

REVIEW

# Emotional Intelligence and Resilience Outcomes in Adolescent Period, is Knowledge Really Strength?

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**Abstract:** Adolescence is possibly the most difficult period of life, because it is the beginning of a series of changes in both the internal and external aspects of the body. For this reason, we all have a series of psychological mechanisms, resilience and emotional intelligence, which allow us to adapt to these periods of change. In this way, the present study aims to analyse through a systematic review the results obtained in different studies to better understand the current situation. The methodology used in the systematic review was PRISMA, covering a period of the last 10 years. The results obtained show that the selected studies show a strong relationship between resilience and emotional intelligence when there are adequate levels of resilience and emotional intelligence. Therefore, it is necessary for young people to develop a series of internal mechanisms that act as protectors against the vicissitudes they may face in their lives, allowing them to fully adapt to the demands of the context.

Keywords: emotional intelligence, resilience, PRISMA, adolescence

#### Introduction

Adolescence is one of the most difficult periods of life as it is subject to a series of changes that mark the transition from childhood to adulthood.<sup>1</sup> During this period, young people undergo a series of psychological, biological, social and cognitive changes.<sup>2</sup> Fox compares young people to monsters, because the body changes, our parents become terrible people to them, they start to behave differently, and so on. These maturational changes prepare the young person for adulthood by making the first decisions for themselves without the influence of their parents. Therefore, adolescents often show maladaptive behavioural patterns such as alcohol, tobacco, drugs or sex consumption, among others.<sup>3</sup> Moreover, during this period young people have to deal with the ability to cope with distress, fear and pain<sup>4</sup> because they have to face many challenges such as interpersonal relationships, social influence, new responsibilities, academic demands, peer group pressure or different tasks, among others.<sup>5–7</sup> Emotional intelligence and resilience are two essential factors during this stage because they can predict one's life outcomes.<sup>8,9</sup> In fact, it has been shown that emotionally intelligent people lead fuller and happier lives,<sup>10</sup> and resilient people experience less stress and pain.<sup>11,12</sup>

# Emotional Intelligence in Young People

Emotional intelligence (EI) warrants full attention because it is associated with success in life<sup>13</sup> and increases with age.<sup>14</sup> People emotionally intelligent are able to understand rules, evaluate situations, express their feelings in an appropriate way, and respect beliefs.<sup>15</sup>

EI is divided into two conceptualizations: abilities and traits.<sup>8</sup> Abilities EI is the aptitude of processing emotional information in an accurate and effective way.<sup>8</sup> Traits EI is integrated into personality categories, for instance, self-awareness, self-motivation, self-esteem, happiness, empathy, optimism, and interpersonal skills.<sup>16–18</sup>

1365

Collado-Soler et al Dovepress

Regardless of conceptualization, it is evidenced that emotionally intelligent people are happier, more productive, and healthier. 19,20

In the last decade, emotional intelligence has become more popular in academic and professional areas. The reason is that academic and social adaptation, <sup>21</sup> use of toxic substances, <sup>22</sup> and self-concept<sup>23</sup> are variables influenced by EI. Indeed, there are different EI training initiatives<sup>24,25</sup> that have diverse results and efficacy<sup>26,27</sup> for children and teenagers. People should learn more about how EI works if they want to ensure age-appropriate interventions.<sup>28</sup>

Apart from that, during this period significant emotion regulation development takes place,<sup>29</sup> that's why EI is considered as a protective factor for teenagers.<sup>30</sup> Emotions are essential not only in personal but also in interpersonal behaviors.<sup>31</sup> Acquiring a predictive value, school bullying, mental health, and well-being also have a close relationship with emotional intelligence.<sup>32</sup> Moreover, emotional skills contribute to an improvement in academic performance<sup>33–35</sup> and a decrease in anxiety,<sup>36</sup> and it's related to resilience.<sup>37</sup>

## Resilience in Young People

Resilience can be defined as a personal strength that allows a person to adapt quickly to setbacks.<sup>5,38,39</sup> You can ask yourself the following question to understand this concept: how can you deal more or less successfully with new and problematic situations?<sup>40</sup> The answer would approximately measure your level of resilience.

Traditionally, it was believed that resilience was a characteristic of an individual but nowadays it represents the complex interplay between the person and his living environment.<sup>41,42</sup> With that conception, the ability of a person to use the resources available is included in the definition of resilience.

