

## Emotional Intelligence in the School Context: The Case of Greece for Teachers' Attitudes and the Role of Mobiles and ICTs

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**Abstract**—The purpose of this study was to examine teachers' attitudes and perceptions regarding the integration and development of Emotional Intelligence (EI) in preschool, primary, and secondary teaching levels within the school context. EI is a gateway to a balanced life. It is a major factor for a healthy development of interpersonal relationships, whether we are referring to relationships in personal or professional life. Because of its importance, teachers should be informed and trained how to develop their EI and how to cultivate and strengthen their students' EI. In this study is presented an online questionnaire which was designed in order to assess teachers' attitudes and perceptions regarding EI development in Greek schools. Psychometric evaluation on data from 242 teachers indicates that the proposed scale is valid and reliable.

**Keywords**—emotional intelligence, teachers' perceptions, teachers' attitudes, ICT tools, future teacher

### 1 Introduction

Emotions and EI are important chapters in the field of research and their study has occupied a large number of scientists. One of the most important applied domains for developing emotions and EI is education. EI is a key factor that affects the social and mental well-being of students, making it easier for them to understand their environment and make the right decisions in the face of the various conflict situations that arise daily [1]. At all levels of the educational system, from elementary and secondary curriculum to post-secondary, vocational, and continuing education programs, emphasis on social-emotional learning (SEL) is increasing quickly [2].

School and education in general are not only aimed at providing knowledge but also at offering the necessary supplies for shaping the character and personality of the individual [3]. The teacher's role is not limited to imparting knowledge, but acquires a consultative and collaborative character, contributing to the creation of a favorable school climate in which students can live and socialize. A teacher acts as a role model for

students and must provide them opportunities for autonomy and development of emotional abilities, recognizing and offering incentives in their efforts to achieve personal goals. Systematic training in emotional competencies would be beneficial in creating a healthier emotional and productive environment for both students and teachers.

According to Article 1, § 1 of Law 1566/85 in Greece which determines the structure and function of education: "The purpose of primary and secondary education is to contribute to the holistic, harmonious and balanced development of students..." [4]. Curriculums have begun to include non-cognitive goals, new books have been written, and a debate has started surrounding the integration of elements of emotional education into education. In Greece and in many other countries, a variety of social and emotional education programs have been implemented in recent years and there is an ever-increasing interest in them [5].

Emotional Intelligence Quotient (EQ) is considered an indicator of EI or the ability to use one's emotions in various situations of daily life and to interact effectively with other people. Conceptualizing has become a difficult task precisely because there are many detailed definitions surrounding it [6]. However, apart from the various definitions, there are also many theoretical models that try to define EI and to give its dimensions [7,8]. EI can include many of our abilities such as self-control, empathy, creativity, social adaptability, stress management, self-respect, emotional self-awareness, and intrapersonal and interpersonal skills. EI can be defined "as a set of abilities and skills that a person must train and develop gradually and hierarchically to reach emotional self-realization. It is the response to emotional stimuli, the recognition – expression of emotions, the full awareness and management of our own emotions but also the emotions of others, the social skills for better intrapersonal, interpersonal, and working relationships, the empathy and compassion, the accurate discrimination of emotions with the ultimate aim of the emotional development of our potential, self – actualization, transcendence and finally the unity of emotions because humans are part of a united world" [9].

The cultivation of EI should start from childhood in the school environment alongside the family environment. Teachers' influence on students' emotional development has a fundamental impact, leaving traces that will enable the learner to act assertively and empathetically in the future [10]. Teachers with high levels of EI tend to be more successful in teaching than teachers with low EI [11]. Emotionally intelligent teachers are more energetic towards students, work, and life. Emotionally stable teachers demonstrate positive behavior in all kinds of academic tasks and show a more resilient response to stressful situations and are less likely to react to stress. They discourage pessimism and negative thoughts [11]. Teachers that exhibit emotional intelligence are thought to be more proactive, resilient, and self-assured, as well as more communicative, positive, thoughtful, and optimistic people. By utilizing emotions in adaptive ways to manage any challenges, teachers with high levels of EI stay away from dysfunctional emotions and retain a happy frame of mind.

