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## Study of emotional intelligence using the Bar-on IQ inventory in students of the Faculty of Philosophy

*Estudio de la inteligencia emocional, empleando el inventario de coeficiente intelectual Bar-on en estudiantes de la Facultad de Filosofía*

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(Received on: 27/07/2023; Accepted on: 18/10/2023; Final version received on: 15/12/2024)

Suggested citation: Taramuel-Villacreces, J., Pérez-Narváez, H. y Rosero-Celi, Y. (2025). Study of emotional intelligence using the Bar-on IQ inventory in students of the Faculty of Philosophy. *Revista Cátedra*, 8(1), 39-58.



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## Abstract

Higher education faces challenges in the integral formation of students in an environment that demands emotional intelligence (EI) to manage complex situations. EI is essential for developing interpersonal skills, adaptability and stress management, which are fundamental for personal and professional success. Although research such as Thorndike's and Gardner's have explored social and emotional intelligence, they have not proposed specific methodologies to measure EI in the university context. This study adopts Bar-On's multifactorial model of EI, which combines emotional and social skills to cope with environmental pressures. Using a quantitative and descriptive approach, the Emotional Quotient Inventory (EQ-i)-S was used to assess five key dimensions of EI in 177 students in their last semesters at the Faculty of Philosophy of the Universidad Central del Ecuador, aged 17 to 65 years, of both genders. The Cronbach's alpha coefficient of 0.75 indicates acceptable reliability. The results showed variable levels of EI, with notable influence in the social, academic and professional spheres. It is recommended to create spaces for analysis between teachers and students to reflect on the results and work on problem areas. These initiatives should focus on developing emotional self-awareness, self-regulation and other interpersonal skills that strengthen the integral development of university students.

## Keywords

Emotional intelligence, Bar-On model, emotional skills, EI measurement, holistic development, stress management.

## Resumen

La educación superior enfrenta desafíos en la formación integral de los estudiantes en un entorno que exige inteligencia emocional (IE) para manejar situaciones complejas. La IE es esencial para desarrollar habilidades interpersonales, adaptabilidad y manejo del estrés, fundamentales para el éxito personal y profesional. Aunque investigaciones como las de Thorndike y Gardner han explorado la inteligencia social y emocional, no han planteado metodologías específicas para medir la IE en el contexto universitario. Este estudio adopta el modelo multifactorial de IE de Bar-On, que combina habilidades emocionales y sociales para enfrentar presiones ambientales. Con un enfoque cuantitativo y descriptivo, se utilizó el Inventario de Cociente Emocional (EQ-i)-S para evaluar cinco dimensiones clave de la IE en 177 estudiantes de últimos semestres de la Facultad de Filosofía de la Universidad Central del Ecuador, con edades entre 17 y 65 años, de ambos géneros. El coeficiente alfa de Cronbach de 0.75 indica una fiabilidad aceptable. Los resultados mostraron niveles variables de IE, con influencia notable en los ámbitos social, académico y profesional. Se recomienda crear espacios de análisis entre docentes y estudiantes para reflexionar sobre los resultados y trabajar en las áreas problemáticas. Estas iniciativas deben centrarse en desarrollar la autoconciencia emocional, la autorregulación y otras habilidades interpersonales que fortalezcan el desarrollo integral de los estudiantes universitarios.

## Palabras clave

Inteligencia emocional, modelo Bar-On, habilidades emocionales, medición de IE, desarrollo integral, gestión del estrés.

## 1. Introduction

The formation of students in a complex and constantly changing world is a central concern for psychologists, sociologists, pedagogues and philosophers involved in the field of



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education. In this context, emotional intelligence (EI) has become an essential tool for integral development. EI enables individuals to effectively manage the demands and pressures of the environment, facilitating their personal and professional adaptation.

According to Bar-On and Parker (2018) emotional intelligence is defined as the “set of emotional, personal, and interpersonal skills that influence the ability to cope with environmental demands and pressures” (p. 9). These skills are key to strengthening students' adaptability, stress management, and interpersonal competencies. Given the increasing complexity of the social and work environment, it is essential to study how emotional intelligence can be effectively integrated into educational processes. This will make it possible to design teaching strategies that respond to the comprehensive training needs of students, preparing them to face the challenges of today's world.

For this study, the elements of emotional intelligence linked to coexistence and the development of the self were considered as a common thread. These components facilitate the understanding of social and emotional skills in the context of higher education. In addition, they strengthen the integral formation of students by preparing them to face the interpersonal and professional challenges of today's world. The integral formation of students should encompass not only the cognitive and procedural sphere, but also the attitudinal sphere, in which emotions play a fundamental role. Gardner (2019) emphasizes that “emotions are essential in the educational process, since they influence how students learn and relate to their environment” (p. 29).

In this sense, Bisquerra (2011) defines emotional competencies as “the set of knowledge, abilities, skills and attitudes necessary to become aware of, understand, express and appropriately regulate emotional phenomena” (par. 2). These competencies enable students to effectively manage their emotional states and interactions with others, which is crucial in a higher education context. Therefore, fostering emotional awareness and self-regulation in students is essential to strengthen their integral development and prepare them to face both personal and professional challenges.