Strengthening individual resilience is crucial because it can enhance the possibility of changing situations, if we only provide material assistance it solves the dilemma temporarily.<sup>43</sup> We should help people strengthen their resilience through social support.<sup>44</sup> In this sense, resilience interventions have been implemented in schools around the world<sup>45,46</sup> because that is the perfect place to foster adolescents' resilience.<sup>47</sup>

As EI does, resilience is related to positive emotions and well-being with a positive correlation between them. In fact, some authors understand resilience as psychological resilience<sup>48</sup> which consists in a dynamic process where live events and protective factors act simultaneously.<sup>49</sup> As we mentioned before, EI is considered a protective factor, but it is not the only one. We can differentiate between external, such as family, school, or social environment, and internal factors, for instance, intelligence, and personality traits.<sup>50</sup>

Resilience and emotional intelligence have a positive relationship as literature reflects.<sup>51,52</sup> The problem is that there is no empirical study that verifies whether the relationship was because a higher level of resilience would run a higher level of EI or vice versa. On the one hand, it was demonstrated that people with a higher level of EI can deal with negative situations better<sup>53</sup> because it confers adaptability on people.<sup>54</sup> On the other hand, it is thought that resilient people are more emotionally intelligent.<sup>53</sup> This is the reason why we will focus on the type of relationship they have in this systematic review.

# **Objectives**

The main objective of this research is to find empirical research about the relationship between emotional intelligence and resilience in adolescents in the last ten years. This general objective is specified by the following research questions:

Research Question 1: How often have emotional intelligence and resilience been studied?

Research Question 2: What are the trends of emotional intelligence and resilience in terms of geographic region?

Research Question 3: What variables have been studied apart from emotional intelligence and resilience?

Research Question 4: Does emotional intelligence affect resilience or does resilience affect emotional intelligence? What happen with the other variables?

# Methodology

# Search Strategy

This systematic review was carried out following the recommendations of Preferred Reporting Items for Systematic Reviews and Meta-Analyses 2002 (PRISMA 2020).<sup>55</sup> This guideline document provides a checklist that has been

followed in order to produce this study. Articles were searched electronically from August to November in order to compile a list of relevant research about resilience and EI. We searched in the two highly valued databases which contain relevant scientific literature (SCOPUS and Web of Science), with restrictions on the publication year (2013–2022) and document types (articles).

The string of descriptors defines the general lines of the research: (("emotional intelligence" OR "EI") AND "resilience" AND ("secondary education" OR "secondary school" OR "high education" OR "high school" OR "teen\*" OR "youth" OR "young people")). This search strategy produced a total of 99 publications which were exported to EndNote to identify duplicate articles. Then, the inclusion and exclusion criteria were applied to select what articles will be studied.

#### Inclusion and Exclusion Criteria

Looking at title, keywords and abstracts some articles that were not in line with our objectives were removed. The criteria were:

- Studies had to be published in scientific journals, we refused articles in web pages or non-specialized blogs, book chapters, among others.
- Articles had to be written in English or Spanish language, we refused studies in other languages.
- Participants had to be adolescents of high school, between 10–18 years old. Articles whose participants were primary school students and university students were refused.
- Articles had to be an experimental, quasi experimental or descriptive research. We refused grey literature and people's opinion research.
- Articles had to include both "resilience" and "emotional intelligence" as a measured variable. We refused articles
  that only studied one of them.
- Articles had to explain what effects the resilience or EI have, we refused articles whose objective was not the effects of the variables mentioned before. Moreover, they had to show the relationship between them.

After enforcing these criteria, each article was examined with the objective of verifying that main sections have been included. We looked at the research objective in introduction, the sample and data collection in methodology, explications of results, and discussion to verify if objectives had been answered. At the end, 12 relevant articles were included in this systematic review. Figure 1 shows the identification, screening, and eligibility process recommended by PRISMA.

#### Search Process

The three authors searched separately the different databases and analyzed the papers found. Removing papers that did not follow our criteria, each author compiled a list of relevant preselected studies at first. Any disagreement was resolved by the researchers in a respectful way. Later, the authors compared their results and obtained a consensus.

