The role of Emotional Intelligence in Psychological Adjustment among Adolescents

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Título: Inteligencia emocional y su papel en el ajuste psicológico en la adolescencia.
Resumen: El objetivo del presente trabajo es analizar el papel de la inteligencia emocional y diferentes aspectos psicológicos en el contexto escolar. Se comparan factores psico-sociales en un centro en zona de riesgo social frente a un centro en zona normativa, en los que 211 adolescentes españoles con una edad media de 13 años. Se empleó el *Emotional Intelligence Inventory: Young Version* de Bar-On (EQi:YV) y el *Autoinforme de Personalidad para adolescentes del sistema de evaluación (*BASC). Se encontraron diferencias en la prevalencia de los problemas conductuales según el contexto escolar y según los niveles de inteligencia emocional. Además, se encontraron correlaciones positivas entre el ajuste psicológico y todas las escalas del EQi:YV. Los modelos de regresión múltiple obtenidos destacan la influencia del estado de ánimo y la relación de con los padres como factores para el ajuste psicológico y la inteligencia emocional.
Palabras clave: inteligencia emocional; ajuste psicológico; contexto escolar; adolescencia.

Abstract: This research aims to analyse the role of emotional ingelligence and various psychological factors in school environment. This paper compare psychosocial factors from a school in social risk area with a school in normative area, where in 211 spanish adolescents with a average age of 13 years participated. The Bar-On *Emotional Intelligence Inventory: Young Version* (EQi:YV) and the Behavior Assessment Sysem for Children (BASC) were used. Differences in behavior problems were found according to school environment and emotional intelligence level. Furthermore, positive correlations between psychological adjustment and all scales from EQi:YV were found. Multiple regression models obtainted emphasized the influence of general mood and parents relationship as factors to psychological adjustment and emotional intelligence.
Key words: emotional intelligence; psychological adjustment; school context; adolescent.

Introduction

Emotional Intelligence (EI) has been explored in many psychological aspects, such as aggressive behaviour and substance abuse (Coccaro, Solis, Fanning, & Lee, 2015; Garaigordobil & Peña-Sarrionandia, 2015; García-Sancho, Salguero, & Fernández-Berrocal, 2014, 2016; Gugliandolo, Costa, Cuzzocrea, & Larcan, 2015), attitudes and antisocial behaviours (Brackett, Mayer, & Warner, 2004), socio-moral competencies in bullying (Sánchez, Ortega, & Menesini, 2012; Schokman et al., 2014), interpersonal relationships (Salguero, Fernández-Berrocal, Ruiz-Aranda, Castillo, & Palomera, 2011), prevention of internalizing problems (Ruiz-Aranda et al., 2012), depression (Lombas, Martín-Albo, Valdivia-Salas, & Jiménez, 2014), suicide (Abdollahi & Talib, 2015), life satisfaction (Rey, Extremera, & Pena, 2011), professional success (de Haro & Castejón, 2014), mood (Villanueva, Prado-Gascó, González, & Montoya, 2014), anxiety disorders (Ahmadpanah et al., 2016; Diaz-Castela et al., 2013), academic performance (Aritzeta et al., 2016), family relationships (Argyriou, Bakoyannis, & Tantaros, 2016; Contreras & Cano, 2016; Lim, You, & Ha, 2015), and so forth.

EI has been defined according to several different theoretical models. A model focusing on mental abilities defines EI as the ability to control one's own and other's emotions, such as discriminating and using control for behaviour regulation (Salovey & Mayer, 1990); while a model of mental abilities with personality traits defines EI as a set of emotional, cognitive and behavioural skills (and competencies) influencing emotional self-awareness, interpersonal relation-ships and daily life problem solving (Baron-Cohen & Hammer, 1997). This model differentiates basic emotional competencies (self-regard, emotional self-awareness, assertiveness, empathy, etc.) and emotional facilitator competencies (optimism, self-fulfilment, happiness, emotional independence, social responsibility, etc.), combining these competencies in turn with five components: intrapersonal, interpersonal, stress management, general mood and adaptability.

Therefore, the conceptualization of EI is very important to making decisions on what and how to assess, and during intervention, what type of training programmes are selected. However, the difficulty of EI assessment in childhood and adolescence should be noted. As shown by Fenández-Berrocal, Salguero, Noguera, Castillo & Ruiz-Aranda (2010), there is a lack of validated instruments to exhaustively assess all the EI dimensions at these ages, and they are assessed as if they occurred in adults. A review by Extremera, Fernández-Berrocal, Mestre & Guil (2004) differentiated self-report and ability tests. Specifically, the Spanish validation by Fernández-Berrocal, Extremera & Ramos (2004) of the Trait Meta-Mood Scale (TMMS-48, Salovey, Mayer, Goldman, Turvey y Palfai, 1995), is made up of emotional attention, emotional clarity and emotional repair components. Likewise, the Bar-On Emotional Quotient Inventory (Bar-On & Parker, 2000) is composed of intrapersonal, interpersonal, stress management, general mood and adaptability dimensions, following this author's theoretical framework, with both self-report and external observation scales. Among the ability scales is the Mayer-Salovey-Caruso Emotional Intelligence Test (Mayer, Salovey, & Caruso, 2001), which assesses EI by means of emotional tasks that must be solved.

