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Review Article

Emotional Intelligence Models as Generators of Business Management Change in the Human Talent Area

¹Zlata Borsic Laborde, ¹Karol Benítez Burbano, ²Verónica Gallardo Reinoso, ^{1,3}Manjunatha Bangeppagari, ⁴Sikandar I. Mulla and ⁵Mariadoss Selvanayagam

¹Department of Economic, Administrative and Commercial Sciences CEAC, Universidad de las Fuerzas Armadas ESPE, Sangolquí, P.O. Box 171-5-231B, Ecuador, South America

²Universidad Regional Amazónica Ikiam, Ewador, South America

³Center for Biofluid and Biomimic Research, Pohang University of Science and Technology (POSTECH), Pohang 37673, South Korea

⁴Department of Biochemistry, Karnatak University, Dharwad, Karnataka 580003, India

⁵Loyola-ICAM, College of Engineering and Technology (LICET), Loyola campus, Chennai, India

Abstract

Emotional intelligence models helps in designing strategies that allow the development in human talent area. The objective of this study was to perform a critical analysis on the evolution of construct and emotional intelligence models in the human talent area. An intellectual quotient approach based on social and emotional intelligence is also carried out. Social intelligence develops the ability of individuals to perform in the human relations area, self-awareness and contact with others. Emotional intelligence due to its role in the organizational structure, is able to identify emotions, feelings, self-esteem and emotional management. This article describes emotional intelligence models focused on the company and its contribution in increasing business productivity, adaptation and change as a generator of interpersonal relationships, which facilitates proper management, efficient evaluation of staff and better productivity of organizations. Finally, a brief discussion is presented regarding the future development of the intelligence theory in the administrative area as a manager of human talent.

Key words: Intelligence, emotional intelligence, models of emotional intelligence, social intelligence, self-awareness, human relations area, intelligence theory, human talent

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Corresponding Author: Zlata Borsic Laborde, Department of Economic, Administrative and Commercial Sciences CEAC, Universidad de las Fuerzas Armadas ESPE, Sangolquí, P.O. Box 171-5-231B, Ecuador, South America Tel: +593995712945

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INTRODUCTION

Emotional intelligence models in the human talent area and his first approach was managing efficiently the human resources of the organizations and designing strategies that allow their development. Taylor¹ considered the administration as an interdisciplinary area of knowledge. Consequently, emotional intelligence is born in psychology, however it has transdisciplinary characteristics, so its application in the administrative area facilitates the management of individuals in the labor field and in the emotional intelligence construct, which allows to manage human talent in any field of action². Considering the individuals emotions, managers of organizations must prepare themselves to take on the challenges of dynamism, as well as design strategies to develop human talent in their work since feelings allow individuals to learn from their experiences and react more adequately³. Given the diversity of definitions of intelligence and emotions available, recognizing the key elements in both the terms and the construct of emotional intelligence becomes imperative. Etymologically, "intelligence" comes from the Latin *intelligentia*, which derives from *inteligere*: *Intus* which means between and *legere* which means to choose. According to Royal Spanish Academy⁴, the term Intelligence refers to the capacity of an individual to choose the most convenient alternative to solve a problem. Therefore, intelligence could be defined as the ability of an individual to solve problems in various contexts or an individual's flexibility and ability to adapt to changes⁴⁻⁵.

While Lolas⁶ analyzed how emotions have been studied from different angles, such as biology, psychology and sociology⁷, describes emotions as constructs related to personality and socio-cultural features as demonstrated by the influence of the context on individual behaviour. Emotions are change adaptation processes biologically expressed as corporal reactions and emotional intelligence results from the relationship between emotions and functional skills. Currently in organizations has increased the interest in the application of emotional intelligence, since emotions are part of working life. Contrary to the previous decades, in which the IQ was considered as a predictor of job success⁸. The emotional intelligence influence in the workplace emphasizes the satisfaction of people in their work and the strengthening of workers. If emotional intelligence influences the work performance of individuals, the fact of investigating this construct is justified⁸. At the end of the XVIII century, intelligence was defined as the ability of an individual to face daily life situations and capability of learning and solving problems. French researcher Binet and Simon⁹ developed the

first test designed to measure the intellectual capacity and introduced the expression Intellectual quotient, better known as IQ (*Intelligenz-Quotient*, in German). In the early XIX century, Thorndike¹⁰ introduced the concept of social intelligence defined as the ability of individuals to perform within human relations based on empathy. Garner¹¹ defined personal intelligence which refers to self-knowledge (intrapersonal) and knowledge of others (interpersonal). Both concepts are similar to what would be later called emotional intelligence.