#### Data Collection Process

Each author analyzed independently each article selected and collected specific data. Data extraction was carried out based on:

- 1. Authors and year of publication;
- 2. Objective or objectives;
- 3. Variables measured;
- 4. Instruments used;
- 5. Participants. This column includes the country or region of adolescents;
- 6. Results of research based on mainly emotional intelligence and resilience.

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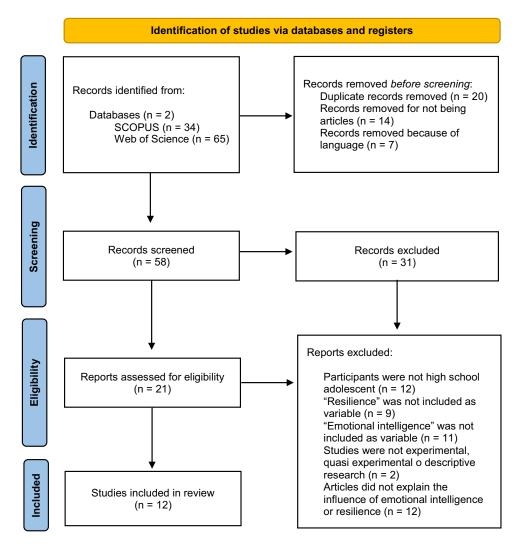


Figure 1 Diagram of Search and Selection of Analysed Studies.

#### **Results**

Several pieces of information have been included in Table 1, for instance, objectives, variables, measurements, samples, and results. Although the research variables were similar in the studies, the measurement instruments were sometimes different. The capacity of the sample was from 70 to 1235. Most of articles selected measure the levels and relationship between variables, except the last one that carry out a program to train resilience and EI and study the differences between pre-test and post-test.

Our central objective is to look for articles that study the relationship between emotional intelligence and resilience. To get it, we raised different research questions.

## Frequency

Considering that we have looked for articles published since 2013 up to now, we can affirm that 2019 is the year with a greater number of publications, followed by 2020. On the other hand, no articles were selected from 2013, 2016 and 2022. It is supposed to be a topic of interest nowadays because the most publication were made in the last five years as we can see in Figure 2.

Table I Selected Articles Results

Authors	Objectives	Variables	Instruments	Participants	Results
Di Fabio and Saklofske (2014) <sup>63</sup>	To investigate the role of fluid intelligence, personality traits and different models of emotional intelligence in relation to core self-evaluation, resilience, and life satisfaction.	Fluid intelligence Personality traits Ability-based emotional intelligence Trait emotional intelligence Resiliency Satisfaction with life	Advanced Progressive Matrices Big Five Questionnaire Mayer Salovey Caruso Emotional Intelligence Test Bar-On Emotional Intelligence Inventory Trait Emotional Intelligence Questionnaire Cores Self-evaluation Scale Connor-Davidson Resilience Scale Satisfaction With Life Scale	164 Italian high school students	Fluid intelligence does not affect in any variable.  Results of Mayer Salovey Caruso Emotional Intelligence Test have not significant correlations with any variable.  Core self-evaluation is positively and significatively correlated to some personality traits (extraversion, conscientiousness, emotional stability, and openness).  Resilience is positively and significant correlated to all personality traits (p<0.05) and emotional intelligence (p<0.01).  Life satisfaction is positively and significantly correlated with personality traits (except openness), emotional intelligence, and resilience.
Di Fabio y Kenny (2015) <sup>80</sup>	To find how Emotional Intelligence and support contribute to resilience, self-perceived employability, and career decision self-efficacy	Emotional intelligence Teacher support Friend support Resilience Self-perceived employability Career Decision Self-Efficacy	Bar-On Emotional Quotient Inventory The Teacher Perceived Social Support Scale The Friend Perceived Social Support Scale The short version of the Connor-Davidson Resilience Scale Self-perceived Employability scale for Students The Career Decision Self-Efficacy Scale-Short Form	254 Italian high school students	Emotional intelligence and social support contribute significantly to resilience (p<0.001), employability (p<0.001) and career decision (p<0.05).
Mestre et al (2017) <sup>81</sup>	To investigate the relationship between emotional regulation abilities and strategies, and resilience.	Resilience Emotion Regulation Ability Cognitive Emotion Regulation Strategies Personality traits Verbal Intelligence	Resilience Scale for Schoolchildren Sections D and H of the Spanish version of the Mayer-Salovey-Caruso Emotional Intelligence Test Cognitive Emotion Regulation Questionnaire Spanish version High School Personality Questionnaire Spanish version	164 Spanish high school students	Emotional regulation ability,  Positive reappraisal and sociability are the variables that better predict total resilience.  Emotional intelligence (emotion regulation ability, self-blame, acceptance and focus on thought) has a positive and significant correlation to resilience (p<0.01).  The subscales of Cognitive Emotion Regulation have not the same results. Only positive refocusing, refocus on planning, positive refocusing, sociability, and ego-strength (p<0.05) are positively and significantly correlated to resilience. On the other hand, dominance is negatively and significatively correlated to resilience (p<0.01).  In personality, only conscientiousness, venturesome and will power be positively and significatively correlated to resilience (p<0.01).

