



# **Emotional Intelligence in Teachers from a Commercial Aviation Technical Institute in Lima, Peru, during the year 2019**

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MASTER'S THESIS  
November 2019

Master of Business Administration  
Educational Leadership

## ABSTRACT

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Degree Program in Educational Leadership  
Educational Leadership

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Master's thesis 64 pages, of which appendices 6 pages  
November 2019

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Emotional intelligence is considered to be a crucial skill that 21<sup>st</sup> century teachers should possess in order to perform their tasks effectively inside and outside the classrooms. A critical issue in technical productive education in Peru is that teachers have not received previous education on pedagogy, much less in emotional intelligence.

The main objective of this study was to measure and explain the level of emotional intelligence of teachers working in a technical productive commercial aviation institute in Lima, Peru, in order to arrive at conclusions regarding their capacity to perform as 21<sup>st</sup> century teachers and suggest possible solutions for the improvement of this skill and the enhancement of the institution.

For this case study, a quantitative survey was used as the main data collection method through the application of the Bar-On (I-CE) emotional intelligence Inventory, adapted to Peru by doctor Nelly Ugarriza Chávez. Using this tool, the levels of emotional intelligence of a selected sample of nine teachers were measured. Additionally, an exclusively designed semi-structured interview was applied to the sample, for the interpretation of the quantitative results.

The total sample obtained an average score in emotional intelligence with 87 points, close to the lower limit of the category. From this total, 66.7% of the sample obtained an average score, while 33.3% achieved a low score. Divided by components, the sample obtained average scores in interpersonal intelligence (113 points), general mood (97 points), stress management (91 points), and low scores in adaptability (83 points) and intrapersonal intelligence (76 points).

Despite the sample obtaining an average general score, there were significant challenges encountered among teachers, especially in the intrapersonal, adaptability and interpersonal areas. Some of these included: difficulties in empathizing with younger generations of students and dealing with the differences among them, finding the right ways to relate themselves with the administrative area, adopting modern teaching methods and embracing innovation in their daily practices.

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Key words: Peru, Bar-On, emotional intelligence, intrapersonal, interpersonal, stress management, adaptability, general mood, 21<sup>st</sup> century teaching, teaching skills, teacher performance

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## **1 INTRODUCTION**

### **1.1 Current situation and objectives**

The knowledge era is characterized by the velocity of change on all levels, from technology, science, economics, and demographics to climate change. The world nowadays is global and has available the highest amount of information ever. In a matter of seconds, one can access, thanks to the internet and information technology, the most significant information database in the history of humanity. However, despite a lot of these changes, education is the only sector that has remained practically unchanged in more than a century. It continues operating under the same structure where students are passive recipients of information while teachers give lectures without being aware of students' emotions and differences in personalities and interests (Ea, 2016).

The expansion of social media is generating new forms of relationships among people and towards learnings. For the newer generations, known as generation "z" or centennials, smartphones are an essential element of their lives as they offer the possibility of socializing instantly and learning according to their interest in the language they prefer (Torrado, 2018). However, in most educational institutions, the use of smartphones is prohibited, which generates unease among the students and distance towards their teachers, whom they perceive as outdated and tedious, increasing the emotional disconnection between them.

On the other hand, the labor market is global and requires professionals with a differentiated value in terms of soft skills (Ignatowski, 2018). Technical skills are not enough anymore, modern corporations are requiring people with values, flexible to change, optimistic, capable of auto-motivating themselves, with good social skills, good team workers that tolerate stress, that know how to manage their impulses and have a sense of humor, in order words, professionals with emotional and social intelligence.

Kofman (2007) points out that academic study programs exclude the development of emotional intelligence as they concentrate exclusively on intellectual aspects. In 1998 Goleman demonstrated through a study on 121 organizations from around the world the importance of emotional development for professional performance. His results concluded that 67% of the skills denominated as essential for an effective performance were emotional.

In this context, it is necessary that all teachers involved in 21<sup>st</sup> century teaching, drop old paradigms and seek to adapt to the modern world's needs by becoming closer to students, adopting technology efficiently as an important learning tool for newer generations, generating trust inside and outside the classrooms and inspiring their students to grow integrally as human beings. For this, it is necessary that they possess adequate levels of emotional intelligence, in order to become role models, adapt to the ever changing society and modern teaching methods, guiding and motivating their students towards the achievement of their goals and also teaching them emotional intelligence skills to become better humans and professionals (Barraza, 2017).

In the case of Peru, the Ministry of Education has, among other functions, to ensure the quality of all levels of education throughout the country. Hence, it is also in charge of designing the national curricula for teacher training. However, in upper education, technical education, and technical productive education in Peru, there is no obligation for the teachers to have a pedagogical degree. Teachers in these levels are usually professionals that have several years of experience in their sectors and are allowed to teach based on their experience. Depending on the level of education, they could be required to have a master's or a doctoral degree but not a pedagogical degree. Due to this, most of these teachers have not received training in emotional intelligence skills.

The commercial aviation institution chosen for this study is cataloged under technical productive education in Peru, also known as CETPRO. According to the technical productive education regulation in Peru (Technical Productive Education Regulation, 2004), this level of education serves teenagers, young people, adults, and people with special educational needs that require:

- 1 Developing their vocational inclinations, job skills, and entrepreneurship abilities for work.
- 2 Training and specializing in job skills, as well as consolidating their occupational learning.
- 3 Complementing the development of education for work offered during basic education.
- 4 Validating their studies and recognizing their work experience.

Another essential characteristic is that CETPROS aim at providing the student with the necessary work skills and abilities to execute lower complex jobs that allow them to enter the industrial market quickly. The admission requirements involve the identification of necessary essential job skills, and it is not mandatory to have culminated primary education. This justified in Peru due to the fact that there is still a large population that has not concluded their basic education studies but has entered the labor market and requires further training for their jobs.

Since CETPROS are popular in Peru, and they work as a key educational platforms for many citizens, the main purpose of this study will be to measure the level of emotional intelligence of teachers working in the commercial aviation technical institute in order to arrive at conclusions regarding their capacity to perform as 21<sup>st</sup> century teachers and suggest possible solutions for the institution for the improvement of this skill and the improvement of the organization in general.

In terms of the components of emotional intelligence that will be taken into consideration, Reuven Bar-On's framework has been selected (Bar-On, 1997), since his work has been validated for the application in Lima Peru. The proposal of Bar-On is based on five main competencies, namely: interpersonal,

intrapersonal, adaptability, stress management, and general mood. They will be explained thoroughly in section 2.14.

## **1.2 Research Question**

What is the level of emotional intelligence in teachers from a commercial aviation institute in Lima, Perú, during 2019?

### **1.2.1 Secondary questions**

- 1 What is the level of emotional intelligence in its interpersonal component in teachers from a commercial aviation institute in Lima, Peru during 2019?
- 2 What is the level of emotional intelligence in its adaptability component in teachers from a commercial aviation institute in Lima, Peru during 2019?
- 3 What is the level of emotional intelligence in its stress management component in teachers from a commercial aviation institute in Lima, Peru during 2019?
- 4 What is the level of emotional intelligence in its mood component in teachers from a commercial aviation institute in Lima, Peru during 2019?

## **1.3 Justification of the Project**

Many studies support the importance of emotional intelligence skills for 21<sup>st</sup> teachers as critical for their effectiveness in delivering their classes and in their relationships with parents, students, and peers as crucial leaders in the learning community. This section will go over some of the ideas of international authors in order to provide theoretical support on the importance of emotional intelligence

as a necessary skill for 21<sup>st</sup> century teachers and its direct impact on their performance.

Humberto Maturana (2002) notes that it is necessary to reform education to recover the area of emotions in its authentic human dimension since this is the only way to transform society. This reform implies transforming the educational environment into a warm, welcoming place where students have a good time and desire to spend time. For Maturana, the role of the teacher in this context is critical and oriented towards promoting collaboration, respect, and harmony in relations and interactions, all of which require emotional and social intelligence skills.

Capella University (2018) points out what the six essential soft skills for K-12 teachers are in their web blog. One of these skills is Emotional and Social Intelligence, which according to their information, "is the foundation for safe and positive learning in increasingly multicultural and multilingual education systems" They also argue that: "teachers should be prepared to teach and practice social and emotional skills, give students opportunities to practice these skills, and help students apply these skills in other scenarios" (Capella University, 2018).

Moreover, Capella University (2018) quotes an article from Edutopia (2016), which is the educational foundation of George Lucas. In this article, they claim the following:

Social and emotional learning (SEL) provides a foundation for safe and positive learning and enhances student's ability to succeed in school, careers, and life. (Edutopia, 2016).

Promoting social and emotional development for all students in classrooms involves teaching and modeling social and emotional skills, providing opportunities for students to practice and hone those skills, and allowing students to apply these skills in various situations. (Edutopia, 2016).

One of the most common SEL approaches involves training teachers to deliver explicit lessons that teach social and emotional skills, then finding opportunities for students to reinforce their use throughout the day." (Edutopia, 2016).

These comments from Edutopia show the importance of modeling emotional intelligence skills by teachers in order to facilitate the learning of these towards their students. It is evident that in order to model them they need to be “installed” in their system and training them to become models is a crucial practice.

Vivias de Chacón (2004) conducted a study with the aim of diagnosing the situation of emotional education on the pedagogical curriculum for the state of Tachira in Venezuela. For this, she gathered information through a set of methods, which consisted mainly of interviews with educational trainer of trainers and future teachers from several faculties in the selected region.

Based on results obtained, she summarized that teachers should possess higher knowledge on the subject of emotions and their implication on cognitive processes, as well as on the role that emotional intelligence plays in the wellbeing of people, their adaptation to working, and in the establishment of positive relations with others. She continues and points out that these socio-emotional competencies are associated with skills that have to do with learning to be (intrapersonal skills), learning to live with others (interpersonal skills) and academic skills which have to do with their professional roles as teachers.

