

ANALYSIS OF EMOTIONAL INTELLIGENCE DIMENSIONS IN LEADERSHIP - CASE STUDY

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Abstract

Developing emotional intelligence (EQ) brings numerous benefits in different aspects of a person life, including interpersonal relationships, career, school and mental health. Thinking before acting is an essential element. Emotionally intelligent people know that they must act, they know that emotions are strong and intense, but also that the need to control impulses is fierce. It is not only social constraints that dictate this direction, it is about the conscious tempering of impulses that comes from the complexity of understanding and correct reasoning. A greater awareness of one's own emotions, feelings and needs then extends to the others too. People with developed and fully aware emotional intelligence also show an associated empathy, which comes from understanding how we would react if we were in the same situation. Based on these considerations, the present study aimed to capture how different people, in terms of age, gender and occupation, act in different contexts and which dimensions of emotional intelligence are predominant, depending on the mentioned characteristics. For this purpose, it was used a standardized questionnaire, elaborated by Daniel Goleman, with 10 multiple-choice questions, to which we added 3 filter questions for a better in-depth study, applied to a sample of 320 respondents, from the student category, institutional sector and private sector. The correlations between the items were analyzed using the theoretical χ^2 test. Following the study, we cannot conclude that age has a significant importance in the components of emotional intelligence, but the results from the socio-professional groups gave us some important clues. The fact that students obtained the highest score is probably the result of the introduction into the study program of disciplines that directly or indirectly develop this type of intelligence, and the field that had a close score was the private economic sector, where most people are administrators and, in the competitive context of our economy, they had to develop leadership skills in order for their business to work.

Key words: emotions, emotional intelligence, leadership, questionnaire, perspectives

INTRODUCTION

Charles Darwin was the first to highlight the importance of emotional intelligence for survival [8].

In the 20th century, researchers began to realize the importance of non-cognitive aspects for intelligence. Immanuel Kant (1724-1804) distinguished “three types of action”: (i) technical action (the way of handling objects), (ii) pragmatic action (the way of dealing with people), and (iii) ethical action (the way of approaching moral values), which Müller-Merbach transferred to the level of intelligence [8,11]. The distinction between technical, pragmatic, and ethical action helps to realize the total responsibility of agents. According to Kant, these actions correspond to the hypothetical imperative subordinate to the

categorical imperatives. There is a hierarchy between the three types of action and the corresponding imperatives. The problematic and the affirmative imperative are hypothetical in that they are subordinate to the categorical imperative. According to Russell, the hypothetical imperative states how one should act according to a purpose, unlike categorical imperatives which declare the necessity of actions without regard to any purpose; thus, the categorical imperative “acts as if the maxim of your action would by your will become a general law of nature” [8].

In 1920, E. L. Thorndike used the term social intelligence in human relations, proposing several types of intelligence. In 1940, David Wechsler highlighted the importance of affective, personal, and social factors in predicting one's ability to succeed in life as

cited [2 and 12]. The term “emotional intelligence” first appeared in a 1964 paper by Michael Beldoch and in a 1966 paper by B. Leuner entitled “Emotional Intelligence and Emancipation” in the Journal of Psychotherapy: “The Practice of Child Psychology and Child Psychiatry” [11]. In 1983, in *Frames of Mind: The Theory of Multiple Intelligences*, Howard Gardner introduced the idea of multiple intelligences, interpersonal and intrapersonal [9]. The term reappeared in Wayne Payne's doctoral thesis, *A Study of Emotion: Developing Emotional Intelligence* in 1985 [9].

The first use of the term “EQ” (Emotional Quotient) was in an article in 1987 by Keith Beasley in the British magazine *Mensa* [12]. In 1989, Stanley Greenspan presented a model describing EI, followed by another by Peter Salovey and John Mayer published the following year [6,11]. Psychologists John Mayer and Peter Salovey introduced the concept of emotional intelligence as “The ability to perceive emotions, to access and generate emotions in a way that aids thinking, to understand emotions and emotional knowledge, and to regulate emotions reflectively in a way that promotes emotional and intellectual growth.” The term became popular with the publication of Daniel Goleman's book: *Emotional Intelligence – Why it can matter more than IQ* [4]. In 1996, Reuven Bar-On developed the first scientifically validated measurement of emotional intelligence, through a test covering five domains: intrapersonal, interpersonal, adaptability, stress management, and general mood [1].

The distinction between features and skills emotional intelligence was introduced in 2000 [3, 5]. Emotional intelligence (EQ) consists of a person's ability to recognize and manage both their own emotions and those of the people they interact with, using emotional intelligence information in an efficient and empathetic manner [6,11].