(Continued)

Table I (Continued).

Authors	Objectives	Variables	Instruments	Participants	Results
Kobylarczyk and Oginska-Bulik (2018) <sup>64</sup>	I. To investigate the relationship between emotional intelligence, resilience, and personal growth.  2. To examine the mediating role of emotional intelligence in the relationship between personal growth and resilience.	Variables  ● Personality growth  ● Resilience  ● Emotional Intelligence	■ The KOW-27 Personality Growth Questionnaire ■ The SPP-18 Resiliency Measurement Scale ■ INTE Emotional Intelligence Questionnaire	Participants  101 Polish adolescents	Relationship between the type of negative live situation and the severity of personal growth is not found. The time passes since the event does not affect neither.  There is a positive relationship between emotional intelligence and personal growth - general. It is statistically significant (p<0.05). The interaction between emotional intelligence and resilience will result in higher levels of personal growths.  "Greater appreciation of life" is positively associated with both, emotional intelligence and resilience. However, "Changes in self-perception and in relating to others are not significantly related to resilience or emotional intelligence. Emotional intelligence plays a mediating role between resilience and personal growth. Adolescents characterized only by a high level of resilience will less frequently improve
Trigueros et al (2019) <sup>56</sup>	To investigate the influence of emotions on the resilience, motivation, academic performance, and adoption of healthy lifestyle habits.	<ul> <li>Emotional intelligence</li> <li>Emotions</li> <li>Resilience</li> <li>Motivation</li> <li>Intention to be physically active</li> <li>Academic performance</li> </ul>	<ul> <li>Spanish version of the Emotional Intelligence Scale in PE</li> <li>Questionnaire on Emotional State in PE</li> <li>Scale on Resilience in PE classes</li> <li>Spanish version of the Perceived Locus of Causality Revised</li> <li>Spanish version of the Intention to be Physically Active</li> <li>Grades obtained</li> </ul>	615 Spanish secondary school students	personal growth than those who are resilient and have a well- developed emotional intelligence.  Emotional intelligence is positively associated to positive emotions, self-determined motivation, resilience, academic performance, and intention to be physically active. There we can find significant differences (p<0.001)  Negative emotions are negatively related to all the variables with significant differences (p<0.05).  Resilience has a positive correlation with academic performance, self-determined motivation, and intention to be physically active. There we can find significant differences
Molero et al (2019) <sup>67</sup>	To investigate the influence of emotional intelligence, resilience, and family on adolescents' use of alcohol and tobacco.	Emotional intelligence     Resilience     Family Functioning     Use of alcohol and tobacco     Self-concept	The Brief Emotional Intelligence Inventory for Senior Citizens The Spanish version of Resilience Scale for Adolescents The Family Function Scale The Spanish adaptation of the Alcohol Expectancy Questionnaire-Adolescent The Five-Factor Self-Concept Questionnaire	317 Spanish high school students	(p<0.001)  Non-user groups scored higher in stress management (a component of El) (p<0.05 for alcohol and p<0.01 for tobacco).  Non-user groups scored higher in family cohesion (a component of resilience) (p<0.05 for both).  Frequency of use of alcohol or tobacco did not correlate with any of the emotional intelligence factors, resilience, or family functioning.  The intrapersonal factor (component of El) is a protective factor against alcohol.  Family cohesion (resilience factor) and stress management (El factor) negatively predict the risk of being a smoker.

