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## EMOTIONAL INTELLIGENCE AND ACADEMIC ACHIEVEMENT. A STUDY AMONG UNIVERSITY STUDENTS FROM PUBLIC ADMINISTRATION PROGRAMS

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### **Abstract:**

In recent years the interest in emotional intelligence within scientific literature has grown, but too little has been written about the influence of emotional intelligence within educational systems, especially the relation between emotional intelligence and teachers' job performance, or emotional intelligence and students' academic achievement. Universities around the world have experiencing changes and reforms, impacting the teachers' job performance and academic achievement among university students. Emotional intelligence plays an important role in many areas of our lives. The scope of the research is to investigate the impact of emotional intelligence on students' academic achievement from public administration programs. We choose students from public administration, since they are supposed to work after graduation in public institutions, and get in direct contact with citizens.

At the level of Romania, there is no study with predictive value regarding the "impact of emotional intelligence on students' academic achievements" supported by empirical research. Regarding the methodology, we collected data using the questionnaire which was developed based on the instruments by previous researchers. Respondents were students from public administration programs. The benefits of such a study are to provide a solid basis for understanding the mechanisms of emotional intelligence (EI) and their role in determining or sabotaging academic achievement. The effect of emotional intelligence on students' academic achievement was established. On the basis of the findings, it is suggested that emotional intelligence should be integrated into university students' curriculum. The study further advocated for the promulgation of educational policy on emotional intelligence. Also, this research will represent an important contribution to the Romanian and international literature, both in the field of emotional intelligence, as well as in the field of students' academic achievement and continuous students' personal development (academic self-efficacy).

**Keywords:** academic self-efficacy, emotional intelligence, student achievement, public administration program.

**JEL:** D91, I21, I23

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### **INTRODUCTION**

Given this relatively recent topics, this research analyses the impact of emotional intelligence on students' academic achievement. This study starts from the premise that pupils, high school students from previous generations, today's students have not had programs dedicated to this kind of intelligence, and in order to know where to start for future research or action, there is a need to know where we stand. Four types of intelligence can be distinguished: physical intelligence, mental intelligence, spiritual intelligence and emotional intelligence, this classification addressing

intelligence in all respects (Covey, 2005). Physical intelligence consists of our ability to maintain good physical condition, through regular physical activities, proper nutrition, but also through rest, otherwise the organism will be weakened, and we will no longer be able to do daily activities (Mohanu, 2010). Mental intelligence is the one that uses the mind, is the most used and common type of intelligence, and is trained in schools. It represents the ability to rationalise, systematise, abstract or use the language (Szekely, 2007). As regards spiritual intelligence, it addresses parts related to the authenticity of our personal values and mission. At the same time, this type of intelligence is the most complex and consists of all other types (Griffiths, 2019).

The first articles and publications that spoke of emotional intelligence as an integral part of people's life began to appear after 1990, some papers even emphasising that it is much more important and useful than cognitive intelligence (Côté & Miners, 2006). Emotions are our way of acting in a situation that immediately requires you to stand up, and they are practical impulses. Often, in tricky situations where we need to quickly adopt a decision, emotions accompany us and guide us because responsibilities and tasks are far too great to be left to the intellectual alone. In concrete terms, every emotion gives us a distinct desire to act (Goleman, 2001, p. 18).

## 1. LITERATURE REVIEW

### 1.1. EMOTIONAL INTELLIGENCE

The concept of "emotional intelligence" was used and explained for the first time in 1990 by two great psychologists, Peter Salovey and John Mayer, in the paper entitled "Emotional Intelligence", which is defined as: "part of the social intelligence that deals with the way our own feelings are controlled, but also with those of others, and how they are used to guide our future actions and decisions" (Agavriloaiei, 2016, p. 12). Emotional intelligence is the ability of each person to recognise their own limits, their own emotions, and those around us, which differentiate us from others in the way we behave. This intelligence is not an innate one, as is mostly cognitive intelligence (IQ), but is flexible and perfect depending on the context to which we are exposed (Bradberry & Greaves, 2019, p. 26; Sabie et al., 2020).

In Bar-On's vision (2006), emotional-social intelligence is the way to express ourselves coherently and effectively, connect in the best possible way with those surrounding us, to know how to manage current requirements, the challenges and critical moments we meet throughout our lives. It is clear from this that, in order to be able to manage all these activities, but also interpersonal relationships, we must first know ourselves very well, know how to highlight our strengths and use them as a competitive advantage, and, moreover, let us know how to hide our weaknesses or turn them into strengths on the way.

In particular, emotional intelligence is made up of two parts: personal competence and social competence. The first is made up of: self-awareness and self-control. Self-awareness is the ability to become aware of your emotions in a crisis situation and how you can understand and master your reactions during an event or a challenge. Self-control is how self-awareness intervenes to achieve a positive result, because it is not enough to be aware of what is happening, but also to manage your emotions in limited situations or around certain people (Bradberry & Greaves, 2019, pp. 30-40; Goleman et al., 2002).

On the other hand, social competence is composed of two parts: social awareness and the relations' management. Social awareness is characterised by the ability to overshadow our emotions and how we could manage a situation and pay greater attention to the emotions of others, by listening to and observing the techniques they choose to solve an emerging problem. The last component of emotional intelligence is a combination of the three above: self-awareness, self-control and social

awareness and is called "relationship management". This refers to the human-to-human connections that develop over time, to the interaction of people with others, and how they can become successful by combining self-awareness and social awareness to manage their emotions and understanding the emotions of others (Bradberry & Greaves, 2019, pp. 41–50; Goleman, et al., 2002).

When it comes to comparing cognitive intelligence (IQ) with emotional intelligence, these are two separate concepts. If we talk about IQ, many common tests can be done to identify the level a person has, but this is no longer the case with emotional intelligence, for which there is no standard test to be measured, with little chance of ever inventing such an instrument (Goleman, 2001, p. 62).

It can also be argued that this emotional intelligence coefficient (EQ) is much more important than the coefficient of IQ, in that however many and varied tests exist to measure the second coefficient, they would still be limited and would not encompass everything that is intelligence.