Moreover, Palomera, Salguero & Ruiz-Aranda (2012) found relationships between psychological adjustment and EI in adolescents, more specifically, a higher level of emotion identification was found to be a predictive factor in psy-

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chological adjustment. While children move towards adolescence, emotional perception ability is related to better academic adjustment in social relationships, less tension and stress, better parental relationships, as well as more self-confidence and perceived personal competence (Salguero et al., 2011). Similarly, the development of personality patterns has been related to perceived EI. Specifically, problems in emotional compression and regulation are associated with avoidance, depression, dependence or limiting personality patterns (Ruiz, Salazar, & Caballo, 2012). Intervention in emotional competencies is a useful tool for facilitating emotional adjustment (Guil & Gil-Olarte, 2007) and optimizing human development, so that emotional education is an unspecific primary prevention that reduces some dysfunctional behaviours (Bisquerra, 2003). Finally, as the most direct antecedent of this study, Zalava & López (2012) explored the relationships between psychosocial risk and EI in a Mexican adolescent population from social risk areas, in which negative correlations were found between EI and some social risk behaviours (substance abuse, impulsivity, susceptibility to delinquency, etc.).

In view of the above, the aim of this study was to explore the relationships of EI and behavioural and personality aspects, as well as to analyse the differences in EI profile, that is, low, medium or high EI coefficient and psychological adjustment to socio-academic context, to finally evaluate potential relationships between adolescent psychological adjustment and development of EI. Differences in an academic context (an ordinary school and a compensatory education centre) are assessed. Distinguishing factors necessary to adapt intervention and prevention programmes for optimal development of EI, in both populations, are determined.

Method

Participants

The study sample was made up of students in their first, second and third year of compulsory high school education at two schools in Almeria (Spain). One was a compensatory education school in the outskirts of the city with 53 participants (25% of sample) 28 males (52.8%) and 25 females aged 12 to 16 years (*M*=13; *SD*=1.02), and another normative school from a medium socio-economic and socio-educational area with 158 participants (75% of sample) of whom 77 were males (48.7%) and 88 were females aged 12 to 17 years (*M*=13; *SD*=1.15).

The total sample was comprised of 211 students (49.8% males) with a mean age of 13 years (*SD*=1.12).

Instruments and variables

As the variables of the study are EI and behaviour and personality characteristics of the sample, the instruments employed were:
- The Emotional Intelligence Inventory: Young Version

(EQi:YV, Bar-On & Parker, 2000), Spanish adaptation, was used to assess EI. It is a self-report questionnaire for children to adolescents aged 7 to 18 years. The inventory is composed of 60 Likert-type items from 1 (rarely happens) to 4 (frequently happens). In addition to the Emotional Intelligence Coefficient, the inventory assesses the following EI components:
(1) Intrapersonal: emotional compression, or the ability to express and communicate one's own feelings and needs.
(2) Interpersonal: the ability to listen, understand and appreciate others' emotions.
(3) Adaptability: the ability to deal with daily problems.
(4) Stress management: the ability for self-control, keeping calm and coping with stressful situations.
(5) General Mood: the ability to keep a positive appearance, optimism and feel satisfied with oneself and others.

The reliability of the Spanish version, which was validated in a Spanish population aged 6 to 18 years, has a Cronbach's alpha of .63 to .80 in five dimensions (Ferrándiz, Hernández, Bermejo, Ferrando, & Sáinz, 2012).

- The Behaviour Assessment System for Children and Adolescents 2nd Edition (BASC) was used for assessing behavioural and personality characteristics. The BASC questionnaire is for 3 to 18 year-olds with parent, teacher and self-report versions. The Self-Report Scale for children aged 12 to 18 years (BASC-S3) was used in this study. The Spanish validation has demonstrated satisfactory psychometric properties, which are specified for each scale (González-Marqués, Fernández-Guinea, Pérez-Hernández, Pereña, & Santamaría, 2004).

The instrument assesses 14 areas classified in clinical and adaptive scales:
(1) BASC Clinical Scales: negative attitude toward school (α= .83), negative attitude toward teachers (α= .75), sensation-seeking (α= .76), locus of control (α= .72), somatization (α= .56), social stress (α= .76), anxiety (α= .73), depression (α= .80) and feeling of inadequacy (α= .74).
(2) Adaptive scales: interpersonal relationships (α= .79), parental relationships (α= .64), self-esteem (α= .83), self-confidence (α= .37)
(3) Global dimensions to delimit educational and clinical risk situations: (a) Clinical maladjustment (α= .86), comprising anxiety, atypicality, locus of control and somatization; (b) School maladjustment (α= .87), composed of negative attitude toward school, negative attitude toward teachers and sensation-seeking; (c) Personal adjustment (α= .84), composed of interpersonal relationships, parental relationships, self-confident and self-esteem; and (d) Emotional Symptoms Rate (ESR) (α= .92) composed of anxiety, interpersonal relationships, self-esteem, social stress, depression and sense of inadequacy.

The EQi:YV was used mainly to acquire an EI coefficient in agreement with a theoretical model that conceptualizes EI as a personality pattern, as the aim of the study was to explore relationships between EI and psychological adjustment as assessed by BASC, which is conceptualised as a

personality trait. So both dependent variables are based on the same theoretical framework.

