the data for the Emotional States Meta-Knowledge Scale-24 *TMMS-24* was performed.

DESCRIPTIVE ANALYSIS: META-KNOWLEDGE SCALE ON EMOTIONAL STATES-24

For its study we started with the three factors that compose it. Table 1 shows the results of the descriptive statistics obtained for each scale.

	M	*SD*
Attention	25.94	6.017
Clarity	27.81	6.267
Repair	29.20	5.601

Table 1. *Descriptive statistics of the TMMS-24*

Generally speaking, all the emotional intelligence factors scored above half for each factor (which would be 20 for each by having the same number of items, i.e., 8), which means that the emotional intelligence of the university students is adequate. The factor with the best scores would be Emotional Repair (*M* = 29.20; *SD* = *5.601*), which encompasses the regulation of emotions, that is, a large part of the students are at the highest level of emotional intelligence, knowing how to manage their emotions without the need to repress them (something expected for the educational level at which they are).

The factor with the worst scores is Emotional Attention (*M* = 25.94; *SD* = 6.017), equivalent to the Emotion Perception factor.

Regarding the Emotional Clarity factor (*M* = 27.81; *SD* = 6.267), it can be said that it is at an intermediate level between the other two factors, being the equivalent of understanding emotions, these students already know the means of expression of emotions, whether it is genuine or not, the most important thing is that they think about the importan-

ce of paying attention to their emotions and moods (*M* = 3.50; *SD* = 1.243); however, they still present difficulties in letting their feelings affect their thoughts (*M* = 2.76; *SD* = 1.234), which means that there are students who, in order to have good emotion regulation, must recognize the importance of their feelings and how it affects them, in addition to understanding the importance of experiencing negative emotions, and how to manage them without the need to repress or ignore them.

DESCRIPTIVE ANALYSIS OF FREQUENCIES FOR ATTENTION, CLARITY, AND EMOTIONAL REPAIR ACCORDING TO SEX

To determine the level of emotional intelligence of university students, the three factors of the *TMMS-24* were considered*:* attention, clarity and emotional repair, by means of a descriptive analysis of frequencies considering the scores obtained and the cut-off points modified for this particular sample.

In general terms, from the frequencies it can be said that the majority of women and men have an excellent level of attention, clarity and repair (i.e.: perception, understanding and regulation of emotions), in the Emotional Attention factor, women have a better level than men (*M* = **31.87;** *SD* = 3.048 than *M* = 30.82; *SD* = 3.362), the same happens with the factor Emotional Clarity, women have better levels than men (*M* = 33.55; *SD* = 2.724 than *M* = 33.40: *SD* = 2.724), this can tell us that women have a better perception and understanding of emotions than men at the university, knowing how to identify the traits and expressions of emotions as well as the importance of feeling emotions, whether negative or positive. With respect to the last factor: Emotional Repair, the opposite occurred, men obtained better scores overall than women (*M* = 34.58; *SD* = 2.488 than *M* = 33.84; *SD* = 2.629), this can tell us that in the regulation of emotions the highest level of emotional intelligence is better in men than women, there may be several reasons, such as the internalization of emotions, i.e. a more physiological expression unlike women who externalize more emotions, i.e. they express them much more, it may also be that the cultural factor that men should not express their feelings and emotions makes that they do not repress them at all and can regulate them through a better understanding of them in an internalized way.

COMPARATIVE ANALYSIS ACCORDING TO SEX, RACE AND AGE

After performing a descriptive analysis for the *TMMS-24* and a descriptive analysis of frequencies for each factor according to sex, the means of different subgroups were compared to analyze if there were significant differences in the dependent variables (emotional intelligence and the factors perception, understanding and regulation), according to the independent variables (sex, career and age), the Kruskall-Wallis H test was used for group comparisons, and finally a Spearman correlation coefficient was performed to analyze the relationship between school performance (average) with any of the dependent variables.

COMPARISON OF MEANS ACCORDING TO SEX

An H-test for independent samples was performed to compare the level of emotional intelligence between men and women, the results of which are shown in Table 3.