In the present, EQ is measured by complex tests. Although this is more difficult to quantify, several psychologists have discovered and developed several tools and methods, such as: Mayer-Salovey-Caruso Emotional Intelligence Test (MICEIT™), which is designed to test the emotional intelligence and performance of those it is applied through various creative tasks, made up of as objective questions as possible to improve and solve potential problems or tasks in which emotions are used (Sample, 2005; Agavriloaiei, 2016, p. 13).

The concept of emotional intelligence in social and emotional education has grown up in all educational environments around the world, from pre-school to high-profile universities. In some regions of the United States, social and emotional education has become an integral part of school curricula, where primary school children need to learn about and classify their emotions. At the end of the primary cycle, they must already recognise nonverbal indications and feelings hiding behind other people's decisions, and then until the end of the upper cycle, they must know how to settle conflicts with others, how to overcome difficult periods of examination, tests, or checks. This concept has been extended to Japan, Korea, Malaysia, Australia, and the most representative model in Europe is the United Kingdom (Goleman, 2018, p. 12). The introduction of these courses of social and emotional education has led primarily to a decline in bullying, improved climate conditions in educational institutions, and last but not least, to higher academic performance. The more emotionally stable students are, they manage to improve their capacity to accumulate information, which has a positive and direct impact on academic performance.

Since the first research on emotional intelligence, the way in which it could have been measured has been sought. In view of the above, the authors have tried to find ways that include what they thought would be useful in identifying, quantifying, recording, and then researching, so that the studies in this field are as specific and as close to reality as possible. Researchers have started to formulate tests in different variants, with simple or complex questions, applied by age class or general tests to measure this kind of intelligence. Of the most well-known, in the literature we can identify in a first phase three theoretical models designed to measure in various ways emotional intelligence. These models are: the model of ability, developed by Mayer and Salovey (2002); the factorial model, developed by the Israeli psychologist Bar-On (2006) and, last but not least, the mixed model developed by Goleman (Hay Group, 2011).

## 1.2. ACADEMIC ACHIEVEMENT

When it comes to academic performance, two types of measurement can be made, one in terms of university performance, of teachers and one in terms of academic performance of students in higher education institutions. Thus, if we speak of the first category, at first sight it can be said that students

select the university where they intend to study, guided by the prestige of the institution, its profile, the feedback from the students who graduated there, the reviews provided by others or what that university can offer.

One method used is that of international rankings or accreditations, which is an effective method of measuring and assessing the performance of higher education institutions (Urdari, 2015). One of international rankings where some of our universities are, is: "Emerging Economies University Rankings", which is published annually by the Times Higher Education Magazine, in which universities from 43 countries participate annually (Bothwell, 2019). The same magazine also records other rankings, depending on the profile that the faculty has, such as: "World University Rankings 2019 by subject" (Times Higher Education World University Rankings, 2019). These include "The Academic Ranking of World University 2019", which is one of the most prestigious international rankings, and which divides the best faculties in the world by profile, such as natural sciences, mathematics, agriculture, medicine and pharmacy, social sciences, chemistry, economics, etc (Academic Ranking of World Universities, 2019).

If we are talking about academic achievement among students, it can be measured by taking into account several benchmarks, such as: grades to the subjects or half-yearly examinations, grades or qualifications from tests or partial-papers during the academic year, participation in specific competitions or scientific communication sessions, as well as extracurricular activities, written assessments such as themes, drafts, papers. So far, no concrete definition has been given of what may be "academic achievement", as teachers can say that from their point of view, having a high performance may be to complete higher education with high grades or high average, while employers can say that being good in this respect means being able to apply everything you have learned during years of study in the future career (Travis, et al., 2015, p. 1). Furthermore, academic achievement, in social studies, can also be linked to observable behaviour and can be measured by teachers in certain situations during courses or seminars (Yusuf, 2002).

Academic performance can also be defined by means of final notes obtained at master or doctoral examinations, completion rate of studies, but also at various advanced examinations, such as: The ECD, which is a certification program, translated into the 'European computer driving license' and which aims to build and develop knowledge in the field to all the persons concerned (Kuh, et al., 2006, p. 5; ECDL Romania, 2016). Other performance tests are IELTS ("The International English Language Testing System"), which is the most common English test in the world and helps you measure your performance and improve your skills through two tests, one for the academic world and the other for the everyday environment (British Council, n.d.), but also Cambridge Assessment English, which is also an internationally recognised English-language test by means of a certificate (British Council, n.d.). The academic achievements of students can be influenced by various factors, such as demographic factors, degree of participation in courses, but also number of students, stress, and motivation. They can be grouped into several broad categories: Social, organisational, psychological, cultural, and economic perspectives.

The first factor that directly influences academic performance is the social factor, because once the upper secondary cycle is over, that person must be able to separate from the groups he was used to, from the family, in order to be able to integrate properly into the new faculty group (Kuh, et al., 2006, p. 11). Academic performance is directly influenced by the communication skills of students with the other members of the group, its integration into it, which is also highlighted by some authors (Tinto, 1975, p. 93), which states that poor integration within the group not only does not lead to significant performance but can even lead to the dropout from higher education system.

The second factor influencing students' academic achievements is the organisational one, including among others: number of students enrolled in study programs, organisation size, resources, management of the number of qualified teachers for the fields, but also institutional policies and how

they are respected and implemented (Kuh, et al., 2006, p. 12). The policies and measures applied during the courses, such as compulsory attendance in the courses, but also the size of the classes, can also influence academic performance (Caviglia-Harris, 2004, p. 13). The number of students assigned to a group, but also their level of training, can influence their involvement, attention and interaction in the courses; this is complemented by the degree of seriousness with which students approach that discipline (Caviglia-Harris, 2004, p. 15; Duggal & Mehta, 2015).

Another category of factors is demographic, where authors like Smith and Naylor (2001) say that women tend to achieve better results than men, but also that married people tend to get better qualifications. The employment status of parents also contributes directly to academic performance, as they can therefore give them access to favourable conditions for learning and access to prestigious universities where the tax is higher (Smith & Naylor, 2001; Li, et al., 2010).