According to Sutton and Whitely (2003), for personal well-being, their students' socio-emotional growth, and their effectiveness and quality in carrying out teaching-learning processes in the classroom, teachers' EI is essential [12]. Teachers face innumerable challenges in school, such as conflicts with management, low pay, relations with parents, lack of discipline and motivation among students, stress, additional duties,

bureaucracy, as well as insufficient training and access to new technologies. In addition, the teacher not only plans lessons, but organizes activities, adopts new communication techniques and motivates students with words and actions and tries to contribute to the emotional and social development of the child. Thus, teachers are expected to possess a multifaceted personality [13]. This fact, sometimes can lead to problems in the development of their own EI and that of their students.

Research by Tassi et al. (2014) demonstrates the necessity of strengthening the EI of kindergarten teachers (general and special education), in order to be more effective in their work [14]. This should be extended to all levels of education. In other words, it is considered important to inform teachers about issues of emotional empowerment, stress and anger management, and efficiency. This updating can be done through appropriate education and training programs such as experiential seminars, lectures and others. Future teachers should be prepared and properly trained to develop the emotional sphere of themselves and their school students [15] through programs, strategies, teaching plans and the use of new technologies (robots, serious games, software, virtual and augmented reality etc.). ICT tools that foster social and emotional skills in children have been the subject of numerous significant and noteworthy research efforts [16-20]. Moreover, we have to underline the important general role of digital technologies in education domain that is very productive and successful, facilitates and improves the assessment, the intervention and the educational procedures via mobiles [21-23], various ICTs applications [24-33], AI & STEM [34-36], and games [37-41]. Additionally, the combination of ICTs with theories and models of metacognition, mindfulness, meditation and emotional intelligence cultivation [42-46] accelerates and improves more over the educational practices and results.

This research aims to outline the current situation in Greece regarding the perceptions of teachers as far as EI and its development in the school environment are concerned. Therefore, a questionnaire survey was conducted through a valid and reliable questionnaire in order to investigate the attitudes of Greek teachers towards EI, its integration in education, as well as the factors affecting their attitudes. This research aims to contribute providing useful data about teachers' concerns on the subject of EI, thus drawing some conclusions about possible improvement.

## **2 Materials and methods**

In order to examine perceptions and attitudes of teachers in Greece towards EI, an online survey was conducted. In particular, this study aimed to answer the following questions:

1. Are teachers concerned with their own EI as well as that of their students?
2. Do they agree with the integration of the teaching of EI (emotional skills) in the school environment and in what way?
3. In which areas do they think that the students, as well as themselves, benefit from the teaching and development of EI?
4. Do teachers feel confidence on teaching emotional intelligence in students?
5. Which are the main barriers towards the integration of EI in school settings?

## 2.1 Measure

Based on findings from relevant literature, a questionnaire was developed (Appendix A). Participants were asked to rank the items on a five-point Likert scale, in order to avoid forced choice bias (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree). The items of the questionnaire targeted data collection on the following topics:

1. How teachers handle student emotions.
2. Means and tools for teaching EI
3. Students' gains from EI teaching
4. Teachers' gains from EI teaching
5. Teachers' confidence towards EI teaching
6. Barriers towards integration of EI in school settings

Structural validity of the questionnaire, as well as internal consistency and reliability of the measurements were also evaluated.

## 2.2 Sample

The sample of the study consisted of 242 teachers (average age 46.16 years). Convenience sampling was used for data collection. A total of 200 women participated, accounting for 82.6% of the sample and 42 men, accounting for 17.4% of the sample. In terms of the teaching level, 52 (21.5%) participants were teaching at preschool education, while 111 (45.9%) were at elementary schools and 79 (32.6%) at secondary schools. Most of the participants hold a Master's degree (53.7%), while 3.7% hold a second Bachelor degree and 3.3% a PhD (Table 1).

**Table 1.** Demographic Data for the Sample (N=242)

	N	Percent (%)
Gender		
Male	42	17.4
Female	200	82.6
Education		
Bachelor	95	39.3
2 <sup>nd</sup> Bachelor	9	3.7
Master	130	53.7
PhD	8	3.3
Teaching Level		
Preschool	52	21.5
Elementary	111	45.9
Secondary	79	32.6
Experience (in years)		
0-9	57	23.6
10-19	71	29.3
20-29	79	32.6
30+	35	14.5

### 3 Results

For the evaluation of internal consistency, Cronbach's  $\alpha$  coefficient was calculated (Table 2). Coefficients for all the questionnaire subscales were greater than 0.700 indicating a strong internal consistency for the scale. The value of the Cronbach's  $\alpha$  coefficient for all the 35 items of the scale was 0.961.

