

## Emotional intelligence, age and origin: the mediating role of self-efficacy in the regulation of affectivity in future disability support teachers

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### Abstract

*In the educational field, studies on emotional intelligence are fundamental because of the importance that this construct has for disability support teachers, who are called on to deal with affective and relational dynamics for which emotional intelligence, empathy and the ability to regulate their emotions play a crucial role. Based on previous research, the aim of this study was to examine whether certain variables such as age and origin - that is, having spent most of one's life in large cities or small towns - play a role in increasing emotional intelligence, considering the mediating role of previous teaching experiences and self-efficacy in the regulation of positive, negative and empathetic emotions. Data was collected from 301 future disability support teachers. The tools used were the following: I) the self-report emotional intelligence test; II) the scale of perceived self-efficacy in the management of negative, positive, and empathic emotions. In addition, socio-demographic data, such as age, origin, educational qualifications and previous teaching experience, were also taken into consideration. The results show that age*

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*and origin were related to emotional intelligence; however, this relationship was mediated by a perception of self-efficacy in regulating emotions and, also, by past teaching experiences at school. The results discussed are in relation to the need to implement training courses that improve teachers, not only in terms of teaching and teaching skills in general, but also in terms of affective/relational skills.*

**Keywords:** Emotional intelligence; Disability support teachers; Self-efficacy; School; Emotions regulation; Empathy; Negative and positive emotions.

## 1. Introduction

The school plays an important role in the training of both pupils and teachers, which is why, in addition to paying attention to the purely didactic aspects, the importance of transversal skills, such as emotional intelligence, cannot be neglected (D'Amico, Geraci, & Tarantino, 2020). Many studies agree that students with cognitive or physical disabilities experience poorer relationships with teachers and the school, greater dissatisfaction with teaching and perceive more danger at school than students without disabilities (Murray & Greenberg, 2001). Students with special needs require more attention as they tend to face social and emotional failures more often during their lifetime than their peers (Beckmann & Minnaert, 2018).

In Italy, the Ministerial Decree n. 92 (Decreto Ministeriale 8 Febbraio 2019, n. 92, 2019) of the Ministry of Education, University and Research for “the specialization support paths for pupils with disabilities attending kindergarten, primary and secondary schools” considers emotional intelligence and empathic ability as the main skills that future teachers should possess. These skills include: 1) the teacher’s recognition and understanding of the pupil’s emotions, moods and feelings; 2) the ability of the teacher to guide pupils so that they can experience and regulate their own affective states in an appropriate way; 3) the ability of the teacher to guide his/her own affective states, and 4) the ability of the teacher to self-analyze his/her emotional dimensions in educational and didactic relationships. Mayer and Salovey (1997) define Emotional Intelligence (EI) as “the ability to perceive and express emotions, assimilating them in thought, understanding and reasoning with emotions, regulating them in themselves and in others” (p. 5). Only much later, Mayer, Caruso and Salovey (2016) reformulated their original ability model stating that EI is “a member of the class of broad intelligences focused on hot information processing” (p. 5), positioning emotional intelligence amidst other hot intelligences, including personal and social intelligences. Besides EI, we consider the importance of self-efficacy (SE), defined by Bandura (1977) as “an integrative theoretical framework to explain and predict psychological changes achieved by different modes of treatment” (p. 191). Over the years, other types of SE have been identified. Based on Gross and John’s (2003) studies on emotion regulation, perception SE in modulating affectivity is the ability to regulate one’s mood, one’s emotional states, positive and negative, which is essential for social adaptation and the construction of satisfactory