The recognition and study of EI has a long history. Its origins date back to the 19th century with the first studies on human emotions. Thorndike (1920) introduced the concept of social intelligence, defining it as the ability to act wisely in human relationships. Decades later, Gardner (1996), in his theory of multiple intelligences, distinguished between two other types of intelligence relevant to the understanding of EI: interpersonal intelligence and intrapersonal intelligence. Interpersonal intelligence refers to the ability to understand and relate to other human beings, while intrapersonal intelligence implies a deep understanding of one's own emotions and the ability to use that self-knowledge to function effectively. Extremera and Fernández (2016) consider that it “refers to the understanding of one's own emotional life, the ability to form an accurate and real model of oneself and to be able to use that model to function effectively in life” (p. 6).

These studies have driven the development of empirical research that deepens the understanding of emotional intelligence. Pérez (2005) emphasizes that these advances “generate interest and the basis for many researchers to begin studies using instruments designed for field research” (p. 79). The relevance of this work lies in its application to a society that seeks high levels of efficiency and professional productivity, while promoting emotional stability and personal well-being. Deepening the analysis of emotional intelligence is fundamental to foster commitment and self-regulation in university students. However, one of the challenges encountered was the scarcity of information at the national level, which limited a more exhaustive comparison of the results.



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The article begins with a review of the literature that includes the fundamental authors as well as those who carried out important current work, then considers methodological aspects as well as the main findings that lead to conclusions about emotional intelligence at a higher level within the study population.

## 2. Literature review

The purpose of this study is to analyze emotional intelligence (EI) in five fundamental dimensions: intrapersonal, interpersonal, adaptability, mood and stress management. These dimensions encompass physical, cognitive and verbal aspects essential for the integral development of individuals.

Understanding, controlling and transforming emotions is vital for daily performance. Emotions are not simply internal and subjective processes; on the contrary, they are expressed objectively and manifest themselves in social interactions. In particular, social intelligence-also known as interpersonal intelligence-plays a crucial role in the ability to establish empathy and effective relationships with others, especially in work environments. Gardner (1993) proposed the following definition “involves the ability to understand others: what motivates them, how they work, and how best to cooperate with them. Professionals such as salespeople, politicians, teachers, doctors and religious leaders usually possess a high degree of interpersonal intelligence (p. 43). In consideration of the above, it is necessary to strengthen these emotional skills, not only to improve individual well-being, but also to optimize performance in academic and professional contexts.

People who have developed this type of intelligence are characterized by their success in the social and collaborative environment. They are empathetic individuals, capable of understanding the behavior and emotions of others. This ability allows them to lead teams effectively and become role models for others to follow and support. In addition, they have the ability to regulate their emotional impulses and recognize the feelings of those around them, which facilitates conflict resolution and the achievement of common goals. Consequently, interpersonal intelligence promotes respectful and cordial treatment, allowing people to adapt effectively to different environments and social contexts. Bar-On's Emotional Intelligence model defines this intelligence as a set of non-cognitive capacities, competencies and skills that influence the ability to successfully cope with the pressures and demands of the environment. Within this model, components such as problem solving and reality testing are included, which are more linked to personal and social competencies than to purely emotional skills. Bar-On emphasizes that both his theoretical model and its measurement tools are indicators of emotional and social competencies, thus providing an estimate of social and emotional intelligence, rather than an exclusive definition of emotional intelligence. For their part, Fernández and Ruiz (2008) consider that

The skills included in EI are a key factor in the appearance of disruptive behaviors underlying an emotional deficit. It is logical to expect that students with low levels of EI present higher levels of impulsivity and poorer interpersonal and social skills, which favors the development of various antisocial behaviors (p. 431).

These skills are crucial for individuals to adapt to different social environments. It is recognized that emotional intelligence is as important as traditional intelligence measured by IQ, as it incorporates aspects essential for self-awareness and understanding of one's own and others' actions. The instrument developed by Bar-On is a multifactorial model that measures five dimensions of emotional intelligence, created with the intention of



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establishing the level of satisfaction with human relationships in five sub-dimensions: Intrapersonal, Interpersonal, Adaptability, Stress Management and Mood. Ugarriza and Pajares (2005) state that:

In the intrapersonal area it is important to understand the emotional states that a person experiences, in several occasions the human being is not aware of his feelings, even if he is at a high level of maturity, that is to say that he is not aware of them due to unconscious dynamics (p. 15).

For the adaptability dimension, the need for the correct use of vocabulary and appropriate verbal expression that are common within the culture in which the individual develops is mentioned; this is linked to the ability to demonstrate a social role that is capable of resisting stress, that regulates avoidant behavior and above all that reduces the intensity or duration of emotions. The state of mind is generally responsible for achieving the emotional capacity for self-efficacy: the individual perceives him/herself in the way he/she truly wants to feel. This is called emotional self-efficacy, i.e. accepting unique and singular emotional experiences that are conventionally linked to the person's beliefs about what constitutes a desired emotional balance.

It is common to observe inadequate attitudes in people who are preparing to practice professionally, therefore, it is necessary that these individuals in the process of training generate the possibility of rationalizing and improving their emotional conditions. With this awareness and management of emotions they will achieve a better performance in the personal, social and professional spheres.