That is why we call on self-control, self-knowledge, empathy, motivation, social skills, all of which are components of emotional intelligence [4,13].

As advantages of emotional intelligence, we can list improving relationships with people, communication, developing empathy skills, increasing confidence, reducing stress levels, managing change more confidently, and career prospects [3,12].

It has been found, without scientific proof, that people with high emotional intelligence (EI) have better mental health, better job performance, and better leadership skills. (A) Daniel Goleman indicated that EI accounted for 67% of the skills needed for leadership performance and counted twice as much as technical knowledge or IQ [4].

There are several models that aim to measure EI levels [5, 9]. Daniel Goleman's original model is a mixed model that combines skills with features [4]. A feature model was developed by Konstantinos V. Petrides in 2001 [10] with an emphasis on self-awareness, and a skill model was developed by Mayer et al. (2000) focusing on social relationships [6].

What led us to approach this topic was the fact that we observed in different circumstances people who, although intelligent, in the general sense of the term, did not achieve the expected success in life. It was a signal that made us study this aspect, to analyze personal development not only through the lens of cognitive processes but also of psychic and emotional ones. We thus found that most people consider academic intelligence more important than emotional intelligence in achieving performance, although psychologists demonstrated that these abilities are not generated by a high level of theoretical/academic knowledge, but they constitute a kind of specific sensitivity towards practice and interpersonal relationships [10,12,13].

This study has the goal to identify how different people, in terms of age, gender and occupation, act in various contexts and which dimensions of emotional intelligence are predominant, depending on the mentioned characteristics.

MATERIALS AND METHODS

The purpose of this paper is to analyze and interpret how different people, by age, gender

and occupation, act in different contexts and which dimensions of emotional intelligence are predominant, depending on the listed characteristics. To this end, we applied a standardized questionnaire, elaborated by Daniel Goleman, with 10 multiple-choice questions, to which we added 3 filter questions for a better in-depth study, applied to a sample of 320 respondents, from the student category, the institutional sector and the private sector, as shown in Table 2. Completing the test took into account, on the one hand, the transposition of the respondent into the respective situation, and on the other hand, the choice of one of the four possible answer options, which represent some concrete ways of reacting in the predetermined situations indicated by the questions. The answers were scored with points from zero to 20 up to 100p – below average score; 100p-125p – average score; 125p-175p – above average score; 200p – exceptional. The scoring and interpretation of the answers to the emotional intelligence test consisted of adding the points corresponding to the four answer options from the ten items, after which the score obtained was reported to the standard. The questions were structured on two levels, respectively, 3 filter questions and 10 grid-type questions, with 4 predetermined answers.

The questionnaire was applied both physically and online, through Google Forms, on a sample of 320 people from different public and private institutions. The test questions consisted of the subject being transposed into a certain situation and the way he/she would react. The filter questions aimed at classifying the respondent into an age category, his/her gender and place of work. The age groups were structured in five steps, starting with the 18-25 year-old group, up to the over 60 year-old group, as mentioned in Table 1.

In forming the research sample, the condition was established that the respondent be a student or active in the labor market because in a world of collaboration, multicultural teams and digital communication, observing the competencies in the five dimensions of emotional intelligence in a team or community is important to identify strengths and vulnerabilities (Table 2). It is necessary to

know the people around us and fundamental to know ourselves to be successful leaders. Measured variables: Emotional awareness, expression of emotions, regulation of emotions, use of emotions.

Potential limitations: Like other self-report-based tests, it can be affected by the subjectivity and self-reporting tendencies of the respondent.

Table 1. The structure and share of respondents according to age

Age group	No of respondents	%
18- 25 years old	72	22.5
26-35 years old	87	27.2
36-45 years old	65	20.3
46-60 years old	59	18.4
>60 years old	37	11.6
Total	320	100

Source: Questionnaire on measuring emotional intelligence [4].

Table 2. The structure of the respondents according to the profession

Socio-professional categories	Total	
	No.	%
Teaching staff	49	15.3
Medical staff	23	7.2
Civil servants	31	9.7
Bank employees	10	3.1
Private economic sector	44	13.7
Private technical sector	48	15.0
Private agricultural sector	27	8.4
Students	82	25.6
Other categories	6	1.9
Total	320	100.0

Source: Questionnaire on measuring emotional intelligence [4].

In establishing the correlations of the information collected on the basis of the questionnaire, the theoretical Chi, Hi or χ^2 test was used, theoretically, a concordance test applied to statistical distributions for which we can calculate the cumulative distribution function [7].