Within intrapersonal skills, the author mentions as crucial elements for teachers the capacities to identify, understand, and regulate their own emotions. These skills will allow them to become better persons and become better prepared to deal with emotional pressures in the exercise of their profession.

In interpersonal skills, the author describes the importance of identifying and understanding other's emotions, empathizing with students, parents, and teachers, and possessing social abilities to create and maintain relationships. In order to recognize conflicts and solve them positively, finding the right way to relate with students and parents, and working in teams, among other skills.

Finally, in didactics skills, the author mentions as a critical element, the ability to construct socio-affective and stimulating teaching environments for students.

Another author, Verónica Hernández Barraza, states the following:

Emotional competencies of teachers displayed in their teaching practice should be consolidated side by side with professional ones, as teachers perform a task beyond the mere compliance with the curriculum. Furthermore, repercussions of this become evident in how they perform their tasks and the relationships they establish with their students. In order to achieve the integral formation that is sought-after, the educator must become aware of its function and look for a development that's both professional and personal. (Barraza, 2017, p.1).

This explains one of the author's main ideas in the sense that a good emotional intelligence competence development in teachers will strengthen their professional profile and allow for a better performance. (Barraza, 2017).

In summary, emotional intelligence as a whole and through its several components is considered to be a critical skill that 21<sup>st</sup> century teachers should possess in order to perform effectively in their demanding tasks, both inside the classroom and in relation to the stakeholders they interact with on a regular basis (peers, parents, staff, etc).

Other justifications that provide relevancy to this research include the lack of studies applied to teachers in CETPROS in Peru, specifically related to commercial aviation institutes. Therefore, determining the emotional intelligence level in commercial aviation teachers in Lima, Peru, may contribute to a higher awareness of its use and relevance in the educational area.

On a practical level, this study will allow us to determine and describe the levels of emotional intelligence in commercial aviation teachers from the chosen institution. If, after the tabulation process, results encountered are under average, suggestions may be made on organizational improvements and workshops, courses, or programs that may foster the development of emotional and social intelligence in teachers, benefiting participants, staff, and the institution as a whole that could execute the program.

#### **1.4 Research approach**

As mentioned earlier, this study will be applied to a technical productive education institution in Lima, Peru, under the denomination of a CETPRO. The institution trains students to undertake professional activities in the area of commercial aviation. Since the purpose entails measuring and understanding the emotional coefficient of teachers within this organization and propose suggestions for future improvements, the research approach falls under the category of a case study. The study will start analyzing the current situation of a sample of teachers but aims at identifying opportunities for improvement from an organizational level that could improve their performance and the well-functioning of the organization as a whole.

## **2 LITERATURE REVIEW**

### **2.1 Emotional Intelligence Theories**

Over the last years, there have been many developments in the field of emotional intelligence. This section will review some of the most relevant authors in this area and their theories. These include Howard Gardner's theory of multiple intelligences, Mayer and Salovey's four stage model of emotional intelligence, Goleman's five competences' theory, and Reuven Bar-On's methodology to measure emotional skills, including the adaptation of his model for Peru developed by the psychologist Nelly Ugariza Chávez.

#### **2.1.1 Theory of Multiple Intelligences**

The academic and psychologist Howard Gardner published "Frames of Mind" (1983), in which he criticized the existence of single intelligence and established that people possess seven types of different and independent intelligences. These are: musical, bodily-kinesthetic, visual-spatial, - verbal-linguistic, logical-mathematical, interpersonal, and intrapersonal (Gardner, 1983). Subsequently, in 1995, the author proposed the naturistic intelligence, and in 1997, he proposed the existential intelligence.

In 2003, Gardner published "Intelligence reframed: Multiple intelligences for the 21<sup>st</sup> century". In this publication, Gardner develops new types of intelligences: the spiritual and moral one. Also, he describes relations between the intelligences, creativity and leadership (Gardner, 2003).

The contribution of Howard Gardner lies in the deconstruction of intelligence and the disassociation of intelligence with intellectual capacity. Under his framework, people may have some types of intelligence more developed than others. He also considers the importance of relations through intrapersonal and interpersonal intelligence, the former one being related to the individual and the understanding

of one's values, motivations and behaviors, and the latter one linked to the capacity of socializing while becoming aware of the differences between individuals. In an advanced level, the interpersonal intelligence allows the individual to understand the intentions and desires of others, allowing for actions and decision making based on this knowledge.

### **2.1.2 Mayer and Salovey's four stage model**

The psychologists Peter Salovey and John Mayer defined emotional intelligence as "a subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey y Mayer, 1997,189).

The authors point out that emotional intelligence has four stages; each one of them built on top of the skills achieved in the previous stage. These skills are developed and refined as the individual grows and matures.

The first stage has to do with emotional perception, which consists in detecting and deciphering one own's emotions and other's emotions. The second stage is linked to the assimilation of emotions, which implies using them to communicate feelings and facilitate various cognitive processes. The third stage is related to understanding the emotional language Finally, the fourth stage encompasses managing emotions, which is the ability to regulate emotions on ourselves and in relation to others. Therefore, according to the authors, an emotionally intelligent person can achieve objectives even when dealing with negative emotions.

Thanks to the contribution of Salovey and Mayer, we can appreciate that emotional intelligence is not a single skill that remains unchanged but may evolve and be developed over time.

### 2.1.3 Goleman's five competences' theory

Developed by psychologist Daniel Goleman in his book *emotional intelligence* (1995), he points out that emotional intelligence is composed of five competencies. The first three are personal, and the rest are social. These are the following:

- 1 Self-awareness: being aware of one's and others feelings. Understand feelings and using them to guide decisions. Within this competence we find abilities such as: emotional consciousness, self-assessment and self-trust.
- 2 Self-regulation: learning to express emotions appropriately given the context and the situation. Waiting for the right time and the right way to express them. Within this competence we find abilities such as: emotional integrity, openness to change and comfort with ambiguity.
- 3 Self-motivation: being able to motivate oneself towards the achievement of results, not depending on external motivations. Within this competence we find abilities such as: success desire, commitment, initiative and optimism.
- 4 Empathy: perceiving what others are feeling and desiring and having the capability of placing oneself in other's situation. Within this competence we find abilities such as: understanding others, helping others develop, service orientation, acknowledging diversity and political consciousness.
- 5 Social skills: social skills are necessary to build and maintain good relationships with others. Within this competence we find abilities such as: influencing, communicating, leading, change management, collaborating and team building.

Goleman's theory is relevant since it challenges theories that state that the Intellectual Coefficient provides a competitive advantage in terms of success.

Moreover, Goleman pointed out that some people with lower rational coefficients achieved more success than others due to their high emotional intelligence coefficient, which allowed them to become more friendly and inviting to other people, which in turn allowed them to obtain better results.

#### **2.1.4 Reuven Bar-On's methodology**

Reuven Bar-On defines emotional intelligence as the capacity that allows us to understand how others feel, relate to others, and face the daily challenges of life. He defines it as a series of competences that determine how we understand and control our emotions, as well as how we express feelings (Bar-On, 1997).

The proposal of Bar-On is based on five main competencies that encompass a total of 15 abilities that can be measured through a psychometric test that he created, the EQ-I test. These five competencies and their abilities are the following:

- 1 Intrapersonal competence: This component comprises the following abilities: Self-Regard, Emotional Self-Awareness, Assertiveness, Independence, and Self- Actualization.
  - Emotional self-awareness: the ability to realize and comprehend one's feelings and emotions, distinguish them and understand why they appear.
  - Assertiveness: the ability to express feelings, beliefs and thoughts without damaging other's feelings while defending one's rights in a constructive way.
  - Self-esteem: the ability to understand accept and respect oneself, acknowledging one's strengths, weaknesses, limitations and opportunities.

- Self-fulfillment: the ability to reach one's full potential, becoming the most one can be.
  - Independence: the ability to self-direct oneself, feel self-confident in one's thoughts, actions and become emotionally independent to make decisions.
- 2 Interpersonal competence: This component comprises the following abilities: empathy, interpersonal relationships and social responsibility.
- Empathy: The ability to realize, understand and acknowledge other's feelings.
  - Interpersonal relations: The ability to establish and maintain mutual satisfactory relationships that are characterized by intimacy and emotional proximity.
  - Social responsibility: The ability to become a collaborative person that contributes and is an active member of the social community.
- 3 Adaptability: This component comprises the following abilities: reality-testing, flexibility and problem-solving.
- Reality-testing: The ability to assess the links between what we experiment (the subjective) and what is real (the objective).
  - Flexibility: The ability to adapt one's emotions, thoughts and behaviors to changing situations and conditions.
  - Problem-solving: The ability to identify and define problems as well as generate and implement effective solutions.
- 4 Stress management: This component comprises the following abilities: stress-tolerance and impulse-control.

- Stress-tolerance: The ability to handle adverse events, stressful situations and strong emotions without “collapsing”, facing stress actively and positively.
- Impulse-control: The ability to resist or postpone an impulse or temptation for acting and control one’s emotions.

5 General mood: This component comprises the following abilities: optimism and happiness.

- Happiness: The ability to feel satisfied with one’s life in order to enjoy oneself and others, have a good time and express positive feelings.
- Optimism: The ability to see the bright side of life and maintain a positive attitude, despite adversity and negative feelings.

### **2.1.5 Bar-On’s adaptation to the Peruvian context**

The psychologist Nelly Ugariza Chávez (2001) adapted the Bar-On Emotional Quotient Inventory considering the social cultural characteristics of Peru. For this, the author used a representative sample of 1996 persons from Metropolitan Lima, including men and women from 15 years old above.