Chen (2019) <sup>70</sup>	To investigate the relationships among emotional intelligence, perceived social support and resilience.      To investigate how school type difference impacts these relationships.	Emotional intelligence     Perceived Social Support     Resilience	Trait Emotional Intelligence Questionnaire-Adolescent Short Form The Multidimensional Scale of Perceived Social Support Resilience Scale for Chinese Adolescents	493 Chinese adolescents	The effect of emotional intelligence on students' resilience depends on their perceived social support from friends. Friends are a significant predictor (p<0.05), but family is not (p>0.05). The perceived social support from friends depends closely on school type.  There are not significant differences between genders. The effect of trait El on resilience is consistently positive. There are significant differences in school type when the perceived social support is from low to moderate level, however, when the support is at a high level, they are not significant.
Zhao et al (2019) <sup>69</sup>	To investigate the relationship between emotional intelligence and adolescents' positive and negative affect by exploring the mediating roles of social support, personal resilience, and prosocial behavior.	Trait Emotional Intelligence Personal resilience Social support Prosocial behavior Positive and negative affect Family incomes Type of school	<ul> <li>A self-rated scale by Wong and Law</li> <li>Connor-Davidson Resilience Scale</li> <li>Multidimensional Scale of Perceived Social Support</li> <li>The Perceived Social Competence Scale</li> <li>The Positive and Negative Affect Schedule for Children</li> </ul>	714 Chinese high school students	Direct effect of emotional Intelligence is positively related personal resilience (p<0.001), social support (p<0.001) and prosocial behavior (p<0.001). Emotional intelligence has a positive indirect influence on positive affect via personal resilience. However, it is not significative for negative affect. Moreover, we can find a positive relationship between emotional intelligence and family income, and between emotional intelligence and school ranking. It could indicate that the family status and school circumstances have potential influences on emotional intelligence.  Personal resilience, social support and prosocial behavior are positively related to positive affect (p<0.05). Social support is negatively related to negative affect (p<0.001).  Positive affect is negatively correlated to negative affect (p<0.001).
Droppert et al (2019) <sup>32</sup>	To investigate whether resilience mediate the relationship between emotional intelligence and school achievement.	<ul> <li>Emotional Intelligence</li> <li>Resiliency</li> <li>Academic performance</li> </ul>	<ul> <li>SUEIT-A</li> <li>Resiliency Scales for Children and Adolescents</li> <li>Grade Point Average</li> <li>Final secondary education scores</li> </ul>	I53 Australian boys' high school	Grade point average is significantly and positively correlated with emotions direct cognition (p<0.05), understanding emotions of others (p<0.05) and emotional management and control (p<0.01). Three of the four emotional intelligence subscales predict variance in grade point average. Emotional management and control, understanding emotions of others and emotional recognition and expression significantly predict variance in all global subscales of resilience. Three of the four emotional intelligence subscales predict variance in resilience.  Only reactivity (a subscale of resilience) mediates the relationship between emotional intelligence and academic performance.
Fiorilli et al (2020) <sup>57</sup>	To investigate the role of emotional intelligence in preventing students' school burnout, considering the academic resilience and anxiety.	Emotional Intelligence     Academic anxiety and resilience     Students' burnout	The Trait Emotional Intelligence Questionnaire-Short Form for adolescents The Italian Questionnaire for Anxiety and Resilience for students School burnout Inventory	1235 Italian high school students	Emotional intelligence is positively related to resilience. Emotional intelligence is negatively related to anxiety. Emotional intelligence and resilience are negatively related to school burnout.  School burnout is positively related to anxiety.  All of them have significant differences (p<0.01)

Collado-Soler et al

Collado-Soler et al

Table I (Continued).

Authors	Objectives	Variables	Instruments	Participants	Results
Zheng et al (2020) <sup>85</sup> Cerit and Simsek (2021) <sup>86</sup>	To investigate the bidirectional relationship between emotional intelligence and resilience.  To investigate the effect of a training program on resilience and emotional intelligence.	Trait Emotional Intelligence Resilience Risk factors Protective factors  Resilience Emotional intelligence	The self-reported Emotional Intelligence Scale The Resilience Scale (CD-RISC) The Shanghai High School Student Development Questionnaire  Resilience Scale developed by Gürgan in 2006. Emotional Intelligence Evaluation Scale developed by	988 Chinese high school students  70 Turkish high school students	For emotional intelligence, resilience and support, it is observed a significant effect of time (p<0.05; p<0.01; p<0.05, respectively).  Compared with T1 and T3, the level of emotional intelligence and resilience at T2 is higher, and the level of T1 is higher than T3. Causes are not explained.  Resilience was divided into different subscales:  We can not find significant differences between groups in
(2021)	on resilience and emotional intelligence.	Social skills	Hall in 1999.	school students	We can not find significant differences between groups in Being strong, achieving a goal and being an explorer.  We can find that intervention group has higher results in being an entrepreneur, being optimistic, and being able to communicate in the follow-up results.  In post-test, the intervention group has better scores in being a leader.  Regarding to emotional intelligence, we can find that no significant increase was observed between groups in post-test. However, in follow up there is a significant difference in the awareness of emotions, self-motivation and empathy subscales, and in the overall emotional intelligence mean scores in favor of intervention group.

