Research Article

The Influence of Emotional Intelligence on Pupils' Achievements at School

Dorina Xhani*

Brunilda Hoxhaj

Artenida Zykaj

Elsida Sinaj

Department of Psychology, Education and Sports,
Faculty of Human Sciences, Education and Liberal Arts,
European University of Tirana, Kompleksi Xhura,
Rruga Xhanfize Keko, 1001 Tirana, Albania
*Corresponding Author

Abstract

Emotional intelligence is the ability to perceive, interpret, demonstrate, control, and use emotions to communicate with and relate to others effectively and constructively. This ability to express and control emotions is essential, but so is the ability to understand, interpret, and respond to the emotions of others. The purpose of this study is to show the impact that emotional intelligence has on pupils and whether this affects their relationships with others and their social interaction. Moreover, this study intends to show how much emotional intelligence and its components affect academic achievement. This is a quantitative research approach, based on data from 154 questionnaires with 20 questions each, measuring emotional intelligence with five assessment levels, conducted on 154 pupils aged 10 to 14 years old. Cronbach's Alpha reliability coefficient is used to see the instrument's internal consistency. The findings of this research indicate that emotional intelligence is an important element of significant influence on pupils' academic achievement. This shows that pupils nowadays possess cognitive skills to recognize, understand, and express their emotions, as well as adapt to social relationships. Based on the results, it is evident that there is a link between emotional intelligence and academic achievement, establishing that the higher the emotional intelligence, the higher the pupils' performance. Emotional intelligence supports and maintains the emotional well-being of pupils individually and with their peers.

Keywords: Emotional intelligence, academic achievement, social relationships, pupils, school

1. Introduction

Educating children is one of the first steps towards the paths of knowledge and a determinant factor in their lives, defined by the methods that shape pupils for a successful future. According to Daniel Goleman (1999), it is necessary to understand how our brain works to see the power that emotions

have over our thoughts.

Education is a field with a wide extent, influences the development of the new generations. Many factors affect this process, one of which is emotional intelligence as a crucial component that influence directly to the self-knowledge and other interpersonal relationships. In addition, everything is reflected in the academic level of pupils. As always, importance prevails in the emotional aspects, particularly on the emotional intelligence that combines with the education of pupils today.

EI (Emotional Intelligence) relates with the ability to process the information received throughout the day, the emotions experienced, and the understanding of the information as a guide for acting and thinking. Emotional intelligence influences how pupils manage their behavior, the way they adapt and create connections with their peers. Goleman (1999) defines emotional intelligence as a means that shows how effectively people perceive and understand their own emotions, others' emotions, and how they can regulate and control their emotional behavior. Intelligence, in general, is about the capacity to learn and behave appropriately. Recently, emotional intelligence has received attention in the academic and scientific process (Mortan et al., 2014). Emotional intelligence has an impact on academic knowledge because it influences positively the practice of the teaching process. This aspect relates to the teacher-pupil relationship and social interaction (Chew et al., 2013). Emotional intelligence is one of those topics with great interest on studies and research and acknowledge it in different contexts. Data shows how important emotional intelligence is, especially in schools.

This study is carried out through the review of literature on different topics and theories of academics who have discussed the importance of emotional intelligence in school, in the teaching process, and how much emotional intelligence affects pupil's academic performance.

This research is of interest since it concerns the emotional condition of pupils and their connections with peers and teachers, which affects pupils' academic performance. The importance of this research consists in the measurement of pupils' emotional intelligence after spending a relatively long time in the school environment, as well as in relationships with their peers. Emotional intelligence affects their emotional and mental well-being, as well as their academic achievements, substantiating the importance of these relationships for them after they return to their school environment. The interest on emotional intelligence is growing so far, as it is reported in many studies regarding this issue (Tripathy, 2018). According to them, people who know how to manage their emotions are more successful than those who are emotionally vulnerable in different situations. During the last two decades, emotional intelligence has become a key indicator of an individual's knowledge and skills, whether in school, work, or personal life environments (Tripathy, 2018).