affective relationships (Caprara, 2001). While some theories define emotion regulation as an integral component of EI, others see the two constructs as separated. Theorists suggest that people, as well as for EI, construct their own rules of emotion regulation and emotional display based on their experience, culture and personal needs (Zysberg & Raz, 2019). Empathic SE is defined as the awareness of knowing how to put oneself in the shoes of others, of realizing their moods, anticipating their requests for help and of being able to offer support in adverse situations (Caprara, 2001). Empathic SE differs from emotion regulation SE because the first consists in the ability to perceive oneself as effective in feeling the emotions of others, the second consists in the ability to regulate one's own inner emotional experience. The development of EI seems to be linked to age as well as to the context of life in which one grew up (Ybarra, Rees, Kross, & Sanchez-Burks, 2011; Adsul, 2013). Some studies have shown how the salience of emotions increases with advancing years (Chen, Peng, & Fang, 2016). Studies of affective processing throughout life suggest that older people are more skilled at regulating their emotions than young people (Atkins & Stough, 2005). When people grow old, they remember emotional material more easily (Carstensen & Turk-Charles, 1994), they use more emotional content in their representations of other people (Carstensen & Fredrickson, 1998), they make more use of emotions in solving social problems (Blanchard-Fields, Chen, & Norris, 1997). Other studies have highlighted how EI is strongly predisposed by the culture of the society to which individuals belong; having spent part of their life in a small town or rural setting or in a large city, influences the development of EI (Adsul, 2013; Kar, Saha, & Mondal, 2014).

The growing interest in EI in recent years has been dictated by the common belief that social and emotional skills are associated with success in many areas of life, including effective teaching, student learning, quality relations and academic performance (Sutton & Wheatley, 2003; Mayer, Salovey, & Caruso, 2004). Depending on the essential role that EI plays in teacher training and in light of the above, the present study aims to explore the role that some sociodemographic variables have in increasing EI considering the mediating role of SE related to emotion regulation and empathy in future disability support teachers.

## 2. Emotional intelligence at school

Studies on EI have a crucial impact in the educational field because of the importance that this construct has for teachers, which is why many studies have tried to identify the most important characteristics of EI by directing their focus on the relational dimension of learning and on the importance of the emotional mind of the teacher. EI represents a great benefit to support teachers, who are under strain not only for the high level of professional competence demanded by their profession but also considering their educational function provided to students with disabilities (Garbo & Albanese, 2006). Teachers are, in fact, especially exposed to the risks of emotional stress and professional burnout (Albanese & Pieri, 2013). Er and Mohd Rameli (2019) highlighted the important role of emotional intelligence and personality on career adaptability in the context of special education teachers in Malaysia. As has been extensively reported in the literature, the construct of EI is a key factor for teaching success; to become effective teachers it is necessary to be emotionally more intelligent (Ciarrochi, Chan, & Caputi, 2000; Sutton & Wheatley, 2003; Kauts & Saroj, 2010; Brackett, Rivers, & Salovey, 2011; Kauts & Chechi, 2014; Lestari & Sawitri, 2017; Wijayati, Kautsar, & Karwanto, 2020; Bechter, Whipp, Dimmock, & Jackson, 2021). From the results of these studies, it appears that teachers with a high level of EI, together with a good number of years of teaching experience, are much more effective than teachers with low EI and less experience (Kane, Rockoff, & Staiger, 2008). The authors agree that EI and teaching experience are important for making a teacher effective and that EI can be developed and matured over time.

### *2.1. Emotional Intelligence and self-efficacy in teachers*

General education teachers often report that teachers feel unprepared to teach students with disabilities (Ajuwon, Lechtenberger, Griffin-Shirley, Sokolosky, Zhou, & Mullins, 2012). Chan (2004) and Chan and Hui (1998) focused their study on EI in relation to SE highlighting how teachers often have to face and help students with disability, as well as face behavioral and emotional problems, which are tasks for which they do not feel adequately prepared and for which they report to have insufficient training to guide and counsel interventions that require a good dose of EI in the empathic and socio-interpersonal areas, often feeling ineffective and inexperienced in the face of tasks that go beyond traditional teaching. This suggests that teachers

with a low SE in helping others may also be less intelligent from an emotional point of view (Chan, 2004).

The link between EI and the components of effectiveness in teachers has been investigated in many studies. Sutton and Wheatley (2003) suggest that substantial variation in teaching effectiveness may depend on the varying abilities and emotions of teachers. Chan (2004) found good levels of correlation between the four dimensions (positive use of emotions, evaluation of one's own emotional experiences, ability to enter into the emotions of others and the ability to manage emotions) of the Emotional Intelligence Scale by Schutte and colleagues (Schutte, Malouff, Hall, Haggerty, Cooper, Golden *et al.*, 1998) and the beliefs of SE; in particular, Chan found that the positive regulation of emotions is a significant predictor of general SE, while empathic sensitivity is a significant marker in predicting SE in helping others.