Based on her experience and expert advice, Ugariza proposed 1000 key items for the inventory, from which, after the work and interviews she carried out with the sample, 133 items were selected for the adapted inventory.

This study confirms that, despite that the Bar-On test was designed for the North American culture and structure, the adapted version is consistent and effective, taking in consideration the characteristics and reality of Peru.

## **2.2 Previous work**

This section will discuss previous research done on measuring emotional intelligence in teachers on different educational levels. Many of the studies go further and assess the relationship between emotional intelligence and teacher performance concerning the expected tasks that they should carry out as 21<sup>st</sup> century teachers. The studies use diverse methodological frameworks and they provide statistical support on the importance of emotional intelligence for 21<sup>st</sup> century teacher performance. The section will be divided between international and national studies (applied to the Peruvian context).

### **2.2.1 International studies**

Abanades (2016) aimed at finding out whether upper education teachers were prepared to display emotional intelligence in the subjects they taught and whether they considered they needed this in their role as teachers.

He used a qualitative methodology, using interviews on a sample of 16 teachers with six or more years of experience as full-time upper education teachers in diverse faculties in Spain (Social Science and Communication faculties, Health Science faculties and Physical Activity and Sport faculties, among others).

His main conclusion is that the subjects of study consider that they need and would like to receive more formation on the emotional intelligence competence from the institution they belong in order to utilize it during teaching. They also stated that it should have a higher emphasis on the teacher training curriculum so they can start familiarizing with the competence before they start working (Abanades, 2016).

Another idea that teachers conveyed in this study is related to the importance of this competence not only to improve relations with students but also with peers and to deal with diverse circumstances outside the classrooms.

They also claimed that this competence should be developed permanently throughout their career by applying the learnings inside the classrooms and experiencing results.

Hernández (2017) studied teacher emotional intelligence competences and their relation with professional performance, to demonstrate that an adequate level of this competence for teachers improves the academic performance of students. His sample was composed of 30 teachers from early education, high school, and upper education in the Federal District of Mexico. In order to gather information, he used an observation guide and a self-esteem test. The results of his study showed that a significant percentage of the teachers sampled did not know what emotional competencies were and, instead, mixed them with values such as respect.

In addition to this, teachers from this study admitted having difficulties in managing emotions while giving classes, having lack of empathy with students, lack of motivation to pursue their role, excess of stress, and low self-esteem. The author concludes that it is imperative to give more emphasis to teacher training and continuous education in emotional intelligence for upper education teachers. The research by Hernández is relevant because it stresses the importance of measuring the level of emotional intelligence of upper education teachers and the urgency for including its development throughout their learning stages so they can become better equipped to guide 21st century students.

Borsic and Riveros (2017), demonstrated that there is a relation between emotional intelligence and the working performance of teachers from Upper Education. Their study was carried out on a sample of 338 teachers that were selected randomly from the University of the Armed Forces ESPE in Ecuador. To analyze the variables, they used the trait model of emotional intelligence, by applying the trait emotional intelligence questionnaire, developed by Petrides, Pérez-González y Furnham (2007), which conceives emotional intelligence as a group of personality traits integrated with cognitive skills, motivations and socio-emotional competencies individuals possess. This model is composed of four elements: wellbeing, sociability, self-control, and emotionality.

The research conducted by Borsic y Riveros (2017) is relevant, since in addition to demonstrating that emotional intelligence has a correlation with working performance, also confirms that it varies with age and gender.

Arrieta, Córdoba, Maestre, and Niño (2015) verified that the presence of emotional skills in teachers during the learning process of Basic Education students has a correlation with their integral development and the improvement of the learning environment.

The study was carried out on a sample of 50 public sector teachers from the city of Barranquilla, Colombia, employing the Model of the four branches of theoretical Emotional Skill Salovey- Mayer (2007) and applying the MSCEIT emotional intelligence test (Mayer, Salovey and Caruso emotional intelligence Test, v 2.0 2001, Spanish version from Extremera, 2003). This data was complemented by a class observation survey that was intended to follow teacher's behavior during class in terms of emotional skills.

The results showed that 56% of teachers were situated in a competent range, i.e., they possessed sufficient skills that allow them, with some degree of success, to perceive, assess, express emotions and properly handle classroom situations. Additionally, 32% of teachers were in the low range, and 12% were located in the "highly competent" range in terms of these abilities.

Class observation data allowed to see that those teachers located in the "highly competent" rank in emotional skills, promoted a better classroom climate, children maintained a healthier behavior and responded better to attention warnings from the teacher. In the same way, greater participation and disposition of the students was revealed before the activities proposed by the teacher, the teacher looked comfortable in the teaching practice and maintained a high motivation level in engaging with students.

On the other hand, teachers with low level of emotional skills triggered environments marked by inadequate children's behavior, making teachers resort to the "stereotype" of the authoritarian educator, oblivious to physical or visual

contact, using negative verbal expressions of threat and sarcasm, and an exaggeratedly high tone of voice at all times of class development and under any circumstances, generating a classroom climate that was not suitable for learning and with frequent interruptions. Due to children's misbehavior, little work in activities was done, and handling of conflict situations resorted to the imposition of the teacher to solve them or even to ignore them, denying the opportunity for children to construct a reflexive and evaluative judgment of the situation, directly threatening the socio-affective training process of students.

This study is relevant since it validates that there is a correlation between emotional intelligence skills and pedagogical practice performance in the early years of basic education, applying a unique research method. It also demonstrates the differences in terms of teaching environment and results of those teachers with a high average emotional intelligence skill compared to those with a low average skill.

### **2.2.2 National studies**

Tarrillo (2018) verified a positive correlation between emotional intelligence and working performance in teachers from Peruvian Higher Education. This study was conducted in the Peruvian Union University in Tarapoto, Peru, using a sample of 82 teachers from both genders who gave at least 12 hours of class weekly. The instrument he used, validated by experts, was the one proposed by Goleman (1995) for emotional intelligence and the one from Hernández (2008) for work performance.

In his conclusions, the author describes his main results, which show the positive relations between emotional intelligence and the variables of performance, service quality, productivity, and knowledge.

Huanca (2012), used the standardized Bar-On test and adapted for Peru by Ugarriza (2001) in order to measure the levels of emotional intelligence of teachers in an educational institution in the district of Ventanilla, Callo, Lima, Peru. For this, he used a sample of 60 teachers and demonstrated that the

majority of teachers he sampled (96.7%) exhibited an adequate level of emotional intelligence.

Huanca's work is relevant because it applies the Bar-On standardized test adapted by Ugarriza to Peruvian teachers. With this, he is able to assess emotional intelligence from its multiple aspects and use results to segment the sample in an effective way in order to arrive to conclusions.

Arribasplata (2018), confirmed the correlation between emotional intelligence and work performance in teachers in the educational institution 8183 Pitagoras of Puente Piedra, Lima, Peru (basic education).

The technique selected for the recollection of information comprised a teacher survey using the Bar-On emotional intelligence questionnaire adapted to Peru. For this, a sample of 28 teachers from the primary level of basic education was used, selecting teachers that had a high interaction with students from the educational institution.

The conclusion of this thesis also exposed the correlation between emotional intelligence and work performance of teachers for the selected institution.

Flores (2018), demonstrated that emotional intelligence has a highly significant relationship with the teacher's performance in the classroom in his study applied to teachers from the faculty of Education of the San Marcos University in Peru. The research was applied to 24 teachers from cycle I, 2012- II semester from the Physical Education Professional School. For the recollection of data, the BaroOn (I-CE) emotional intelligence questionnaire test was used.

This thesis sheds light on the relevance of emotional intelligence in upper education teachers, and like the previous ones mentioned, also encounters a positive relationship between this variable and teacher performance.

### **3 METHODOLOGY**

This section describes the data collection methods used to measure, determine and interpret the level of emotional intelligence in the case studied.

#### **3.1 Methodological Approach**

This study has a quantitative simple descriptive approach, since it measures one single variable in a determined context and expresses the data through number, with the purpose of determining how the analyzed phenomenon manifests (Grajales, 1996; Hernández, Fernández y Baptista, 2006; Barrenos, Cárdenas, López, & Mugruza, 2018). This way, the intent is to contribute to the scientific literature in the area of upper education, specifically, in the identification of emotional intelligence levels in teachers from a commercial aviation technical institute in Lima, Peru.

This study has a non-experimental design, since the variables have not been manipulated, and it corresponds to a transversal type, since the data has been recollected in a single moment. (Aponte, De la Cruz, & Herrera, 2018; Palomino & Jara, 2019).

#### **3.2 Research Questions**

The research questions have been proposed with the intention of determining the level of emotional intelligence of the participants. The main research question is:

What is the level of emotional intelligence of teachers in a commercial aviation institute in Lima, Perú, during 2019?

Next, the secondary research questions, focused on the subcomponents of the construct to be measured:

- 1 What is the level of emotional intelligence in its interpersonal component in teachers from a commercial aviation institute in Lima, Peru during 2019?
- 2 What is the level of emotional intelligence in its adaptability component in teachers from a commercial aviation institute in Lima, Peru during 2019?
- 3 What is the level of emotional intelligence in its stress management component in teachers from a commercial aviation institute in Lima, Peru during 2019?
- 4 What is the level of emotional intelligence in its mood component in teachers from a commercial aviation institute in Lima, Peru during 2019?

The definitions used for the selected variable are the following:

**Conceptual Definition:** emotional intelligence is a group of personal and emotional skills that influence in the ability to adapt and face the challenges and demands from the environment (Bar-On, 1997, quoted by Ugarriza, 2001).

**Operational Definition:** Assessed through the emotional intelligence inventory of Bar-On ICE, that measures the intrapersonal, interpersonal, adaptability, stress management and mood components.