Gardener broadened the perception of intelligence by theorizing the existence "multiple intelligences" where individuals have different types of intelligence: verbal, musical, logical-mathematical, visual-spatial, bodily-kinaesthetic, interpersonal, intrapersonal, naturalistic and existential. Later, Gardner¹² described emotional abilities as: leadership, capability to cultivate relationships and maintain friendship, conflict management and social analysis skills. Gardner¹¹ and Sternberg¹³ also made reference to multiple ways in which to be intelligent in different environments. Based on the previous statements it was proposed that there are differences in the cognitive abilities that individuals need to develop for the proper exercise of their functions. In addition to the cognitive aspect, individuals manifest diverse physiological and mental changes that form a determined behaviour known as emotion. About 2500 years ago, it described emotions as an innate part of human beings. An emotion is an affective state resulting from senses, ideas or memories and represents a noticeable organic alteration consisting of a cognitive and a physiological factor^{14,15}, theorized emotions as being the origin of everything. To explain this theory, it used the concept of the internal medium as an equivalent to the environment inside the human body. Wukimir¹⁶ stated that emotions are an immediate organic responses that can transfer messages about how a stimuli or a situation is received. Therefore an emotion can be negative or positive. Finally, intelligence and emotional concepts converge in the definition of emotional intelligence. This study was performed a critical analysis of construct and emotional intelligence models in the human talent area.

EMOTIONAL INTELLIGENCE MODELS

The current study "Emotional intelligence models as generators of business management change in the human talent area" was consisted of a literature review using digital resources from the Universidad Nacional Autónoma de México (UNAM) and additional papers from Redalyc. The selection criteria for the resources were: limiting research to indexed

publications, prioritizing accessibility, recent releases and reliability. Additional sources such as dictionaries and books were used.

Intelligence defines as the individual's capacity to learn⁹, solve problems and aptitude in dealing with daily situations. The author considered that this unique capacity could be measured using standardized instruments, leading her to develop the first intellectual capability test and to coin the term Intellectual Quotient, also known as IQ which stands for the German: Intelligenz-Quotient. At the beginning of the XIX century, Thorndike¹⁰ introduced the concept of social intelligence, defining it as the ability of individuals to perform human relationships based on empathy. On the other hand, described personal intelligence as self-knowledge (intrapersonal intelligence) and the knowledge of other (interpersonal intelligence). At the same time, Gardner¹¹ introduced the theory of multiple intelligences, in which individuals have different types of intelligence: verbal-linguistic, musical-rhythmic, logical-mathematical, visual-spatial, bodily-kinaesthetic, interpersonal, intrapersonal, naturalistic and existential. Later, Gardner¹² established that the emotional abilities were: leadership, ability to cultivate relationships and maintain friendships, conflict management and social analysis skills. In this context, Sternberg¹⁷ and Gardner¹¹ detailed the importance of the multiple intelligence figure in studying how people perform in different environments, contemplating the existence of differences in cognitive abilities. In addition to the cognitive aspect, individuals manifest diverse physiological and mental changes that form a determined behaviour known as emotion.

Definitions of emotional intelligence: Emotional intelligence is described as a key element in personal development and social performance. Researchers highlighted the existence of an intelligence that differs from the intellectual intelligence which is based on emotions and serves the purpose of solving problems and adapting to the environment¹⁸. Later, Mayer and Salovey¹⁸ redefined emotional intelligence as the ability to perceiving, value and express emotions; in addition to the capacity of an individual to generate feelings that contribute to thinking and controlling emotions, in order to promote emotional and intellectual development.

According to the theory of Emotional Intelligence¹⁹, individuals have the ability to face problems, overcome mishaps, be conscious of their emotions and understand the feelings of others. Goleman²⁰ redefined emotional intelligence as a set of skills that allow an individual to have self-control,

self-motivation, be persistent and the ability to control impulses, postpone gratification, regulate mood states, avoid stress and maintain hope. By doing so, the individual is able to use emotional information to guide thinking processes and behaviour. Emotional intelligence, then presents characteristics known as personality traits. Emotional intelligence described as non-cognitive capacities that influence how individuals face environmental pressures, increasing the possibilities of successfully responding to that environment. Bar-On²¹ considered that emotional intelligence can be developed and improved with training and time; the author also hypothesized that individuals with a superior emotional quotient are more likely to face the environmental demands and that emotional and cognitive intelligences conform the general intelligence as an indicator of life success. In other words, individuals with high emotional intelligence perform more effectively both as individuals and in groups. At the same time, Cooper and Sawaf²² conceived emotional intelligence as being a set of competences that determine behaviour, the style of facing life, reaction to stimuli and communication. Cooper and Sawaf²² and Mehrabian²³ stated that the ability to perceive one's emotions and those of others, dominating emotions and responding appropriately to daily situations were part of emotional intelligence. Consequently, they considered that emotional intelligence allows the conscious expression of emotions, in a balanced environment, with courtesy, consideration and respect to others.