Penrose, Perry, and Ball (2007) investigated whether, in a group of primary school teachers, the relationship between SE and EI was mediated by age, status and years of experience; their results show a direct relationship between EI and SE without the mediation of the above variables. Di Fabio, Giannini, and Palazzeschi (2008) used the Emotional Quotient Inventory developed by Bar-On (1997) correlated with professional self-efficacy in high school teachers demonstrating that greater EI in teachers was related to professional SE, i.e., the ability to motivate students, to use appropriate educational strategies and to manage classes (Wu, Lian, Hong, Liu, Lin, & Lian, 2019; D'Amico *et al.*, 2020).

Many other studies also found the same results in their investigations (Salami, 2007; Gürol, Güher Özeran, & Yalçın, 2009; Moafian & Ghanizadeh, 2009; Rastegar & Memarpour, 2009). In the same way, many studies validated the relationship between SE and EI. Koçoglu (2011) found a positive relationship between the two constructs in a sample of Turkish teachers, the same relationship was found by Al-Adwan and Al-Khayat (2016) in a group of Jordanian teachers of different teaching levels, which was also confirmed in a group of Iranian high school teachers (Amirian & Behshad, 2016). In a study on SE in the regulation of emotions, Sutton, Mudrey-Camino and Knight (2009) found that “expert teachers consider themselves capable of using a variety of strategies for regulating emotions, trying to better communicate positive emotions and contain their negative emotions since they believed that this makes them more effective in managing relationships with their students” (p. 134).

These results show that the expression of positive emotions and a capacity to control negative emotions contribute to the construction of a productive learning environment. Regulating emotions means modulating their shape or mitigating their urgency by responding to the demands of the environment in a flexible and adaptive way and that the inability to acquire effective strategies for regulating negative emotions is harmful to an individual's well-being (Matarazzo & Zammuner, 2009).

What has been said so far suggests that, in teachers, SE and EI are considered two fundamental requirements to create positive effects in students. Emotionally competent teachers manage to create an educational environment that facilitates the development of self-awareness in students and increases their social, emotional and interpersonal abilities.

### 3. Aims and hypotheses

Mayer, Caruso, and Salovey (1999) consider EI as an ability that can be enhanced and matured over time; they argue that age and experience represent the most relevant socio-demographic variables for the evolution of EI (as well as for the evolution of other types of intelligence; Kafetsios, 2004; Extremera & Fernández-Berrocal, 2006). The studies considered thus far have frequently shown the correlation between EI, age, teaching experience and SE investigated in generic terms or in the context of teaching, hardly in its specificity connected to the regulation of positive, negative and empathic emotions. As we have already mentioned above, some authors consider emotion regulation as an integral part of EI, others as a separate construct. Bandura's theory of SE (Bandura, 1997) states that emotions influence individuals' judgments of efficacy, and one type of belief in SE is the perceived control over affections. Thus, a higher perception of SE in teachers could be matched by greater emotional intelligence (Atkins & Stough, 2005). If it is true that the age factor and origin (i.e., having lived in a city or a small town) are important for EI, what role do previous teaching experiences, perceived self-efficacy in affective skills, and the management of emotions in their positive, negative and empathic variations, have? It is important to stress that there are other EI models that conceptualize it as a stable personality trait (Petrides & Furnham, 2003). Our study is based on the idea that EI is an ability that can be learnt and trained, in fact, our interest was aimed at understanding what factors increase EI in support teachers, analyzing the relationship between age, origin, and EI – already observed in the previous literature – but, in this

case, exploring the role of SE and the time spent to teach as mediators. Despite the support of the specific variables introduced above, a predictive model that considers them together has not been tested to date, to the best of our knowledge. The various correlations between the variables, we considered and introduced, represent valid elements to test a predictive model. More specifically, we assumed that:

*Hypothesis 1:* Factors such as age, gender, origin – understood as having lived mainly in the same country or city, perception of SE and teaching experience generate differences in EI levels.