### 3.3 Determination of the sample

The population is composed by the total number of teachers that work in different modalities (hourly, half-time and full-time) in a Commercial Aviation Center in Metropolitan Lima. The sample was selected in a non-probabilistic way and was composed by a total of 9 teachers that accepted to participate in this study.

Teachers from both genders compose the sample, 66.6% were women and 33.4% men, with an age range between 41 and 73 years, with different

professions and years of work experience in the commercial aviation sector and outside it, as well as with differences in the number of years working in the institution.

Regarding consent and confidentiality, before the application of the instruments, participants were informed regarding the development of the study for which they were a part of, as well as the use of the information and results to be obtained. The participation of the teachers was voluntary, and it was guaranteed that results would be anonymous, and their answers would be held in strict confidentiality, to be used solely for this research.

### **3.4 Data acquisition methods**

For this quantitative case study, the survey was used as the main method, through the application of the Bar-On (I-CE) emotional intelligence Inventory, adapted by doctor Nelly Ugarriza Chávez for the case of Peru (see appendix 1 to view the complete test) in order to measure the levels of emotional intelligence of participants (Ugarriza, 2001). In a complementary way, a semi-structured interview was applied to the participants, which was designed exclusively for the study (see appendix 2 to view the complete interview questionnaire applied).

The technical dataset of the Bar-On (I-CE) emotional intelligence inventory used was the following:

- Name: Bar-On (I-CE) emotional intelligence inventory
- Original Name: EQ-I Bar-On Emotional Quotient Inventory
- Author: Reuven Bar-On
- Origin: Tronto – Canada
- Peruvian Variation: Nelly Ugarriza Chávez (2001)
- Type of administration: Individual or collective. Booklet type.
- Test duration: No time limit. Approximately 30 to 40 minutes.
- Application: Adults of 40 years old or more. Higher education level.
- Scoring: Computer grading

- Significance: Factorial Structure: 1 CE-T - % component factors, 15 subcomponents.
- Uses: Educational, clinic, judicial, medical, labor and for investigation. Potential users are those who work as organizational development consultants, psychologists, psychiatrists, doctors, social workers, counselors and vocational guides.
- Materials: Questionnaire that contains the I-CE items, answer sheet, Correction template, results and profiles sheet.
- Description: The Emotional Intelligence Bar-On inventory may be applied individually or collectively. The questionnaire administrator must be familiarized with the concepts and application procedures and be capable of answering questions or concerns from participants, related to human rights, discrimination, confidentiality of results and skepticism towards psychological tests.

The standard Emotional Coefficient total scores, components, and subcomponents are distributed in three categories. The results “high or very developed” (116 or above) and “low or to improve” (84 or less) indicate the distance towards the adequate and good score (85-115). The acknowledgment of high or low scores helps people identify improvement areas in their current performance.

Likewise, the components considered in the inventory for emotional intelligence are the following: Intrapersonal (ECIA), Interpersonal (ECIE), Adaptability (ECAD), Stress Management (ECSM), and General Mood (ECGM).

In contrast, the semi-structured interviews are intended to collect qualitative information that will allow for the interpretation of the quantitative results, including teacher perceptions about the organization, their relationship with students, administrative staff, and some of challenges they may face in their day to day tasks.

### **3.5 Validity and reliability**

#### **3.5.1 Validity**

Ugarriza (2001) says that the Emotional Intelligence Inventory possesses 9 types of validation studies, this study was taken to 7 countries in the last 17 years.

In order to obtain the validity of the study, Ugarriza (2001) conducted the factorial confirmation analysis in a Peruvian adult population Metropolitan Lima, which is reliable in accordance with the Chi-squared test in order to verify the adjustment of the model. The components with their factorial scores are: intrapersonal (0.92), interpersonal (0.68), adaptability (0.78) stress management (0.61) and general mood (0.88).

#### **3.5.2 Reliability**

According to Hernández, Fernández and Baptista (2006), the reliability of a measurement instrument is referred to the degree in which its repeatedly application to the same subject or object produce consistent and coherent results. Reliability can be determined using diverse techniques: (a) measuring of stability or reliability through test-retest; (b) alternative or parallel forms method; (c) method of split-halves and (d) internal consistency measures, the most used being the coefficient of alfa Cronbach.

For the Peruvian sample, a reliability test was carried out by Ugarriza (2001) using the coefficient of alfa Cronbach measure and the results showed a very high degree of reliability.

### **3.6 Application of Instruments**

With prior authorization from the authorities of the selected commercial aviation institute in metropolitan Lima, the total population was calculated and the sample was determined taking into consideration basic criteria such as the regular assistance to the institution and the acceptance to participate in the study.

Subsequently, the EQ-I Bar-On Emotional Quotient Inventory and the semi structured interviews were applied to the participants in the month of June of 2019. Teachers were located in a designated classroom for this study, empty, with good illumination and ventilation. They were handed out the questionnaire with 133 questions accompanied by the answer sheet with the indication that there were no correct or incorrect answers, and they were asked to be honest when choosing the answers. The application of this test was collective.

Additionally, the semi-structured interviews were individual, on a separate classroom with the same conditions as the quantitative test. They had a duration of between 15 and 25 minutes per participant. Next, the data was collected, tabulated and interpreted.

### **3.7 Limitations of the research**

One of the limitations of this study is that only teachers have been evaluated. In order to carry out an intervention that could generate more impact, the evaluations could be extended to the administrative employees who are also important stakeholders in the educational community and have frequent interaction with teachers.

Another point to take into consideration is that the emotional intelligence coefficient measured might have been affected by the context. In other words, the stimuli that participants are receiving in their workspace has an effect on how they handle their emotions. The bigger the challenges, the more difficult it may be for them to handle and this may also have an effect on their emotional

coefficient results. Also, the emotional coefficient tests were taken in a workspace setting so the results will be biased toward how they handle their emotions at work, rather than in their personal life. This may also affect the objectivity of results to some extent.

Finally, as this research is based on a case study, the results cannot be generalized to other institutions or contexts, therefore, conclusions and recommendations will be specifically linked to the commercial aviation institute selected.

## 4 RESEARCH RESULTS

As mentioned before, for the present study, the sample was composed of 9 teachers of a commercial aviation technical institute in Lima, who completed the Bar-On Emotional Intelligence Test (I-CE) adapted by Dr. Nelly Ugarriza to Peru (see appendix 1 to view the complete test). The application of this test was carried out on the 6th and 13th of June 2019 with the participants.

### 4.1 General Emotional Intelligence results

In table 1, the emotional intelligence standard Bar-On scores are displayed, along with the instrument interpretation guidelines for each range:

**TABLE 1: STANDARD SCORES AND BAR-ON'S TEST INTERPRETATION GUIDELINES**

STANDARD SCORES	INTERPRETATION GUIDELINES
130 and more	Very high emotional capacity: Notably high. Unusual emotional capacity.
115 to 129	Very developed emotional capacity: High.
86 to 114	Adequate emotional capacity: Average.
70 to 85	Needs improvement: Low. Emotional capacity below average.
69 and less	Needs improvements: Very low. Emotional capacity extremely lower than average.

*Source: Reuven Bar-On scoring test for emotional intelligence, adaptation of Ugarriza.*

Table 2 shows the general results for emotional intelligence and its components for the 09 subjects evaluated:

TABLE 2: GENERAL EMOTIONAL COEFFICIENT RESULTS OF THE SAMPLE

Subjects	Intra-personal (ECIA)	ECIA Level	Inter-personal (ECIE)	ECIE Level	Adaptability (ECAD)	ECAD Level	Stress Management (ECSM)	ECSM Level	General Mood (ECGM)	ECGM Level	General Emotional Coefficient (GEC)	GEC Level
Subject 1	81	Low	121	High	98	Average	85	Low	100	Average	94	Average
Subject 2	75	Low	133	Very High	103	Average	90	Average	102	Average	95	Average
Subject 3	74	Low	96	Average	76	Low	90	Average	100	Average	83	Low
Subject 4	65	Very Low	95	Average	70	Low	85	Low	81	Low	72	Low
Subject 5	79	Low	126	High	90	Average	95	Average	107	Average	95	Average
Subject 6	82	Low	101	Average	79	Low	101	Average	107	Average	91	Average
Subject 7	80	Low	110	Average	81	Low	90	Average	81	Low	86	Average
Subject 8	74	Low	102	Average	70	Low	88	Average	81	Low	79	Low
Subject 9	76	Low	130	Very High	78	Low	93	Average	114	Average	92	Average
<b>TOTAL</b>	<b>76</b>	<b>Low</b>	<b>113</b>	<b>Average</b>	<b>83</b>	<b>Low</b>	<b>91</b>	<b>Average</b>	<b>97</b>	<b>Average</b>	<b>87</b>	<b>Average</b>

Source: own elaboration

As we can conclude from table 2, one third of the assessed sample (33%) has obtained a low general emotional coefficient level, while 67% of the sample has obtained an average general emotional coefficient.

## 4.2 Analysis of results in terms of emotional intelligence components

### 4.2.1 Intrapersonal component (ECIA)

The Intrapersonal Emotional Intelligence component (ECIA) is the area that groups the following subcomponents: emotional self-awareness, as the ability to realize and comprehend one's feelings and emotions, distinguish them and understand why they appear; assertiveness, as the ability to express feelings, beliefs, and thoughts without damaging other's feelings while constructively defending our rights; self-esteem, as the ability to understand, accept, and respect oneself, acknowledging one's strengths, weaknesses, limitations, and opportunities; self-fulfillment, as the ability to reach one's full potential, becoming the most one can be; and independence, as the ability to self-direct oneself, feel self-confident in one's thoughts and actions.

Table 3 displays the aggregate results regarding the Intrapersonal Emotional Intelligence component (ECIA) from all the subjects assessed under this study.