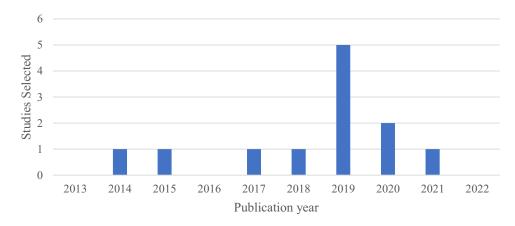


Figure 2 Frequency of selected studies by year.

## Geographic Region

Among the 12 studies that were included, 3 were from Italy, 3 from Spain, 3 from China, 1 from Poland, 1 from Australia, and 1 from Turkey (Figure 3). We can affirm that most of them were carried out in Europe, but we can appreciate a short variety.

#### Variables Studied

Taking into account that studies usually study more than one variable, we can find 17 groups of variables. The most repeated variables are Resilience which appears in every article, and EI which have been divided into different categories depending on the study. In this way, we can find "emotions", "personality traits or growth", "emotion regulation ability" and "cognitive emotion regulation" apart from EI and its two conceptualizations.

Moreover, other variables studied are support in 3 out of 12 articles, academic performance (2 out of 12), satisfaction with life, motivation, or social skills, among others. Table 2 shows the variables and frequency.

# Emotional Intelligence and Resilience

Table 1 shows the results of the different articles selected. There we can find that negative emotions are negatively and significantly related to academic performance, self-determined motivation, and intention to be physically active. In fact, school burnout is positively related to anxiety. On the other hand, grade point average is significantly and positively correlated with emotions direct cognition, understanding emotions of others and emotional intelligence subscales. Core self-evaluation and life satisfaction are also positively and significantly correlated with personality traits. Moreover, the family status and school circumstances have potential influences on emotional intelligence. In this sense, social support is related to positive affect, an essential component of EI. In addition, social support is an important protective factor that increases resilience.

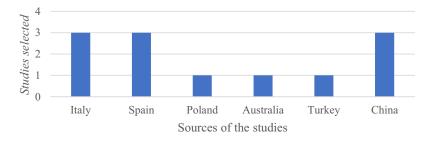


Figure 3 Frequency of selected studies by country.

Collado-Soler et al Dovepress

Table 2 Variables Studied in Articles Selected

Variables			Frequency
Intelligence	Fluid Intelligence		Ţ
	Verbal intelligence		1
	Emotional Personality traits		2
	intelligence	Ability-based El	1
		Trait El	3
		General El	8
		Emotion regulation ability	1
		Cognitive Emotion Regulation	1
		Personality growth	1
		Emotions	1
Support		Teacher support	1
		Friend support	2
	Per	2	
	Family incomes		I
Resilience			12
Satisfaction with life			1
Self-perceived er	1		
Career Decision	1		
Motivation	I		
Intention to be p	1		
Academic perfor	2		
Use of alcohol a	1		
Self-concept	1		
Positive and nega	1		
Type of school	1		
Students' burnou	1		
Risk factors	1		
Protective factor	1		
Social skills	I		

On the contrary, risk factors turn up such as the use of alcohol and tobacco. Non-user shows higher scores in stress management (a component of EI) and in family cohesion (a component of resilience). Apart from that, results affirm that the frequency of use did not correlate with emotional intelligence factors or resilience.

What happens with the relationship between EI and resilience? Resilience is positively and significantly correlated to EI, and EI has a positive and significant correlation to resilience. The interaction between them results in higher levels of personal growth, but resilient people will less frequently improve personal growth compared to resilient and emotionally intelligent people. Answering the fourth research question: Does emotional intelligence affect resilience or does resilience affect emotional intelligence? We have to say that most of the studies refers to EI predicting resilience.