*Hypothesis 2:* There are significant positive relationships between teachers' age, background, teaching time, empathic SE, SE in the management of positive and negative emotions, and EI.

*Hypothesis 3:* Empathic SE, SE in the management of positive and negative emotions and teaching time mediate the relationship between age and EI, origin and EI (see the path illustrated in Fig. 1).

## 4. Materials and methods

### 4.1. Participants

The research sample consisted of 301 future disability support teachers (274 females, 91% and 27 males, 9%) and of participants in the ATI (active training internship), a specialization course of annual duration for the teaching of support activities to students with disabilities established by Italian universities - in this case, the University of Catania - which confers the qualification to teach in secondary schools, following the final exam.

At the beginning of the course, future teachers were asked if they would answer some questionnaires, anonymously; the administration took place during the break in the lessons and in full compliance with the ethical standards of the APA (American Psychological Association – APA, 2016). The mean age of the respondents was 37.5 years old ( $SD = 6.69$ ); 54.2% of the sample had a degree in Humanities, 21.9% had a scientific degree, and 24% had an economic/social degree. Roughly half of the sample (50.2%) had been awarded other titles (Master's degree, PhD, second degree, etc.), while the other half (49.8%) only presented one degree. Two-thirds of the participants (69.1%) had previous teaching experience with a mean of 40.8 months ( $SD = 58.3$ ), while a third (30.9%) were novel at teaching. A large proportion of the participants (59.8%) had lived principally in a city, while 40.2% in a small town.



## 4.2. Measures

### 4.2.1. *The Self-Report Emotional Intelligence Test (SREIT)*

The *SREIT* is a self-report measure of emotional skills, according to Mayer and Salovey's (1997) model of EI that, in contrast to that proposed by Petrides and Furnham (2003), considers EI as an ability and not a trait. The *SREIT* was elaborated by Schutte and co-workers (Schutte *et al.*, 1998) and validated in the Italian version by Craparo, Magnano, and Faraci (2014). It is a unidimensional scale, with higher scores indicating a greater level of EI (with a Cronbach's alpha reaching .93). The *SREIT* represents each of the following categories: the evaluation and expression of self-emotions and those in others, the self-regulation of emotions and regulation in others and the use of emotions in problem solving. The choice to use self-report measures rather than performance tools is due to practical and administrative needs. Moreover, in line with our needs, potential uses of the scale in theoretical research involve exploring the determinants of EI, the effects of EI and whether EI can be enhanced. The *SREIT* consists of 33 items evaluated with a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Examples of items are the following: "I congratulate others when they have done something right", "It is hard for me to understand why people feel the way they feel", "I know why my feelings change".

### 4.2.2. *The Scale of Perceived SE in the Management of Negative Emotions (APEN/A)*

The *APEN/A* (Caprara, 2001), in the adult version, measures the beliefs related to one's ability to adequately regulate negative emotions. The scale consists of 8 items, evaluated with a 5-point Likert scale. For each item, the subjects evaluate the degree to which they believe they can regulate negative emotions from 1 (not at all capable) to 5 (completely capable). Examples are the following: "Overcoming irritations for the wrongs suffered", "Avoiding being discouraged in the face of adversity" ( $\alpha = .82$ ).

### 4.2.3. *The Scale of Perceived SE in the Expression of Positive Emotions (APEP/A)*

The *APEP/A* (Caprara, 2001), in the adult version, measures the beliefs related to one's ability to express positive emotions. The scale consists of 7 items, evaluated with a 5-point Likert scale. For each item, the subjects evaluate the degree to which they believe they can express their positive emotions from 1 (not at all capable) to 5 (completely capable). Examples of

items are the following: “Express your happiness when something good happens to you”, “Be joyful for the success of a friend” ( $\alpha = .82$ ).