2. Materials and Methods

Throughout this research, a quantitative, correlational, and regression approach, that relates to the cause-and-effect relationship between the variables of the study, the impact that emotional intelligence has, and the academic achievements of pupils from class VI-VIII, has been carried out. This study collects actual data from pupils through the review of literature and studies conducted on this topic. The primary purpose of this paper is to show the impact that emotional intelligence has on pupils, how much they know their own emotions, and whether this affects their relationships with others and their social interactions. Another issue to be considered in this research is determining whether pupils' emotional intelligence has gender differences. If so, who has higher emotional intelligence, males, or females, and how does this affect their academic achievements.

The hypotheses of the study show whether pupils' emotional intelligence has an impact on their grades and if gender issues show differences regarding pupils' emotional intelligence and academic achievements. In addition, the aim of the research is to demonstrate the importance of self-knowledge and satisfactory relations with friends, as well as how much it affects their academic results.

The instrument used for the study is the questionnaire. Questions are formulated according to

the Likert scale from 1 to 5. Based on this fact, we used Cronbach's Alpha reliability coefficient to see the instrument's internal consistency. During the pilot phase, 15 pupils were surveyed to verify if the questionnaire used during this study was understandable and if there were unclear issues to the 154 pupils who answered by choosing the alternatives based on the Likert scale.

The study took place in two elementary schools in Tirana, specifically "Vasil Shanto" and "Drita Pelniku". The respective school directors provided the data for this study. The random sampling used for the sample selection is a type of non-probability sampling that provides data from all the population units. This type of sampling enables some groups or individuals to be more likely selected than others in the study. This method foresees the selection of the sample according to the criteria of convenience or practice, such as the costs involved, since there are more pupils or parallel classes available at school, etc. The selected sample in accordance with these criteria is faster to access, however the data can be easily damaged from systematic errors.

At this point, the study's sampling were pupils of class six to eight from the two schools in Tirana, 154 pupils in total, who participated by answering the questionnaire as an instrument used in the research. The number of pupils is relatively high in these two schools, specifically at "Vasil Shanto" school, which has 1300 pupils. There were 141 pupils from 6th class who received 15 questionaries randomly. The random distribution is done also for 30 pupils from 7th class where there are 135 pupils in total, and 60 pupils from 8th class where there are 154 pupils in total. There are nearly 600 pupils at "Drita Pelniku" school. There were 14 questionnaires distributed to 6th class, 24 questionnaires distributed to 7th class, and 11 questionnaires distributed to 8th class. It was also attempted to distribute the questionnaires equally between genders.

It was used SPSS computer program to process the data. The data from both schools was uploaded and analyzed together since the purpose of the research was to evidence the effect of emotional intelligence on pupils. The questionnaire applied in both schools is called "Self-assessment tools of emotional intelligence" and it is considered a questionnaire used to measure emotional intelligence. This questionnaire (instrument) has 20 questions about emotional intelligence, and four measurement scales. The scoring is measured on a scale from one to five, Likert scale, and each component's result varies from 5 to 25. The emotional intelligence measuring questionnaire was first adapted by Emily A. Sterrett (2000), whereas the guiding manual by Daniel E. Feldman (1999). As a measurement scale of this questionnaire, the pupils had to choose one of five mentioned numbers, from "1. Never" to "5. Always". Based on Cronbach Alpha calculations, the reliability test is 863. We added the demographic data of the pupils in the questionnaire, related to class, gender, and academic achievement, to complete the necessary calculations and make the accurate calculations for this study.

1. Cronbach's Alpha shows the instrument's internal stability to observe how closely or narrowly the questions are related to each other. It is considered the first measure of the reliability of the scale, as our questions are based on Likert scale. Technically, Cronbach's Alpha is not a statistical test but a coefficient of reliability (stability). Alpha was developed by Lee Cronbach in 1951, as in the following:
2. - $\alpha \geq 0.9$ excellent.
3. - $0.8 \leq \alpha \& lt; 0.9$ good.
4. - $0.7 \leq \alpha \& lt; 0.8$ acceptable.
5. - $0.6 \leq \alpha \& lt; 0.7$ disputable.
6. - $0.5 \leq \alpha \& lt; 0.6$ poor.
7. - $\alpha \& lt; 0.5$ unacceptable.

These values help to analyze and interpret the data shown in the tables, as well as to ensure that this data is comprehended distinctly. Furthermore, these values help to find the following in charts and tables: Mean, Standard deviation, Minimum, Maximum, Frequency, Percentage; - which will serve to illustrate a more transparent framework of the questionnaire result in table and chart form.