Psychological factors are one of the most important factors determining academic achievement, and from the perspective of the authors Swamy and Shastri (2014) they can be grouped into three main categories: openness to new experiences involving active imagination, intellectual curiosity and independent judgment; the second is agreeable and involves altruism, trust, modesty, but also conscientiousness. Moreover, psychological factors are found in all the activities that we carry out every day, and the failure or gains that we have depend in most part on human psychic. Researchers speak of a number of factors such as stress, anxiety, depression, lack of motivation, loneliness, and even the feeling of helplessness and phobia (Beharu, 2018, p. 60). Anxiety is one of the factors that most often occurs over academic years, especially when there are discrepancies between the tasks the student must perform and the resources he/ she has, including time, energy or material resources (Beharu, 2018).

Another psychological factor is "motivation", which influences students' daily activities. For example, when you go on a road, as faculty is, you always have to find your motivation to continue to go in that direction, no matter what obstacles you may have, because in the end all the efforts you have made to get there will pay off. It is said that nothing is done without the help of motivation, being that "inner voice," which helps you not to give up or deviate from the original purpose. An involvement that other stakeholders might have would be that of teachers, who, even if the subject matter can be difficult, could, through the teaching method, attract students' attention through various interactive games or lessons, all students in the room or even group projects during courses and seminars should participate. A study on 206 students from the University of Bergen showed that the most important factors that can influence academic achievement are: good methods of teaching, but also quality of teaching, clear themes, clearly formulated work tasks that are consistent with the subject being taught, proper assessment, fear of failure, study organised with colleagues, time management, effort and finally the correctness of the final exam marks. Given this last criterion, according to this study, students who are not correctly graded are disappointed, which ultimately leads to no future involvement in other activities, even in extracurricular activities (Diseth, 2007).

In practice, there are different methods for measuring academic performance, depending on the school or students. These can be classic methods of measuring performance, from simple tests, which can be of several types, from oral assessments, half-yearly evaluations, annual assessments, but also university entrance examinations. It is not surprising that the most common methods of measuring academic performance are in the form of academic achievements, in the form of meeting course objectives, but also the acquisition of new skills in different fields. Final tests, projects or evaluations are also mostly used in universities, as they are the easiest to apply and can also be an objective assessment.



### 1.3. RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND ACADEMIC PERFORMANCE

Emotional intelligence is undoubtedly a type of intelligence that needs to be used and developed throughout life, because it helps to better know us, but also others around us, improve relations with others, manage borderline situations and how we respond or react. When it comes to the relationship that emotional intelligence has with academic performances, we can say it has an overwhelming influence on the second term, both positively and in a negative way. Thus, when it comes to examinations or tests, emotional intelligence helps us to remain calm, to act rationally, to focus on achieving high academic performance. At the beginning of the school year, in some Spanish schools, the MICEIT test was applied and then these results were linked to the final exam scores. In this way was demonstrated that those pupils who had low scores in the MICEIT test also had low or average scores in the evaluations, also those who had a high score in the MICEIT test, had high scores during the evaluations (Márquez, et al., 2016). A 2012 study at Barbados University, where 151 students were questioned, showed that emotional intelligence directly influences academic performance. Also, 48% of the EQ component parts have contributed to a considerable extent in improving performance. Moreover, research has shown that students who are in transition from high school to university and then into a future career, but also minorities are performing worse than others who have already gone through these stages (Fayombo, 2012).

Moreover, a study was conducted in the United States of America among children from 13 urban kindergartens, which were mostly made up of children from local minorities. It has been demonstrated that their performance was directly influenced by some components of emotional intelligence. Trentacosta and Izard (2007) focused in particular on terms such as: awareness-taking, verbal ability, the relationship and proximity between the teacher and their relationship to the kindergarten pupils' performance. The tests carried out over a six-month period of time show that once pupils started to know better what emotional intelligence is, they started to focus much better on the teachers' explanations, on the presentations of the study program, which finally led to higher academic performance and more attention (Mayer, et al., 2011). It is well known that parents, teachers, colleagues, friends, knowledge, and other sources are representing the base pillars for EQ development.

In Dewaele's (2011) study conducted in London on what impact teachers have on emotional intelligence, he found that an open relationship between the student and teacher can increase the student's self-confidence. Moreover, it also states that the elements of differentiation between teachers are the way in which they choose to talk about the discipline in question. If they only present courses in a systematic and schematic manner, the degree of attention and interest of students will be low. Otherwise, the teacher who chooses to talk about his discipline in a pleasant way that attracts students through interactive games or activities, uses techniques that create a positive atmosphere of learning, will increase significantly students' academic achievement. The school process itself is a cumbersome one, full of emotions, for both students, their parents and teachers. All emotions play an essential role in motivating students (Curci et al., 2014). Another component of emotional intelligence is conscientiousness, which has a direct impact on students' academic achievements. In a study carried out on 138 students from the Faculty of Psychology at the Ecologic University from Bucharest, it was demonstrated that there is a clear correlation between the conscientiousness coefficient and academic performance (Brazdău & Mihai, 2011).

## 2. METHODOLOGY

This research aims to analyse the impact of emotional intelligence on the academic achievement of students from public administration programs in Romania.

## 2.1. THE PURPOSE AND ASSUMPTIONS OF THE RESEARCH

The aim of the research is to analyse the impact of emotional intelligence on the academic achievement of students from bachelor and master programs in the field of public administration.

The main assumptions made are:

- Hypothesis 1: The organisational factor directly influences academic achievement.
- Hypothesis 2: Psychological factors have an overwhelming impact on academic achievement.
- Hypothesis 3: The way teachers interact and approach the teacher-student relationship influences academic achievement.
- Hypothesis 4: Grading methods and grades that students receive influence their mood.
- Hypothesis 5: The perception, knowledge, and expression of emotions, but also the emotional facilitation of thoughts, are skills possessed by the vast majority of students.
- Hypothesis 6: A substantial proportion of students have the personal skills developed.
- Hypothesis 7: Students have not developed the social skills side.
- Hypothesis 8: The higher the level of emotional intelligence, the better the academic achievement is.