**Table 2.** Internal Consistency Indicators of the individual Subscales

Subscale	Cronbach's Alpha
Student emotions	0.946
Tools	0.867
Student gains	0.970
Teacher gains	0.925
Confidence	0.897
Barriers	0.895

Pearson's  $r$  coefficients indicate mainly moderate to high correlations between subscales of the questionnaire (Table 3). The strongest correlations were observed between teacher gains and student gains ( $r = 0.880, p < 0.001$ ) which confirms our expectations based on findings from the literature. On the other hand, the weakest correlation was observed between Barriers and Confidence ( $r = 0.162, p = 0.012$ ), as well as between Barriers and Student emotions ( $r = 0.306, p < 0.001$ ) and between Barriers and Tools ( $r = 0.346, p < 0.001$ ).

**Table 3.** Correlations Between Subscales

Subscale	Student emotions	Tools	Student gains	Teacher gains	Confidence	Barriers
Student emotions	1.000					
Tools	0.528**	1.000				
Student gains	0.657**	0.639**	1.000			
Teacher gains	0.636**	0.633**	0.880**	1.000		
Confidence	0.567**	0.565**	0.529**	0.505**	1.000	
Barriers	0.306**	0.346**	0.488**	0.462**	0.162*	1.000

\*Correlation is significant at the 0.05 level.

\*\*Correlation is significant at the 0.01 level.

In order to ensure that the questionnaire items that form each subscale actually measure one single variable, Principal Component Analysis (PCA) was performed (Table 4). Loading on the components for all items were greater than 0.4 and thus considered acceptable. Kaiser-Meyer-Olkin (KMO) index was used in order to evaluate the suitability of the sample for the analysis. KMO test of sample adequacy achieved 0.891 for Student emotions, 0.796 for Tools, 0.955 for Student gains, 0.853 for Teacher gains, 0.789 for Confidence and 0.890 for Barriers. In addition, Barlett's test of sphericity for Student emotions ( $\chi^2(10) = 1180.66, p < 0.001$ ), Tools ( $\chi^2(15) = 931.43, p < 0.001$ ), Student gains ( $\chi^2(36) = 2922.5, p < 0.001$ ), Teacher gains ( $\chi^2(6) =$

805.06,  $p < 0.001$ ), Confidence ( $\chi^2(6) = 694.75, p < 0.001$ ) and Barriers ( $\chi^2(21) = 980.93, p < 0.001$ ) indicate that the correlation matrix did not contain too high or too low correlations among variables. Finally, the sample size used (N=242) was more than four times the number of the analysed items, ensuring the suitability for the quality of the statistical analysis [47].

**Table 4.** Descriptives for Items and Results for the PCA with 6 Component

Item	M	SD	Skewness	Kurtosis	Loading	Component
STE1	4.012	0.949	-0.613	-0.608	0.925	1
STE2	3.956	0.965	-0.591	-0.377	0.924	1
STE3	4.004	1.012	-0.904	0.359	0.927	1
STE4	4.269	0.914	-1.018	0.140	0.908	1
STE5	3.880	1.065	-0.734	-0.199	0.861	1
TLS1	4.194	0.911	-0.993	0.467	0.738	2
TLS2	3.595	1.051	-0.297	-0.529	0.817	2
TLS3	3.413	1.068	-0.226	-0.470	0.835	2
TLS4	3.343	1.060	-0.236	-0.388	0.865	2
TLS5	3.678	1.099	-0.602	-0.251	0.676	2
TLS6	3.950	1.107	-0.826	-0.120	0.726	2
STG1	4.045	0.939	-0.910	0.590	0.712	3
STG2	4.550	0.773	-1.582	1.467	0.937	3
STG3	4.521	0.790	-1.622	2.113	0.941	3
STG4	4.525	0.779	-1.542	1.471	0.937	3
STG5	4.550	0.778	-1.632	1.702	0.936	3
STG6	4.566	0.761	-1.595	1.433	0.924	3
STG7	4.483	0.769	-1.353	0.983	0.936	3
STG8	4.401	0.830	-1.216	0.555	0.906	3
STG9	4.393	0.854	-1.415	1.503	0.897	3
THG1	4.401	0.815	-1.229	0.716	0.930	4
THG2	4.442	0.824	-1.473	1.704	0.927	4
THG3	4.343	0.866	-1.229	0.901	0.918	4
THG4	4.124	1.015	-0.947	0.034	0.862	4
CNF1	3.351	1.133	-0.222	-0.714	0.917	5
CNF2	3.240	1.090	-0.178	-0.462	0.932	5
CNF3	3.120	1.115	-0.040	-0.572	0.803	5
CNF4	3.624	1.020	-0.494	-0.166	0.845	5
BRS1	4.194	1.006	-1.212	0.778	0.669	6
BRS2	3.773	1.083	-0.704	-0.138	0.695	6
BRS3	4.223	0.960	-1.029	0.097	0.893	6
BRS4	4.281	0.953	-1.140	0.314	0.864	6
BRS5	4.017	1.046	-0.866	-0.004	0.781	6
BRS6	3.992	1.010	-0.787	-0.149	0.851	6
BRS7	3.756	1.083	-0.510	-0.562	0.746	6