Emotional intelligence models: Emotional intelligence is classified into: ability models and mixed models.

Ability Models

Mayer, Salovey and Caruso model: The abilities of the emotional intelligence are divided into three hierarchical categories where perception of emotions forms the base and the emotional management is located at the top in Table 1.

Basically Mayer and Salovey¹⁸ and Mayer *et al.*²⁴ formed the original concept of emotional intelligence, introducing empathy as one of its components and presenting the most representative ability model in terms of intellectual and emotional development potential, known as the mental ability model with focus on emotions (MSCEIT). The MSCEIT model focuses on emotional information processing and the study of capacities related to this processing and its application on an individual's thinking. This way, emotions can contribute to solving problems and adaptation processes.

Table 1: Categories of the hierarchical categories

Categories	Concept
Appreciation and expression of emotions	Includes self-assessment and expression of emotions through verbal and non-verbal modes and the evaluation of others' emotions through non-verbal perception and empathy
Emotions regulation	Is the capacity of an individual to control emotions and regulating the emotions of others, the ability to calm down, overcome states of anxiety, sadness and excessive irritation
Use of emotions in problem solving	Using emotions to solve problems through planning, creative thinking, attention redirection and motivation

Source: Mayer and Salovey¹⁸

Table 2: Models of emotional intelligence

Abilities	Concept
Perception and expression of emotions	Is the ability to identify and express personal emotions and recognize the emotions of others through facial expressions, body language or tone of voice
Emotional thinking	Is the ability to harness emotions in order to carry out cognitive activities such as: thinking, solving problems and adapting to tasks
Understanding and use of emotions	Is the ability to solve problems and identify similar emotions
Regulation of emotions for the intellectual and emotional development	Consists of maintaining a receptive attitude towards feelings for an integrated individual thinking management. By doing so, it is possible to reach social harmony when managing emotions and to reach goals set in the problem solving process

Source: Mayer *et al.*²⁴

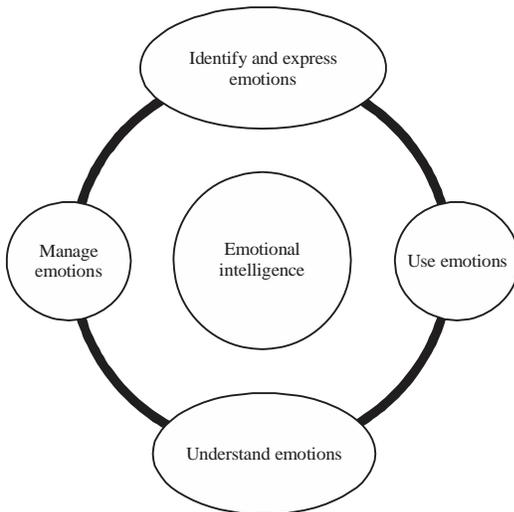


Fig. 1: Four branches of emotional intelligence abilities

Source: Mayer *et al.*²⁴

This model sorts the four branches of mental ability hierarchically, in order to facilitate the understanding of emotions (Fig. 1).

The MSCEIT model²⁴ is formed by the four branches of emotional intelligence abilities (Table 2) and seeks for the individual to regulate emotions in order to achieve an intellectual and emotional development.

These authors questioned the validity of emotional intelligence models considering that evaluation instruments used in the mixed models were limited to an individual whose response could be distorted to show a positive image of themselves²⁴⁻²⁶. Petrides *et al.*^{27,28} and Perez-Gonzalez *et al.*²⁹ pointed out the difference between the operationalization of

the emotional intelligence ability or cognitive- emotional capacity and the emotional intelligence trait or emotional self-efficacy. When managed as a cognitive capacity it carries a different construct resulting from the operationalization of emotional intelligence as a personal trait.

Mixed models of the emotional intelligence: Some of the principal representatives of the mixed models of emotional intelligence include: Goleman³⁰ reported the emotional competences model, Bar-On²¹ reported the socio emotional model and Petrides and Furnham³¹ reported the trait model. These models include personal traits such as motivation, self-control, stress management, assertiveness, persistence and tolerance to frustration.