RESULTS AND DISCUSSIONS

A positive and sustainable organizational climate is a very important condition in today society, characterized by permanent evolution and rapid changes.

People have emotional needs and seek not only financial well-being but also psychic and emotional well-being in any kind of interpersonal relationships, and here emotional and social skills play a more important role than cognitive intelligence [1, 4].

In this context, emotional intelligence became an almost fundamental element in the practice of effective leadership.

In this study, we aimed to identify the predominant dimensions of emotional intelligence by respondent categories and by sectors of activity, respectively, private and institutional. The responses regarding the identification of specific characteristics of emotional intelligence were scored, with a maximum of 200 points, and were subsequently organized in graphs and tables to obtain an overview of the level of emotional intelligence, correlated with the age group in which the respondent falls and with his occupation. As shown in Table 3, we assigned the questions in the test to the five components of emotional intelligence, as grouped by Daniel Goleman [4].

In Table 4, we averaged the respondents' scores by age group, where we could observe a total of 90/200 points, a low to average score, with higher emotional intelligence being in the first age group. Although we cannot say that it is a conclusive factor, due to the unequal number of respondents, we note that the average score decreases as the age category advances, in the over 60 category we had the lowest score, which may be the result of the relatively recent training of leadership skills in Romania.

To investigate whether the participants' occupation has an influence on their emotional intelligence, we grouped them into socio-professional categories and averaged the score obtained by each in the test, as presented in Table 5.

The highest score was obtained by students, with an average of 107 points out of 200,

closely followed by teaching staff and civil servants.

Regarding the private sector, those working in the agricultural sector rank first, with 93/200 points, while employees in the private economic sector and bank employees have the same score, 76/200 points.

In Table 6, it was correlated the respondents age with the sector in which they work. The value of the Chi calculated test, of 31.87, indicates a significant correlation between the two variables, meaning that people in the age categories 26-45 years, as well as the age category over 60 years, work mostly in the private sector, while the age category 46-60 years works mostly in the public sector.

In Table 7, in order to observe the predominant characteristics of the respondents to the test, we distributed the points obtained on the questions according to each dimension. We thus observed that self-regulation and social skills hold the share, while our respondents have a fairly low level of empathy, one of the important characteristics of social awareness: sensitivity to the needs of others, awareness of emotions, willingness to provide help where needed.

It is worth mentioning the high level of social skills, which includes skills such as managing the anger of others, influencing, identifying and communicating optimal solutions for a climate favorable to collective development.

In the self-regulation chapter, it is worth mentioning that the first question was about a single emotion, namely: fear for one's own life and how we react in a stressful situation. Here, out of the ten questions, we have the highest score obtained: 90% of the test respondents chose an appropriate answer.

Unlike the first, the second question, however, concerned a tense situation, where aggression and pride were present in the relationship with a loved one.

Only 16.25% of the people surveyed chose the option marked in the test.

We can deduce that such feelings affect interpersonal relationships, very few have the ability to stop when things degenerate, taking into account their own righteousness and ego more than the relationship and its importance.

Table 3. Correlation of questions in the test with the element of emotional intelligence

Elements of emotional intelligence	Question in the test
Self-knowledge	3. You got a bad grade at school/faculty, which could make you lose your scholarship. What do you do? 10. How do you proceed if you decide you want to use your time effectively and resume training in a sport you practiced as a child?
Self-regulation	1. You are flying on a plane and there is turbulence that shakes the aircraft; what do you do? 7. When an argument in your couple degenerates into verbal violence and personal attacks from both parties, what should be done?
Social awareness	2. A little child is crying because the others do not want to play with him; what do you do? 9. If you have a shy, sensitive child who is afraid of strange people and places. What do you do?
Social skills	5. You are the leader of an organization for ethnic and racial equality. Someone tells a racist joke; what do you do? 6. What do you do if, while in a friend's car, another car is about to hit you and your friend gets angry? 8. As a team leader, you need to find a creative and urgent solution to an unforeseen problem. What do you do first?
Self-motivation	4. You are a telephone sales agent; today all the customers hung up on you, you are discouraged; what do you do? 10. How do you proceed if you decide you want to use your time effectively and resume training in a sport you practiced as a child?

Source: Elaborated by authors.

Table 4. Average score obtained by age categories

Age category	Number of respondents	Average score obtained
18-25 years old	72	113/200
26-35 years old	87	97/200
36-45 years old	65	96/200
46-60 years old	59	82/200
Over 60 years old	37	60/200
Total	320	90/200

Source: Questionnaire on measuring emotional intelligence [4].