#### 4.2.4. *The Perceived Empathic SE Scale (AEP/A)*

The AEP/A (Caprara, 2001), in the adult version, measures the beliefs related to one's ability to recognize the feelings, emotions and needs of others. The scale consists of 12 items, evaluated with a 5-point Likert scale. For each item, the subjects evaluate the degree to which they are convinced that they can recognize the feelings and needs of others from 1 (not at all capable) to 5 (completely capable). Examples of items are the following: “Understanding whether a person is sad or unhappy”, “Understanding the effect of your actions on the feelings of others” ( $\alpha = .89$ ).

#### 4.2.5. *Socio-demographic information*

At the end of the compilation of the instruments, data, such as age, educational qualifications, origin, and information on previous teaching experience, was also collected.

## 5. Data analysis

The internal coherence of the scales was verified with Cronbach's Alpha. For the scores of the scales of the questionnaires, we considered asymmetry, kurtosis, and the mean of the item scores for all the tools used. We used the *t*-test to assess gender differences and differences between those who had lived mainly in cities or small towns. Bivariate (Spearman) correlations between all primary variables were also computed using the SPSS version 24.0 (IBM Corporation, Armonk, NY, USA). The total and direct relationship between origin, age and EI, and indirect relationship via SE (empathy, positive and negative emotion and time spent to teach), were estimated in a single model (see Fig. 1) using a bootstrapped approach, i.e. the Jamovi 18.1 software to test the model of relationships between variables, including multiple mediations.

## 6. Results

The multivariate indices of asymmetry and kurtosis are shown in Table 1 in addition to the descriptive statistics; since the values are within the range (-1 and +1), indicating that normality is not a source of distortion

(Barbaranelli & D'Olimpo, 2007), we can consider them good. Cronbach's Alpha was calculated, which had optimal values for all the variables.

Table 1 – *Descriptive statistics, normality, Alpha for the variables examined in the study*

	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>SD</i>	<i>Asymmetry</i>	<i>Kurtosis</i>	<i>Alpha</i>
EI	93	155	125.37	11.15	-.069	-.070	.842
SE-EP	24	60	45.01	5.56	-.090	.634	.863
SE-PEEP	17	35	28.67	4.38	-.381	-.543	.861
SE-PGEN	11	38	25.36	5.36	-.098	-.320	.874

Legend: *EI*: Emotional Intelligence; *SE-EP*: Self-Efficacy Perceived Empathy; *SE-PEEP*: Self-Efficacy Perceived in the Expression of Positive Emotions; *SE-PGEN*: Self-Efficacy Perceived in the Management of Negative Emotions.

### 6.1. *t*-test for gender and origin

Concerning gender differences, despite the striking disparity in our sample between females and males (with a female prevalence of 91%), females obtained significantly higher scores, compared to males, only in the self-efficacy perceived in the expression of positive emotions (males:  $M = 27.0$ ,  $SD = 5.03$ ; Females:  $M = 28.8$ ,  $SD = 4.28$ ;  $t = -2.134$ ;  $p < .03$ ). For the remaining scales, no significant differences emerged.

Table 2 – *t*-test ( $p < .05$ ) for origin and variables included in the study

	<i>Origin</i>	<i>Mean</i>	<i>SD</i>	<i>t</i>	<i>p</i>
EI	Town	123.39	11.42	-2.54	.011
	City	126.69	10.79		
SE-EP	Town	44.08	5.58	-2.37	.018
	City	45.63	5.48		
SE-PEEP	Town	27.67	4.52	-3.29	.001
	City	29.34	4.15		
SE-PGEN	Town	24.67	5.04	-1.82	.064
	City	25.82	5.53		

Legend: *EI*: Emotional Intelligence; *SE-EP*: Self-Efficacy Perceived Empathy; *SE-PEEP*: Self-Efficacy Perceived in the Expression of Positive Emotions; *SE-PGEN*: Self-Efficacy Perceived in the Management of Negative Emotions.

Table 2 shows that those who claimed to have lived for most of their lives in a city had significantly higher levels of EI, perceived empathic SE

and SE in expressing positive emotions compared to individuals who had prevalently lived in a town.