## **4 Discussion**

The importance of the development of emotional intelligence in the educational field is indisputable and this was shown to a great extent through the statements of the teachers in the questionnaire. Teaching children emotional education is an important way to potentially influence many aspects of their lives in their school years and well into adulthood. The benefits of emotional development are manifold both for the teachers themselves and for their students.

The largest percentage of teachers (56.2%) stated that they have dealt empirically with EI, 29.3% have attended a seminar, 19.4% that they have nothing to do with the subject, 18.6% have attend a relevant conference and 14.5% have dealt with this topic at a master's or doctoral level. A minority of teachers have studied social and emotional education as a part of their teacher preparation or ongoing professional development, according to a poll that also included teachers in Greece [48]. Of the 242 teachers only 51 stated that they have been very concerned with the development of their own EI and 18 teachers that they have not been concerned at all. This becomes a little worrying as all people and even more teachers should give importance to cultivating their EI and because the personal benefits are many [7], but also to be able to get closer to their students and help them develop useful emotional skills [49]. According to research, some early childhood educators are already intuitively aware of the significance of their own emotions as well as the emotions of their students, and they pay great attention to these matters in the classroom [50,51].

Regarding the students' feelings (Q9), the teachers through their answers (STE 1-5) seem to strongly agree that they care about how their students feel, they deal with the emotions of their students in the classroom and try to encourage them to express their feelings. A smaller portion of the teachers stated that they try to act as a role model for students in the area of emotions, perhaps due to a lack of confidence in managing such a topic and a lack of awareness and engagement with their own EI. This matches the low rate found in developing their own EI. In addition, there was also a division in teachers' responses regarding whether they help their students manage their emotions. This may be due to their difficulty managing their own emotions which can create insecurity to apply it to someone else.

Most of the teachers seem to agree with integrating EI (emotional skills) into the school environment (Q10). Where differentiation is presented is in the ways in which the teachers consider that this integration should take place (Q11 - TLS1-6). The majority of educators advocate teaching EI through formal emotional and social learning programs and through its integration as a separate subject in the curriculum. Furthermore, they agree on creating autonomous teaching plans that nurture emotions. They appear positive, but a little hesitant in teaching EI with ICT tools (serious games, educational robotics, software), perhaps due to the teachers' lack of engagement and familiarity with them. This is in agreement with other studies stating that the attitudes towards social robots in schools is cautious, but potentially accepting, presenting a set of obstacles to the wider adoption of robots in the classroom such as insufficient training in technical details, etc. [52,53]. Istenic et al. (2021) identified participants' negative attitudes and a clear rejection of humanoid robot technology and social skills in the

classroom [54]. Participants in the study do not reject social robots as such, but in their point of view, robots do not have the status of a social entity capable of engaging in student-centered teaching and caring for the child's well-being and development. Serholt et al. (2017) hold a belief that children need teachers for their socio-emotional development [55]. Previous research has shown that educators' views of incorporating robots with social-emotional skills are generally positive, but that there are concerns about equitable access, robustness of the technology, and potential disruption to classrooms [56,57]. A more encouraging study was conducted by Musić et al., (2020) for the current attitudes and opinions towards robotics and IT in primary schools [58]. The research took place in four countries—Bulgaria, Greece, Croatia and Bosnia and Herzegovina. Results indicate a highly positive attitude towards robotics and IT in elementary schools with the teachers believing that R&IT can support developing empathy and improving EI in children. Another study discovered that rather than education policy, instructors (or a partnership between teachers and principals) were more likely to bring emotional and social learning into classrooms [48]. Furthermore, the findings show that the provision of emotional learning was more likely to be taught individually in classrooms, but not as a separate subject, than with dedicated time and integration into the curriculum [48].