TMMS-24	H		M		Test H	
Factors	M	SD	M	SD	H	P
Attention	**25.64**	5.91	**26.25**	6.14	.650	.420
Clarity	27.96	5.88	27.66	6.68	.086	.769
Repair	**29.70**	5.44	28.69	5.75	1.010	.315

Table 3. *Means, standard deviations and H-test for independent samples by sex*

TMMS-24		Cut-off points		Descriptive				Frequency	
Factors		H	M	H		M		H	M
				M	SD	M	SD		
	Must improve	<21	<22	18.79	2.275	19.05	3.440	19	19
Attention	Adequate	22-25	23-26	22.94	1.444	24.50	1.249	17	18
	Excellent	26-40	27-40	30.82	3.362	31.87	3.048	34	30
	Must improve	<22	<22	19.88	1.933	19.35	1.801	17	17
Clarity	Adequate	23-29	23-27	26.83	1.969	24.53	1.328	23	17
	Excellent	30-40	28-40	33.40	2.724	33.55	2.724	30	33
	Must improve	<25	<24	22.47	1.940	21.39	2.173	17	18
Repair	Adequate	26-30	25-28	27.80	1.473	26.71	.985	20	17
	Excellent	31-40	29-40	34.58	2.488	33.84	2.629	33	32

Table 2. *Descriptive of frequencies for attention, clarity and emotional repair according to sex.*

TMMS-24	Medicine		Psychology.		Nursing		Dental Surgeon		Biology		Nutrition		Q.F.B		D.C.E		I.Q		Test H	
Factors	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	H	P
Attention	**29.65**	7.23	25.26	5.55	24.29	6.42	26.9	5.94	27..5	5.0	22	3.68	**29**	5.49	27.6	3.32	22.1	7.27	14.13	.078
Clarity	27.95	6.21	28.18	6.49	26.12	5.26	28.1	7.19	27.7	6.34	26.3	5.53	28	6.42	28.1	7.83	**29**	5.44	2.11	.977
Repair	29.45	5.87	29.13	5.86	26.94	4.57	29.2	5.48	29.2	6.32	26.8	6.40	30	5.73	**32.6**	5.0	**30.8**	4.11	8.14	.420

Table 4. *Means, standard deviations and H-test for independent samples according to race.*

There were no statistically significant differences in any of the factors, since all three factors had a significance greater than .05 Emotional Attention p = .420, Emotional Clarity p = .769 and Emotional Repair p = .315. These results suggest that the emotional intelligence of men and women at this university is similar, despite the fact that the attention factor is slightly better in women than in men and the repair factor is slightly better in men, the clarity factor is similar, differing only by three tenths.

COMPARISON OF AVERAGES BY RACE

An independent samples H-test was performed to compare the level of emotional intelligence among university careers, which are nine in total.

There were no statistically significant differences in any of the factors, since all three factors had a significance greater than .05 Emotional Attention p = .078, Emotional Clarity p = .977 and Emotional Repair p = .420. These results suggest that the emotional intelligence among students of the careers in this university is similar; however, the scores in each factor stand out, in Emotional Attention the highest scores correspond to the careers of Medicine and Pharmaceutical Biological Chemistry (M =29.65; SD = 7.23 and M = 29; SD = 5.49), for the factor Emotional Clarity the highest scores correspond to Chemical Engineering and Psychology (M = 29; SD = 5.44 and M =28.18; SD = 6.49), Finally in the factor Emotional Repair the highest scores correspond to the careers of Chemical Engineering and Community Development for Aging (M = 30.8; SD = 4.11 and M = 32.6; SD = 5.0).

RELATIONSHIP BETWEEN SCHOOL PERFORMANCE AND EMOTIONAL INTELLIGENCE

Spearman's correlation coefficient (rho) was analyzed to study the relationship between the measures of emotional intelligence represented by the factors Attention, Clarity and Emotional repair with the students' academic performance, with the variable Average.