Table 5. Average score obtained by socio-professional categories

Socio-professional category	Number of respondents	Average score obtained
Teaching staff	49	106/200
Medical staff	24	99/200
Civil servants	31	101/200
Bank employees	10	76/200
Private economic sector	44	76/200
Private technical sector	48	62/200
Agricultural sector	27	93/200
Students	82	107/200
Other categories	6	90/200
Total	320	90/200

Source: Questionnaire on measuring emotional intelligence [4].

Table 6. Analysis of the correlation between the age of the respondents and sector where the respondent works

Age	MU	Sector of work			Total	
		Students	public	Private	no	%
18- 25 years old	No	67	1	4	72	22.5
26-35 years old	No	15	27	45	87	27.5
36-45 years old	No	0	23	42	65	20.3
46-60 years old	No	0	40	19	59	18.4
>60 years old	No	0	12	25	37	11.6
Total	No	82	103	135	320	100
	%	25.62	32.19	42.19	100	X
Indicators	Test χ^2	Significance threshold				
	\leq	0.1	0.05	0.01	0.001	
Chi theoretical	\geq	16.37	24.23	29.57	34.23	**
Chi calculated	31.87					

Source: Questionnaire on measuring emotional intelligence [4].

Table 7. Respondents skills depending on the components of emotional intelligence

Components of emotional intelligence	Answers 20 points	Answers 5 points	Average of skills %
Self-knowledge	124/320 56/320	N/A	56.25%
Self-regulation	188/320 52/320	N/A	75.0%
Social awareness (empathy)	114/320 103/320	35/320	47.5%
Social skills	112/320 27/320 37/320	53/320	71.56%
Self-motivation	82/320 94/320	N/A	55.0%

Source: Questionnaire on measuring emotional intelligence [4].

Table 8. Analysis of the correlation between the respondents age and components of emotional intelligence

Age	MU	Components of emotional intelligence					Total	
		Self-knowledge	Self-regulation	Empathy	Social skills	Self-motivation	No.	%
18- 25 years old	No.	13	18	14	7	20	72	22.5
26-35 years old	No.	15	22	13	27	10	87	27.5
36-45 years old	No.	11	21	5	23	5	65	20.3
46-60 years old	No.	10	12	9	17	11	59	18.4
>60 years old	No.	10	12	4	7	4	37	11.6
Total	No.	59	85	45	81	50	320	100
	%	18.44	26.56	14.06	25.31	15.63	100	X
Indicators	Test χ^2	Significance threshold						
	\leq	0.2	0.1	0.05	0.01	0.001		
Chi theoretical	\geq	22.04	23.15	26.2.3	32.27	38.11	N	
Chi calculated	21.74							

Source: Questionnaire on measuring emotional intelligence [4].

In Table 8, the respondents age was correlated with the components of emotional intelligence. The calculated Chi test value of 21.74 indicates an insignificant correlation between the two

variables, with self-regulation and social skills being predominant in all age categories, except for the 18-25 age category, where self-motivation ranks first.

CONCLUSIONS

Emotional intelligence (EQ) is a crucial component of professional success and fulfillment in the workplace. Research in the field has shown that people with high EQ can be effective leaders, who have the ability to inspire and motivate the team, manage conflicts effectively, and organize a positive work climate. Effective communication is an important component of EQ in the workplace, as it contributes to a clear expression of emotions and thoughts, active listening, correct understanding of the perspectives and needs of team members, and the avoidance of conflicts. In addition, a developed EQ facilitates the establishment and maintenance of healthy interpersonal relationships in the workplace.

From the study carried out, we cannot deduce whether age has a significant importance in emotional intelligence skills, but the results from socio-professional groupings gave us some important clues. The highest score was obtained by students, with an average of 107 points out of 200, closely followed by teaching staff and civil servants. As for the private sector, those working in the agricultural sector are in first place, with 93/200 points, while employees in the private economic sector and bank employees have the same score, 76/200 points.

We observed that self-regulation and social skills hold the share, while our respondents have a fairly low level of empathy, one of the important characteristics of social awareness. In order to achieve outstanding leadership performance, we need skills dispersed in all five areas of emotional intelligence, and the good thing is that it can be developed through different leadership techniques. Following the research carried out, we can deduce that most of the people surveyed have a high level of social skills and self-regulation in stressful situations, but there is an urgent need to introduce training courses to develop self-knowledge, self-motivation, empathy, conflict management skills in almost all socio-professional areas analyzed.

In order to make real steps towards progress, we need leaders who combine logical thinking with human sensitivity, capable of creating a

healthy work area, based on respect, cooperation and mutual trust.