The T-test is used to observe if there are significant differences in (Mean), for example between two independent groups like gender (male, female) regarding the level of academic achievement and

EI.

The questionnaire used in this study is an inventory with five Likert scales. Cronbach's Alpha is used to show the reliability of the questions, their correlation, and how closely are the questions related to each other, as given in the tables below:

Table 1: Cronbach's Alpha Reliability coefficient for EI

Questionnaire	Cronbach's Alpha n=15	Cronbach's Alpha n=154	No. of questions
self-management	.784	.720	5
relationship management	.764	.735	5
social awareness	.739	.746	5
self-awareness	.756	.787	4
IE	.832	.863	20

The reliability coefficient of the questionnaires used in the case study is higher than 0.7, which is the lower value accepted from the literature for the validity of the questionnaires. This shows that the participants understand the questionnaire, and there are no issues with the reliability of the data.

Table 2: Demographic data (N=154)

		n	%
School	Vasil Shanto	100	64.9
	Drita Pelniku	54	35.1
	Total	154	100.0
Class	Class VI	29	18.8
	Class VII	54	35.1
	Class VIII	71	46.1
	Total	154	100.0
Gender	Female	80	51.9
	Male	74	48.1
	Total	154	100.0

The questionnaires were distributed to 154 pupils, 18.8% or 54 questionnaires to 6th class, 35.1% or 54 questionnaires to 7th class, and 46.1% or 71 questionnaires to 8th class.

Regarding the distribution of the questionnaires based on gender, the results show that females have answered more frequently, specifically 51,9%, and males 48,1%. From 154 pupils, 51,9% are females, and 48,1% are males.

Table 3: Results for academic achievement

Grade	n	%
5	12	7.8
6	15	9.7
7	28	18.2
8	33	21.4
9	40	26.0
10	26	16.9
Total	154	100.0

This table displays pupils' academic achievement, according to their average grade, with the results as followed: Based on academic achievements, the pupils that obtained grade 5 are 12 (7,8%), grade 6 are 15 (9,7%), grade 7 are 28 (18,2%) grade 8 are 33 pupils (21,4%) grade 9 are 40 pupils (26,0%), and grade

10 are 26 pupils (16,9%). In Figure 1 are depicted the pupils' academic achievements according to the percentage of the grade received, according to which the number of pupils who obtained grade 9 is higher in percentage (26%).
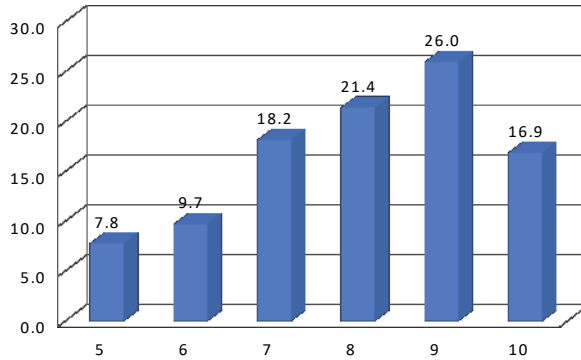

Figure 1: The frequency of academic achievements

Table 4: Descriptive data of academic achievements

	N	Minimum	Maximum	Mean	Standard Deviation
Academic achievement	154	5	10	7.99	1.49

Academic achievements vary from grade 5 to 10 with a Mean (M=7.99, sd=1.49).