Table 3 – *Correlations between all the variables observed in the study.*

	1	2	3	4	5	6	7
1. Age	—						
2. Time Teaching	.379***	—					
3. Origin	.012	.028	—				
4. SE-EP	.099	.095	.119**	—			
5. SE-PEEP	.059	.094	.149**	.439***	—		
6. SE-PGEN	.202***	.089	.085	.390***	.303***	—	
7. EI	.141*	.177**	.107**	.650***	.532***	.453***	—

\*\*\*  $p < .001$ , \*\*  $p < .01$

Legend: *Time Teaching*: Time spent Teaching; *Origin*: Town or City; *SE-EP*: Self-Efficacy Perceived Empathy; *SE-PEEP*: Self-Efficacy Perceived in the Expression of Positive Emotions; *SE-PGEN*: Self-Efficacy Perceived in the Management of Negative Emotions; *EI*: Emotional Intelligence.

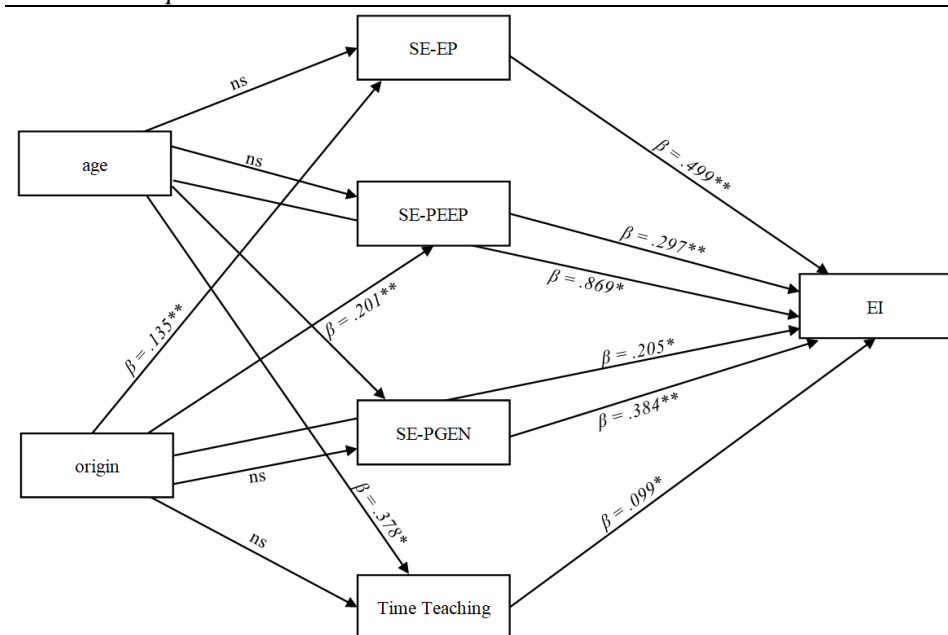
Since there was a dichotomous variable, having lived in the city or not, the correlations were performed considering Spearman's *rho* correlation index. As shown in Table 3, age correlated positively with EI and with SE in the management of negative emotions, supporting hypothesis 1. EI correlated positively and strongly with teaching experience and with all three variables measuring the different types of SE, supporting hypothesis 2. Having lived in the city or not correlated with EI, with the empathic SE, and strongly with SE in the management of positive emotions.

## 6.2. Multiple mediations

Mediation analyses are reported to be employed to understand a known relationship by exploring the underlying mechanism or process by which one variable influences another variable through a mediator variable (Cohen, Cohen, West, & Aiken, 2003). In this study, mediation regression analysis was conducted using the statistical procedures described in MacKinnon and Dwyer (1993). Based on the correlations above, we estimated a multiple mediation model (Preacher & Hayes, 2008; Gallucci, 2020) realizing a path diagram to represent the multiple mediation analysis used to test our third hypothesis. To do this, we included age and origin (having lived mainly in

the city or not) as exogenous variables (IV), teaching time and the three types of SE measured (empathic SE, SE in the perception of positive emotions and SE in the management of negative emotions) as (parallel) mediator (M) variables, and EI as the only endogenous variable (DV).

Figure 1 – Overview of the proposed mediation model, considering four parallel mediators



Legend: *Origin*: Town or City; *SE-EP*: Self-Efficacy Perceived Empathy; *SE-PEEP*: Self-Efficacy Perceived in the Expression of Positive Emotions; *SE-PGEN*: Self-Efficacy Perceived in the Management of Negative Emotions; *Time Teaching*: Time spent Teaching; *EI*: Emotional Intelligence.