### 3. Methodology

The present study is framed within a quantitative approach, the objective of which is to identify in a measurable manner the dimensions proposed by the instrument used. A non-experimental design was used, since the aim was to observe and analyze the variables without intervening or manipulating them. This choice was appropriate because the study focused on describing the emotional conditions of university students in their natural environment (Field, 2013). The study population consisted of 177 university students in their seventh, eighth and ninth semesters of the Faculty of Philosophy at the Universidad Central del Ecuador. The sample comprised individuals aged between 17 and 65 years, of which 119 were women and 58 were men. The EQ-i-S instrument (Emotional Quotient Inventory - Short Form), a tool widely validated in the field of educational psychology (Bar-On, 1997), was used for data collection. This instrument assesses emotional competencies through several dimensions, such as emotional self-awareness, impulse control and interpersonal skills. The EQ-i-S consists of 51 items that are answered on a Likert-type scale, allowing an accurate measurement of participants' emotional intelligence (Bar-On & Parker, 2000).

The application of the instrument was conducted in an academic setting during previously scheduled sessions. Participants took the EQ-i-S face-to-face, lasting approximately 30 minutes per session. Prior to the application, a brief explanation of the purpose of the study was provided and instructions for completing the questionnaire were clarified. The ethical principles of research were strictly respected. Informed consent was requested from all participants, guaranteeing their voluntary participation and the right to withdraw at any time. Likewise, data confidentiality was ensured and measures were taken to protect students' privacy (American Psychological Association, 2017).



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Data analysis was performed with SPSS (Statistical Package for the Social Sciences) software (Field, 2013). Descriptive techniques, such as measures of central tendency (mean, median and mode) and percentage analysis were applied to characterize the results obtained. In addition, the reliability of the instrument was evaluated using Cronbach's alpha coefficient, ensuring the internal consistency of the EQ-i-S (Cronbach, 1951). The results of the analysis made it possible to draw well-founded conclusions about the emotional state of the students.

### 3.1. Instrument

To establish the reliability of the instrument, it was first applied globally and then by specific dimensions. As for the calculation of Cronbach's alpha, an average value of 0.75 was obtained, indicating acceptable reliability. The reliability analysis was carried out both for the instrument as a whole and for each of its dimensions individually. The dimensions evaluated are subdivided as follows:

- intrapersonal dimension: includes the subscales of emotional self-awareness, assertiveness, self-concept, self-actualization and independence.
- Interpersonal dimension: includes the subscales of empathy, interpersonal relationships and social responsibility.
- Adaptability dimension: includes the subscales of problem solving, reality appraisal and flexibility.
- Stress management dimension: includes the subscales of stress tolerance and impulse control.
- General mood dimension: includes the happiness and optimism subscales (Bar-On, 2006, pp. 4-5).).

The instrument used, the Bar-On Emotional Quotient Inventory (Bar-On EQ-i), is composed of a scale with five response options: 1 = Never; 2 = Almost never; 3 = Sometimes; 4 = Almost always; 5 = Always. In addition, the instrument was applied in [face-to-face/virtual, individual/group] modality, and clear instructions were provided to the participants prior to administration, which ensured a correct understanding of the purpose and procedure.

## 4. Results

This section presents the interpretation of the results obtained from the instrument applied to university students. The results are presented in the form of frequency in each of the options of the instrument's own scale. Subsequently, the interpretations related to the data in the table were made. Table 1 presents the results of the grouped items of the Interpersonal Dimension. In summary, it is identified that most people are not able to control their anger; there is a significant number who show that they sometimes control their anger, i.e. there is little management of their emotions.

		Intrapersonal dimension				
		NEVER	ALMOST NEVER	SOME TIMES	ALMOST ALWAYS	ALWAY S
It's a problem controlling my anger.	NEVER	0	4	15	1	0
	ALMOST	2	1	51	1	0
	NEVER					
	SOMETI MES	1	3	64	3	0



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It's a problem controlling my anger.	ALMOST	1	1	14	1	0
	ALWAYS					
	ALWAYS	0	0	9	5	0
	NEVER	0	1	3	0	0
	ALMOST	1	1	6	0	0
	NEVER					
I don't do bad things in my life.	SOMETI	0	4	47	1	0
	MES					
	ALMOST	1	3	69	2	0
	ALWAYS					
	ALWAYS	1	0	27	8	0
	NEVER	0	2	12	0	0
I am unable to understand how other people feel.	ALMOST	0	3	45	0	0
	NEVER					
	SOMETI	2	4	47	6	0
	MES					
	ALMOST	1	0	40	3	0
	ALWAYS					
My friends can tell me intimate things about themselves.	ALWAYS	0	0	8	2	0
	NEVER	1	2	19	4	0
	ALMOST	1	7	60	0	0
	NEVER					
	SOMETI	1	0	44	0	0
	MES					
It's hard for me to enjoy life.	ALMOST	0	0	25	5	0
	ALWAYS					
	ALWAYS	0	0	3	2	0
	NUNCA	0	0	0	0	0
	CASI	0	0	4	0	0
	NUNCA					
When I face a problem, the first thing I do is stop and think..	A VECES	1	4	16	0	0
	CASI	0	2	46	4	0
	SIEMPRE					
	SIEMPRE	1	3	85	7	0
	NUNCA	1	6	55	2	0
	CASI	0	2	53	1	0
	NUNCA					
	A VECES	0	1	23	2	0
	CASI	0	0	16	3	0
	SIEMPRE					
	SIEMPRE	1	0	4	3	0
	NEVER	0	0	1	0	0
	ALMOST	0	2	15	0	0
	NEVER					
	SOMETI	0	5	44	1	0
	MES					
	ALMOST	1	1	57	4	0
	ALWAYS					
	ALWAYS	1	1	34	6	0
	NEVER	0	4	11	0	0