## 2.2. SAMPLING

The participants in this sample were students from university programs in the field of public administration in Romania, aged between 18 and 50. This research tool has been applied to 339 learners from different cycles (bachelor, master degree), 274 of which were females and 65 males. Of these, 286 are students in the bachelor programs and 53 are in master programs.

Of the 339 respondents, 74,3% said that they had "budget" funding, and the remaining 25,7% are tax payers. Another interesting fact is that only 128 of the respondents said they had a job and 211 said they had no job at present. Out of 339 respondents, 206 are students at the Faculty of Administration and Public Management from Bucharest University of Economic Studies, 63 are students at The University of Bucharest, Faculty of Administration and Business, bachelor field - Administrative Sciences, 51 are students at The University of "Alexandru Ioan Cuza" in Iasi, The Faculty of Economics and Business Administration, the bachelor field - Administrative Sciences, and 19 are students at The National School of Political and Administrative Studies (SNSPA), Faculty of Public Administration.

## 2.3. METHODOLOGY

Going through the literature we noticed that many methods and techniques for research in the field of social sciences have been developed. In the first part of the research we chose to use a qualitative method, by means of which we summarised and explained the main concept addressed in this study, in the second part we chose a quantitative method - the opinion poll. We used this method, because in Chelcea (2001) and Sandor (2011) views' it is also the most common method.

The questionnaire used was exclusively applied online through the specialised platform <http://www.isondaje.ro/>, where respondents could complete it between 1 May and 30 May 2020. The link of the questionnaire was distributed on mail and social media Facebook and WhatsApp. This questionnaire consists of 42 questions, 8 of which are socio-demographic questions and the remaining 34 were intended to measure how emotional intelligence affects students' academic performance.

The first 11 questions of the questionnaire were designed to measure the level of emotional intelligence of students based on the Goleman (1998) classification of emotional intelligence, listing the largest categories of personal and social skills, which in turn consist of several sub-components. These 11 questions consist of 40 items, each of which is marked by 2,5 points, totalling 100 points, which were then compared with the average of the students during the first semester of the current academic year (question 25 of the questionnaire), but also with question (Q) 28, where students are asked to mention whether they have arrears or not. The next 23 questions address students' academic performance. The present questionnaire has several types of questions, such as: open questions, where the respondents expressed their views on certain proposed topics, but also closed questions, with a single choice or multiple variants. There were also included matrix questions with a single answer, but also a scoring question, where respondents had to rank the options.

## 2.4 DATA ANALYSIS

The data analysis was done through the site where the questionnaire was accessed, using Excel functions. As we said before, the first part of the questionnaire is composed of questions intended to measure the level of emotional intelligence of students. Thus, the first question relates to the perception, knowledge, and expression of emotions, which implies the ability to identify the emotions of those around us. To this question, "I am good at reading the emotions of the people around me", 304 people answered "yes", while only 35 of them answered negatively.

The following four questions help us understand how students perceive the feelings of others around them through descriptive images. By centralising the answers, the respondents' majority correctly recognised the feeling (295). The next feeling identified is that of sadness with 27 respondents who identified this feeling in the image, followed by respondents who identified that the person in the image feels rather relaxed (17). It is interesting that no one has identified the feeling of anger.

The next question relates to the intensity of the feeling presented in the previous question, where most respondents said that the intensity of the feeling is strong (63,4%). Turning to the next question, which is also represented by an image, this time it can be seen a crying child and the respondents mostly chose the feeling of sadness (311), followed by those who said that this image is more associated with a feeling of fury (26) and two said that it is associated with the feeling of indifference. The following question is about the respondents' perception regarding the intensity of the feeling expressed previously. Here we can see more details, such as: a large part of the respondents, 181 of the 339, stated that the feeling previously presented was a strong one, followed by 109 others who considered it to be very strong, lower values are recorded in the "neutral" categories, "small" and "very small", where the number of respondents was 33, 12 and 4 respectively.

Question number six is a matrix question, where respondents had to provide information on several items. The first is "Intuitively I am aware of others feelings", where the predominant answer was "yes", (304) and the negative answer was chosen by 35 students. The following item in this matrix is: "I am aware of my emotions and those around me," where the answers are similar, 307 answered "yes" and 32 "no". For "I realise quickly when someone hides his/her emotions", the answers are slightly more balanced, meaning 69% answered "yes" and 31% did not. If we look at "When I have a good mood, I tend to make decisions without reflecting too much", the answers are balanced, 193 students say that they make decisions without reflecting too much time when they have good mood. Also, an interesting fact to mention here is that little more than half of women make decisions without reflecting too much when they have a good mood, with 149 out of the total of 274, while most of the male students questioned said this is true (44 out of the 65). Of the 339 students surveyed, 282 said that when they are happy, creativity increases. The last item is the way students



manage the deadlines, 182 said they do not panic, and 157 claimed to have such sensations (128 women and 29 men).

Question number seven refers to the components of "self-awareness" and consists of six items, to which the students replied with "yes" or "no". The first item relates to the weaknesses of the respondents, where 315 said they knew their weaknesses, with only 24 of them denying this sentence. Next is how past experiences influence today's decisions; 81,7% say that when they must decide, they also think about the past; the remaining 18,3% deny it. 127 students are also reluctant to receive feedback from close people, while 212 are open to receiving the views of others. When it comes to the way students interact with people around them, the 87,9% majority say they know how to make themselves liked in groups of friends or college colleagues, with 12,1% having some shortcomings in this regard.

If we are talking about the fifth item from question number 7: "When my opinion is different from that of others, I try to put as many arguments as possible", 74,6% of respondents put forward more arguments for their opinion to be understood or adopted by others, while 25,4% of students don't. The last point of this question refers to how respondents choose to make a decision. Thus, 225 of them postpone the decision and think about potential risks, while the remaining 114 take the decision without considering all the risks.

The next question (Q8) refers to "self-regulation". This question was formulated in matrix type, with 8th items, each describing another part of emotional intelligence. The first point refers to the way students go beyond nervous starts. 194 said they are easily exceeding such periods, and 145 do not easily exceed nervous situations. Also, 59% of the surveyed students said they can remain calm at tense times, while the remaining 41% are not so good at this chapter. Of the 139 students who have said so, 66 are 20 or 21 years old, and as age increases, the data is also decreased, with another 56 negative answers being recorded in the age range 22-26.