**TABLE 3: INTRAPERSONAL EMOTIONAL INTELLIGENCE COMPONENT SCORES BY EVALUATED SUBJECT**

Subjects	Intrapersonal (ECIA)	ECIA Level
Subject 1	81	Low
Subject 2	75	Low
Subject 3	74	Low
Subject 4	65	Very Low

Subject 5	79	Low
Subject 6	82	Low
Subject 7	80	Low
Subject 8	74	Low
Subject 9	76	Low
<b>TOTAL</b>	<b>76</b>	<b>Low</b>

*Source: own elaboration*

The sample obtained an average low score (76) in the Intrapersonal Emotional Intelligence component. From the 9 teachers surveyed, only one displayed a score of very low, while all of the rest scored low. It's worth mentioning that this is the category with the least dispersion of results.

#### 4.2.2 Interpersonal component (ECIE)

The Interpersonal Emotional Intelligence component (ECIE) is the area that groups the following sub components: empathy as the ability to realize, understand and acknowledge other's feelings; interpersonal relations as the ability to establish and maintain mutual satisfactory relationships that are characterized by intimacy and emotional proximity; and social responsibility as the ability to become a collaborative person that contributes and is an active member of the social community.

Table 4 displays the aggregate results regarding the Interpersonal Emotional Intelligence component (ECIA) from all the subjects assessed under this study:

**TABLE 4: INTERPERSONAL EMOTIONAL INTELLIGENCE COMPONENT SCORES BY EVALUTED SUBJECT**

<b>Subjects</b>	<b>Interpersonal (ECIE)</b>	<b>ECIE Level</b>
Subject 1	121	High

Subject 2	133	Very High
Subject 3	96	Average
Subject 4	95	Average
Subject 5	126	High
Subject 6	101	Average
Subject 7	110	Average
Subject 8	102	Average
Subject 9	130	Very High
<b>TOTAL</b>	<b>113</b>	<b>Average</b>

*Source: own elaboration*

The sample obtained an average score of 113 in the Interpersonal Emotional Intelligence component (ECIE). This is the highest score of the 5 components measured under this study, and according to the guidelines, this score is located in the upper limit mark of the range. 55.6% of the sample resulted in a score of average in this component, while 22.2% scored high and the remaining 22.2% scored very high in the Interpersonal Emotional Intelligence component (ECIE).

#### 4.2.3 Adaptability component (ECAD)

The Adaptability Emotional Intelligence component (ECAD) is the area that groups the following sub components: reality-testing as the ability to assess the links between what we experiment (the subjective) and what is real (the objective); flexibility as the ability to adapt our emotions, thoughts and behaviors to changing situations and conditions; and problem-solving as the ability to identify and define problems as well as generate and implement effective solutions.

Table 5 displays the aggregate results regarding the Adaptability Emotional Intelligence component (ECAD) from all the subjects assessed under this study:

**TABLE 5: ADAPTABILITY EMOTIONAL INTELLIGENCE COMPONENT SCORES BY EVALUATED SUBJECT**

<b>Subjects</b>	<b>Adaptability (ECAD)</b>	<b>ECAD Level</b>
Subject 1	98	Average
Subject 2	103	Average
Subject 3	76	Low
Subject 4	70	Low
Subject 5	90	Average
Subject 6	79	Low
Subject 7	81	Low
Subject 8	70	Low
Subject 9	78	Low
<b>TOTAL</b>	<b>83</b>	<b>Low</b>

*Source: own elaboration*

The sample obtained an average score of 83 in the Adaptability Emotional Intelligence component (ECAD), which is a low score. Only 3 subjects obtained an average score in this component, while 67% of the sample obtained a low score.

#### **4.2.4 Stress Management component (ECSM)**

The stress management Emotional Intelligence component (ECSM) is the area that groups the following sub components: stress-tolerance as the ability to handle adverse events, stressful situations and strong emotions without “collapsing”, facing stress actively and positively; and impulse-control as the ability to resist or postpone an impulse or temptation for acting and control our emotions.

Table 6 displays the aggregate results regarding the stress management Emotional Intelligence component (ECSM) from all the subjects assessed under this study:

**TABLE 6: STRESS MANAGEMENT EMOTIONAL INTELLIGENCE COMPONENT SCORES BY EVALUATED SUBJECT**

<b>Subjects</b>	<b>Stress Management (ECSM)</b>	<b>ECSM Level</b>
Subject 1	85	Low
Subject 2	90	Average
Subject 3	90	Average
Subject 4	85	Low
Subject 5	95	Average
Subject 6	101	Average
Subject 7	90	Average
Subject 8	88	Average
Subject 9	93	Average
<b>TOTAL</b>	<b>91</b>	<b>Average</b>

*Source: own elaboration*

The sample obtained an average score of 91 in the Stress Management Emotional Intelligence component (ECSM). Only two subjects of this study obtained low scores, inside the upper limit of this level, according to the standard scores. This component displayed the second lowest diversity of results, after the Intrapersonal Emotional Intelligence component (ECIA).

#### **4.2.5 General Mood component (ECGM)**

The General Mood Emotional Intelligence component (ECGM) is the area that groups the following sub components: Happiness, as the ability to feel satisfied

with one's life in order to enjoy oneself and others, have a good time and express positive feelings; and optimism as the ability to see the bright side of life and maintain a positive attitude, despite adversity and negative feelings.

Table 7 displays the aggregate results regarding the general mood Emotional Intelligence component (ECGM) from all the subjects assessed under this study:

**TABLE 7: GENERAL MOOD EMOTIONAL INTELLIGENCE COMPONENT SCORES BY EVALUTED SUBJECT**

<b>Subjects</b>	<b>General Mood (ECGM)</b>	<b>ECGM Level</b>
Subject 1	100	Average
Subject 2	102	Average
Subject 3	100	Average
Subject 4	81	Low
Subject 5	107	Average
Subject 6	107	Average
Subject 7	81	Low
Subject 8	81	Low
Subject 9	114	Average
<b>TOTAL</b>	<b>97</b>	<b>Average</b>

*Source: own elaboration*

The results obtained by the sampled studied in this last component show a total score of average. 67% of the sample surveyed achieved this level, while 3 participants obtained a low score, however, within the upper limit, close to the average level.

#### 4.2 Analysis of results in terms of gender

Table 8 shows the general emotional intelligence results by gender:

**TABLE 8: EMOTIONAL INTELLIGENCE COEFFICIENT BY GENDER**

GENDER	AVERAGE	LOW	TOTAL
MALE	2	1	3
FEMALE	4	2	6

GENDER	AVERAGE	LOW	TOTAL
MALE	66%	33%	33%
FEMALE	66%	33%	67%
TOTAL			100%

*Source: own elaboration*

As shown in table 8, a third part of the sample corresponds to the male gender, and within this sub group, 66% achieved an average emotional intelligence level, while 33% resulted in a low level. On the other hand, 67% of the sample corresponds to the female gender, from which 67% obtained an average level of emotional intelligence while 33% resulted in a low level. As we can see, results are identical percentagewise by gender, therefore, emotional intelligence does not seem to have a relation with this variable.

#### 4.3 Analysis of results in terms of age

Table 9 shows the general emotional intelligence results by age:

**TABLE 9: EMOTIONAL INTELLIGENCE COEFFICIENT BY AGE**

AGE	AVERAGE	LOW	TOTAL	TOTAL
40-49 years	1	-	1	11%

50-59 years	3	2	5	56%
60-69 years	1	1	2	22%
70-79 years	-	1	1	11%
<b>TOTAL</b>	<b>5</b>	<b>4</b>	<b>9</b>	<b>100%</b>

*Source: own elaboration*

In table 9, 56% of the sample falls in the range between 50 to 59 years old, of which, 60% scored an average level of emotional intelligence, and 40% low level. On the other hand, 22% of the sample are between 60-70 years old, from which, 1 subject obtained average level and 1 obtained a low level. Finally, the only participant older than 70 years, obtained a low level of emotional intelligence.

## 5 DISCUSSION

### 5.1 Discussion of results

66.7% of the teachers evaluated, obtained an average or adequate level of emotional intelligence, while the third part of the sample (33.3%) scored low or room to improve. No teacher evaluated achieved a very high level of emotional intelligence (115 or more) or very low (84 or less); being the lowest score 79 and the highest 95. The average score of the sample is 87 points; that is, an average outcome of emotional intelligence, however, a score close to the lower limit of the category.

In terms of the Intrapersonal component, teachers evaluated obtained the lowest scores at the group and individual level. All participants obtained low scores, and there is even a case with 65 points (very low intrapersonal intelligence capacity), this being the lowest of all the research and far from the general average. This component groups abilities such as the understanding of oneself, of one's feelings and emotions; the ability to understand and accept oneself considering one's potentials and limitations; self-confidence and the ability to be emotionally independently when making decisions.

In this way, intrapersonal emotional intelligence results suggest that the subjects evaluated could be presenting emotional difficulties to process information from the outside world and managing their own emotions. Some of these difficulties have been collected through the semi-structured interviews conducted with participants, from where they have identified some challenges and how they deal with them:

*For me it is an institution that receives very skilled students, but with shortcomings that do not let them flourish. There are students that you tell them A and they are already in Z; they don't need more assistance. But emotionally you have to work hard, and I recognize that as a teacher I cannot handle it. (Teacher, 50 years old)*

This reveals how some teachers may find the work of giving emotional support to the students demanding and exhausting, since they consider that they themselves do not have the necessary emotional tools.