Goleman's emotional competences model: This model focuses on personal competences and what an individual is able to perceive through self-knowledge, self-regulation and driving relationship management. Additionally, this model includes social competences through social awareness and how an individual manages relationships with others, mixing intelligence and motivation, states of consciousness and social activity. In contrast to previous research, Goleman^{19,20} and Boyatzis *et al.*³² explained that a high IQ alone does not determine success in life. Emotional intelligence, on the other hand appears to be a better indicator as it seems to have a greater influence on decision making processes.

This emotional intelligence model highlighted the relevance an individual's ability with regards to emotional self-awareness, understanding of other individual's feelings,

Table 3: Goleman’s emotional intelligence model

Personal aptitude	Measured aptitude	Social aptitude	Measured aptitude
Self-awareness	Emotional awareness Self-assessment Self confidence	Empathy	Sensing other’s feelings Development sense Service orientation Diversity appreciation
Self-management	Self-control Trustworthiness Scrupulousness Adaptability Innovation	Social awareness	Political awareness Influence Communication Conflict management Leadership
Motivation	Achievement Commitment Initiative Optimism		Chance catalyst Building bonds Teamwork

Source: Goleman²⁰

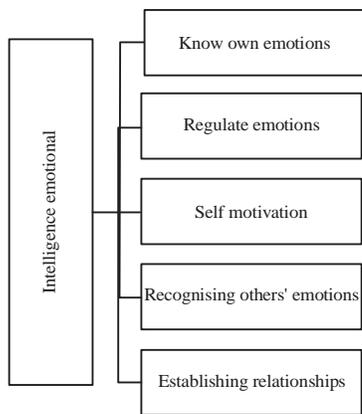


Fig. 2: Goleman’s emotional intelligence model

Source: Goleman¹⁹

facing problems; overcoming difficulties, working in teams; tolerance and empathy (Fig. 2). According to the model, these capacities are used to deal with pressure, daily problems and determine an individual’s personal development potential. The CE Goleman³⁰ emotional competences mixed model is based on cognitive aspects, personal traits, emotions and intelligence (Table 3).

The Goleman²⁰ model initially included five main groups: Self-awareness, self-management, social awareness, empathy and motivation. Later, Goleman *et al.*³³ merged the empathy and self-motivation group resulting in four groups:

- **Self-awareness:** Refers to preferences, sensations, states and internal resources. Abilities include: Emotional awareness, accurate self-assessment and self- confidence
- **Self-regulation:** Feelings, impulses, states and internal needs management. Abilities: Emotional self-control, honesty, adaptability, achievement mentality, initiative and optimism

- **Social awareness:** Refers to the recognition of feelings and the concerns and needs of others. The abilities of this group include: Influence, communication, conflict management, leadership, change catalyst, building bonds, organizational awareness and service orientation
- **Relationship management:** Is the capability to manage relationships and to build support networks. The abilities of relationship management include: developing others, inspirational leadership, change catalyst, influence, conflict management, teamwork and collaboration. The Goleman³⁰ emotional competences model enables the identification of individuals with high IQ but little work capacity and individuals with average IQ but high work capacity. This model is used in organization processes to analyze behaviour

Bar-On’s social and emotional intelligence model: The Bar-On²¹ presented the Social and Emotional Intelligence Model (ESI) based on previous studies by Mayer and Salovey¹⁸. Additionally, Emotional Quotient Inventory or EQ-i was introduced as a contributing factor to emotional and cognitive development. Bar-On²¹ stated that mixed models focus on emotional intelligence from a trait perspective, implying a situational consistence of the behaviour. Situational consistence can manifest through different components such as: Intrapersonal, interpersonal, mood, adaptability, stress management, empathy, assertiveness, optimism and understanding of the individual abilities. The Bar-On²¹ model consists of five groups which are described in Table 4.

The Bar-On²¹ model, combined personality dimensions and self-drive with emotional management. Additionally, the model employs both emotional and social intelligence terms referring to the social competences that an individual must have to succeed in life. Bar-On²¹ pointed out that the dynamic nature of both emotional and social intelligence is greater than that of cognitive intelligence.

