

# The Impact of Students´ Perceived Emotional Intelligence, Social Attitudes and Teacher Expectations on Academic Performance

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## Abstract

**Introduction.** The aim of this study is to analyze the role that Perceived Emotional Intelligence and social competences have on academic performance. Furthermore, we analyze the role of teacher's expectancies on performance in secondary school students.

**Method.** One hundred ninety three students (50.7% male and 49.3 % female) from the first and second cycle of secondary school ( $M = 14.1$  years;  $DT = 1.39$ ; range from 11 to 16 years old), completed a self-report evaluating Perceived Emotional Intelligence (TMMS-24), and Social Attitudes (AECS). Academic performance was assessed by individual marks and an ad hoc Likert scale that comprised different behaviour indices assessed teachers' expectancies about performance.

**Results.** Our results show that prosocial attitudes predicted positively and significantly, not only students' academic performance but Perceived Emotional Intelligence (PEI) as well. Teachers' expectancies also play an important role in this prediction.

**Discussion.** Our study reflects that social behavior impacts academic performance. Furthermore, other variables as perceived emotional intelligence and teacher's expectancies have an important role. The implications of these results on education are discussed.

**Key Words:** academic performance, perceived emotional intelligence, prosocial behaviour, social competence.

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# Impacto de la Inteligencia Emocional Percibida, Actitudes Sociales y Expectativas del Profesor en el Rendimiento Académico

## Resumen

**Introducción.** El objetivo de este estudio ha sido comprobar el papel que la Inteligencia Emocional percibida y las competencias sociales tienen en el rendimiento académico. Además, tuvo el propósito de analizar el papel de las expectativas de los profesores en el rendimiento de los alumnos de Educación Secundaria Obligatoria (ESO).

**Método.** La muestra estaba compuesta por 193 estudiantes (50.7% varones y 49.3 % mujeres) de primer y segundo ciclo de E.S.O., con edades comprendidas entre 11 y 16 años ( $M = 14.1$  años y  $DT = 1.39$ ), que completaron un autoinforme que evaluaba inteligencia emocional, (TMMS-24), y actitudes sociales (AECS). Para la evaluación del rendimiento académico, se emplearon las calificaciones obtenidas y para comprobar las expectativas de los profesores sobre el rendimiento, se empleó una escala tipo Likert de elaboración propia, que valoraba diferentes indicadores de comportamiento.

**Resultados.** Los resultados obtenidos mostraron que las actitudes prosociales fueron un predictor positivo y significativo, no solo del rendimiento académico sino también del nivel de inteligencia emocional percibida (IEP) de los estudiantes, desempeñando a su vez las expectativas del profesor un rol determinante.

**Discusión y conclusión.** El presente estudio refleja que la conducta social influye decisivamente sobre el rendimiento académico, y analiza la influencia de otras variables como son la inteligencia emocional y las expectativas del profesor. Los resultados obtenidos se discuten en torno a sus implicaciones educativas.

**Palabras Clave:** competencia social, conducta prosocial, inteligencia emocional percibida, rendimiento académico.

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## **Introduction**

In last years, a wide corpus of studies has focused on Emotional Intelligence (EI), to analyze the influence that emotional abilities have on the socio-school adaptation of students. However, the impact of EI on students' performance is still an open question. Both interest and controvert, the EI concept was introduced by John Mayer and Peter Salovey in 1990, in the educational context, referring to a set of abilities that allows individuals to process and reasoning in an efficient way about emotions, using that information to guide feelings and actions, achieving a better problem solving (García-León & Lopez-Zafra, 2009).

It is now considered that the knowledge leverage information of our own emotions can provide us with better psychological adjustment (Fernández-Berrocal, Ruiz, Extremera & Hair, 2009), and increased welfare (Augusto, Pulido & Lopez-Zafra, 2011). This recognition has led to the emergence of a renewed interest in the application of EI in education and to establishing its predictive capacity for adaptation of the subject versus other constructs, among which is the intelligence quotient (CI), which traditionally has been considered the determinant of academic performance.