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I don't have bad days.	ALMOST	0	3	35	1	0
	NEVER					
	SOMETI	1	2	81	6	0
	MES					
	ALMOST	0	0	18	2	0
	ALWAYS					
When I try to solve a problem, I analyze each possibility and then decide the best way out.	ALWAYS	1	0	6	2	0
	NEVER	0	0	0	0	0
	ALMOST	0	0	8	0	0
	NEVER					
	SOMETI	1	6	38	0	0
	MES					
I am able to respect others.	ALMOST	1	1	69	5	0
	ALWAYS					
	ALWAYS	0	2	36	6	0
	NEVER	0	0	3	0	0
	ALMOST	0	3	4	0	0
	NEVER					
I am sensitive to the feelings of others.	SOMETI	0	2	11	0	0
	MES					
	ALMOST	1	1	44	2	0
	ALWAYS					
	ALWAYS	1	3	89	9	0
	NEVER	0	0	3	0	0
I have good relationships with others.	ALMOST	1	4	11	0	0
	NEVER					
	SOMETI	0	4	38	0	0
	MES					
	ALMOST	0	0	59	0	0
	ALWAYS					
Before I start something new, I usually feel like I'm going to fail.	ALWAYS	0	1	39	11	0
	NEVER	0	0	0	0	0
	ALMOST	0	0	2	0	0
	NEVER					
	SOMETI	0	2	22	0	0
	MES					
	ALMOST	1	4	81	5	0
	ALWAYS					
	ALWAYS	0	3	45	6	0
	NEVER	0	5	47	2	0
	ALMOST	0	2	56	1	0
	NEVER					
	SOMETI	1	2	34	3	0
	MES					
	ALMOST	0	0	6	2	0
	ALWAYS					
	ALWAYS	0	0	6	3	0

Table 1. Results of the intrapersonal dimension, block 1



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The vast majority of people state that they face difficulties and problems step by step. One of the factors that intervene to act in this way is the security they have in them on how to solve such problem, while a low percentage mentions that it is difficult for them to face the problems they face. A large percentage of those surveyed say that they make good decisions in their lives, which means that they have formed criteria that allows them to be clear about what they want, while a small number do not know how to make decisions, or they make them at that moment without considering the consequences.

Regarding empathy, they show a scarce development between sometimes and almost never, which expresses a difficulty to consider the feelings and way of thinking of the rest of the people. Regarding the trust that their friends can have in them, the respondents say they consider themselves trustworthy in a high percentage and very few express the opposite. For the majority of respondents, it seems easy for them to enjoy life, understood as the ability to feel happy, only a minimum percentage responds that it is difficult for them to feel that way continuously.

With respect to thinking about a problem, there is a significant number who say that they always or almost always do so; this percentage is higher than those who say sometimes or almost never. When questioned about the way they act to solve a problem, most of the students say that they analyze and make decisions, while a low percentage do it sometimes or almost never. It can be considered that most of them use critical and reflective thinking when faced with a problem. When asked about respect for other people, most of them say that they do, while very few consider that they do it sometimes or never, so it can be considered that the practice of this value is present among the students. When asked about sensitivity to the feelings of others, the majority expressed that they always or almost always do so, and a minimum percentage stated that they sometimes, almost never or never pay attention to the feelings of others.

In reference to the relationships they have with others, the majority of those interviewed say that they have good relationships and a small percentage say that they do not. In a world where actions such as communication and collaboration are considered important factors in work and daily activities, personal relationships are highly valued in the workplace. The feeling of failure before starting an activity is not a feeling present in most of the interviewees; very few of them say that they usually feel frustrated. Table 2 shows the grouped results of the items related to the Interpersonal Dimension. Regarding decision making, the majority almost always feel confident in the decisions they make and a minority express feeling insecure.

			Interpersonal dimension				
			NEVE R	ALMOS T NEVER	SOMETIME S	ALMOST ALWAYS	ALWAYS
I feel confident in my decisions.	NEVER	0	0	0	0	0	0
	ALMOST	0	1	5	1	0	0
	NEVER	0	0	21	7	0	0
	SOMETIME S	0	0	43	47	0	0
	ALMOST	0	0	10	38	1	1
	ALWAYS	0	0	1	0	0	0