Table 4: Bar-On's social and emotional intelligence model

Components	Concepts
Intrapersonal component	Refers to the ability of self-knowing, self-awareness, self-regard, assertiveness, self-actualization and self-appraisal (independence)
Interpersonal component	Consists of empathy, social responsibility and interpersonal relationships
Emotional management component	Includes stress tolerance and impulse control
Mood component	Refers to optimism and happiness
Adaptability component	Reality-testing, flexibility and problem-solving

Source: Bar-On²¹

Table 5: Trait emotional intelligence model

Facets	High punctuation view themselves as
Adaptability	Flexible and willing to adapt to new conditions
Assertiveness	Frank and willing to stand up for their rights
Emotional expression	Capable of communicating their feelings to others
Emotion management (others)	Capable of influencing other people's feelings
Emotional perception	Capable of controlling their emotions
Impulsiveness (low)	Reflective and less likely to give in to their urges
Relationships	Capable of maintaining successful relationships
Self-esteem	Successful and self-confident
Self-motivation	Driven and unlikely to give up in the face of adversity
Social awareness	Accomplished networkers with superior social skills
Stress management	Capable of with standing pressure and regulating stress
Empathy trait	Capable of taking someone else's perspective
Happiness trait	Cheerful and satisfied with their lives
Optimism trait	Confident and likely to look the positive side of life

Source: Petrides *et al.*³⁴

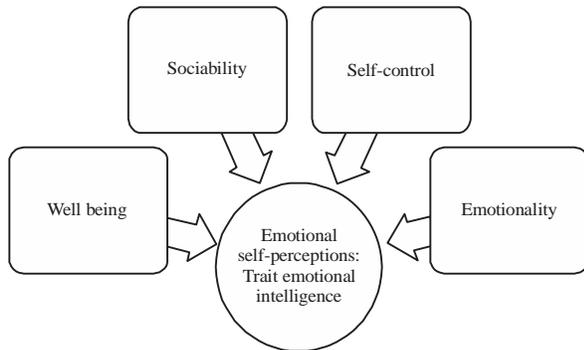


Fig. 3: Petrides and Furnham Trait Emotional Intelligence Model

Source: Petrides and Furnham³¹

Petrides and Furnham emotional intelligence model: These authors presented the emotional intelligence model as a set of traits that relate to an individuals' ability to understand, process and use affect-laden information³¹. The trait EI model considers the behavioural dispositions and self-perceptions described in Fig. 3.

According to the authors, Trait EI consists of a constellation of emotions, behaviours, abilities and self-assessments focused on the individual's capacity of recognizing, processing and utilizing emotional information. The trait EI mixed model presented by Petrides and Furnham³¹, Petrides *et al.*^{28,34} incorporates elements from the Goleman¹⁹ model and Bar-On²¹, when considering emotional intelligence

as a key factor to achieve personal development. Petrides *et al.*³⁴, highlighted that the trait EI uses a self-applied test consisting of 15 distinct facets considered personality traits. Facets are described in Table 5.

Petrides and Furnham³¹ and Petrides *et al.*^{27,28} criticized the measurement procedure used in the Mayer *et al.*³⁴ ability model-MSCEIT and the Bar-On²¹ model, they considered that these models lack psychometric meaning and that are based in the self-perception, respectively. The authors stated that the emotional intelligence-ability tests cannot be objective since the criteria of the answers considered correct are defined by the researcher's perspective.

Other models: This section describes models which include personality components and cognitive abilities that have been created with the objective of divulging the use of the emotional intelligence construct. Some of the most popular models among researchers include: Matineaud and Engelhartn³⁵, Cooper and Sawaf³⁶, Rovira³⁷, Boccardo *et al.*³⁸, Valles and Valles³⁹ and Elias *et al.*⁴⁰.

Matineaud and Engelhartn model: Data in Table 6 shown emotional intelligence components, this model focuses on the evaluation of its components through questionnaires that include different dimensions and external factors³⁵.

Authors integrated the above dimensions as emotional intelligence components: Self-awareness, mood management, self-drive, impulse control and empathy. The components of the Matineaud and Engelhartn³⁵ model coincide with

Table 6: Matineaud and Engelhartn model

Dimensions	Concept
Self-awareness	Conscious knowledge of self
Mood management	Use of humour, self-reflection, self-determination, social abilities, communication skills and emotional management
Positive self-drive	Positive self-motivation
Impulse control	Ability to resist impulses and delay gratification
Openness to other and empathy	Social sensitivity as the ability to "put oneself into someone else's shoes"

Source: Matineaud and Engelhartn³⁵

Table 7: Cooper and Sawaf model dimensions

Dimensions	Concept
Self-awareness	Conscious knowledge of self
Emotional literacy	Is related to intuition and emotional awareness. The model contains aspects that lead to: emotional honesty, emotional energy, emotional feedback, intuition, responsibility and synergy
Emotional fitness	Refers to the emotional fitness as a result of an individual's authenticity, credibility and flexibility and factors that build trust and improve abilities to listen and manage conflicts
Emotional depth	Describes the application of integrity and responsibly finding balance between daily life activities and work
Emotional alchemy	Is the ability to cope with problems and pressure, demonstrating innovation and conflict management skills through new means