Table 5: Descriptive data of emotional intelligence

	N	Min.	Max.	Mean	Standard Deviation
I easily admit mistakes and apologize	154	1	5	2.68	1.16
I can effectively persuade others to adopt my point of view without forcing them.	154	1	5	2.70	1.31
When I feel angry, I can still stay calm.	154	1	5	2.75	1.05
When I feel a strong impulse to do something, I usually stop to reflect and decide if I really want to act on it.	154	1	5	2.77	1.23
I am respected and liked by others, even when they do not agree with me.	154	1	5	2.79	1.26
I can continue a project regardless of obstacles.	154	1	5	2.85	1.24
I can honestly say how I feel without upsetting others.	154	1	5	2.90	1.29
I am good at managing my mood and refrain from bringing negative emotions to school	154	1	5	2.91	1.29
I can deal calmly, sensitively, and passively with the emotional displays of others.	154	1	5	3.01	1.30
Others feel encouraged after talking to me.	154	1	5	3.08	1.06
It is easy to understand why other people feel the way they do.	154	1	5	3.54	1.07
I am aware of physical reactions (tremors, pain, sudden changes) that signal a "gut reaction."	154	1	5	3.55	1.38
I generally have a poor idea of how another person perceives me during a given interaction.	154	1	5	3.68	1.09
I can show empathy and match my feelings with those of another person in an interaction.	154	1	5	3.75	1.10
I can engage in an interaction with another person and determine that person's mood based on nonverbal cues.	154	1	5	3.77	1.07

E-ISSN 2240-0524
ISSN 2239-978X

Journal of Educational and Social Research
www.richtmann.org

Vol 13 No 3
May 2023

	N	Min.	Max.	Mean	Standard Deviation
Before making important decisions i take into consideration my "emotional temperature".	154	1	5	3.84	0.94
In assessing a situation, I look at my biases and adjust my assessment accordingly.	154	1	5	3.88	1.04
I can easily identify my emotions at any given time.	154	1	5	3.99	1.07
I think about the emotions behind my actions.	154	1	5	4.00	1.00
I pay notice at how others react to me to understand which of my behaviors are effective and which are not.	154	1	5	4.07	0.99

This table shows the descriptive data of the questions related to pupils' emotional intelligence. The questions ranking is done from 1 to 5. Referred to Mean data, the question with the highest Mean is '*I see how others react towards me to understand which of my behaviors are effective and which are not' (M=4.07, sd=.99)* that corresponds with alternative no.4 (Usually) and the question with the lowest Mean is '*I accept my mistakes and ask for forgiveness easily' (M =2.68, sd=1.16)* which corresponds to alternative no.3 (Sometimes). The higher the results of Mean, the higher the pupils' emotional intelligence.

Table 6: Descriptive data of emotional intelligence components

	N	Minimum	Maximum	Mean	Standard deviation
self-management	154	6	24	14.2	4.19
relationship management	154	7	24	14.3	3.96
relationship management	154	10	24	18.8	3.11
self-awareness	154	6	25	19.3	3.63
Emotional intelligence	*154*	*38.0*	*94.0*	*66.5*	*8.72*

Emotional intelligence is composed of 4 components: self-management (M=14.2, sd=4.19), *relationship management (M=14.3, sd=3.96), *social awareness (M=18.8, sd=3.11) and *self-awareness (M=19.3, sd=3.63), with the total EI (M=66.5, sd=8.72). The self-awareness component is reported to be higher than others.

Table 7: T -Test of differences in medians of academic achievements by gender

Gender		N	Mean	Standard deviation	t	p
Academic Achievement	Female	80	8.28	1.41	2.537	.012
	Male	74	7.68	1.52		

We used the T-Test to conclude whether there are important gender differences regarding academic achievement in pupils or not. From the table, we can see that there are important statistical differences between males and females (t=2.537, p≤.05). Results show that academic achievements are higher in girls (M=8.28, sd=.1.41) compared to boys (M=7.68, sd=1.52).

Table 8: Pearson Correlation between emotional intelligence and academic achievements

		Academic Achievement
self-awareness	Pearson Correlation	.246[**]
	Sig. (2-tailed)	.002
	N	154
self-management	Pearson Correlation	.135
	Sig. (2-tailed)	.094
	N	154

E-ISSN 2240-0524
ISSN 2239-978X

Journal of Educational and Social Research
www.richtmann.org

Vol 13 No 3
May 2023

		Academic Achievement
social awareness	Pearson Correlation	.294**
	Sig. (2-tailed)	.000
	N	154
relationship management	Pearson Correlation	.203*
	Sig. (2-tailed)	.011
	N	154

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

It is used Pearson Correlation to show if there is a significant relationship between academic achievement and pupils' different dimensions of emotional intelligence. From the table we can see that there is an important statistical link between them ($p \leq .01$). There exists an important positive correlation between academic achievement and self-awareness ($r_{(n=154)} = .246$, $p \leq .01$), an important positive correlation between academic achievement and social awareness ($r_{(n=154)} = .294$, $p \leq .01$), and an important correlation between academic achievement and relationship management ($r_{(n=154)} = .203$, $p \leq .01$). There was not found important correlation for the self-management ($p > .05$).