In Q12, based on the responses of the teachers, teaching and developing EI benefits students (STG1-9) in social relationships, in managing anxiety and other negatively charged emotions, in self-confidence, in personal growth and emotional maturity, in empathy, in better mental, spiritual and physical health, in gaining skills for both the classroom and life and in promoting students' emotional skills. The factor where the answers were divided was in the relationship between academic performance and EI. These results are in line with other studies that present teachers' positive perceptions of the usefulness and effectiveness of cultivating EI in the classroom and the positive effects at many levels such as academic, communicative and personal [59].

When in Q13 were asked about the benefits of teachers from developing students' EI (THG1-4), teachers strongly agree that it helps them to better understand students' emotional state, strengthen the teacher-student relationship, contribute to their personal well-being and get satisfaction because they are dealing with such a sensitive and important subject. From the implementation in a school environment of two EI programs, the results, also, showed very positive effects on the professional and personal development of teachers. Teachers reported improvements in student behavior, relationships with each other, and the classroom environment. They also stressed the necessity of providing instructors with greater emotional education training during their academic and professional development [60]. Teachers who had received training in social and emotional learning were more likely to agree that it had enhanced their interaction with their students, according to a study that compared the differences in the Likert scales between those teachers and those who hadn't [48].

Regarding teachers' self-confidence in Q14 (CNF1-4), most of the teachers agree that they feel more confident about their level of EI but appear less confident and neutral in teaching EI in general and specifically through computer tools. According to research, teachers with over 10 years of experience were significantly more confident in their ability to help students develop their social and emotional skills than teachers

with less experience. In other words, experience as a teacher, not training or academic credentials, was what gave teachers the confidence to teach emotional intelligence [48]. Furthermore, teachers' perceptions of their emotional competence significantly predict the development of quality interactions with students [61].

Finally, in Q15 regarding the factors that could be an obstacle for the implementation of EI in the school environment (BRS1-7), the teachers agree that the most significant factor is insufficient training in the use of ICT tools, but also difficulties in the concept of EI and its developmental strategies, as well as lack of time within the curriculum and lack of ICT tools in the Greek reality. On the other hand, they believe that teachers' reluctance, doubt about the level of their own EI and lack of emotional and social development programs impact the implementation of EI but not in a very huge degree. Therefore, the majority of teachers in Greece appear rather reluctant to instill in students the principles of emotional empathy and well-being, partly because they "have not been trained in how to do it" [62]. In other words, in the Greek educational reality, teachers often feel powerless to encourage the right kind of emotional response in students or to help them emotionally harmonize with the wider school context [63]. In accordance with studies, which show that instructors express uncertainty and worry when dealing with the emergence of EI, teachers' responses show their need for additional training as well as their concern about the sufficiency of the knowledge they now possess [64]. Due to the emphasis on academics placed by legislation and/or school management, the lack of time also aligns with other findings [48].

EI, with the application and implementation of innovative, educational practices and actions, is a central priority of a globalized learning environment and must run through all the individual learning areas of modern analytical curricula. A series of research confirms that EI can be cultivated and taught through appropriate programs [65] and with the contribution of ICT tools.

EI skills are necessary resources for every person, not only for their academic success, but also for their life in general. Perhaps the most important benefit is that students are equipped with the necessary supplies they will need for the rest of their lives so that they can face future challenges. In addition to students' personal development, an important benefit of acquiring EI skills is the promotion of students' mental and emotional health, which will later help them play meaningful and responsible roles in society.

Through the questionnaire we can conclude that teachers recognize the necessity of integrating EI's skills within the school context. What is also apparent, not clearly stated, is that educators are afraid - not unreasonably - to wander into uncharted waters and spend teaching time cultivating emotional skills without having done the necessary preparation, training and education by straying from the familiar paths of their teaching. Of course, their hesitation is reinforced because they have not come into contact with programs and ICT tools that cultivate EI in order to become familiar with them. Also, maximum role in all of this demonstrates the cultivation of their own EI so that they can subsequently pass it on to their students.