Source: Cooper and Sawaf³⁶

Table 8: Rovira's emotional intelligence model

Dimensions	Sub dimensions
Positive attitude	Consideration of positive aspects over negative Highlight achievements over mistakes and effort over results Sincerely compliment people regularly Balancing tolerance and demand Awareness of one's own limitations and those of others
Feelings awareness	Conscious knowledge of one's own feelings and emotions
Ability to express emotions	Appropriate expression of one's feelings and emotions
Emotional management	Tolerance to frustration Patience and deferral of rewards
Empathy	Ability to identify others' emotions through body language
Decision making ability	Integrate rational and emotional aspects
Drive	Show interest for someone or something
Self- esteem	Have positive emotions towards oneself Trust in one's own ability to face challenges
Ability to give and receive	Demonstrate generosity Personal values such as: paying attention, listening and offering company
Having alternative values	Embracing life
Ability to overcome difficulties	Overcome difficult situations
Ability to integrate mental faculties	Integrate cognition and emotion

Source: Rovira³⁷

those of the social cognition processes in mixed models: Self-awareness, self-drive and impulse control with those of social perception: Humour management and with those of interpersonal relationships: Openness to others and empathy.

Cooper and Sawaf model: Pioneers in the practical application of emotional intelligence, these authors made advances in leadership and teamwork in different fields³⁶. Their model, based on four cornerstones, short emotional intelligence in the fields of the direct knowledge, the study and the practice in organizations. These cornerstones are: Emotional literacy, emotional fitness, emotional depth and emotional alchemy in Table 7.

The model is based on four cornerstones adapted to the working environment in search of efficacy and assurance.

Rovira model: This model includes social values such as: Positive attitude, having alternative values and the ability to give and receive³⁷. In contrast to Mayer *et al.*²⁴ models, empathy is not presented as an emotional ability but as an intrapersonal attitude. Rovira presented a twelve dimensions model with sub dimensions, described in Table 8.

Boccardo, Sasia and Fontenla model³⁸: This model distinguishes emotional intelligence from interpersonal intelligence. Boccardo *et al.*³⁸ and places emotional self-awareness, emotional management and positive self-drive as components of the emotional intelligence construct. Data in Table 9 described the components of the Boccardo *et al.*³⁸ model.

Table 9: Boccardo, Sasia and Fontenla emotional intelligence model

Areas	Concept
Emotional self-awareness	Conscious knowledge of own feelings
Emotional management	Ability to relate feelings with past experiences and adapt them to new situations
Positive self-drive	Address emotions in order to achieve objectives. Individuals are open minded and in constant search for solutions
Awareness of others' emotions	Ability to empathize, recognizing others' feelings through verbal and non-verbal perception
Ability to establish interpersonal relationships	Social and communication abilities that contribute to the emotional management and to generate feelings in others

Source: Boccardo *et al.*³⁸

Table 10: Vallés and Vallés emotional intelligence model

Principles	Components
Positive attitude	Ability to have fun Demonstrate dynamism Optimism Sense of humour Smile Value positive actions Value opinions
Self-esteem	Self-confidence
Motivation	Self-drive Self-reinforcement
Identify feelings and emotions	Learn from mistakes Self-perception stemming from the perspective of other Awareness of the behaviours of others Identification of one's shortcomings Conscious knowledge of self Identification of the emotions of others Identify situations that generate positive or negative emotions Understand expectations Being realistic
Ability to control emotions and feelings	Ability to verbalize thoughts and feelings in order to address behaviours Ability to calm others Ability to be alone without being anxious Ability to calm down Anger management Thinking management Fear management Avoiding obsessions Identification of key facts in every situation Being able to work on unpleasant but necessary tasks Tolerate frustration
Empathy	Understand others' feelings Active listening Group/team participation Predicting the reaction of others
Ability to express emotions and feelings	Establish effective communication with others Respond to unfair criticism Establish dialogue Reach reasonable agreements with colleagues Reject unreasonable petitions Be creative

Source: Vallés and Vallés³⁹

Vallés and Vallés emotional intelligence model: The authors described this modeled as the ability to achieve self-knowledge, tolerate frustration, reach agreements with colleagues, prioritize, make conscious efforts, manage anger, manage thoughts, handle criticism, have fun, be dynamic, be optimistic and have sense of humour, in addition to other components of the emotional intelligence that

demonstrate positive attitude³⁹. The model includes components such as: Self-esteem, motivational aspects and the ability to identify, manage and express own and others' feelings and emotions. For a better understanding, the abilities of the Vallés and Vallés³⁹ model has been classified, based on the principles of emotional intelligence and shown in Table 10.