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I think I can handle difficult situations.	ALMOST	0	0	5	0	0
	NEVER					
	SOMETIME	0	1	33	16	0
	S					
When I'm faced with difficult situations, I like to gather as much information as I can about them. I am an optimist in most things I do..	ALMOST	0	0	40	55	0
	ALWAYS					
	ALWAYS	0	0	0	22	1
	NEVER	0	0	0	0	0
	ALMOST	0	1	10	3	0
	NEVER					
	SOMETIME	0	0	32	18	0
	S					
	ALMOST	0	0	30	32	0
	ALWAYS					
I like to have an overview of problems before trying to solve them.	ALWAYS	0	0	6	40	1
	NEVER					
	NEVER	0	0	0	0	0
	ALMOST	0	1	2	0	0
	NEVER					
	SOMETIME	0	0	15	4	0
	S					
	ALMOST	0	0	52	36	0
	ALWAYS					
	ALWAYS	0	0	10	53	1
I have not broken any law of any kind.	NEVER	0	0	2	1	0
	ALMOST	0	1	2	3	0
	NEVER					
	SOMETIME	0	0	28	5	0
	S					
	ALMOST	0	0	39	47	0
	ALWAYS					
	ALWAYS	0	0	8	37	1
	NEVER	0	1	31	24	0
	ALMOST	0	0	22	24	0
I am satisfied with my life.	NEVER					
	SOMETIME	0	0	16	16	0
	S					
	ALMOST	0	0	4	18	0
	ALWAYS					
	ALWAYS	0	0	4	11	1
	NEVER	0	0	3	1	0
	ALMOST	0	0	4	0	0
	NEVER					
	SOMETIME	0	1	17	7	0
	S					
	ALMOST	0	0	30	24	0
	ALWAYS					
	ALWAYS	0	0	24	61	1
	NEVER	0	0	18	27	1



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I'm depressed	ALMOST	0	0	28	35	0
	NEVER					
	SOMETIME	0	1	16	20	0
	S					
I generally hope that things will turn out well, despite the setbacks that arise from time to time.	ALMOST	0	0	10	5	0
	ALWAYS					
	ALWAYS	0	0	4	5	0
	NEVER	0	0	0	0	0
I believe in my ability to handle the most difficult problems.	ALMOST	0	0	1	1	0
	NEVER					
	SOMETIME	0	1	30	5	0
	S					
It is difficult for me to fight for my rights.	ALMOST	0	0	32	41	0
	ALWAYS					
	ALWAYS	0	0	13	46	1
	NEVER	0	0	1	0	0
	ALMOST	0	1	6	0	0
	NEVER					
	SOMETIME	0	0	27	9	0
	S					
	ALMOST	0	0	31	38	0
	ALWAYS					
	ALWAYS	0	0	9	46	1
	NEVER	0	0	18	26	0
	ALMOST	0	0	19	24	0
	NEVER					
	SOMETIME	0	1	24	18	0
	S					
	ALMOST	0	0	13	19	1
	ALWAYS					
	ALWAYS	0	0	1	6	0
	NEVER					

Table 2. Intrapersonal dimension results, Block 2

Regarding how they deal with difficult situations, there is no clear majority, however, it can be established that a significant number of students always or sometimes gather information before making a decision. A significant majority consider themselves to be optimistic about things they do almost always, followed by those who sometimes think so. There is a small number of students who say the opposite. The respondents report that they like to have an overview of the problem before solving it, mostly always or almost always, and a small number say that they never or almost never. The result expresses the importance given to knowing about an issue before looking for a solution, an element that expresses that they avoid acting without reflection.

Regarding the question about having broken the law, a minority say they have not done so, that is, a high number of students recognize having broken the rules in some way at some point. Regarding satisfaction with their life, a significant number of respondents are located between always and sometimes, which can be understood as high levels of satisfaction. While there is a small number of those who say they do not feel good about the life they



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have. Respondents to the question whether they are depressed show diverse answers without reflecting a majority percentage, which would suggest that it is not a common feeling among students or they cannot recognize it. The positive view of the activities that students do is mainly distributed between almost always and sometimes, with those who say they do not have it corresponding to a small number.

When asked about the ability to handle the most difficult problems, the majority say that they almost always manage to do so and there are no students who say they cannot handle them. It is evident that for the majority of people surveyed, close relationships always mean a lot, this is demonstrated by the majority answers that are between almost always and sometimes, with minority answers being never and sometimes. When asked about it being difficult to fight for their rights, the answers are between sometimes, almost never and never. Accordingly, it can be considered that students are willing to a large extent to complain when they consider their rights affected.

Table 3 shows the grouped data of the adaptability dimension. When asked if their impulsiveness creates problems, the majority said sometimes, followed by almost never.

		Adaptability dimension				
		NEVER	ALMOST NEVER	SOME TIMES	ALMOST ALWAYS	ALWAYS
My impulsiveness creates problems for me.	NEVER	1	20	10	1	0
	ALMOST NEVER	0	17	27	2	0
	SOMETIMES	0	4	57	9	0
	ALMOST ALWAYS	0	0	6	7	0
	ALWAYS	0	0	1	11	2
I feel that it is difficult for me to control my anxiety.	NEVER	1	20	12	1	0
	ALMOST NEVER	0	16	32	2	0
	SOMETIMES	0	3	44	12	0
	ALMOST ALWAYS	0	0	11	9	2
	ALWAYS	0	2	0	6	0
I tend to explode with anger easily.	NEVER	1	19	7	0	0
	ALMOST NEVER	0	19	22	1	0
	SOMETIMES	0	3	46	5	0
	ALMOST ALWAYS	0	0	20	13	0
	ALWAYS	0	0	4	11	2
I have strong impulses that are difficult to control.	NEVER	1	22	12	0	0
	ALMOST NEVER	0	16	36	1	0
	SOMETIMES	0	2	45	14	0
	ALMOST ALWAYS	0	1	4	8	1
	ALWAYS	0	0	2	7	1
My close relationships	NEVER	0	1	2	1	0
	ALMOST NEVER	0	1	2	1	0
	NEVER					