The next item refers to how students act at tense moments, with 59% saying they can keep their calm at such times, and the remaining 41% deny that sentence. Also, 54 students do not recognise their own mistakes and do not apologise, while at the opposite side are those who apologise when they are wrong (285). When difficult and heavy times occur, 79,9% of respondents succeed to manage their time efficiently, while 20,1% do not.

The fifth issue of the eight question shows that 252 of the students who responded to this questionnaire are adapting quickly to unforeseen events and the remaining 87 are experiencing difficulties at such times. The next three comments refer to how the projects students have to carry out at university seminars or courses are addressed, these last three statements have similar percentages. 85,8% are reported from several sources when drafting a project, with a similar percentage when it comes to the originality of the projects, with 85,3% saying they opt for the most original projects possible. The majority of respondents said that they have their mark on the projects (292 out of the total of 339).

The following question is about "tolerance" and how those members of minorities are looked at or helped. This question is made up of three items, the first of them refers to the way in which students tolerate people from minorities in Romania. Here, some of the respondents say they accept minorities, namely 313. An even higher percentage is also recorded in the second item, "I accept the views of others." where 96,5% are tolerant to the people around them. The last point refers to "I stand up for the people of minorities in front of others", where there were little more negative answers, that is 71, 20,9%.

The last question looking at students' emotional intelligence refers to the category of social skills, which is measured by seven items. The first 90,3% of the respondents answered "yes" to the statement "I am a good listener", but there were also negative answers (9,7%). To item "When

I have a dispute, I try to speak openly about it until it is resolved", which is part of the social skills component, in the "communication" category, the respondents answered: 291 answered "yes" and 48 answered negative. The following item refers to the way in which the students surveyed accept the bad news. Thus, 153 students admit that they are hard to outperform the less good news, while the remaining 186 are more open to receiving such news. Also, another point where interesting data was recorded is the one related to how many students assume the role of leader in the projects they have to design during the college. Thus, according to the centralised answers, more than half of the total number of students questioned assume such a role (183), while 156 students prefer not to get involved so much and not to take over such responsibility. For the statement "I have many friends", the data was unexpected, in the sense that more than half of the respondents denied this (197) and only 142 students mentioned that they have a large group of friends.

As for the interaction students have with their college colleagues during their holidays, 230 of them claim to speak to their colleagues during their holidays, and 109 deny it. The last indicator refers to team skills as part of emotional intelligence, where 84,1% of respondents mention that when participating in team projects they try to involve all participants and the remaining 15,9% do not. Those who answered the negative question are most often in the age range 21-23

Considering the results presented earlier, we can say that emotional intelligence influences students' academic performance. The lowest result was in one of the students with the average of 6,01-7,00, with only 22,5 points scoring and declaring that he has arrears.

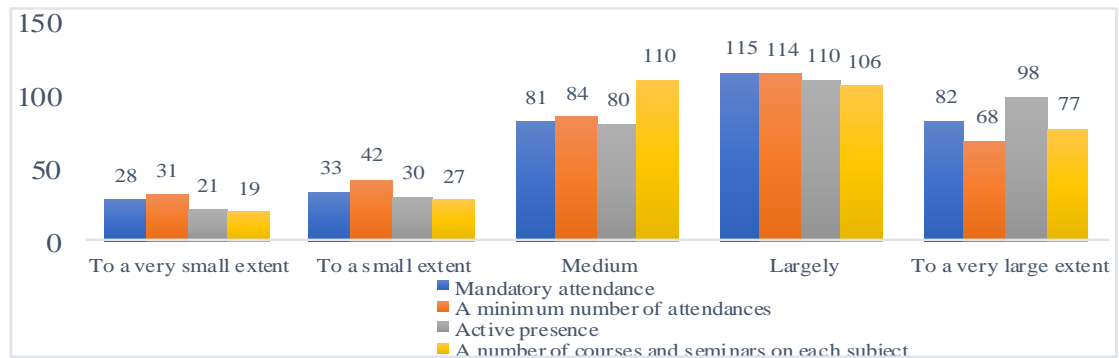
Moreover, high results were also achieved among students with averages between 9,01-10, with eight of them having a total score of 90 points following the answers made in the first part of the questionnaire. It should also be noted that the majority of students have accumulated more than 50 points, with only seven of them in the range 47,5 points to 22,5 points, where the average is the one between 7,01 and 8,00.

The next interval, ranging from 50 to 60 points, was made up of fifteen respondents, who had the average of 7,01-8,00, and there were two students with the average of 6,01-7,00. Only four of the respondents said they had at least one arrears in the previous semester of the academic year.

The most common score is the 70 points, which is rated as an average score, where students were from all the medium categories, the most representative of which is category 7,01-8,00, followed by category 8,01-9,00. More than 80 points have accumulated no less than 35 students from the bachelor and Master's programs, where the predominant averages were those in the years 8,01-9,00, but also 9,01-10. Last but not least, there is a student with an average of 8,01-9,00 who has no arrears and who has scored a maximum of 100 points. The top 25 students, after the number of points accumulated from this questionnaire, are students with averages between 8,01 and 10 and who have no arrears.

The following question concerns the policies and methodologies adopted at university level related to: mandatory attendance, a minimum number of attendances to take part in the examination, active attendance at the course or seminar (Figure 1). Figure 1 shows that the methodologies that regulate students' participation in activities influence students' academic performance. Therefore, we can see that 115 students stated that compulsory attendance at courses and seminars influences their academic performance, the same can be said for the item "a minimum number of attendances", where 114 students said that it influences their performance in to a large extent. Also, for the "active presence" the following data were recorded: 80 of the respondents said that this policy partially influences the performances, 110 of them stated that it influences to a large extent, and 98 of the respondents chose the "very large" option measure.