Figure 1 shows the Beta scores of the individual components considered in the path diagram. The results of the total, direct and indirect effects are shown in Table 4. The results of multiple mediations contain the standardized coefficient  $\beta$ , indicating the intensity of the effect and 95% C.I. indicating the significance of the effect with a probability of error of 5%. As can be seen for the two exogenous variables, *origin* ( $\beta = .0154$ ;  $p > .733$ ) and *age* ( $\beta = .0112$ ;  $p > .828$ ), the direct effect on EI was not significant, therefore the mediation was total. The results show that having spent one's life more in a city or not, has an indirect effect on EI, which is thus mediated by the perceived SE in the expression of positive emotions ( $\beta = .0556$ ;  $P < .007$ ) and by the perceived empathic SE ( $\beta = .0677$ ;  $P < .032$ ). The second

exogenous variable, age, has an indirect effect on EI, mediated, in this case, by SE in the management of negative emotions ( $\beta = .0415$ ;  $P < .009$ ) and by time spent teaching ( $\beta = .0375$ ;  $P < .036$ ).

In other terms, having lived mainly in a city or not has an indirect effect on EI, mediated, in this case, by perceiving oneself both empathetic and able to express positive emotions. Age, instead, has an indirect effect on EI because it is mediated by perceiving oneself to be efficacious in the ability to manage negative emotions and also in having had previous teaching experience.

Table 4 – *Direct, Indirect and Total Effects of age and origin on Emotional Intelligence mediated by Self-Efficacy and time spent teaching*

Type	Effect	Estimate	SE	95% C.I.		$\beta$	z	p
				Lower	Upper			
Indirect	age $\Rightarrow$ SE-EP $\Rightarrow$ EI	.073	.047	-.016	.168	.048	1.524	.128
	age $\Rightarrow$ SE-PEEP $\Rightarrow$ EI	.025	.026	-.024	.081	.017	.960	.337
	age $\Rightarrow$ SE-PGEN $\Rightarrow$ EI	.062	.023	.022	.120	.041	2.606	.009
	age $\Rightarrow$ Time Teach $\Rightarrow$ EI	.056	.026	.007	.112	.037	2.097	.036
	origin $\Rightarrow$ SE-EP $\Rightarrow$ EI	.382	.646	.173	2.715	.067	2.139	.032
	origin $\Rightarrow$ SE-PEEP $\Rightarrow$ EI	.134	.420	.478	2.234	.055	2.698	.007
	origin $\Rightarrow$ SE-PGEN $\Rightarrow$ EI	.435	.274	-.018	1.086	.021	1.589	.112
	origin $\Rightarrow$ Time Teach $\Rightarrow$ EI	.017	.121	-.201	.302	.032	.144	.886
Direct	age $\Rightarrow$ EI	.016	.077	-.132	.172	.011	.217	.828
	origin $\Rightarrow$ EI	.314	.961	-1.603	2.217	.015	.327	.737
Total	age $\Rightarrow$ EI	.234	.094	.049	.418	.140	2.484	.013
	origin $\Rightarrow$ EI	.284	1.283	.767	5.800	.144	2.558	.011

*Legend:* Origin: Town or City; SE-EP: Self-Efficacy Perceived Empathy; SE-PEEP: Self-Efficacy Perceived in the Expression of Positive Emotions; SE-PGEN: Self-Efficacy Perceived in the Management of Negative Emotions; Time Teaching: Time spent Teaching; EI: Emotional Intelligence.

*Note:* Confidence intervals computed with method: Bias corrected bootstrap. Betas are completely standardized effect sizes.

## 7. Discussion

The present study represents an attempt to identify which elements, in addition to those already reported in the literature, contribute to increasing the EI in future disability support teachers, who are trained to support and take on the burden of students with problems affecting both the physical and mental spheres and who carry out a job where emotional and empathic skills play a fundamental role for the well-being of the teacher-pupil relationship.

The results obtained confirm previous findings and offer interesting points of discussion.