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mean a lot to me and my friends.	SOMETIMES	0	8	16	3	0
	ALMOST	0	11	33	11	1
	ALWAYS					
I am impulsive.	ALWAYS	1	20	46	14	1
	NEVER	1	23	5	0	0
	ALMOST	0	12	21	1	0
	NEVER					
	SOMETIMES	0	5	55	5	0
	ALMOST	0	1	17	17	0
I have a bad temper.	ALWAYS					
	ALWAYS	0	0	1	7	2
	NEVER	1	10	3	1	0
	ALMOST	0	20	26	0	0
	NEVER					
	SOMETIMES	0	10	46	10	0
I am impatient.	ALMOST	0	0	18	11	0
	ALWAYS					
	ALWAYS	0	1	6	8	2
	NEVER	1	10	3	0	0
	ALMOST	0	21	18	1	0
	NEVER					
It is hard for me to describe my feelings.	SOMETIMES	0	7	53	9	0
	ALMOST	0	2	18	12	0
	ALWAYS					
	ALWAYS	0	1	4	8	2
	NEVER	1	4	10	4	0
	ALMOST	0	18	16	1	0
	NEVER					
	SOMETIMES	0	9	34	11	1
	ALMOST	0	10	33	9	1
	ALWAYS					
	ALWAYS	0	0	3	5	0

Table 3. Adaptability dimension results

When asked about the difficulty in controlling anxiety, students mostly give answers that are sometimes, almost never, and never. According to what they say, a high percentage of them consider that they can control their anxiety adequately. When asked about anger management, the interviewees mainly say that they can control it sometimes, so according to their answers they say that they cannot always control themselves in moments when emotions can lead them to angry situations.

When asked how often they have impulses that are difficult to control, the interviewees say that they say sometimes and almost never in high percentages, while those who say they have them always or never are few. Considering the answers, it can be said that there is no trend that shows problems in this regard. Regarding personal relationships, the majority of those who answer always and almost always consider their friendships very important, followed by sometimes and in a minimum percentage those who indicate almost never or never. According to the answers, it is evident that they value friendships very much. They consider impulsiveness as part of their personality, the majority saying that they are sometimes, followed by those who say that they are almost never. A minority of informants say that they are always or almost always. In this sense, it is not possible to determine a predominant tendency among the students. The so-called bad temper that expresses a



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mood that shows changes in state and resistance to supposed threats, according to the interviewees, the majority says that they are sometimes and almost never. Therefore, it could be determined that the majority considers that they do not have difficulties with their character.

Regarding impatience, the majority percentage indicates that they are sometimes, followed by almost always and almost never in the same amount, so it can be considered that it is not a present or constant element in the students. In reference to being able to describe their feelings, the informants are mostly located between almost always and sometimes, so it can be considered a somewhat common situation among the students, being able to express them, while there are few who consider that they cannot talk about them. Regarding the Mood Dimension, in Table 4 you can see the summary data of the items corresponding to the mentioned dimension.

		Mood				
		NEVER	ALMOST NEVER	SOMETIMES	ALMOST ALWAYS	ALWAYS
I am a very happy person.	NEVER	0	0	0	0	0
	ALMOST NEVER	0	0	2	1	0
	SOMETIMES	0	2	20	8	0
	ALMOST ALWAYS	0	0	43	50	2
	ALWAYS	0	0	11	34	4
I am good at understanding how others feel.	NEVER	0	1	0	0	0
	ALMOST NEVER	0	0	7	1	0
	SOMETIMES	0	1	31	26	0
	ALMOST ALWAYS	0	0	28	49	1
	ALWAYS	0	0	5	17	5
I have never told a lie in my life.	NEVER	0	0	21	10	0
	ALMOST NEVER	0	1	14	11	0
	SOMETIMES	0	1	29	54	3
	ALMOST ALWAYS	0	0	7	11	2
	ALWAYS	0	0	0	7	1
I am concerned about what happens to other people.	NEVER	0	1	2	2	0
	ALMOST NEVER	0	0	10	3	0
	SOMETIMES	0	1	27	13	0
	ALMOST ALWAYS	0	0	24	45	0
	ALWAYS	0	0	8	30	6
I don't feel ashamed of	NEVER	0	1	12	6	0
	ALMOST NEVER	0	0	23	23	0
	SOMETIMES	0	1	20	22	0



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anything I've done.	MES					
	ALMOST	0	0	14	29	2
	ALWAYS					
	ALWAYS	0	0	2	13	4
To handle the situations that come my way, I try to think of as many possibilities as I can.	NEVER	0	0	1	0	0
	ALMOST	0	1	4	1	0
	NEVER					
	SOMETI-MES	0	1	30	13	0
	ALMOST	0	0	26	44	2
	ALWAYS					
	ALWAYS	0	0	9	35	4

Table 4. Mood dimension results

On the question of whether they consider themselves to be commonly cheerful, most of the informants say that this is almost always the case, followed by a significant percentage who say that they are always cheerful. There are no opinions indicating that they do not show joy, so it can be considered that most of them have a positive perception of themselves. In reference to empathy with other people, most of the interviewees are located between almost always and sometimes, so it can be considered that most of them consider that they understand the feelings of others and there are few who say they cannot understand others.