Table 11: Elías, Tobías and Friedlander emotional intelligence model

Components	Concepts
Emotional appreciation and expression	Being aware of one's own feelings and those of others
Empathy	Show empathy and understand the perspectives of others
Positive self-drive	Positively face and manage emotional and behavioural impulses
Use of emotions for problem solving	Set positive goals and establish plans to achieve said goals
Use of social abilities	Use positive social skills to manage relationships

Source: Elías, Tobías *et al.*⁴⁰

Table 12: Bonano's emotional self-regulation model

General category	Definition
Control regulation	Refers to the automatic behaviours addressed to the immediate regulation of emotional responses
Anticipatory regulation	Anticipation of possible situations.
Exploratory regulation	Acquisition of new abilities or resources in order to obtain mental stability

Source: Bonano⁴¹

Elías, Tobías and Friedlander model: The authors described five basic principles of emotional intelligence: emotional self-awareness, recognition of others' emotions, emotional self-control, self-drive and interpersonal relationships⁴⁰. The components of emotional intelligence are shown in Table 11.

Authors integrated previous models by means of standardizing the emotional intelligence construct measurement. However, the development of objective and reliable techniques to measure the construct has not been achieved. The emotional intelligence models not only differ from each other for how the construct is conceived but for which evaluation tool is used.

Bonano's emotional self-regulation model: There is an emotional intelligence model based on emotional self-regulation processes, under the premise that all human beings have a level of emotional intelligence that has to be regulated to in order to be efficient⁴¹. Table 12 described the three categories of emotional self-regulation.

CONCLUSION

Intelligence is defined as the learning capacity of an individual to look for the best solution in different daily situations and problems. Based on the intellectual quotient, it is divided into social and emotional intelligence. Social intelligence develops the ability of individuals to perform in the fields of human relationships, self-awareness and contact with others. Emotional intelligence is the ability to identify one's own emotions and feelings and those of others, self-worth and emotional management; contributing to adaptation to change as an interpersonal relationship builder. Besides considering the intellectual capacity of their human assets, organizations take into account emotional intelligence due to its role in the organizational structure. Emotional

intelligence has demonstrated to increase productivity, efficiency and efficacy in business related activities.

SIGNIFICANCE STATEMENT

The different models of Emotional Intelligence provide tools to managers in the human talent area, which allow an evaluation of the organizations personnel, which has direct implications in the organizations productivity.

REFERENCES

1. Taylor, F., 1911. *The Principles of Scientific Management*. Harper & Brothers, New York.
2. Valenica, G.F. and J.I. Salazar, 2012. *Emotional intelligence in business success: Empowerment of the supply chain process*. Graduate Unit. Masters of Business Administration Quito, Ecuador: Abya Yala.
3. Laborde, Z.D.B., 2016. *The management of human talent and emotional intelligence in the work performance of higher education institutions*. Proceedings of the 21st International Congress of Accounting, Administration and Information Technology, Mexico City, Mexico (AAIT'16), Universidad Nacional Autonoma de Mexico.
4. Royal Spanish Academy, 1984. *Spanish Dictionary*. Royal Spanish Academy, Madrid.
5. Stern, W., 1914. *The psychological methods of testing intelligence*. Educational Psychology Monographs, Vol. 13. Warwich & York, Baltimore, MD, US.
6. Lolas, F., 2008. *Las emociones*. Chil. J. Neuropsychiat, 46: 151-152.
7. Puig, N., 2012. *Emotions in sport and sociology*. RICYDE. Int. J. Sport Sci., 8: 106-108.
8. Laborde, Z.D.B. and A.R. Rosas, 2017. *Emotional intelligence in the work performance of teachers of higher education institutions*. Proceedings of the 22nd International Congress of Accounting, Administration and Information Technology, Septiembre 27-29, 2017, Universidad Nacional Autonoma de Mexico-UNAM., Mexico City, Mexico.