Research on the influence of the emotional and personal balance capabilities on the teaching-learning process (Adell, 2006; Miñano & Castejón, 2008), is still relatively low. However, recent research shows that a self-regulated student (autonomous and independent) can modulate his/her thought, affect, and behavior to deal effectively with learning situations (Gaeta, Teruel, & Orejudo, 2012), integrating intellectual, motivational, and behavioral aspects. Therefore, we think that to understand the role that emotional variables play on academic performance, we must deepen in the relationship between these variables. In our case, we think that we should analyse the relation between EI and social attitudes and expectations of people with whom they interact, and specifically from teachers.

### *Emotional Intelligence and Social Competence*

Literature shows that EI plays a basic role in the establishment, maintenance and quality of interpersonal relationships, and ultimately, of social competence (Brackett, et al., 2006; Eisenberg & Fabes, 2006; Gil, Gil -Olarte, Mestre, & Nuñez, 2006; Jimenez & Lopez-Zafra, 2011; Mestre, Palmero, & Gil, 2004). It notes, for example, that adolescents with a greater ability to recognize the emotional states of others, report better social relationships with peers

and parents, less strain on social relationships, as well as a higher level of confidence and perceived competence (Salguero, Fernández-Berrocal, Ruiz-Aranda, Castillo & Palomera, 2011).

Similarly, there are numerous studies that found a relationship between emotional intelligence and empathy (Aguilar-Luzon, & Augusto-Landa, 2009; Goleman, 2005; Muncer & Ling, 2006), and between EI and social competence (Gilar, Miñano & Castejón, 2008; Juntilla, Voeten, Kaukianen, & Vauras, 2006). Furthermore, in last years the number of studies about prosocial behaviour has increased due to the important role it has on positive interpersonal relationships creation and the maintenance of individual and social wellbeing (Eisenberg & Fabes, 2006; Inglés et al., 2009). However, there are scarce studies analysing jointly these aspects. As an example, the study carried out by Mavrovely and Sánchez-Ruiz (2011) showed with children aging from 7 to 12 years old, that a high score on EI was related to high nominations by peers in prosocial behavior and low nominations in antisocial behavior, but their relationship with academic performance was very limited. It has also been demonstrated that the dimensions of EI are positively related to prosocial attitudes different, being the variable emotional attention and attitude of help and cooperation, the dimensions most related to the assessment made by the teacher on social adjustment of the student (Jiménez & Lopez-Zafra, 2011). Thus, students with higher social-emotional skills are more emotionally balanced and better socially adjusted than those with a low emotional intelligence, low interpersonal skills and who have antisocial behaviors contributing to poor social adjustment (Fernández-Berrocal, *et al.*, 2009; Petrides, Frederickson, & Furnham, 2004).

However, while the empirical evidence is overwhelming when demonstrating the influence of knowing one's emotions and those of others in the level of psychosocial adjustment of individuals, it has not been able to pinpoint their influence on academic performance.

Academic performance is a complex psychological construct; it is multidimensional and multidetermined, and its study is has some difficulties (Adell, 2006; Hintsanen, 2011). However, it is a social problem of great concern in our society today, especially due to the low level of performance obtained by the students, as well as the progressive increase in absenteeism and school failure in existing schools (Pérez, 2011). Therefore, the analysis of the different variables that influence this results is, and will be, a constant issue in educational research (Martín, Martínez-Arias, Marchesi & Pérez, 2008).

Although in general, research has shown that social and emotional skills play a decisive role in the social adaptation of school students (Extremera & Fernández-Berrocal, 2004; Zeidner, Matthews & Roberts, 2009), other studies aimed at analyze the influence of EI on academic performance have provided inconsistent results. This lack of conclusive findings is due, first, to the lack of agreement among theorists about what is Emotional Intelligence (Newsome, Day, & Catano, 2000; Zeidner, Roberts, & Matthews, 2008) and second, to ignorance about what the available assessment tools are most appropriate to be used in scientific, educational, clinical and organizational contexts (Extremera, Fernández-Berrocal, Mestre & Gil, 2004) and, finally to the methodological differences that present most of the studies (Parker et al., 2004) (for a more extensive review, see Jimenez & Lopez-Zafra, 2009).