On the other hand, Cerit and Simsek conducted experimental research, where the control group showed worse results on the subscales: being a leader, being entrepreneurial, being optimistic, being able to communicate, being aware of emotions, self-motivation and empathy, than the experimental group. These results indicate the importance of training emotional intelligence and resilience.

#### **Discussion**

This systematic review has presented an analysis of the influence of emotional intelligence and resilience in other variables and the relationship between them.

Referring to the field of academia, our results show that EI and resilience are positively associated with academic performance<sup>56</sup> and negatively related to school burnout.<sup>57</sup> Similarly, several authors found that students who feel less resilient have high levels of burnout.<sup>58,59</sup> Resilience also positively predicts self-motivation.<sup>56</sup> In this line, some studies have affirmed that high levels of self-motivation result in greater commitment in lessons, displaying a high academic achievement.<sup>60</sup>

Furthermore, higher EI promote a deeper sense of life satisfaction because it is related to being able to use adequately more resources. 61,62 Our results are in line with it, as di Fabio and Saklofske 63 affirm, life satisfaction is positively and significantly correlated with EI and resilience. In this sense, Kobvlarczyk and Oginska-Bulik obtained in their findings that the interaction between EI and resilience results in higher levels of personal growths, playing EI a mediating role between the other two variables. 64 Other studies confirm this role of EI, for instance, Schutte and Malouff. 65 Alegre and Benson 66 found EI as a mediator between family attitudes and behavior adjustment in young children.

In this sense, the family is a predictor not only of behaviour. In our results, Trigueros et al<sup>67</sup> affirm that family cohesion negatively predict the risk of being a smoker because non-smoker adolescents present higher scores in family cohesion. This result is in line with Zurita and Álvaro<sup>68</sup> who found better family functioning score in non-smokers youngs. Moreover, Table 1 shows that there is a positive relationship between family income and EI,<sup>69</sup> which make us to suppose that family status can potentially influence EI.

On the contrary, Chen<sup>70</sup> find that family support is not a significant predictor of the effect of EI on resilience, but friends support is. Previous literature corroborated it.<sup>71</sup> It could be explained by the period of life, adolescents try to become independent from their family and form close friendships.<sup>72</sup> Thomas and Baek<sup>73</sup> verified that friendship is the most important social support among adolescents. However, it does not mind that family support is not important, it plays a critical role in adolescents' development though adolescents do not perceive it.<sup>74</sup>

In general, social support is positively related to emotional intelligence, reducing the negative impact that unpleasant events can have.<sup>69,75</sup> It is true that facing challenges allow adolescents to learn and utilize EI,<sup>76</sup> nonetheless social content and support is important too.<sup>77</sup>

Finally, people who have higher levels of EI perceive themselves more capable to deal with negative experiences and to cope with adversity. This mean that EI has a close relationship with resilience. Our results confirm these previous findings: EI is positively related to resilience and support it. S6,57,69,80,81 In general, EI helps people maintain optimistic feelings and deal with difficulties, In addition, EI helps people interpret other's emotion. Our results, which indicate that understanding emotions of others predict resilience, support that idea. In conclusion, it can be affirmed that resilience is affected by emotional intelligence whose essential component, social support, exerts an important mediating influence on the relationship between the two variables.

#### Conclusion

Emotional intelligence and resilience are essential factors in our lives that can make us happier and healthier. This is the mean reason to consider the importance of taking educative programs in schools and high schools. We mention these two stages because there the children are growing up not only in a physical way but also in a mental and personal way. In this line, our proposal for future research goes. Indeed, some authors said that EI is amenable to training.<sup>84</sup>

PRISMA methodology used to have veracity in social science research because of its strengths: transparency and openness. This's the reason why we follow their recommendations. Nevertheless, some limitations can be found. Book chapters and grey literature were refused because we looked for experimental or descriptive research, selecting articles published in specialized journals. Moreover, articles written in English or Spanish were accepted, refusing others language. On the other hand, we found a wide range of articles that show the relationships between different variable and the narrow relation between EI and resilience.

### **Author Contributions**

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically

Collado-Soler et al Dovepress

reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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