More emotionally capable teachers may either have greater success in the classroom or be better able to recognize the effect they are having on the EI of the students, which strengthens their belief in the importance of imparting such abilities to young people [66]. To date, however, teachers report little preservice training on how to help children

develop emotional skills [67], let alone support their own competencies. Therefore, the majority of teachers in Greece appear rather reluctant to instill in students the principles of emotional empathy and well-being, partly because they "have not been trained in how to do it" [68]. In other words, in the Greek educational reality, the teachers often feel powerless to encourage the right kind of emotional response in students or to help them become emotionally attuned to the wider school context [63].

The modern teacher, in order to be able to help children develop the necessary mental and emotional resources and regulate their emotions [69], must be an empathetic adult himself/herself so to listen to and understand the emotional needs of students. Training programs aim at increasing teachers' emotionally supportive behaviors may be more effective if they first help teachers develop positive attitudes towards emotions and better understanding of emotions, including their own [66].

Teacher education programs should be revitalized by designing intervention strategies to enhance future teachers' EI and self-esteem. This is a big challenge for teacher education institutions and training programs, but extra emphasis should be given to further develop their EI, enhance their sense of efficacy and meet modern teaching demands [70]. Increasing teachers' EI looks to be a way to improve good quality student outcomes because teacher self-efficacy is connected to student accomplishment [40], developing close and meaningful relationships, managing a variety of emotions satisfactorily, resolving properly problems and conflicts.

Grobler et al., (2017) examined teachers' perceptions on how EI (EI) was utilized by their school principals to manage mandated curriculum change processes [72]. It was found that EI is one of the tools that can be used to help manage the process of educational change, as it provides school leaders with the ability to maximize positive teaching and learning behaviors through understanding the emotions of others and how they in turn affect their work positively or negatively.

This study adds to prior studies by offering proof of the significance of instructors' perceptions of EI in classrooms and indirectly presents concerns that exist regarding the teaching and development of EI. Teachers seem to be concerned with the emotions of their students and want to be more involved in helping their students recognize, express and manage them. Also, they consider very importantly the meaning of EI and the benefits that its cultivation offers on an individual and social level. Any hesitations and insecurities that have arisen in the questionnaire are from their reduced friction on the concept of EI and the incomplete training and familiarization with ICT tools that are very important in the modern era. This finding is important because teachers are role models and play an important role in shaping students' social and emotional behavior [73,74].

Overall, it is important to enhance social and emotional competencies in the elementary, secondary, and higher secondary school system for understanding and improving teaching competence and for the cultivation of teachers' and students' emotional skills. It would be incredibly helpful in the future to introduce courses that can provide insights on the strategies referred to as the development and teaching of socio-emotional skills to the students, as well as familiarity with ICT tools for the same purpose. It would be very positive, constructive and important to create games, applications, ICT tools in general, which will contribute to the development of students' emotional skills and will

function as aids and supports in the teacher's work. These tools should not remain in the context of pilot studies, but should be distributed in schools and educational institutions and the teachers should be properly trained to be able to become familiar with them.

## 5 Conclusion

Teaching and learning are primarily an emotional process. When the principles of EI are applied in the school context, the benefits are significant at all levels. The present study is a limelight for teachers to uphold their EI and promote better EI among their students by integrating EI skills in a more refined and organized manner. EI helps children acquire a wide repertoire of skills and techniques for solving problems and accessing their thoughts and feelings. In this way, learning gradually emerges as a dynamic metacognitive process, involving "knowledge for knowledge" and "thought for thought" increasing future adaptability and functionality within the social whole. An online questionnaire was designed based on recent research findings in order to assess teachers' perceptions and attitudes towards the implementation of EI in the school context. Findings from data analysis indicate that the proposed questionnaire is a valid and reliable tool which can be used for research purposes on the integration of EI education in schools.

Finally we underline the importance of the mobiles and digital technologies in education domain and emotional intelligence development which are very productive and successful, facilitates and improves the assessment, the intervention and the educational procedures via Mobiles which brings emotional intelligence educational activities everywhere [79-84], various ICTs applications which are the core supporters of education [85-104], AI, STEM & ROBOTICS which raise emotional intelligence educational procedures into new levers of performance [36,91,105-106], and games which transforms the emotional intelligence education in a very friendly and enjoyable interaction [16,37-39,107-108]. Additionally, the enhancement and combination of ICTs with theories and models of metacognition, mindfulness, meditation and emotional intelligence cultivation [109-126] as well as with environmental factors and nutrition [75-78], accelerates and improves more over the educational practices and results, especially in the emotional intelligence domain and its practices like assessment and cultivation.