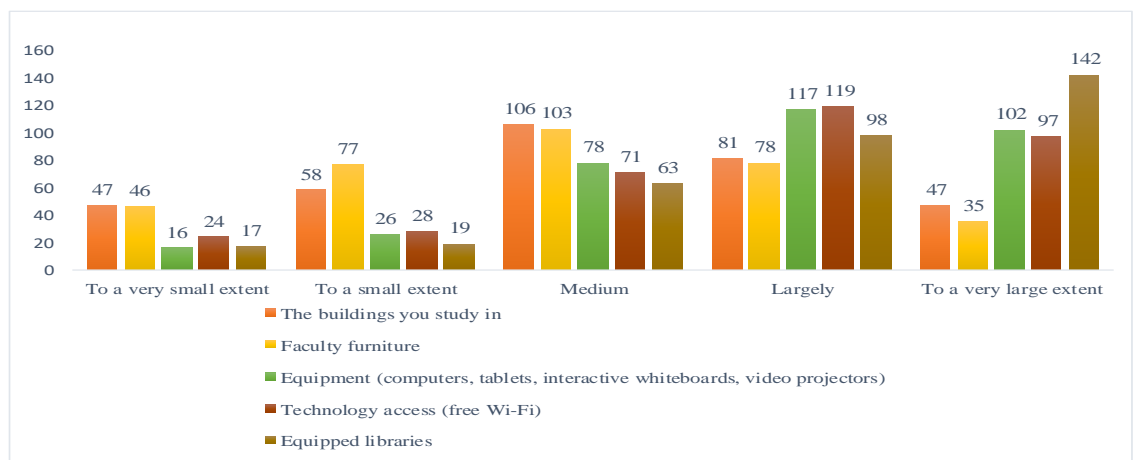
**Figure 1. Policies that could influence academic performance**



Source: Data collected and processed by the authors

Question fifteen also refers to the conditions that the university offers and how they can influence the academic performance of students (Figure 2). Most students argue that university infrastructure greatly influences students' academic performance. Here, the students had the opportunity, through an open question, to add other elements that could influence their academic achievements, in addition to those already mentioned above. Some students wanted to mention the quality of the sports fields, other students discussed the quality of the educational act and how teachers interact with students, and other students added the quality and equipment of sanitary groups.

**Figure 2. University/ faculty conditions that could influence academic performance**



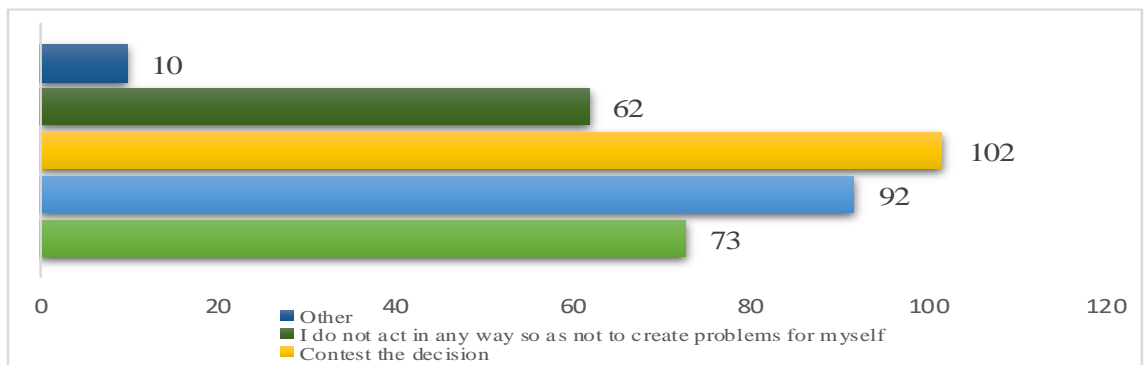
Source: Data collected and processed by the authors

Question number twenty, where the 339 respondents to this questionnaire had to choose from the options "total disagreement", "disagreement", "neutral", "agree" and "full agreement" for the statement: "The higher the score of a test, the greater my motivation to learn." Thus, students tend to be more motivated when the test scores higher, with the highest values being recorded under the "agree" variants, where 132 of the students opted for it, followed by the "full agreement" option, which was chosen by 122 students.

Regarding the interaction between teacher and student, respondents expressed their agreement or disagreement with the statement "If the teacher uses a high tone, I tend to panic". Many students replied that they agreed or fully agreed (146) and some declared themselves neutral (90), with the remaining 103 at either full disagreement or disagreement. Also in this category, the interaction between the student and the teacher, there are the following two questions, where students had to

choose from the "total disagreement", "disagreement", "neutral", "agree" and "full agreement" options, for two statements: "If the teacher interacts with us, I keep a lot more in mind and then it will be easier for me to learn", but also "The interactive games made me more careful". Also, as part of this category is the following question, where the students had one of the possible answers to choose, or add a new one, for the following statement: "If the teacher does not give me a correct score at the seminar/course I intend to...". For further examples, the data are shown in Figure 3, where we noticed that when students feel they didn't obtain the score they thought it was correct according to their implication during courses and seminars, they choose to challenge the decision (n=102), 92 of them said they would get even more involved in the future to show the opposite. Other students will not act or get involved in the future. For the two options mentioned above, the number of students is quite high; if the option "I do not act in any way to avoid creating problems" has been chosen 62 by respondents, while "I don't get involved in the future" option has been chosen by even more students (73).

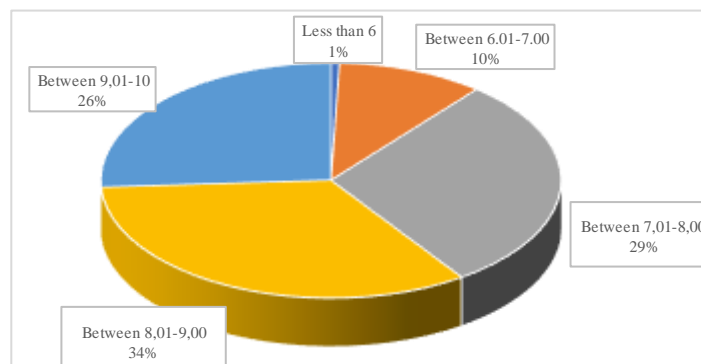
**Figure 3. Students' reactions to teachers scores at the seminar / course**



Source: Data collected and processed by the authors

Information on the students' scholar situation they had during the first semester of the 2019–2020 academic year is shown in Figure 4. According to Figure 4, we can see that only two students have an average of less than 6, then the next interval is the 35 students with an average of between 6,01-7,00, then the opposite is the students with the average between 9,01-10, with 88 in number, or 26% of all respondents. This list is complemented by students who have the average between 8,01 and 9,00 and are the largest with 114 students, but also by those with the average of 7,01-8,00 with 100 students.