Procedure

Participation was completely anonymous, voluntarily and with prior parental authorization. Instruments at each school were administered using age offset. The assessment was made in two one-hour sessions, with one week between sessions.

Data analysis

The purpose was to explore relationships of EI with all the BASC-S3 scales. SPSS Statistics 21 statistical software was employed. First we analysed data normality with the Kolmogorov-Smirnov test. Then we performed the Spearman correlation to analyse the correlation of variables to total sample and groups. Afterwards, we did a descriptive analysis. Differences between dependent variables and schools were explored with a Mann-Whitney nonparametric U test, and differences based on EI level (low, medium or high EI) with the Kruskal-Wallis test for the whole sample and for each school.

Finally, stepwise regression analyses were done using personal adjustment as the dependent variable and the EQi:YV scales as independent variables to determine which EI variables predict psychological adjustment in adolescents. The Emotional Intelligence Coefficient was also employed as the dependent variable and the BASC-S3 scales for which the Mann-Whitney U test had found significant differences as independent variables.

Results

First a descriptive analysis of the scores on each scale was done (see Table 1). As observed, the EI coefficient was 106.08 points, which was the score at the 30th percentile, that is, a low and medium EI. Specifically, adolescents from the compensatory education school (CS) had a mean score of 104.18 (25th percentile) while adolescents from the ordinary school (NS) had a higher mean score (106.72), but not very high, either.

The mean BASC-S3 scores at both schools were in a middle range. The subscales with the highest significant percentage at the NS were: negative attitude toward teachers (19.6%; M=53.21), negative attitude toward school (14.6%; M=55.19) and self-esteem (14.6%; M=48.10), while at the CS, scores in atypical behaviour (11.3%; M=53.50) and somatization (7.5%; M=52.39) were higher (see Table 1).

Table 1. Mean punctuation and SD in EQi:YV and BASC-S3 in normative ordinary school (NS) and compensatory education centre (CS).

	Normative school (NS)		Compensatory school (CS)	
	M	*SD*	*M*	*SD*
EQi:YV				
1.Intrapersonal	14.38	(2.84)	13.28	(3.01)
2. Interpersonal	36.85	(5.02)	35.81	(4.84)
3. Stress Management	27.08	(4.62)	27.24	(5.05)
4. Adaptability	28.39	(6.01)	27.84	(5.62)
5. Mood	43.72	(6.51)	44.66	(4.91)
6. EI coefficient	106.72	(12.18)	104.18	(12.42)
BASC-S3				
Negative attitude school	53.21	(11.92)	48.84	(9.55)
Negative attitude teacher	55.19	(12.22)	47.13	(7.96)
Seek sensations	51.03	(10.25)	51.34	(9.30)
Atypical behaviour	51.32	(10.53)	53.50	(10.15)
Locus of control	52.91	(11.84)	55.13	(7.37)
Somatization	50.10	(12.31)	52.39	(11.47)
Social stress	52.22	(13.08)	49.41	(7.77)
Anxiety	51.05	(9.50)	47.92	(9.89)
Depression	52.86	(14.21)	51.90	(8.69)
Sense of inadequacy	51.39	(12.12)	52.96	(7.43)
Interpersonal relations	47.62	(15.08)	49.69	(7.92)
Parental relations	47.41	(13.29)	52.39	(9.18)
Self-esteem	48.10	(12.18)	51.54	(7.14)
Self-confidence	48.77	(10.45)	50.94	(8)
Clinical maladjustment	52.25	(11.67)	53.28	(9.76)
Academic maladjustment	54.24	(11.50)	49.54	(7.96)
Personal adjustment	47.37	(13.60)	51.58	(7.76)
ESR	52.89	(13.94)	50.41	(7.66)

The correlation analysis of the total sample found mostly positive relationships, that is, a direct relationship between variables (see Table 2). The EQi:YV Stress Management and Mood scales correlate with the majority of the BASC-S3 scales. Furthermore, the personal adjustment scale correlates with all the EQi:YV scales. However, interpersonal relationships and the EI coefficient scales had a lower correlation.

Table 2. Spearman correlation analysis of the total sample.

	1.	2.	3.	4.	5.	6.
Negative attitude school	-.097	-.143*	.156*	-.119	-.179**	-.08
Negative attitude teacher	-.037	-.103	.119	-.193**	-.162*	-.123
Seek sensations	.016	-.017	.165*	.003	.01	.049
Atypical behaviour	.082	-.054	.365**	-.082	-.222**	.093
Locus of control	-.029	-.092	.373**	-.037	-.242**	.058
Somatization	.045	-.076	.139*	-.132	-.286**	-.048
Social stress	-.083	-.064	.292**	-.056	-.351**	.034
Anxiety	.051	.056	.266**	-.04	-.213**	.087
Depression	-.053	-.108	.240**	-.197**	-.377**	-.084
Sense of inadequacy	-.099	-.062	.267**	-.241**	-.433**	-.083
Interpersonal relations	.125	.234**	-.186**	.202**	.331**	.151*
Parental relations	.093	.175*	-.243**	.290**	.353**	.162*
Self-esteem	.135*	.071	-.207**	.219**	.601**	.108
Self-confidence	.196**	.213**	-.136*	.227**	.433**	.196**
Clinical maladjustment	.041	-.039	.387**	-.074	-.305**	.082
Academic maladjustment	-.062	-.108	.161*	-.122	-.138*	-.078
Personal adjustment	.194**	.213**	-.239**	.274**	.544**	.191**
ESR	-.054	-.123	.341**	-.162*	-.485**	-.026

* $p < .05$; ** $p < .01$.