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## 8 Appendix A

Questionnaire: “Teachers’ Beliefs and Attitudes towards Emotional Intelligence in School Environment”

### 8.1 Appendix A.1. Demographic and individual characteristics

#### Q1: Gender

- Male
- Female

#### Q2: Date of Birth

- Month/Date/Year

#### Q3: Education

- Bachelor
- 2<sup>nd</sup> Bachelor
- Master
- Phd

#### Q4: Teaching

- General education
- Special education
- Intercultural schools
- Church schools

#### Q5: Teaching Level

- Preschool
- Elementary
- Secondary

#### Q6: Experience (in years)

- 0-9
- 10-19
- 20-29
- 30+

## 8.2 Appendix A.2. Emotional intelligence

### Q7: What is my relationship with emotional intelligence?

- Taking part in a seminar
- Conference/Meeting Attendance
- I have engaged in Masters/Ph.D
- I have dealt empirically
- None

### Q8: Are you working on developing your own Emotional Intelligence?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

## 8.3 Appendix A.3. Emotional intelligence and school environment

### Q9: Students Emotions

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
	1	2	3	4	5
I deal with the emotions of my students in the classroom (STE1).					
I help my students manage their emotions (STE2).					
I encourage my students to express their feelings (STE3).					
I am concerned with how my students feel (their feelings) (STE4).					
I try to act as a role model for the students in the field of emotions as well (STE5).					

## 8.4 Appendix A.4. Tools

### Q10: Do you agree with integrating the teaching of Emotional Intelligence (emotional skills) into the school environment?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

### Q11: In which ways?

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
	1	2	3	4	5
Emotional - Social Development Programs (TLS1)					
ICT Tools (Serious Games) (TLS2)					
ICT Tools (Educational Robotics) (TLS3)					
ICT Tools (Software) (TLS4)					
Teacher's Work Plans (TLS5)					
Integration into the Analytical Curriculum (TLS6)					

### 8.5 Appendix A.5. Student gains

**Q12: In what areas do you think students benefit from teaching and developing Emotional Intelligence?**

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
	1	2	3	4	5
School performance (STG1)					
Social relationships (STG2)					
Managing anxiety and other negatively charged emotions (STG3)					
Self-confidence (STG4)					
Personal growth and emotional maturity (STG5)					
Empathy (STG6)					
Better mental, spiritual and physical health (STG7)					
Gaining skills for both the classroom and life (STG8)					
Promoting students' emotional skills (STG9)					

### 8.6 Appendix A.6. Teacher gains

**Q13: Where do teachers benefit in the context of the development of their students' EI?**

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
	1	2	3	4	5
Better understanding of students' emotional state (THG1)					
Strengthening the teacher-student relationship (THG2)					
Contribution to their personal development and well-being (THG3)					
Satisfaction dealing with sensitive issues (THG4)					

### 8.7 Appendix A.7. Confidence

**Q14: Confidence and Emotional Intelligence**

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Undecided</b>	<b>Agree</b>	<b>Strongly Agree</b>
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
I feel confident to implement an emotional intelligence development program in my classroom (CNF1)					
I feel confident in teaching emotional development to my students (CNF2)					
I feel confident to implement an ICT tool for the development of EI in my classroom (CNF3)					
I feel confident about my own level of emotional intelligence (CNF4)					

### 8.8 Appendix A.8. Barriers

**Q15: To what extent could the following factors be an obstacle for the implementation of EI in the school environment?**

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Undecided</b>	<b>Agree</b>	<b>Strongly Agree</b>
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Curriculum (due to lack of time) (BRS1)					
Reluctance of teachers (BRS2)					
Insufficient training on the concept of emotional intelligence and development strategies (BRS3)					
Insufficient training in the use of tools (ict tools) that develop emotional intelligence (BRS4)					
Lack of ICT tools for Greek data (BRS5)					
Lack of emotional and social development programs (BRS6)					
Doubt about the level of individual emotional intelligence of the teacher (BRS7)					

Thank You!