9. Binet, A. and T. Simon, 1913. A Method of Measuring the Development of the Intelligence of Young Children. Chicago Med. Book Co., Chicago, Illinois.
10. Thorndike, E.L., 1920. Intelligence and its uses. Harper's Mag., 140: 227-235.
11. Gardner, H., 1983. Frames of Mind: The Theory of Multiple Intelligences. 2nd Edn., Basic Books, New York, USA., ISBN-13: 9780465025084, Pages: 440.
12. Gardner, H., 1994. The Mind Structure: The Theory of Multiple Intelligences. (Segundaed). Fondo de Cultura Economica, Mexico.
13. Sternberg, R., 1985. Beyond IQ: A Triarchic Theory of Intelligence. Cambridge University Press, Cambridge.
14. Plato, 1997. Plato Complete Works. Hackett Publishing Company, Indianapolis, Estados Unidos.
15. Bernard, C., 1927. Introduction to the Study of Experimental Medicine. (Translated by H. C. Green). MacMillan, New York.
16. Wukmir, V., 1967. Emocion y Sufrimiento. Labor, Barcelona.
17. Sternberg, R., 1996. Successful Intelligence: How Practical and Creative Intelligence Determine Success in Life. Penguin-Putnam, New York.
18. Mayer, J.D. and P. Salovey, 1997. What is Emotional Intelligence? In: Emotional Development and Emotional Intelligence: Implications for Educators, Salovey, P. and D. Sluyter (Eds.). Basic Books, New York, pp: 3-31.
19. Goleman, D., 1995. Emotional Intelligence: Why it can Matter More than IQ. Bantam Books, New York.
20. Goleman, D., 1999. Working with Emotional Intelligence. Bloomsbury Publishing, London, UK., ISBN 9780747543848, Pages: 383.
21. Bar-On, R., 1997. The Emotional Quotient Inventory (EQ-I): A Test of Emotional Intelligence. Multi-Health Systems Inc., Toronto, Canada.
22. Cooper, R. and A. Sawaf, 1997. Emotional Strategy for Executives. Martinez-Roca, Barcelona.
23. Mehrabian, A., 2000. Beyond IQ: Broad-based measurement of individual success potential or "emotional intelligence". Genet. Soc. Gen. Psychol. Monographs, 126: 133-239.
24. Mayer, J.D., P. Salovey and D. Caruso, 2000. Competing Models of Emotional Intelligence. In: Handbook of Intelligence, Sternberg, R.J. (Ed.). Cambridge University Press, Cambridge, UK., pp: 396-420.
25. O'Connor, Jr. R.M. and I.S. Little, 2003. Revisiting the predictive validity of emotional intelligence: Self-report versus ability-based measures. Personal. Individ. Differen., 35: 1893-1902.
26. Warwick, J. and T. Nettelbeck, 2004. Emotional intelligence is...? Personal. Individ. Differen., 37: 1091-1100.
27. Petrides, K.V., N. Frederickson and A. Furnham, 2004. The role of trait emotional intelligence in academic performance and deviant behavior at school. Personal. Individ. Differen., 36: 277-293.
28. Petrides, K.V., R. Pita and F. Kokkinaki, 2007. The location of trait emotional intelligence in personality factor space. Br. J. Psychol., 98: 273-289.
29. Perez-Gonzalez, J.C., K.V. Petrides and A. Furnham, 2005. Measuring Trait Emotional Intelligence. In: International Handbook of Emotional Intelligence, Schulze, R. and R.D. Roberts (Eds.), Hogrefe & Huber, Cambridge, pp: 181-201
30. Goleman, D., 1998. The Practice of Emotional Intelligence. Kiros S.A., Barcelona.
31. Petrides, K.V. and A. Furnham, 2001. Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. Eur. J. Personal., 15: 425-448.
32. Boyatzis, R., D. Goleman and B. Hay-McBer, 1999. Emotional Competence Inventory. Hay Group, Boston, USA.
33. Goleman, D., R.E. Boyatzis and A. McKee, 2002. Primal Leadership: Realizing the Power of Emotional Intelligence. Harvard Business Press, New York.
34. Petrides, K.V., J.C. Perez-Gonzalez and A. Furnham, 2007. On the criterion and incremental validity of trait emotional intelligence. Cognition Emotion, 21: 26-55.
35. Martineaud, S. and D. Engelhart, 1996. El Test de Inteligencia Emocional. Martinez-Roca, Barcelona.
36. Cooper, R. and A. Sawaf, 1997. Executive EQ: Emotional Intelligence in Leadership and Organizations. A Perigee Book, New York.
37. Rovira, F., 1998. How to know if it is emocionalment intelligent. Aloma, 2: 57-68.
38. Boccardo, F., A. Sasia and E. Fontenla, 1999. Emotional intelligence. En A. Valles. The Emotional Intelligence Development, Benacantil.
39. Valles, A. and C. Valles, 1999. Developing Emotional Intelligence. EOS., Madrid.
40. Elias, M., S. Tobias and B. Friedlander, 2000. Strategy to Educate with Emotional Intelligence. Plaza y Janes, Barcelona.
41. Bonano, G., 2001. Emotion Self-Regulation. In: Emotions, Current Sigues and Future Directions, Mayne, T.J. and G.A. Bonano (Eds.), The Guildford Press, New Cork.