Apart from this, a Spearman correlation analysis was done for each school (NS and CS) (see Table 3). At the NS we found that the stress management and mood scales correlated with all the BASC-S3 scales except for sensation-seeking, and personal adjustment correlated with all the EQi:YV scales: interpersonal ($r = .240$; $p < .01$), intrapersonal ($r = .223$; $p < .01$), stress management ($r = -.323$; $p < .01$), adaptability ($r = .259$; $p < .01$), mood ($r = .597$; $p < .01$) and EI coefficient ($r = .170$; $p < .05$), but at the CS, correlation was found only for the EQi:YV intrapersonal ($r = .339$; $p < .05$), adaptability ($r = .283$; $p < .05$), mood ($r = .294$; $p < .05$) and EI coefficient ($r = .294$; $p < .05$).

Tabla 3. Spearman correlation analysis for each school.

	1.	2.	3.	4.	5.	6.
Normative School (NS) - ($n = 158$)						
Negative attitude school	-.169*	-.192*	.225**	-.192*	-.271**	-.131
Negative attitude teacher	-.098	-.199*	.183*	-.245**	-.163*	-.176*
Seek sensations	-.007	-.057	.151	-.055	-.048	-.007
Atypical behaviour	.075	-.048	.383**	-.073	-.280**	.093
Locus of control	-.029	-.055	.412**	-.033	-.312**	.088
Somatization	.113	-.077	.244**	-.114	-.321**	.009
Social stress	-.123	-.092	.317**	-.085	-.424**	.016
Anxiety	.006	.094	.347**	-.015	-.260**	.128
Depression	-.027	-.08	.311**	-.170*	-.441**	-.013
Sense of inadequacy	-.127	-.077	.311**	-.221**	-.488**	-.07
Interpersonal relations	.132	.236**	-.213**	.223**	.391**	.166*
Parental relations	.217**	.174*	-.290**	.289**	.391**	.179*
Self-esteem	.135	.088	-.266**	.213**	.659**	.083
Self-confidence	.247**	.211**	-.178*	.215**	.483**	.190*
Clinical maladjustment	.04	-.012	.470**	-.058	-.372**	.128
Academic maladjustment	-.116	-.184*	.219**	-.199*	-.195*	-.133
Personal adjustment	.240**	.223**	-.323**	.259**	.597**	.170*
ESR	-.085	-.091	.389**	-.170*	-.572**	-.011
Compensatory education School (CS) - ($n = 53$)						
Negative attitude school	.094	-.085	.055	.033	.108	.072
Negative attitude teacher	.006	.02	.012	-.157	-.235	-.042
Seek sensations	.125	.107	.204	.133	.215	.209
Atypical behaviour	.159	-.068	.318*	-.057	.001	.112
Locus of control	.033	-.163	.187	.054	.155	-.015

	1.	2.	3.	4.	5.	6.
Somatization	-.031	-.044	-.167	-.071	-.133	-.149
Social stress	-.044	.01	.168	.028	-.09	.042
Anxiety	.057	-.13	.07	-.015	-.012	-.065
Depression	-.033	-.252	.018	-.267	-.134	-.310*
Sense of inadequacy	.121	.049	.118	-.186	-.176	-.032
Interpersonal relations	.134	.213	-.018	.145	.165	.165
Parental relations	-.106	.313*	-.064	.402**	.236	.256
Self-esteem	.245	.125	-.007	.171	.297*	.215
Self-confidence	.156	.281*	.047	.317*	.289*	.314*
Clinical maladjustment	.072	-.106	.135	-.018	-.023	-.021
Academic maladjustment	.15	.032	.074	-.002	.022	.094
Personal adjustment	.174	.339*	-.034	.283*	.294*	.294*
ESR	-.029	-.186	.1	-.126	-.169	-.142

*$p < .05$; **$p < .01$.

Later we analysed the scores on different variables for each instrument, comparing the schools with the Mann-Whitney U Test. This analysis found differences in intrapersonal ($Z = -2.45$; $p < .05$), negative attitude to school ($Z=-2.29$; $p< .05$) negative attitude to teachers ($Z=-4.23$; $p< .05$), locus of control ($Z=-2.062$; $p < .05$), somatization ($Z = -1.81$; $p < .05$), anxiety ($Z = -2.007$; $p < .05$), sense of inadequacy ($Z = -2.09$; $p < .05$), parental relationships ($Z = -2.38$; $p< .05$) and academic maladjustment ($Z = 2.54$; $p < .05$), where the scores were higher at the CS in locus of control ($R = 120.92$), somatization ($R= 118.34$), sense of inadequacy ($R = 121.09$) and parents relationships ($R= 122.24$).