Healthy and harmonious relationships contribute to a sense of belonging, emotional satisfaction and greater resilience in front of stress and life difficulties. Developing emotional intelligence is essential for creating and maintaining harmonious interpersonal relationships. Emotional intelligence helps us understand and manage our own and others' emotions in a healthy and constructive way. It gives us the skills needed to communicate effectively, be empathetic, and resolve conflicts in a way that promotes understanding and cooperation.

In conclusion, developing emotional intelligence brings significant benefits in multiple aspects of life, contributing to healthier relationships, career success, improved academic performance, and overall mental health and well-being.

REFERENCES

- [1]Bar-On, Reuven, 2004, The Bar-On Emotional Quotient Inventory (EQ-i): Rationale, description and summary of psychometric properties", în *Measuring emotional intelligence: Common ground and controversy*". Hauppauge, NY, US: Nova Science Publishers. pp. 115.
- [2]Brackett, M. A., Mayer, J.D., 2003, Convergent, Discriminant, and Incremental Validity of Competing Measures of Emotional Intelligence. *Personality and Social Psychology Bulletin*. 29 (9):pp.58 doi:10.1177/0146167203254596.
- [3]Cavazza, M., Charles, F., Aranyi, G., Porteous, J., Gilroy, S.W., Raz, G., Keynan, N.J., Cohen, A., Jackont, G., Jacob, Y., Soreq, E., Klovath, I., Hendler, T., 2014, Towards Emotional Regulation through Neurofeedback. *Computer Science. Psychology*. https://www.researchgate.net/publication/260981509_Towards_Emotional_Regulation_through_Neurofeedback, Accessed on 20 May 2025.
- [4]Goleman, D., 2018, *Inteligența emoțională (Emotional Intelligence)*. 4th Ed., Curtea Veche Publishing house, Bucharest, pg.11.
- [5]Mayer, J., D., Salovey, P., Caruso, D. R., 2004, *Emotional Intelligence: Theory, Findings, and Implications*. *Psychological Inquiry*. 15 (3): pp.197.
- [6]Mayer, J. D., Salovey, P., Caruso, D. R., 2000, Models of emotional intelligence, in *Handbook of intelligence*. New York: Cambridge University Press. pp. 19.
- [7]Mihăiță, N. V., Stanciu Capota, R., 2003, Strong, hidden false and illusory statistical

relationships/Applications of Informational Statistics,
<http://www.biblioteca-digitala.ase.ro/biblioteca/carte2.asp?id=388&idb>,
Accessed on 10 June 2025.

[8]Morgan, J. K., Izard, C. E., King, K. A., 2010, Construct validity of the Emotion Matching Task: Preliminary evidence for convergent and criterion validity of a new emotion knowledge measure for young children. *Social Development*. 19 (1): 52–70. doi:10.1111/j.1467-9507.2008.00529.x.,
<https://pmc.ncbi.nlm.nih.gov/articles/PMC2850106/>,
Accessed on 15 June 2025.

[9]Müller-Merbach, H., 2007, Technical and Emotional Intelligence – Friends or Enemies? IFAC Proceedings Vol. 10th IFAC, IFIP, IFORS, IEA Symposium on Analysis, Design, and Evaluation of Human-Machine Systems. 40 (16):pp.403 doi:10.3182/20070904-3-KR-2922.00071

[10]Petrides, K. V., Furnham, A., 2001, Trait Emotional Intelligence: Psychometric Investigation with Reference to Established Trait Taxonomies. *European Journal of Personality*. 15 (6):pp. 425, doi:10.1002/per.416.

[11]Sfetcu, N., 2019, Evolution of emotional intelligence concept. *SetThings.com*. 30th December 2019.

https://www.researchgate.net/publication/338390090_Evolutia_conceptului_de_inteligenta_emotionala,
Accessed on 24th July 2020.

[12]Sfetcu, N., 2020, Emotions and emotional intelligence in organizations doi:10.13140/RG.2.2.32991.20640
https://www.researchgate.net/publication/338669667_Emotiile_si_inteligenta_emotionala_in_organizatii,
Accessed on 3th June 2025.

[13]Vintu, A., 2016, What is Emotional Intelligence (EQ) and why is it more important than IQ. <https://adrianvintu.net/2016/08/11/ce-este-inteligenta-emotionala-eq-si-de-ce-este-mai-importanta-decat-iq-ul/ce-este-inteligenta-emotionala-eq-si-de-ce-este-mai-importanta-decat-iq-ul-1/>, Accessed on 1st August 2016.