**Figure 4. Averages of the surveyed students of scholar situation**



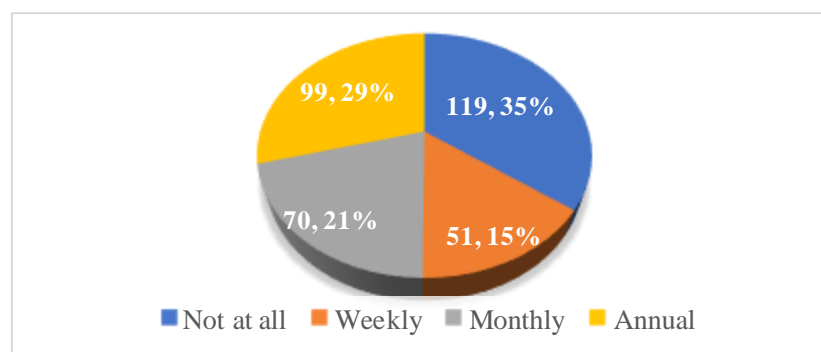
Source: Data collected and processed by the authors

Another fact to be mentioned is that of the 88 students with an average of between 9,01 and 10, 35 students work and the remaining 53 students still do not have a job, however, we can reach the conclusion that students with a job can also face all day-to-day challenges, both at the university and at work. From the total number of respondents, 128 said they are currently employed, while 211 are unemployed and dedicated to the study.

Also, when students were asked whether they had any arrears, 29.8% chose "yes" and the remaining 70.2% said they had no arrears. The two surveyed students with an average of less than 6 said that they had arrears in the previous semester, as did 24 of the 35 students who had the average between 6,01 and 7,00. Another interesting fact is that five out of the 9,01-10 students had at least one arrear. Moreover, 21,9% of those who said they had an average of 8,01-9,00 had arrears.

According to literature (Han & Kwon, 2018; Shaffer, 2019), extracurricular activities are essential to increase students' academic achievements. Students' answers to the question "How often do you get involved in extracurricular activities?" can be seen in Figure 5. 35% students said they do not participate at all in extracurricular activities. Moreover, at the opposite side are those who perform this weekly activity, representing 15% of the students who answered the questionnaire, 21% of them added that they participate monthly, while the remaining 29% of the students participate annually. By analysing the data more closely, we can conclude that, for example, the students participating weekly in extracurricular activities are those with the averages between 8,01 and 10, with a total of 33 students. The two with an average of less than 6 also stated that they do not carry out this type of activity.

Figure 5. Frequency with which students participate in extracurricular activities



Source: Data collected and processed by the authors

Question thirty-two was a little atypical, meaning that students had to do a hierarchy of methods they considered most appropriate for testing knowledge in an exam. The first option in the student preferences was the synthesis, which received the lowest score, followed closely by the problem version, then by "grid exercises", by "essay", and the last one among respondents was the missing statements.

In question thirty-four, students had to mention which other assessment methods they would prefer, and it was an open question. A number of respondents chose practical activities, and everything related to the implementation of the theory they are going through during the semester. Students have placed a great deal of emphasis on not applying enough of what they learn during their faculty. They claimed that they are not prepared for the labour market, and that they do not have experience in the field. Other views are also related to the fact that the scores and the actual method of scoring students are not correct and should be replaced by "pass" or "fail" ratings, as this would eliminate



the gaps between students. Free discussions, oral examinations are other variants that respondents mentioned. In this respect, they want seminars and courses to be much more interactive, to be able to express their views. In this respect debates could play a number of roles, including increasing self-esteem, while shy students who have communication problems could get help to overcome these situations. Extracurricular activities are also preferred by students, in the sense that internship stage and volunteering, but also participation in different conferences should form part of all mandatory activities during the study years.

The continue assessment throughout the semester is the students' choice. They say that the assessment at the end of the semester alone is not exactly appropriate and does not reflect the student's knowledge on a particular subject. Projects, themes, debates, or case studies could be used to carry out this assessment and during seminars students should be encouraged to discuss specific issues with all classmates in different groups.

Also, in disciplines where possible, students would like to try to perform simulations on a real case. When, for example, they calculate or auction online, they can apply the formulas and laws in force on real company data, but also work in specialised applications to prepare themselves for a future career in the field at the university.

## 2.5 INTERPRETATION OF RESULTS

In this paper we have formulated eight hypotheses, each of them analysing either the academic performances taken separately, the emotional intelligence or the impact that emotional intelligence has on academic achievement.

The first hypothesis is: "The organisational factor directly influences academic achievement". For this first hypothesis, four questions were allocated, asking the students in the sample to mention the number of students in a study group (class), then whether this number influences academic performance or not, and then given a list of adopted policies, methodologies implemented at university level. Also, they had to mention the facilities each building has and whether it influences academic performance or not. They considered that the number of students in a seminar group has little influence on academic performance, but the same cannot be said for policies such as: compulsory attendance, a minimum number of attendances, active presence and a certain number of courses and seminars on a case-by-case basis, where the majority of students have chosen "to a large extent" and "to a very large extent". Regarding the last question, which relates to the university conditions and infrastructure, students agreed to a large extent or even to a very large extent that, for example, the buildings in which they study, the equipment (computers, tablets, video projectors), access to technology (free Wi-Fi) and library facilities influence academic performance.