Similarly, the BASC-S3 dimensions were compared with EI levels for the entire population, finding significant differences in negative attitude toward school ($x^2 (2, 211) = 7.37$; $p < .05$), negative attitude toward teachers ($x^2 (2, 211) = 10.33$; $p < .05$), depression ($x^2 (2, 211) = 7.43$; $p < .05$), sense of inadequacy ($x^2 (2, 211) = 6.57$; $p < .05$) parental relationships ($x^2 (2, 211) = 10.16$; $p < .05$), self-confidence ($x^2 (2, 211) = 9.80$; $p < .05$), academic maladjustment ($x^2 (2, 211) = 6.65$; $p < .05$) and personal maladjustment ($x^2 (2, 211) = 10.52$; $p < .05$). In an analysis which compared schools, we found differences in negative attitudes to school ($x^2 (2, 158) =7.98$; $p<.05$), negative attitude to teachers ($x^2 (2, 158) = 11.32$; $p < .05$), parental relationships ($x^2 (2, 158) = 7.38$; $p < .05$), academic maladjustment ($x^2 (2, 158) = 6.34$; $p < .05$) and personal adjustment ($x^2 (2, 158) = 6.03$; $p < .05$) at the NS, while at the CS we found differences in depression ($x^2 (2, 52) = 10.22$; $p < .05$), self-confidence ($x^2 (2, 52) = 6.93$; $p < .05$), and personal adjustment ($x^2 (2, 52) = 7.33$; $p < .05$).

Finally, a stepwise regression analysis was done including personal adjustment as the dependent variable and the EQi:YV scales as independent variables to evaluate the influence of the EQi:YV scales on predicting personal adjustment in adolescents. As observed in Table 4, mood and stress management had a higher significant relationship with personal adjustment. These two factors explained 44.9% of the variability in personal adjustment in which mood takes on high importance ($\beta =.635$) and is positive, while stress management shows a negative relationship ($\beta = -.195$).

Table 4. Multiple stepwise regression analysis.

	Non-standard coefficients		Standard coefficients	t	p
	B	Tip. Error	Beta		
1 (Constant)	-8.626	4.806		-1.795	.074
Mood	1.301	.108	.641	12.015	.0
2 (Constant)	5.984	6.066		.987	.325
Mood	1.289	.105	.635	12.269	.0
Stress management	-.52	.138	-.195	-.763	.0

Another stepwise regression analysis was made using the EI coefficient as the dependent variable and the BASC-S3 scales as the independent variable, which found significant differences between schools. As observed in Table 5, parental relationships, locus of control, sense of inadequacy and anxiety variables are related to the EI coefficient, and these relationships are positive, except for sense of inadequacy, which has a negative relationship ($\beta =-.187$). Moreover, the model that explains the highest percentage of EI variability ($R^2=9\%$) is the one which includes all the variables (Model 4). Parental relationships ($\beta =.233$) and sense of inadequacy ($\beta =-.243$) have the most relevance.

Table 5. Multiple stepwise regression analysis.

	No-standard coefficients		Standard C.	*t*	*p*
	B	Tip. Error	Beta		
1 (Constant)	99.309	3.361		29.552	.0
Parental relationships	.139	.067	.143	2.082	.039
2 (Constant)	81.868	7.764		10.544	.0
Parental relationships	.249	.079	.254	3.132	.002
Locus of control	.227	.091	.202	2.485	.014
3 (Constant)	87.127	8.081		10.781	.0
Parental relationships	.228	.079	.233	2.872	.004
Locus of control	.347	.106	.309	3.258	.001
Sense of inadequacy	-.206	.096	-.187	-2.139	.034
4 (Constant)	81.218	8.452		9.61	.0
Parental relationships	.227	.079	.233	2.893	.004
Locus of control	.325	.106	.29	3.069	.002
Sense of inadequacy	-.267	.099	-.243	-2.686	.008
Anxiety	.204	.093	.161	2.188	.03

Discussion and conclusions

The purpose of this study was to explore relationships between Emotional Intelligence (IE) and psychological adjustment in adolescents, not only in general, but differentiating the social and educational contexts, specifically a compensatory education school (CS) and a normative school (NS). First the results show relationships coherent with previous studies which relate emotional perception abilities to better psychological adjustment, as widely described in the scientific literature (Kumar, Mehta, & Maheshwari, 2013; Palomera et al., 2012; Rivers et al., 2012; Salguero et al., 2011; Salguero, Palomera, & Fernández-Berrocal, 2012). Moreover, the results shed light on differences in prevalence of behaviour in the adolescent's context. Students in a normative context (NS) show a negative attitude to school and teachers and problems of self-esteem, while students in social risk contexts (CS) show atypicality and somatization. The results also show relationships between psychological adjustment and EI in both NS and CS, which is coherent with the study by Zavala & Lopez (2012), who analysed psychological traits in adolescents in social risk areas and found correlations similar to our study related to depression and locus of control, in spite of differences in the instruments used.

Moreover, there are differences between variables in the comparisons of scores from each school (normative school and compensatory school), such as in EQi:YV interpersonal variables and locus of control, somatization, negative attitude toward school and teches, parental relationships, anxiety and academic maladjustment. According to the BASC dimension interrelation model (González-Marqués et al., 2004), some variables for which we found differences in EI are related to personal adjustment, like depression, parental relationships and self-confidence subscales. Similarly, some variables which this model relates to personal adjustment were also related in this study, specifically, negative attitude toward school and teachers and sense of inadequacy.

Results of the regression analyses show that mood and stress management variables are related to psychological adjustment. Zavala & Lopez (2012) found similar results on the influence of stress management and eating disorders, substance abuse, delinquency predisposition, depression and suicidal tendency in adolescents from social risk areas.