Regarding lies and considering never having told them, the majority is located in sometimes followed by almost never and never, so it could be considered that the interviewees express to be trustworthy people who do not resort to lies. About being concerned about what happens to others, the majority of respondents answer almost always and always in significant percentages, so it can be considered that most of them are interested in what happens to the people around them. Regarding feeling ashamed for something they have done, there are different answers, the most important being: almost always, sometimes and almost never, so it can be said that there is no marked tendency in this regard. Regarding having a divergent way of thinking that allows them to find multiple answers to problems, the answers of almost always, always and sometimes show important percentages. This leads us to consider that most students do seek to use divergent thinking when faced with difficulties.

Table 5 shows the responses when asked about supporting other people. The answers of the interviewees are mostly between almost always and always, so it can be established that almost all the students are predisposed to help others.

		Stress management				
		NEV ER	ALMOST NEVER	SOMEI MES	ALMOST ALWAYS	ALWAY S
I like to help people.	NEVER	0	0	1	0	0
	ALMOST	0	0	1	0	0
	NEVER					
	SOMETIMES	0	4	14	0	0
	ALMOST	0	11	65	4	0
	ALWAYS					
I prefer others to make decisions for me.	ALWAYS	0	10	56	10	1
	NEVER	0	22	65	3	0
	ALMOST	0	3	43	5	0
	NEVER					



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I try to see things as they really are, without fantasies or daydreams.	SOMETIMES	0	0	22	5	0
	ALMOST	0	0	4	1	0
	ALWAYS					
	ALWAYS	0	0	1	0	1
	NEVER	0	2	1	0	0
	ALMOST	0	1	8	0	0
	NEVER					
	SOMETIMES	0	7	34	2	0
	ALMOST	0	5	47	5	0
	ALWAYS					
Nothing bothers me.	ALWAYS	0	10	44	7	1
	NEVER	0	3	4	0	0
	ALMOST	0	11	26	1	0
	NEVER					
	SOMETIMES	0	7	74	4	0
	ALMOST	0	3	25	7	1
	ALWAYS					
	ALWAYS	0	1	5	2	0
	NEVER	0	5	4	0	0
	ALMOST	0	11	26	0	0
In recent years I have finished few things.	NEVER					
	SOMETIMES	0	5	60	3	0
	ALMOST	0	3	34	5	0
	ALWAYS					
	ALWAYS	0	1	9	6	1
	NEVER	0	19	43	0	0
	ALMOST	0	4	52	2	0
	NEVER					
	SOMETIMES	0	1	26	5	0
	ALMOST	0	0	12	5	0
It's hard for me to make decisions for myself.	ALWAYS					
	ALWAYS	0	1	0	2	1
	NEVER	0	9	14	0	0
	ALMOST	0	6	25	0	0
	NEVER					
	SOMETIMES	0	9	50	2	0
	ALMOST	0	1	33	5	1
	ALWAYS					
	ALWAYS	0	0	11	7	0
	NEVER	0	14	10	0	0
It is difficult for me to express my inner feelings.	ALMOST	0	6	42	2	0
	NEVER					
	SOMETIMES	0	4	53	4	1
	ALMOST	0	1	20	6	0
	ALWAYS					
	ALWAYS	0	0	6	2	0
	NEVER	0	14	22	3	0
	ALMOST	0	9	47	4	0
	NEVER					
	SOMETIMES	0	2	42	2	0
I am more of a follower than a leader.						
	ALWAYS	0	0	6	2	0
	NEVER	0	14	22	3	0
	ALMOST	0	9	47	4	0
	NEVER					
	SOMETIMES	0	2	42	2	0
	ALWAYS	0	0	6	2	0
	NEVER	0	14	22	3	0
	ALMOST	0	9	47	4	0
Others think I lack assertiveness.	NEVER					
	SOMETIMES	0	2	42	2	0
	ALWAYS	0	0	6	2	0
	NEVER	0	14	22	3	0
	ALMOST	0	9	47	4	0
	NEVER					
	SOMETIMES	0	2	42	2	0
	ALWAYS	0	0	6	2	0



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ALMOST ALWAYS	0	0	16	4	0
ALWAYS	0	0	3	1	1

Table 5. Stress management dimension results

In reference to allowing others to make decisions, the majority percentages are between almost never and never, while a small number say they allow it. Therefore, it can be said that students make their own decisions, which shows a trait of maturity in accordance with emotional intelligence. In relation to the attempt to appreciate the truth, the answers are mostly between always, almost always and sometimes. While very few do it never or almost never. This makes it possible to establish that many of the interviewees consider the facts as they appreciate them.