To this, we should add the fact that teachers participating in this research are not clear about the objective of their function or the objective of the institution for which they work. This makes it difficult that as a formative pedagogical team they can take coordinated actions to achieve goals. When asked “What is the purpose of the institute?”, participants responded as follows:

*What they should do is produce very good staff to fly, because we have a long path in this area, and we have always provided the best students to the airlines, we have to maintain the standard, but now the goal is not being met. (Teacher, 67 years old)*

*The objective is to form commercial aviation professionals. (Teacher, 51 years old)*

Other issues identified during the interviewing process regarding the teaching processes are the following:

- 1 There is no institutional jointly developed curriculum that everybody follows, each teacher teaches according to their criteria.
- 2 Teachers do not have the same understanding of the purpose of the institute; so, each one acts at their own discretion.
- 3 There is no defined student exit profile; that is, there is no knowledge about what technical and socio-emotional skills the graduates of the institute should have.

Despite this lack of institutional identity, teachers do show a level of independence that allow them to perform their tasks in favor of the students.

However, if we consider that their intrapersonal intelligence is low on average, the issues previously mentioned may highly affect their motivation and performance.

Some initiatives to nurture the organizational climate could help the staff become more motivated and increase their sense of belonging to the organization. Some comments, such as the following one suggest that some teachers may feel they are on their own:

*As I always tell my students, companies are great due to their people, thanks to the people that work there. If you do not like it, you better leave, you better go search another place where you can feel comfortable and feel good, otherwise you damage the company and yourself. (Teacher, 54 years old)*

This situation may be harmful for the group, especially for those that may have a low level of assertiveness and may not be able to express their feelings productively, without harming others.

Regarding the Interpersonal component, significant differences among subjects were found. The average score is 113, the highest score of all the components; including 2 individuals with high scores and 2 with very high scores (up to 133 points). These results are reflecting one of the comparative strengths of the teacher's in this commercial aviation institute in Lima, who have developed skills to establish and maintain interpersonal relations based on respect, empathy, cooperation and social responsibility.

However, in the institution where the measuring instrument was applied, not only do teachers interact, but there is a relationship between them and the administrative staff, as well as with the students. All of them are part of this community, so the level of interpersonal intelligence of teachers is connected to all these actors. And in that sense, some insights regarding these relationships were taken from the personal interviews conducted.

According to these, there is affinity -on an individual level- between some teachers and members of the administrative area within the commercial aviation institute of Lima. However, as a group, some elements that do not contribute to positive interpersonal relationships have been identified, such as:

*During lunch hours, doing something together, having a space for teachers to make students raise their grades. And then, in another moment, having a meeting with the administrative area to discuss one or two things, because these things we can solve them without taking too long. (Teacher, 51 years old)*

*Things have to improve, I think there needs to be more meetings among teachers, listen ourselves more because we are the ones who are in touch with the students. We also need more contact with the administrative area, we have two different perspectives. The administrative area thinks A and we think B, and sometimes we clash. It is important to talk. (Teacher, 54 years old)*

Another aspect that is affecting the dynamic between teachers with the rest of employees is the way how they arrive to the institution and how is the adaptation process. In other words, it would be useful to analyze the recruiting and induction processes that teachers and staff go through, and what kind of information is given in these stages:

*I had already worked with the principal before, and, as a chief of crew, I entered the recruiting process. They interviewed me, very friendly, the administrator then indicated where I would be located and where to find everything. I already knew other teachers from here. (Teacher, 63 years old).*

*Here we talk with the new teachers that arrive, to give them confidence, so that they see we are friendly and not monsters. But only teachers do this. (Teacher, 67 years old).*

*For example, now a new teacher has joined and nobody talks to him, we have to make him feel welcomed by the family we are. (Teacher, 52 years old).*

These comments suggest that the institution may be lacking some formal institutional processes that could provide further support to the teachers. One of the problems identified is that recruitment and induction processes are independent of each other: there are no standardized measures to hire personnel, there is no personnel or responsible area to provide induction to new workers, or to accompany them during their early stages of work. Despite these deficiencies, teachers seem to work their way around this using their available interpersonal skills.

One additional factor that could hinder interpersonal relations within the organization has to do with how teachers feel regarding the authority they are given towards the students. At some point they were convinced of being the main authority inside the classrooms, feeling supported by the internal institution regulations, while now some comments reveal that they are feeling deauthorized by the administrative area:

*The internal institution regulations should change because it deauthorizes the teachers. I tell the student that they cannot do certain things due to regulations, but the administrative direction replies a different thing and I am left aside as a teacher. We teachers feel that we are the last priority, but thanks to us they get their prestige here, and they do not take into account what we have to say. (Teacher, 54 years old)*

*Administrative employees and pedagogues should be in the same line, if we have internal regulations, we should all comply. And if we cannot improve something, we can all see how to solve it. I see it like that. I see too much administrative discrepancy; we are not aligned because even students realize that there is no relation between teachers and the administrative area. (Teacher, 50 years old)*

Although there are rules of coexistence and corrective measures established in the internal regulations, these are not met. According to these testimonies, these contradictions come from the administrative area, which discredits them in front of students, and in their words “it takes away their tools to act”.

Some results obtained in the other three components of emotional intelligence show that there may be factors affecting teacher's pedagogical work. In addition, as mentioned before, none of the participants have been trained as pedagogues, they are professionals from the aviation industry who fulfill the tasks of teaching within their field of expertise, so this generates some challenges in how they adapt to their role as 21<sup>st</sup> century teachers, as shown in the following testimonials:

*I did not train to be a teacher; I have discovered my purpose along the way. (Teacher, 52 years old)*

*When I arrived, I did not receive any training, because each one taught what they knew best, those who worked at the airport taught the airport, those who worked as crewmen taught that. (Teacher, 51 years old)*

*Aviation is a completely different world compared to what I had done before. I started studying administration on Saturdays and Sundays, and in my previous job I was working long hours, so I was looking for an independent advisor type job, and I came here. (Teacher, 50 years old)*

Teachers would be expected to have developed new teaching strategies and adapted to their new pedagogical work; however, in the Adaptability component of emotional intelligence, results show a low score. This could mean that they have not developed the skills necessary to solve problems or adjust their emotions, thoughts and behaviors to the new challenging situations they face.

If we delve deeper into some of the testimonials on how teachers prepare their classes, we can obtain some insight on how teachers are dealing with the emotional challenges linked to the adaptation process in assuming their new role:

*Ah well, I have changed my classes completely when I came here, because I came from teaching people who already worked, who were already in the airline industry and in their mind, they had everything on track. So, coming here was a challenge, and in one moment I do not know if I told some classmates that I felt like not continuing because it was a shock. (Teacher, 50 years old)*

*Many times, I get excited and I have the book there at the table, but I speak it up, my classes are based on experience. I tell them "what you have here we will do, but I will explain first ...". Then, I explain what happened, what I have lived. Of course, there are courses that are freer. (Teacher, 73 years old)*

*There are others who do not want me at all in the course of fees, and students come and tell me why I teach like this, if before it was different, what happens is that before there was more analytical ability but now students want everything immediately. They tell me to specify it, I give them the potato and they ask me to make mash potatoes, well I mash them and now they do not even want to grab the spoon to eat. (Teacher, 50 years old)*

On the other hand, there is one teacher who have received some academic training and is able to differentiate himself from the group of teachers who have been trained solely in aviation, by being more familiar with group management and teaching methodologies:

*Well, the first day to get to know them a little better, I ask students why they think it is important to take the course, if they have ever had an accident, if they know something about first aid, always relating it to daily life to that they see it clearer and more necessary. My classes are very practical. Now, they are always accompanied by theory, I already have my classes built in units. Unit 1, is first aid and basic principles, unit 2 is vital functions, and since unit 3 is apparatus, CPR, we have a CPR dummy; that is how I develop my classes. (Teacher, 40 years old)*

In terms of innovation and change, when teachers were asked about which recommendations they would make for the institution, one of them answered the following:

*I would recommend more innovation, here they cover students' needs and no more, I do not see that they want to do something else. Maybe to get an additional chair. Sometimes you propose an idea, but they say no, it is very expensive. It is because of budget and because they have already met the goal of students, but why not give more. See what is missing, customer service. (Teacher, 51 years old)*

This answer suggests there might be resistance to implement new ideas or innovate within the institution. The main belief is that if they are delivering their service well, there is no need to do things differently.

Regarding the levels of emotional intelligence of Stress Management and General Mood, the sample has achieved average scores in both components. The first refers to the fact that the teachers evaluated are able to withstand adverse stimuli, stressful situations or strong emotions without losing emotional stability; events that in their workplace could happen with students, co-workers or the administrative area of the institution. Some situations that illustrate the consequences of stress in this institution are the following:

*There are very old people here and sometimes people explode. Here the oldest teachers are tied to the rules, I tell them that they have to adapt, but they hold on to that. Here we lack teaching strategies. (Teacher, 52 years old)*

*Students here have many emotional deficiencies that I have had to understand, I signed up for a course in youth psychology, I was very stressed, I took pills for my liver, I did not understand certain things. So, I started adapting the course to them, I teach air fares and geography for*

*airlines with codes and such. I have changed my way of being, maintaining my essence, I am a very analytical person. (Teacher, 50 years old)*

*Sometimes I have gone to look for Mrs. Maritza (the principal), and they tell me that she is upset. I reply I just want to discuss a work issue, they say no, that it will become worse. It is the same as when you were in school and someone said there comes the teacher and everyone went to sit down. And that generates a burden, that I have to release once I get to class by making jokes so I can unload stress and become calm. (Teacher, 51 years old)*

As we can see, stressful situations are existing in the institution and most teachers are being able to come up with solutions or deal with these situations in many ways. Despite this, the stress management ability may be developed further in order to come up with more effective solutions to challenging situations, especially for those two individuals who obtained a low score for this component.