The second hypothesis relates to psychological factors and what impact they have on students' academic achievement. Three questions from the questionnaire were allocated to this. The first of them: "When I have a low-difficulty exam, I tend to approach it lightly", where students responded mostly with "agreement" and "full agreement", meaning that they had a low stress level and were unable to concentrate and motivate themselves enough. The same cannot be said about the second question ("when I have a particularly difficult exam, I tend to approach it carefully"), where the students answered "agree" or "total agreement" and where the stress factor has made their presence felt, and the students could concentrate better. The last question relates to the fact that the higher the score of a test, the greater the motivation to learn, where more than half of the respondents answered in the affirmative. Here is the most important motivational factor that is part of the psychological factors category, where students have found their motivation to prepare for the exam. As these three questions have received the answers expected and the second hypothesis is validated.

The third hypothesis refers to the relationship between the student and the teacher and how it can affect students' academic achievements, and by means of questions and this hypothesis has been validated. For this hypothesis there were allocated four questions. The first one is: "If the teacher uses a high tone, I tend to panic", where quite a lot of students said "I agree". The second and third questions were analysed together, because the first of them is related to the way the teacher actively interacts, and the second refers to interactive games. Both questions received positive scores. The last question is: "If the teacher doesn't give me a correct score at the seminar/course, I tend to...", where many of the students said they would no longer get involved in the future, because "I know they would not be appreciated even then", this leads to lower student academic performance, but also to a low self-esteem.

"Grading methods and grades that students receive influence their mood" was the fourth hypothesis. Eight questions were allocated to this, including "What average did you have in the first semester of the current academic year?" and then as an addition came the next question, where students were asked to say whether this average was influenced by teachers or not. When the students were undervalued, they felt mostly motivated, sad and angry, and when they were overvalued, they gave them more confidence in the future and others were happy. Students also consider that current methods of measuring academic performance are not exactly appropriate, do not reflect the current level of knowledge and modern ones should be used, where the implementation of theory is paramount. In conclusion, the fourth hypothesis has validated.

The following hypothesis (5, 6) are related to emotional intelligence and how students perceive it. Hypothesis 5 is: "The perception, knowledge and expression of emotions, but also the emotional facilitation of thoughts, are skills of the vast majority of students." Five questions were asked for this, the first of them answered with "yes" or "no". To the statement "I am good at reading the emotions of the people around me", most of the respondents said "yes". On the second and third questions the students had to correctly identify the feeling illustrated by an image, and then they had to assess the intensity of this feeling, where 87% of the respondents answered correctly. The four and five questions were similar to the previous ones, but the respondents had to analyse an image where the character was a sad child. Here too, the vast majority answered correctly, both when they identified the image and when they spoke about the intensity of this feeling. In view of the answers provided by the participating students to this questionnaire, the fifth hypothesis about the emotional intelligence of the respondents is validated.

The sixth hypothesis for emotional intelligence is: "A substantial proportion of students have the personal skills developed." This was translated into the questionnaire by means of two matrix questions, with a total number of 14 items. The questions looked at components like self-awareness and self-regulation. The majority of the answers led us to the conclusion that the respondents acquired this part of emotional intelligence. So, students have developed personal components, which are a category of emotional intelligence, hence the sixth hypothesis validates.

Hypothesis 7: "Students have not developed the social skills side" has three questions, which relate to tolerance, empathy, and social skills. For all the questions, the weight of the positive answers has been that of the negative ones, so we can say that most of the students questioned have developed the social skills side. According to this, the "students have not developed the social skills side" is not validated, with the results of the questions precisely stating that many students have the side of the social skills developed.

Hypothesis 8 - "The higher the level of emotional intelligence, the better the academic achievement is". By centralised and interpreting the data, it can be concluded that student's emotional intelligence influences their academic performance. With this in mind, hypothesis 8 is confirmed, as students with large backgrounds also have a high emotional intelligence coefficient, and students with small backgrounds have a low coefficient in emotional intelligence.

## CONCLUSION

In conclusion, emotional intelligence should be learned and developed throughout the life cycle of education. Any teacher should know how to nurture this kind of intelligence as an integral part of each discipline. Following the centralisation and interpretation of the responses, it can be concluded that the respondents have a medium to high level of emotional intelligence that influences their educational outcomes. They broadly understand the educational environment, and we believe that the introduction of new methods for measuring academic achievement could even lead to their increase. End-of-term exams using traditional methods of grid, synthesis, or essay exercises should be replaced by case studies, where students have the opportunity to put into practice what they have learned throughout the semester. Students are also aware of the importance of their relationship and communication, interaction with teachers, and want teachers to become more involved, more open, flexible, and focus on innovation, discovery, and learning, to put more emphasis on practice in order to facilitate their access and integration into the labour market.

This research also has a number of limitations. This area of emotional intelligence has come to the attention of researchers recently, but since then there has been an explosion of writings and scientific work. A limitation to this was the fact that not many Romanian researchers approached this subject, so foreign sources were predominant. Also, another limit that we met was related to the questionnaire and its application. In this respect, we believe that there are not too many websites specialised in the application of online questionnaires, with few functions available, or not free of charge. Another limit was the fact that we did not have in the structure of the sample respondents from all public administration programs in Romania. There has also been an inequality between the answers given by men and women. The proportion of women who responded to this questionnaire was much higher than that of male respondents. Last but not least, being a complex questionnaire, but also administrated online, there was the possibility that respondents did not pay attention to questions until the end. Given that the topic chosen was quite sensitive, there is the possibility that the respondents would not always have been honest.

Finally, some proposals were formulated in order to increase emotional intelligence for high academic performance. First of all, this type of intelligence should be learned and deepened from an early age. If in other countries there are hours spent on personal development courses, our country has not yet understood the benefits, and, especially, the role it plays. However, the education in Romania has also taken small steps to develop this branch of intelligence, introducing into school curricula such courses, as personal development, but which are finally replaced by courses such as mathematics or Romanian language and literature. Moreover, they are introduced recently, and generations who have passed the general school, even the high school, reach the faculty with a low to medium emotional intelligence level, as it can be seen in this research. In this respect, it is recommended the introduction of personal development courses in order to improve the students' emotional intelligence, regardless of the university they study. Emotional intelligence is not inborn; it is taught throughout life. Moreover, participation in workshops, or even meetings with friends or specialised groups run by a professional, can make individuals more aware of and learn from the experiences of other participants.

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### AUTHORS CONTRIBUTIONS

The authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

### CONFLICT OF INTEREST STATEMENT

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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