Based on the analysis it is obvious that self-awareness, social awareness, and relationship management positively influence academic achievement. As a result, it is concluded that hypothesis three, "Self-awareness and social awareness influence on academic achievements of pupils," is true.

Table 9: The regression between the link of academic achievement and emotional intelligence

Model	Unstandardized Coefficients		Standardized Coefficients	t	p
	B	Std. Error	Beta		
(Constant)	3.188	.918		3.471	.001
self-awareness	.071	.040	.173	1.801	.074
self-management	.006	.042	-.018	-.151	.880
social awareness	.106	.045	.221	2.343	**.020**
relationship management	.107	.044	.284	2.401	**.018**
$F=7.252, R^2=.163$					

We used the multiple linear regression analysis to measure the extent to which emotional intelligence influence academic achievement, as follows:

Academic achievement = $\beta_0 + \beta_1$*self-awareness$+\beta_2$*self-management$+\beta_3$*social awareness + β_4*relationship management+ εt

Academic achievement - dependent variable.

Self-awareness, self-management, social awareness, relationship management-independent variable.

The Model: Academic achievement with components of EI. It is obvious that the R Square as a coefficient of determinability shows a value of .163. This shows that the variables of EI components explain 16.3% of the variance in academic achievement. Academic achievement has an essential positive link with social awareness (ß=.106) since t-statistic in absolute value is bigger than 2 (t=2.343), or if we focus at the significance of p, its value is shown to be (p=.020<.05). Social awareness increases academic success by 22.1% (Beta=.221).

Academic achievement has an important positive link with relationship management (ß=.107) since t-statistic in absolute value is bigger than 2 (t=2.401), or if we look at the significance of p, its value is shown to be (p=.018<.05). Relationship management increases academic success by 28.4% (Beta=.284). There was no important link found for the other dimensions.

3. Results and Discussions

In this research, we used the Pearson Correlation to observe any essential connection between academic achievement and emotional intelligence in pupils. Results show that there is an important statistical connection between them (p≤0,1), and it is shown that there is an important link between academic achievement and emotional intelligence (r(n=154) =365, p≤.0,1). The findings show that the higher the emotional intelligence, the higher the level of academic achievements. Other similar studies have also shown through their results that emotional intelligence is an important component in achieving academic success. From the research on this topic, we can further emphasize that higher emotional intelligence helps pupils achieve higher level of performance and about emotional intelligence itself results show that it is a very important component not only in school but work as well. According to these results, from the findings on Goleman's research, emotional intelligence more than any other factor, more than I.Q. or expertise, accounts for 85 percent to 90 percent of success at work. Goleman (1999) argues that I.Q. leaves about 75 percent of job success unexplained at best, and at worst, 96 percent. Emotional intelligence is much more significant than I.Q. in determining who emerges as a leader (Goleman, 1999).

Although traditional understanding of intelligence (I.Q.) is important for success in life, emotional intelligence is key to relating well to others and achieving goals, because the human world is all about relationships. By different measures as shown in Tripathy study (2018), one can observe himself/herself and feel comfortable to understand his/her and others' feelings, social-awareness, social disorders even in adverse condition, to have better self-control, social decision making etc.

Based on Chew research findings (2013), they were in line with the general expectation of a positive relationship between emotional intelligence and academic performance. People with higher EI are expected to understand, regulate, and manage emotions better both in themselves and others. This would allow people with higher EI to experience more stable and positive emotions.

High intelligence in school helps pupils have a high performance in the process of education, stay motivated, express, and identify their emotions, have confidence in themselves that they will achieve better results, influence interpersonal relationships, and build optimistic and fruitful relationships. To this regard, another author Mortan (2014), proposed that self-efficacy in tandem with the ability to handle and use emotions properly, are key factors in the development of intentions to start a path of self-employment. However, confidence in one's efficacy alone is not sufficient and must be complemented by an adequate knowledge, training, and experience of business processes, along with a good personal competence in managing emotional situations that may arise during the creation of a business (Mortan, 2014).