The final component, General Mood, indicates that participants have the ability to enjoy themselves, to feel satisfied with their achievements and where they are now in their career, as well as to see the positive aspects of life and maintain an optimistic attitude towards adversity. The adequate results in this emotional intelligence component could be explained by the age of the participants. More than 50% of them are between 50 and 59 years of age, they are professionals who have worked in their careers for more than 20 years, they are fathers and mothers; and according to their testimonies, they have experienced different situations that have taught them to value the most important things in life. These would be factors that explain, both individually and collectively, why they have obtained an adequate level of general mood emotional intelligence:

*I feel satisfied, because I tell myself that I can maintain a work rhythm when most of my friends no longer work, and I do, then, I have a work rhythm that I value because it allows me to be active, it allows me to put into practice my abilities. (Teacher, 61 years old).*

In summary, all these factors are necessary to understand the results from teachers evaluated in the commercial aviation institute in Lima and their level of average emotional intelligence. Research participants have shown adequate levels to interact with others, manage stress and maintain a positive mood. However, the context where they work could require some improvement in order to get the most out of the teaching staff in terms of these components. On the other hand, when intrapersonal and adaptability skills are analyzed, points to improve in the teachers evaluated are identified that, if developed, could positively influence their stability and emotional intelligence, and be reflected in areas of their personal and professional life.

## **5.2 Contribution to previous research**

This thesis has aimed to reinforce the importance of emotional intelligence in teaching, supporting the contributions of several authors referenced under this research that show a positive relation between emotional intelligence and teacher performance.

The scope of this case study is focused on a CETPRO in Peru, specifically applied to a commercial aviation institute in Lima, Peru. Despite the existence of other research conducted in the higher education sector in Peru, this is first study developed in a CETPRO and specifically in a commercial aviation institute. As mentioned before, one the characteristics of these institutions is that not a single teacher has been formed in education. Therefore, the need for emotional intelligence skills is even more necessary as they deal with additional challenges in their tasks as 21<sup>st</sup> century teachers. This is confirmed with the interviews conducted, where the interviewees evidenced the necessity of using emotional intelligence skills to deal with everyday work challenges.

One of the key takeaways is that some components of emotional intelligence may be learned throughout life without formal training on the matter. However, this does not guarantee the learning of all set of skills required to face daily challenges. Despite having used a relatively low sample, it is evidenced that age

and experienced favors the acquisition of some emotional intelligence skills, but some others may be left out if not learned properly. Specifically, results show a lack of intrapersonal and adaptability skills in the group sampled, which definitively limits their performance in some situations while they put in practice their role as 21<sup>st</sup> century teachers. As modern teachers receive higher stimuli, are pressured with higher demands and are exposed to the rapid developments of technology, emotional intelligence skills will be ever more necessary to perform their tasks efficient, especially the Intrapersonal and Adaptability components.

Additionally, it is necessary to recognize that for every teacher it is essential - to achieve an adequate performance – to have the perception of working in a pleasant environment that allows him to experience personal and professional well-being, as well as developing positive relationships with his colleagues (García 2009; Huanca, 2012).

Furthermore, in the educational field, the work of the teacher can be one of the most demanding cognitively, socially and emotionally (Corcoran & Tormey, 2010). Not only should he have knowledge of the area in charge, but be able to implement strategies to keep a group of students active, use a technical and didactic discourse, and immerse themselves in an iterative process of reflection-action on their own pedagogical practice, between others (Flores, 2018). This study sheds light on the importance of emotional intelligence in the implementation of these practices for teachers.

As the authors Barreno, Cárdenas, López & Mugruza (2018) point out, becoming an emotionally intelligent teacher is a challenge, and to be able to assume it, it is necessary to reflect on their own emotional development. In this way, one will be able to continue training and acquiring more methodological tools that facilitate their work. Currently, the scientific literature has highlighted the need and importance of educating and cultivating the cognitive dimension of the student, as well as the affective and moral. An emotionally intelligent teacher is able to generate a safe and motivating learning environment for his students.

## 6 CONCLUSIONS

- 1 The total sample has resulted in an average level of emotional intelligence, achieving 87 points (being in the lower limit of the category); and no participant scored a very high level of emotional intelligence (115 or more) or very low (84 or less). Regarding the components of the construct, the interpersonal intelligence component shows an average level with 113 points, the general mood component shows an average level with 97 points, the stress management component shows an average level with 91 points, while the Adaptability and the Intrapersonal components both shows low levels with 83 and 76 points respectively.
- 2 The low levels of emotional intelligence obtained in both Intrapersonal and Adaptability components have adverse effects in terms of the sampled teacher's performance on some of the tasks they have to undertake in their daily work. For example, some teachers convey difficulties managing their emotions when they experience a challenging outside stimulus coming from students or from the working environment itself. Also, some teachers find it challenging to learn how to become a 21<sup>st</sup> century teacher by doing, especially since they have not studied pedagogy, adapting their methods to making classes more dynamic for students and allowing for innovation to be applied more in the daily life of the institution.
- 3 Despite obtaining an average level in the interpersonal skill, there is evidence that some teachers in the case studied have difficulties in empathizing with younger generations of students, where some process information faster than others and some are more motivated than others, recognizing conflicts and solving them positively and finding the right way to relate themselves with the administrative area. Therefore, an average level of the interpersonal skill does not guarantee an adequate level of performance in managing relations.

- 4 As the sample analyzed has an average general level of emotional intelligence, we can conclude that this skill may be learned throughout life to some extent without formal training on the matter. However, this does not guarantee the learning of all emotional intelligence abilities required to face daily challenges and does not guarantee the development to a higher than average level of the general skill.
- 5 There is no evidence that emotional intelligence has a correlation with gender from the studies carried out in this study. However, the perception is that it has a correlation with age, especially with components such as general mood that are linked to happiness and realization in life. In the case of adaptability, the perception is that the correlation with age is negative, since there appears to be resistance to innovation and changes.
- 6 Some improvement opportunities have been identified linked to internal processes of the organization, that if improved could enhance emotional intelligence among teachers and provide a better working environment with better results for all. Among these, are the absence of a jointly developed curriculum, absence of student graduation profile, definition of the objective of the institution in which they work, establishment of an induction process or adequate accompaniment for newcomers and compliance of internal regulations.
- 7 The work of the teacher is cognitively, socially and emotionally demanding, and requires an iterative reflection on their pedagogical practice and their own emotional development, which can be even more challenging for professionals who have not trained as teachers, and who do not count with spaces or platforms to developed themselves continuously.

## 7 RECOMMENDATIONS

- 1 It is suggested to complete the results of this research with the application of the Bar-On emotional intelligence Test (I-CE) adapted by Dr. Nelly Ugarriza to the administrative staff of the commercial aviation institute of Lima, as well as in-depth interviews.
  
- 2 It is recommended that the commercial aviation institute can create a specialized Talent Development area for the benefit of its teaching and administrative staff. Some of its functions could include the recruiting, delivering the induction process for new workers; trainings, etc. On the other hand, it is also recommended to define a commission or pedagogical area responsible for the elaboration and supervision of the implementation of the institutional curriculum, as well as the design of the student's graduate profile.
  
- 3 Given the challenges encountered under this study, an average general level of emotional intelligence seems insufficient for teachers, given the demands of the role of teachers and the characteristics of the institution studied. On a next step it would be useful to gather more quantitative literature that may support the necessity of having a higher than average emotional intelligence for 21<sup>st</sup> century teacher adequate performance. Some literature reviewed for this thesis already suggests this hypothesis, as can be verified in section 2.
  
- 4 It would be highly recommendable to design a program aimed at improving each of the emotional intelligence components of the participating teachers, working at the individual level and as a group of pedagogues. This program should emphasize the development of the Intrapersonal and Adaptability components, which obtained the lowest scores and have proven to be key abilities for the performance of the teachers in this institute. Some of the objectives of this program could include, but not be limited to the following:

- Generating a reflective process on their pedagogical practice from an experiential, social and emotional approach.
- Collectively providing new support strategies and adaptation to changes in the workplace.
- Equipping them with tools to manage stress and decision making, minimizing anxiety.

In a complementary way to working with the teaching staff, it is recommended to include in certain activities the administrative staff of the institution, since both parties are necessary for an articulated work. In this way, this proposal would be inclusive, participatory and sustainable from different points of view; for example, teachers and staff would increase levels of well-being by having spaces for their training in their workplace, improving the working environment, and in turn, this would reduce student dropout.

- 5 It is recommended to carry out another emotional intelligence test with same sample used for this study, after having carried out the proposed program, in order to observe whether or not there were changes in the levels of emotional intelligence of teachers and key administrative staff.
- 6 It would be useful to elaborate an instrument that can measure teaching performance in the classroom, and that includes the emotional dimension. This way teachers may be observed and provided feedback on how they utilize their emotional skills during teaching.

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## APPENDICES

### Appendix 1. Bar-On Emotional Intelligence coefficient test for Peru

Nombre: Edad: Sexo: Ocupación: Especialidad:

Fecha:

Inventario de inteligencia emocional (Bar-on)

#### Introducción

Este cuestionario contiene una serie de frases cortas que permiten hacer una descripción de ti mismo(a). Para ello, debes indicar en qué medida cada una de las oraciones que aparecen a continuación es verdadera, de acuerdo a como te sientes, piensas o actúas la mayoría de las veces. Hay cinco respuestas por cada frase.

1. Rara vez o nunca es mi caso
2. Pocas veces es mi caso
3. A veces es mi caso
4. Muchas veces es mi caso
5. Con mucha frecuencia o siempre es mi caso.