In our sample, most of the participants were women teachers, which is not a casualty considering the profession of teaching is chosen above all by women. Our results show that women perceive themselves as more effective in expressing positive emotions than men, confirming what has already been reported by Harrod and Scheer (2005). Since teaching, especially in the context of support, is a profession that involves great emotional involvement, women are likely to choose this profession according to a perception of emotional competence greater than men. A second poorly explored result concerns the origin of the sample. Individuals who claim to have lived most of their lives in a city, possess higher levels of EI, perceive themselves as more empathetic and more able to express positive emotions. This fact can be explained considering that those who live in a city, compared to those who live in small towns, have the opportunity to experience a wider variety of relationships because of the presence of a greater number and a greater variety of people, cultures and events with which they interact daily.

Often, models of behavior and socialization, ideologies, beliefs, social cohesion, emotional bonding, simplicity and sincerity of relationships change radically between those who live in large cities and those who live in small towns, influencing EI, as well as various areas of emotional regulation (Crowne, 2008; Adsul, 2013). Regarding the relationship between age and EI, our data agrees with the aforementioned studies in which adults tend to have higher levels of EI, but it is true that, for example, Fariselli, Ghini and Freedman (2006) highlight the limitations of the studies arguing that the increase in EI is not exclusively attributed to age but there are other factors that can develop and train it. From what emerges from our study, the SE perception in regulating positive emotions, and the SE empathic perception are related to age but, at the same time, mediate the relationship with EI. Likewise, both the time previously spent in teaching and the ability to

regulate negative emotions are related to origin but also mediate its relationship with EI. These results offer interesting reflections on two different types of emotions; positive and negative, the latter is considered the more complex for the purpose of social adaptation. The perceived effectiveness in the ability to regulate these emotions, together with empathy, is an aspect that complements and nurtures the components of EI, which, as we have said, are a fundamental aspect for teachers, especially disability support teachers. This result completes data previously found in the literature, that is, people who regulate their emotions obtain high scores in EI tests regardless of the model or measurement of EI (Peña-Sarrionandia, Mikolajczak, & Gross, 2015) and also responds to previous suggestions about the possibility, for the science of EI, to integrate the knowledge acquired in other areas of affective sciences (Barrett & Salovey, 2002). Kauts and Chechi (2014) in their study, confirmed that teachers with poor EI are less effective in teaching than teachers with high EI and that teachers with more teaching experience are more effective than those without experience. Therefore, we can affirm that age, the variety of experience together with a good dose of belief in one's affective abilities, are necessary to acquire those teaching experiences that nourish the teacher more than “doses” of EI, which, in turn, nourish, complete and enrich the teaching path. This data allows us to state that environmental factors have a significant and crucial impact on the quality of teaching. A good teacher is not only one who is didactically prepared but is also one who has a good dose of EI and is able to succeed in the most important mission, which is to educate. The role of the teacher is essential in the function of guide and stimulus, through knowledge, for the development of individual personalities, accompanying pupils in their growth and helping to provide the appropriate tools to ensure pupils' well-being within society.

In conclusion, we can say that our data indicates the importance of training courses that aim to improve emotional skills. Disability support teachers, especially in relation to “particularly difficult” students, as in the case of severely autistic children or children with severe deficits, who are those most often in need of support, need to learn to regulate their emotions: the positive emotions in order to establish a more fruitful relationship with the student and the negative emotions in order to avoid burning-out or experiencing high levels of stress. As Scarzello (2005) points out in a study on SE and coping strategies in a sample of future educators, it is necessary, in the training of future educators, to aim at strengthening the belief of self-efficacy, especially in the management of negative emotions.



Among the limitations of the present study there is certainly the gender disparity, but, as we have already pointed out, most teachers are almost always women. It is also necessary to underline that the teachers included in our dataset are still “aspiring” support teachers, who are still in the process of being trained as such. Furthermore, it would have been useful to collect the same data not only at the beginning but also at the end of the course, which we could not carry out but could have been interesting in terms of comparisons. Future research could be aimed at observing EI levels in a sample of disability support teachers who have been practicing the profession for some time.

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