	M	SD	1	2	3	4
Average	3.02	.624	-			
Emotional Attention	25.94	6.017	.151	-		
Emotional Clarity	27.81	6.297	-.027	.428**	-	
Emotional Repair	29.20	5.601	-.035	.286**	.475**	-

Table 5. *Spearman's coefficient of correlations between the variable Mean, Attention, Clarity and Emotional repair.*

**p <, 01.

In general, there is a positive correlation between Average and Emotional Attention, $p = .151$ and n = 137, and it is also negatively related to Clarity and Emotional Repair, $p = -0.27$ and n = 137 and $p = -.0.35$ and n = 137. These results are not significant, and the only existing correlation is that of Average and Emotional Attention, this correlation is low and not significant, but it is positive, which means that if the average is higher, Emotional Attention, that is, the perception of emotions, may be high. The correlations of Average with Clarity and Emotional Repair are practically null, that is, there is no correlation.

COMPARISON OF MEANS BY AGE

An independent samples H-test was performed to compare the level of emotional intelligence among the age groups of the university, which are three in total.

According to the results of the table, Emotional Performance and Repair was the only factor that presented statistically significant differences for the three groups, group 1 ($M = 30.64$; $SD = 5.60$), group 2 ($M = 28.45$; $SD = 5.44$) and group 3 ($M = 27.50$; $SD = 5.42$); $H(2) = 6.185$, $p = 0.045$. These differences indicate that group 1, which are the youngest, have a better level of regulation of their emotions compared to the intermediate and older age group, this means that the older the age, the worse the level of emotional regulation of university students, possibly due to the increase of demands and responsibilities as they grow, not only in the academic field but also in general life.

DISCUSSION

The objective of this research was to determine if the level of Emotional Intelligence that university students have is adequate, the findings obtained indicate an adequate level of emotional intelligence in university students, showing a high level of Emotional Regulation, which indicates that university students are able to implement strategies that help contain or manage their emotions, regarding Emotional Understanding a medium score was obtained, which is understood that students recognize the importance of paying attention to their emotions, their moods and the way in which they should express these emotions. However, the Emotional Perception level showed low scores, which shows that young people are capable of understanding and regulating their emotions, but present difficulties in perceiving them.

Our data show that the emotional intelligence of men and women at this university is similar, there are no significant differences in any dimension of the model, despite the fact that the Perception factor is slightly better in women than in men and the Regulation factor is slightly better in men, the Understanding factor is similar, differing only by three tenths. In contrast with Rodriguez *et al.* (2019), in

TMMS-24	Group 1 (17-20)		Group 2 (21-23)		Group 3 (24-26)		Test H	
Factors	*M*	*DS*	*M*	*DS*	*M*	*DS*	*H*	*P*
Emotional Attention	26.35	6.03	25.41	5.98	26.61	6.25	1.347	.510
Emotional Clarity	27.53	7.05	28.34	5.87	26.78	5.10	1.064	.587
Emotional Repair	**30.64**	5.60	**28.45**	5.44	**27.50**	5.42	6.185	**.045**

Table 6. *Means, standard deviations and H test for independent samples according to age.*

their research where they state that there are gender differences with respect to emotional intelligence, with women being the ones who pay more attention to their emotions as opposed to men who present high levels of emotional regulation.

Regarding the differences by faculty careers, the results show similarity in the level of emotional intelligence, however, in the dimension of Emotional Perception, the careers of Medicine and Q.F.B. show slightly higher levels, in the dimension of Emotional Understanding, I.Q. and Psychology are the careers with a slightly higher score than the rest of the careers, while for the dimension of Emotional Regulation I.Q. and D.C.E. are the ones that stand out.

Regarding Emotional Intelligence and academic performance in young college students, however, a positive correlation was obtained between the average and the Emotional Attention dimension, therefore, and according to Artnz (2018) it could mean that, if the student's average is high there is a possibility that the level of emotional perception is also higher, although this correlation is not significant in this study, it could be studied in future research if such correlation could be true, in addition to analyzing the factors that influence the student's academic performance and if these are related to EI.

In relation to Emotional Intelligence and the age of the students, it was found that the youngest participants belonging to group 1 (age range of 17 to 20 years) had a higher level of Emotional Repair, which means that the youngest are those who have better regulation of their emotions and coping strategies, unlike the other groups where there were people with older age. This could be related to the fact that the older the age, the greater the responsibilities that life demands, as mentioned by Barcelata and Rodriguez (2021) who affirms that the demands of the environment can alter the lifestyle, being that these changes are perceived as challenging, which would give way to emotional conflicts and other adaptability problems.

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