#### Instrucciones

Lee cada una de las frases y selecciona UNA de las cinco alternativas, la que sea más apropiada para ti, seleccionando el número (del 1 al 5) que corresponde a la respuesta que escogiste según sea tu caso. Marca con un aspa el número. Si alguna de las frases no tiene que ver contigo, igualmente responde teniendo en cuenta cómo te sentirías, pensarías o actuarías si estuvieras en esa situación. Notarás que algunas frases no te proporcionan toda la información necesaria; aunque no estés seguro(a) selecciona la respuesta más adecuada para ti. No hay respuestas “correctas” o “incorrectas”, ni respuestas “buenas” o “malas”. Responde honesta y sinceramente de acuerdo a cómo eres, NO como te gustaría ser, no como te gustaría que otros te vieran. NO hay límite de tiempo, pero, por favor, trabaja con rapidez y asegúrate de responder a TODAS las oraciones.

#### Preguntas

1. Para superar las dificultades que se me presentan actúo paso a paso.
2. Es duro para mí disfrutar de la vida.
3. Prefiero un trabajo en el que se me diga casi todo lo que tengo que hacer.
4. Sé cómo enfrentar los problemas más desagradables.
5. Me agradan las personas que conozco.
6. Trato de valorar y darle el mejor sentido a mi vida.
7. Me resulta relativamente fácil expresar mis sentimientos.
8. Trato de ser realista, no me gusta fantasear ni soñar despierto(a).
9. Reconozco con facilidad mis emociones.

10. Soy incapaz de demostrar afecto.
11. Me siento seguro(a) de mí mismo(a) en la mayoría de situaciones.
12. Tengo la sensación de que algo no está bien en mi cabeza.
13. Tengo problemas para controlarme cuando me enojo.
14. Me resulta difícil comenzar cosas nuevas.
15. Cuando enfrento una situación difícil me gusta reunir toda la información que pueda sobre ella.
16. Me gusta ayudar a la gente.
17. Me es difícil sonreír.
18. Soy incapaz de comprender cómo se sienten los demás.
19. Cuando trabajo con otros tiendo a confiar más en sus ideas que en las mías.
20. Creo que puedo controlarme en situaciones muy difíciles.
21. Realmente no sé para que soy bueno(a).
22. No soy capaz de expresar mis ideas.
23. Me es difícil compartir mis sentimientos más íntimos con los demás.
24. No tengo confianza en mí mismo(a).
25. Creo que he perdido la cabeza.
26. Soy optimista en la mayoría de las cosas que hago.
27. Cuando comienzo a hablar me resulta difícil detenerme.
28. En general, me resulta difícil adaptarme.
29. Me gusta tener una visión general de un problema antes de intentar solucionarlo.
30. No me molesta aprovecharme de los demás, especialmente si se lo merecen.
31. Soy una persona bastante alegre y optimista.
32. Prefiero que otros tomen decisiones por mí.
33. Puedo manejar situaciones de estrés, sin ponerme demasiado nervioso.
34. Pienso bien de las personas.
35. Me es difícil entender cómo me siento.
36. He logrado muy poco en los últimos años.
37. Cuando estoy enojado(a) con alguien se lo puedo decir.
38. He tenido experiencias extrañas que no puedo explicar.
39. Me resulta fácil hacer amigos(as).
40. Me tengo mucho respeto.
41. Hago cosas muy raras.
42. Soy impulsivo(a), y eso me trae problemas.
43. Me resulta difícil cambiar de opinión.
44. Soy bueno para comprender los sentimientos de las personas.
45. Lo primero que hago cuando tengo un problema es detenerme a pensar.
46. A la gente le resulta difícil confiar en mí.
47. Estoy contento(a) con mi vida.
48. Me resulta difícil tomar decisiones por mi mismo(a).
49. No puedo soportar el estrés.
50. En mi vida no hago nada malo.
51. No disfruto lo que hago.

52. Me resulta difícil expresar mis sentimientos más íntimos.
53. La gente no comprende mi manera de pensar.
54. Generalmente espero lo mejor.
55. Mis amigos me confían sus intimidades.
56. No me siento bien conmigo mismo(a).
57. Percibo cosas extrañas que los demás no ven.
58. La gente me dice que baje el tono de voz cuando discuto.
59. Me resulta fácil adaptarme a situaciones nuevas.
60. Cuando intento resolver un problema analizo todas las posibles soluciones y luego escojo la que considero mejor.
61. Me detendría y ayudaría a un niño que llora por encontrar a sus padres, aun cuando tuviese algo que hacer en ese momento.
62. Soy una persona divertida.
63. Soy consciente de cómo me siento.
64. Siento que me resulta difícil controlar mi ansiedad.
65. Nada me perturba.
66. No me entusiasman mucho mis intereses.
67. Cuando estoy en desacuerdo con alguien soy capaz de decírselo.
68. Tengo tendencia a fantasear y a perder contacto con lo que ocurre a mi alrededor.
69. Me es difícil llevarme con los demás.
70. Me resulta difícil aceptarme tal como soy.
71. Me siento como si estuviera separado(a) de mi cuerpo.
72. Me importa lo que puede sucederle a los demás.
73. Soy impaciente.
74. Puedo cambiar mis viejas costumbres.
75. Me resulta difícil escoger la mejor solución cuando tengo que resolver un problema.
76. Si pudiera violar la ley sin pagar las consecuencias, lo haría en determinadas situaciones.
77. Me deprimó.
78. Sé como mantener la calma en situaciones difíciles.
79. Nunca he mentado.
80. En general me siento motivado(a) para continuar adelante, incluso cuando las cosas se ponen difíciles.
81. Trato de continuar y desarrollar aquellas cosas que me divierten.
82. Me resulta difícil decir "no" aunque tenga el deseo de hacerlo.
83. Me dejo llevar por mi imaginación y mis fantasías.
84. Mis relaciones más cercanas significan mucho, tanto para mí como para mis amigos.
85. Me siento feliz con el tipo de persona que soy.
86. Tengo reacciones fuertes, intensas, que son difíciles de controlar.
87. En general, me resulta difícil realizar cambios en mi vida cotidiana.
88. Soy consciente de lo que me está pasando, aun cuando estoy alterado(a).
89. Para poder resolver una situación que se presenta, analizo todas las posibilidades existentes.
90. Soy capaz de respetar a los demás.

91. No estoy muy contento(a) con mi vida.
92. Prefiero seguir a otros a ser líder.
93. Me resulta difícil enfrentar las cosas desagradables de la vida.
94. Nunca he violado la ley.
95. Disfruto de las cosas que me interesan.
96. Me resulta relativamente fácil decirle a la gente lo que pienso.
97. Tiendo a exagerar.
98. Soy sensible ante los sentimientos de las otras personas.
99. Mantengo buenas relaciones con los demás.
100. Estoy contento(a) con mi cuerpo
101. Soy una persona muy extraña.
102. Soy impulsivo(a).
103. Me resulta difícil cambiar mis costumbres.
104. Considero que es muy importante ser un(a) ciudadano(a) que respeta la ley.
105. Disfruto las vacaciones y los fines de semana.
106. En general tengo una actitud positiva para todo, aun cuando surgen problemas.
107. Tengo tendencia a depender de otros.
108. Creo en mi capacidad para manejar los problemas más difíciles
109. No me siento avergonzado(a) por nada de lo que he hecho hasta ahora.
110. Trato de aprovechar al máximo las cosas que me gustan y me divierten.
111. Los demás piensan que no me hago valer, que me falta firmeza.
112. Soy capaz de dejar de fantasear para volver a ponerme en contacto con la realidad.
113. Los demás opinan que soy una persona sociable.
114. Estoy contento(a) con la forma en que me veo.
115. Tengo pensamientos extraños que los demás no logran entender.
116. Me es difícil describir lo que siento.
117. Tengo mal carácter.
118. Por lo general, me trabo cuando pienso acerca de las diferentes maneras de resolver un problema.
119. Me es difícil ver sufrir a la gente.
120. Me gusta divertirme.
121. Me parece que necesito de los demás más de lo que ellos me necesitan.
122. Me pongo ansioso(a).
123. No tengo días malos.
124. Intento no herir los sentimientos de los demás.
125. No tengo una buena idea de lo que quiero en la vida.
126. Me es difícil hacer valer mis derechos.
127. Me es difícil ser realista.
128. No mantengo relación con mis amistades.
129. Haciendo un balance de mis puntos positivos y negativos me siento bien conmigo mismo(a).
130. Tengo una tendencia a explotar de cólera fácilmente.

131. Si me viera obligado(a) a dejar mi casa actual, me sería difícil adaptarme nuevamente.
132. En general, cuando comienzo algo nuevo tengo la sensación de que voy a fracasar.
133. He respondido sincera y honestamente a las frases anteriores.

## Appendix 2. Semi-structured interview questions

### Original version

1. ¿Cómo llegas a esta institución?
2. ¿Cómo preparas una clase? Materiales, aula, etc.
3. ¿Cómo son los estudiantes en esta institución? Describe un estudiante promedio. Uno que recién inicia y otro que está por terminar.
4. ¿Cómo se siente cuando está dictando?
5. Del 1 al 10, ¿qué tan satisfecho/contento estás trabajando en esta institución?
6. ¿Cuál diría que son las principales dificultades que tiene trabajando como docente en esta institución?
7. ¿Cómo se solucionarían esas dificultades?
8. ¿Qué tendría que pasar en esta institución para que los docentes estén más cómodos en su labor?
9. ¿Se les da alguna inducción cuando recién entran?
10. ¿Qué aspectos le gustaría mejorar a usted sobre su (estilo de) enseñanza?

### English Translation

1. How do you arrive to this institution?
2. How do you prepare a class? Materials, classroom, etc.
3. How are the students in this institution? Describe an average student. One that has just started and another that is about to finish.
4. How do you feel when you are teaching?
5. From 1 to 10, how satisfied / happy are you working in this institution?
6. What would you say are the main difficulties you have working as a teacher in this institution?
7. How would these difficulties be solved?
8. What would need to happen in this institution so that teachers are more comfortable with their work?
9. Are teachers offered any orientation process when they join this institution?
10. What aspects would you like to improve on your (style of) teaching?