Furthermore, EI is related to parental relationship and this relationship is maintained in all regression models. These findings agree with other studies by Rodríguez, Doguett & Revuelta (2012) and Bulut (2013) on the development of EI in children from socioeconomically disadvantaged areas.

However, the study has some methodological limitations, such as the size of the sample, which makes it difficult to generalize the results, so the sample should be larger, and other studies should be done from a contextual and ecological perspective that explores the factors and needs for specific intervention programmes in each population. Other limitations are related to the instruments. In EI research variability is usually used to assess this psychological construct, but was not in this study, so this could impede comparison with the results of other studies.

The results are of interest when intervention and prevention programmes must be applied for psychosocial problems so related EI factors that influence adolescents' psychological adjustment depending on their socio-educational context may be taken into account. Moreover, as previous studies have shown, psychological adjustment is related to aggressive behaviour in school contexts that make class integration difficult (Cava, Buelga, Musitu, & Murgui, 2010). Therefore, the application of school prevention and intervention programmes aimed at encouraging and developing EI can improve adolescent psychological adjustment at the same time, and also their behaviour in this context, since EI can act as protective factor for this kind of behaviour (Davis & Humphrey, 2012; Frederickson, Petrides, & Simmonds, 2012). For example, the improvement of psychological adjustment by EI intervention has been explored in various studies, such as the INTEMO Programme (Castillo, Salguero, Fernández-Berrocal, & Balluerka, 2013; Ruiz-Aranda

et al., 2012), the Programme for the Development of Appropriate Social Relationships in Primary Education (Carras-

co, Alarcón, & Trianes, 2015), and "Aprender a Convivir" programme (Justicia-Arráez, Pichardo, & Justicia, 2015).

References

Abdollahi, A., & Talib, M. A. (2015). Emotional intelligence as a mediator between rumination and suicidal ideation among depressed inpatients: The moderating role of suicidal history. *Psychiatry Research, 228*(3), 591-597. doi: http://dx.doi.org/10.1016/j.psychres.2015.05.046

Ahmadpanah, M., Keshavarz, M., Haghighi, M., Jahangard, L., Bajoghli, H., Bahmani, D. S., & Brand, S. (2016). Higher emotional intelligence is related to lower test anxiety among students. *Neuropsychiatric Disease and Treatment, 12*, 133. doi: 10.2147/NDT.S98259

Argyriou, E., Bakoyannis, G., & Tantaros, S. (2016). Parenting styles and trait emotional intelligence in adolescence. *Scandinavian Journal of Psychology, 57*(1), 42-49. DOI: 10.1111/sjop.12266

Aritzeta, A., Balluerka, N., Gorostiaga, A., Alonso-Arbiol, I., Haranburu, M., & Gartzia, L. (2016). Classroom emotional intelligence and its relationship with school performance. *European Journal of Education and Psychology, 9*(1), 1-8. doi: http://dx.doi.org/10.1016/j.ejeps.2015.11.001

Bar-On, R., & Parker, J. D. (2000). BarOn emotional quotient inventory: Youth version. *Technical Manual.New York: Multi-Health Systems,*

Baron-Cohen, S., & Hammer, J. (1997). Parents of children with asperger syndrome: What is the cognitive phenotype? *Journal of Cognitive Neuroscience, 9*(4), 548-554. doi: 10.1162/jocn.1997.9.4.548

Bar-On, R. (2000). Emotional and social intelligence: Insights from the emotional quotient inventory. En W. R. Bar-On, JDA Parker (red.). The Handbook of Emotional Intelligence, (pp. 363-388). San Francisco, CA, US: Jossey-Bass.

Bisquerra, R. (2003). Educación emocional y competencias básicas para la vida. *Revista De Investigación, 21*(1), 7-43. *Recovered from* http://revistas.um.es/rie/article/view/99071

Brackett, M. A., Mayer, J. D., & Warner, R. M. (2004). Emotional intelligence and its relation to everyday behaviour. *Personality and Individual Differences, 36*(6), 1387-1402. doi:10.1016/S0191-8869(03)00236-8

Bulut, S. (2013). Intelligence development of socio-economically disadvantaged pre-school children. Anales de Psicologia, 29(3), 855-864. doi:10.6018/analesps.29.3.168101

Carrasco, C., Alarcón, R., & Trianes, M. V. (2015). Effectiveness of an intervention programme based on social climate, school violence and sociometric tests in primary education. Journal of Psychodidactics, 20(2), 247-262. doi:10.1387/RevPsicodidact.13206

Castillo, R., Salguero, J. M., Fernández-Berrocal, P., & Balluerka, N. (2013). Effects of an emotional intelligence intervention on aggression and empathy among adolescents. *Journal of Adolescence, 36*(5), 883-892. doi:http://dx.doi.org/10.1016/j.adolescence.2013.07.001

Cava, M. J., Buelga, S., Musitu, G., & Murgui, S. (2010). Violencia escolar entre adolescentes y sus implicaciones en el ajuste psicosocial: Un estudio longitudinal. *Revista De Psicodidáctica, 15*(1), 21-34. http://dx.doi.org/10.1387/RevPsicodidact.732

Coccaro, E. F., Solis, O., Fanning, J., & Lee, R. (2015). Emotional intelligence and impulsive aggression in intermittent explosive disorder. Journal of Psychiatric Research, 61(0), 135-140. doi:http://dx.doi.org/10.1016/j.jpsychires.2014.11.004