According to our study, the results of the third hypothesis show a positive correlation between academic achievements and self-awareness (r n (=154=246, p≤0,1) and a positive correlation between academic achievements and social awareness (r (n=154=294, p≤0,1). We concluded that the higher the self-awareness and social awareness level, the higher the academic achievements.

Based on Goleman study (1999), he proposed that "Personal competence" includes self-awareness (knowing one's internal states), self-regulation (managing one's internal states) and motivation (emotional tendencies that help one reach goals). "Social competence" has two major dimensions, empathy (awareness of others' feelings) and social skills (adeptness at getting desirable responses from others). For each of the five components of emotional intelligence, Goleman (1999) identifies five key skills. He refers to these as "emotional competencies." To take just a few examples, under self-regulation he includes self-control (managing one's disruptive emotions) and trustworthiness (maintaining standards of honesty and integrity). Empathy includes understanding others, leveraging diversity (which Goleman defines as "cultivating opportunities through diverse people") and political awareness (Goleman, 1999).

In this research, the questionnaire used measured four important components, self-awareness, self-management, social awareness, and relationship management, and the results show that self-

awareness and social awareness are essential components for pupils. The most important features and trends in the results should be described and not interpreted in detail.

The general results of studies suggest that emotional intelligence impacts employees' performance, school results, motivation, decision-making, successful management of any situation etc.

4. Conclusions

When it comes to gender differences concerning emotional intelligence and academic achievement, the T-Test is used to determine if there are any important differences between two independent groups, such as the groups divided by gender, which through analysis, helped to prove the second hypothesis. "There are gender differences between emotional intelligence and academic achievement", the T -Test used showed that academic achievements were higher in girls (M=8.28, ds=1.41) compared to boys (M=7.68, ds =1.52). The findings show that girls have higher emotional intelligence than boys, which leads to better academic performance. This analysis and previous studies about emotional intelligence indicate that emotional intelligence is an essential component for pupils, that helps them have healthier relationships, understand their emotions, and know how to express them in the relationships they have with their peers. Emotional intelligence helps pupils effectively communicate, know themselves, and build healthy relationships with their peers. The results show that girls possess a higher intelligence than boys. However, the main purpose of this study is to evidence that pupils can explore their selves and they know how to communicate their emotions in the environments they interact in, not just with their peers but with their teachers as well. This leads to a learning process that is more effective not only for the teachers but also for the pupils' potential by helping them achieve good academic success.

The study shows that emotional intelligence is an important element regarding achievements, success, and development in every aspect of life. This demands more studying, research, and the education of new generations on knowing one's emotions due to their influence on everyone's success in life. This research aimed to analyze the influence of emotional intelligence on academic achievement in pupils of 6th – 8th grade, due to them being in a transitory period of their life where the emotional aspect is essential. Through our study, we established an important link between these two variables, which showed that the higher the emotional intelligence, the more positively influenced on pupils' academic achievement. Thus, it is important to pay attention to the emotional aspects of pupils as it is crucial for a successful future and an effective education.

References

Chew, B.H., Zain, A.M. & Hassan, F. (2013). Emotional intelligence and academic performance in first and final year medical students: a cross-sectional study. *BMC Med Educ* 13, 44. https://doi.org/10.1186/1472-6920-13-44

Feldman, D.E. (1999). *The Handbook of Emotionally Intelligent Leadership: Inspiring Others to Achieve Results.* Leadership Performance Solutions pr. ISBN: 0-9670988-0-7

Goleman, D (1999). *Working with emotional intelligence.* Batman Books ISBN-13: 978-0-87425-599-7. ISBN-10: 0-87425-599-6

Mortan R.A., Botella, P.R., Carvalho, C., Bernal, M.C. (2014). Effects of emotional intelligence on entrepreneurial intention and self-efficacy. *Revista de Psikologya del Trabajo y de las Organizaciones,* 30(3), 97-104. DOI: 10.1016/j.rpto.2014.11.004

Sterrett, E.A. (2000). *The Manager's Pocket Guide to Emotional Intelligence.* HRD Press. ISBN: 0-87425-597-6

Tripathy, M. (2018). *Emotional Intelligence: An overview.* LAMBERT Academic Publishing. ISBN 978-613-9-85995-5.