Regarding remaining unperturbed in the face of different situations, the majority indicate that it sometimes happens, followed by important percentages in almost always and almost never. This allows us to consider that the students are not located at extreme points of insensitivity or affectation in the face of external situations. Regarding the completion of programmed activities, the majority express that sometimes. Afterwards, they say almost always followed by sometimes; therefore, it can be said that it is not common for students to complete all the activities until they finish them. With regard to making decisions with difficulty, the majority of students state that it is almost never difficult, followed by those who say that they never have problems, so it can be said that most students do not consider decision making to be a problem.

On expressing the difficulty of expressing feelings, the interviewees indicate that sometimes, followed by almost always and almost never. The answers allow us to establish that there are no extreme positions in reference to communicating what they feel. Regarding considering themselves more of a follower than a leader, the majority of respondents said sometimes, followed by almost never. According to the responses, it can be considered that they do not consider themselves leaders on a continuous basis. When questioned about how they are considered by others in reference to their assertiveness, they mostly mention that they almost never appreciate it, followed by sometimes and never, which leads us to consider that the perception they have of themselves is that they are a person who expresses their ideas without the intention of bothering or hurting others.

## 5. Discussion

The inventory used for the assessment of the emotional state of university students aims to reach a technical and objective measurement on the recognition of the emotions of human beings in an educational context. Considering that self-motivation is important, to the extent that it helps us to achieve personal goals and objectives, so that people feel satisfied with their own achievements and life plan.

Recognizing one's own emotions, appreciation of defects and weaknesses, implies an awareness that leads to expressing them or not, depending on who is present at the time they occur. Observing the responses to the item: I am able to express my emotions to others, we can find high results corresponding to almost never, that is, people are concerned about showing emotions to others, an attitude that can be considered frequent among students. Self-motivation is an emotional tendency that facilitates the achievement of goals, such as achievement motivation, confidence in personal abilities, commitment, promptness, initiative and optimism. In the surveyed population, the item "I am satisfied with my life"



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projects a positive result, as almost half of the participants claim to be always satisfied. This suggests that most people present a positive state of mind.

Also, interesting results are observed, such as that the majority of the population is able to perceive the emotions of others, considering it easier to understand other people than themselves. In addition, it was evidenced that most of the respondents affirm that they almost never feel depressed. This is relevant, since depression is a state of deep sadness, low self-esteem and decay that can lead to isolation and various problems, which is why, in many cases, professional support is required. In general, most of the participants maintain a positive outlook, despite the adverse circumstances they may face.

Regarding impulsivity, a high percentage of respondents indicate that their impulsivity has generated problematic situations that, at times, they are unable to cope with. However, a low percentage claims to be able to control their impulsivity and thus avoid problems. This suggests that there is a significant percentage of students who are able to control their impulses. Finally, it is observed that a high percentage of the participants state that they have mastered the difficult situations they face and face them with maturity, while a lower percentage assures that they are unable to handle such situations.

## 6. Conclusion

It is essential that students develop skills related to emotional intelligence, which will allow them to manage and transform their emotions and feelings effectively. These changes can be achieved through the implementation of contents and disciplines specialized in the study of emotions within the curricula of faculty careers. In this sense, Beteta et al. (2020) highlight that “there are 25 publications detailing the importance and benefits of emotional intelligence for both teachers and students at different educational levels” (p. 106), which supports the proposal to include it in the initial training of teachers.

Likewise, it is necessary for students and future education professionals to foster healthy social relationships, which will help them to identify their emotional state in relation to others and to generate positive affective bonds. These bonds can prevent misunderstandings, disclosure of private information, and conflicts within the educational community. Paz and Rosales (2023) agree with the findings when they conclude “we were able to prove that job performance and success have a deep-rooted relationship between them and emotional intelligence” (p. 10).

In terms of adaptability, it is crucial to develop practices that allow students to identify and address problematic situations. Critical and reflective reasoning are key tools in this process, they allow understanding the causes and consequences of emotions and negative feelings generated by stimuli in the social environment. In addition, it is important to specify how these emotional skills would be integrated in a practical way in the curricula, contributing to a comprehensive training of future teachers. In relation to the management of anxiety and stress, it has been observed that students in pre-professional practice experience high levels of anxiety, which can lead to conditions that are difficult to manage. However, these negative effects could be mitigated by raising awareness of the emotional factors that cause them. With a greater understanding of these emotions, students could lead a calmer and stress-free life, improving their quality of life.

Finally, decision making should be integrative, taking into account not only one's own behavior and state of mind, but also the attitudes and emotions of the people with whom one interacts. This would contribute to improve interpersonal relationships, promoting



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dialogue, empathy and agreements. The results obtained indicate that students generally feel satisfied with the daily situations they face, and although depression is not part of their daily lives, they maintain a cheerful mood despite internal challenges. In summary, the development of emotional intelligence can improve both students' academic performance and their interactions with peers and teachers, so it is crucial to work on this aspect, as well as on the cognitive and procedural areas, during the training of future teachers.

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**JAMES TARAMUEL-VILLACRES:** related concepts, data analysis, organization and integration of collected data, conclusions.

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**YESSENIA ROSERO-CELI:** summary, organization and integration of data collected, final draft and spell check.



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