Contreras, L., & Cano, M. C. (2016). Social competence and child-to-parent violence: Analyzing the role of the emotional intelligence, social attitudes, and personal values. *Deviant Behavior, 37*(2), 115-125. http://dx.doi.org/10.1080/01639625.2014.983024

Davis, S. K., & Humphrey, N. (2012). Emotional intelligence as a moderator of stressor–mental health relations in adolescence: Evidence for specificity. *Personality and Individual Differences, 52*(1), 100-105. doi:http://dx.doi.org/10.1016/j.paid.2011.09.006

de Haro, J. -., & Castejón, J. -. (2014). Perceived emotional intelligence, general intelligence and early professional success: Predictive and incremental validity. *Anales De Psicologia, 30*(2), 490-498. doi:10.6018/analesps.30.2.154621

Diaz-Castela, M., Hale III, W. W., Muela, J. A., Espinosa-Fernández, L., Klimstra, T., & Garcia-Lopez, L. J. (2013). The measurement of perceived emotional intelligence for spanish adolescents with social anxiety

disorder symptoms. *Anales De Psicologia, 29*(2), 509-515. doi:10.6018/analesps.29.2.144271

Extremera, N., Fernández-Berrocal, P., Mestre, J. M., & Guil, R. (2004). Medidas de evaluación de la inteligencia emocional. *Rev. Latinoam. Psicol, 36*(2), 209-228. *Recovered from* http://www.redalyc.org/articulo.oa?id=80536203

Fernández Berrocal, P., Salguero Noguera, J. M., Castillo Gualda, R., & Ruiz Aranda, D. (2010). Inteligencia emocional, adaptación y convivencia escolar. In J. J. Gazquez Linares, & M. C. Pérez Fuentes (Eds.), *La convivencia escolar. aspectos psicológicos y educativos.* (pp. 494). Granada: GEU.

Fernandez-Berrocal, P., Extremera, N., & Ramos, N. (2004). Validity and reliability of the spanish modifed version of the trait meta mood scale. *Psychological Reports, 94*(3), 751-755. Recovered from http://emotional.intelligence.uma.es/pdfs/spanish%20tmms.pdf

Ferrándiz, C., Hernández, D., Bermejo, R., Ferrando, M., & Sáinz, M. (2012). Social and emotional intelligence in childhood and adolescence: Spanish validation of a measurement instrument. *Revista De Psicodidáctica, 17*(2), 309-339. doi: http://dx.doi.org/10.1387/RevPsicodidact.2814

Frederickson, N., Petrides, K. V., & Simmonds, E. (2012). Trait emotional intelligence as a predictor of socioemotional outcomes in early adolescence. *Personality and Individual Differences, 52*(3), 323-328. doi:http://dx.doi.org/10.1016/j.paid.2011.10.034

Garaigordobil, M., & Peña-Sarrionandia, A. (2015). Effects of an emotional intelligence program in variables related to the prevention of violence. *Frontiers in Psychology, 6*(743), 1-11. doi: 10.3389/fpsyg.2015.00743

García-Sancho, E., Salguero, J., & Fernández-Berrocal, P. (2014). Relationship between emotional intelligence and aggression: A systematic review. *Aggression and Violent Behavior, 19*(5), 584-591. doi:http://dx.doi.org/10.1016/j.avb.2014.07.007

García-Sancho, E., Salguero, J. M., & Fernández-Berrocal, P. (2016). Angry rumination as a mediator of the relationship between ability emotional intelligence and various types of aggression. *Personality and Individual Differences, 89*, 143-147. doi:http://dx.doi.org/10.1016/j.paid.2015.10.007

González-Marqués, J., Fernández-Guinea, S., Pérez-Hernández, E., Pereña, J., & Santamaría, P. (2004). Sistema de evaluación de la conducta en niños y adolescentes: BASC [behavior assessment system for children: BASC]. *Madrid: TEA,*

Gugliandolo, M. C., Costa, S., Cuzzocrea, F., & Larcan, R. (2015). Trait emotional intelligence as mediator between psychological control and behaviour problems. *Journal of Child and Family Studies, 24*(8), 2290-2300. DOI 10.1007/s10826-014-0032-3

Guil, R., & Gil-Olarte, P. (2007). Inteligencia emocional y educación: Desarrollo de competencias socioemocionales. En J. M. Mestre y P. Fernández (Eds.), Manual de inteligencia emocional (pp. 187). Madrid: Ediciones Pirámide.

Justicia-Arráez, A., Pichardo, M. a. C., & Justicia, F. (2015). Estudio longitudinal de los efectos del programa aprender a convivir en la competencia social infantil. *Revista De Psicodidáctica, 20*(2), 263-283. doi: 10.1387/RevPsicodidact.13313

Kumar, V. V., Mehta, M., & Maheshwari, N. (2013). Effect of emotional intelligence on the achievement motivation, psychological adjustment and scholastic performance of secondary school students. *Journal of the Indian Academy of Applied Psychology, 39*(1), 60-67. Recovered from http://medind.nic.in/jak/t13/i1/jakt13i1p60.pdf

Lim, S. A., You, S., & Ha, D. (2015). Parental emotional support and adolescent happiness: Mediating roles of self-esteem and emotional intelligence. *Applied Research in Quality of Life, 10*(4), 631-646. DOI 10.1007/s11482-014-9344-0

Lombas, A. S., Martín-Albo, J., Valdivia-Salas, S., & Jiménez, T. I. (2014). The relationship between perceived emotional intelligence and depressive symptomatology: The mediating role of perceived stress. *Journal of Adolescence, 37*(7), 1069-1076. doi:10.1016/j.adolescence.2014.07.016

Mayer, J. D., Salovey, P., & Caruso, D. (2001). Technical manual for the MSCEIT v. 2.0. *Toronto, Canada: MHS,*

Palomera, R., Salguero, J. M., & Ruiz-Aranda, D. (2012). La percepción emocional como predictor estable del ajuste psicosocial en la adolescencia. *Revista Internacional Clínica Y De Salud, 20*(1), 43-58. Recovered from https://www.researchgate.net/profile/Salguero_Jose_M/publication/2 49992796_La_percepcin_emocional_como_predictor_estable_del_ajust e_psicosocial_en_al_adolescencia/l inks/0c96052148083b27b7000000.pdf

Rey, L., Extremera, N., & Pena, M. (2011). Perceived emotional intelligence, self-esteem and life satisfaction in adolescents. *Psychosocial Intervention, 20*(2), 227-234. doi:http://dx.doi.org/10.5093/in2011v20n2a10

Rivers, S. E., Brackett, M. A., Reyes, M. R., Mayer, J. D., Caruso, D. R., & Salovey, P. (2012). Measuring emotional intelligence in early adolescence with the MSCEIT-YV psychometric properties and relationship with academic performance and psychosocial functioning. *Journal of Psychoeducational Assessment, 30*(4), 344-366. doi: 10.1177/0734282912449443

Rodríguez-Fernández, A., Droguett, L., & Revuelta, L. (2012). School and personal adjustment in adolescence: The role of academic self-concept and perceived social support. *Revista de Psicodidáctica,*17(2), 397-414. doi: 10.1387/Rev.Psicodidact.3002

Ruiz, E., Salazar, I. C., & Caballo, V. E. (2012). Inteligencia emocional, regulación emocional y estilos/trastornos de personalidad. *Behavioral Psychology, 20,* 281-304. Recovered from https://www.researchgate.net/profile/Vicente_Caballo/publication/23 0704262_Emotion al_intelligence_emotional_regulation_and_personality_stylesdisorders_ _Inteligencia_e mocional_regulacin_emocional_y_estilostrastornos_de_personalidad/links/0 046352c1b f9fc595d000000.pdf

Ruiz-Aranda, D., Castillo, R., Salguero, J. M., Cabello, R., Fernández-Berrocal, P., & Balluerka, N. (2012). Short-and midterm effects of emotional intelligence training on adolescent mental health. *Journal of Adolescent Health, 51*(5), 462-467. doi: http://dx.doi.org/10.1016/j.jadohealth.2012.02.003

Salguero, J. M., Fernández-Berrocal, P., Ruiz-Aranda, D., Castillo, R., & Palomera, R. (2011). Inteligencia emocional y ajuste psicosocial en la adolescencia: El papel de la percepción emocional. *European Journal of Education and Psychology, 4*(2), 143-152. doi: 10.1989/ejep.v4i2.84

Salguero, J. M., Palomera, R., & Fernández-Berrocal, P. (2012). Perceived emotional intelligence as predictor of psychological adjustment in adolescents: A 1-year prospective study. *European Journal of Psychology of Education, 27*(1), 21-34. doi: 10.1007/s10212-011-0063-8

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality, 9*(3), 185-211. doi: 10.2190/dugg-p24e-52wk-6cdg

Salovey, P., Mayer, J. D., Goldman, S. L., Turvey, C. y Palfai, T. P. (1995). Emotional attention, clarity, and repair: Exploring emotional intelligence using the trait meta-mood scale. *Emotion, Disclosure, and Health, 125,* 154. Recovered from http://www.unh.edu/emotional_intelligence/EI%20Assets/Reprints... Mood%20Meas%2 0and%20Mood%20Cong/CA1995SaloveyMayer.pdf

Sánchez, V., Ortega, R., & Menesini, E. (2012). La competencia emocional de agresores y víctimas de bullying. Recovered from http://revistas.um.es/analesps/article/view/140542

Schokman, C., Downey, L. A., Lomas, J., Wellham, D., Wheaton, A., Simmons, N., & Stough, C. (2014). Emotional intelligence, victimisation, bullying behaviours and attitudes. *Learning and Individual Differences, 36,* 194-200. doi:10.1016/j.lindif.2014.10.013

Villanueva, L., Prado-Gascó, V., González, R., & Montoya, I. (2014). Emotional awareness, mood and individual and social adjustment outcomes in children aged 8-12 years old. [Conciencia emocional, estados de ánimo e indicadores de ajuste individual y social en niños de 8-12 años] *Anales De Psicologia, 30*(2), 772-780. doi:10.6018/analesps.30.2.159261

Zavala, M. A., & López, I. (2012). Adolescentes en situación de riesgo psicosocial:¿ Qué papel juega la inteligencia emocional? *Psicología Conductual, 20*(1), 59. Recovered from http://www.funveca.org/revista/pedidos/product.php?id_product=52 4