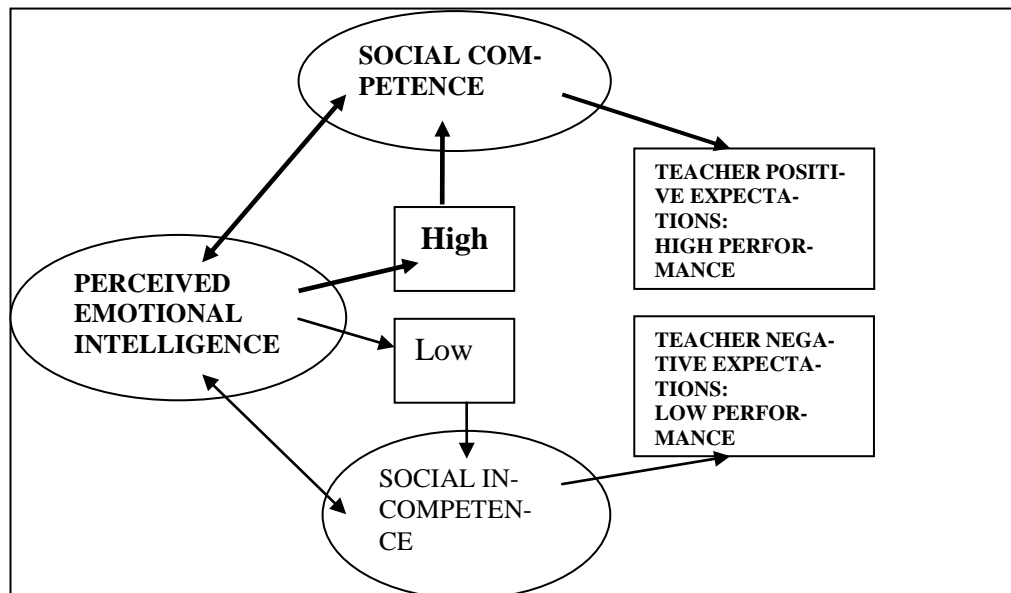
However, Extremera and Fernández-Berrocal (2004) argue that emotional intelligence influences on academic performance through its effect on students' mental health, noting, therefore, an indirect relationship between the two constructs in secondary school students. Their studies have confirmed the predictive power of attention, clarity and emotional repair on levels of anxiety and depression, and over areas related to mental, social and physical health (Extremera & Fernández-Berrocal, 2006). Moreover, EI act as a moderating factor on cognitive skills effects on academic performance (Fernández-Berrocal & Ruiz, 2008) and as a variable whose presence is very useful in our daily lives (for a more extensive review see Fernández-Berrocal & Extremera, 2010).

Social attitudes should be considered as an element that has an influence on the impact of EI on academic performance. Inglés et al., (2009) revealed that prosocial behavior also appears to be a significant positive predictor of academic success and vice versa. These authors found that the proportion of prosocial students that approved all subjects was significantly greater than that of non-prosocial students, the opposite relationship was observed in the case of three or more failed subjects.

Also, teachers' expectations play an important role in academic performance, as demonstrated Rosenthal and Jacobson (1968) in their classic experiments on the Pygmalion effect in the classroom, which have been confirmed in recent studies. Thus, when a teacher is asked to evaluate their students, those students they consider most adapted, who have a more self-regulated behavior and whom they expect higher performance, get greater grades than those worst rated in these aspects (Jiménez & Lopez-Zafra, 2010).

Therefore, given the evidence that EI influences the social competition, we expanded the model of EI and performance proposed by Fernández-Berrocal and Extremera (2004), which considered that the main mediating variable was emotional adjustment. Under this approach, emotional intelligence would influence performance through the student's psychological balance. Thus, high emotional intelligent students would better control anxiety in academic stress (i.e. exams) and have a higher academic performance. However, other studies as Alvarez, Aguilar and Lorenzo (2012), showed a lack of relationship between anxiety, in its various manifestations, and academic performance assessed through the grades.

Bearing these comments in mind, and considering the scarce number of studies that have analyzed the relationship between prosocial behavior and school performance in adolescence (Inglés et al., 2009), the aim of our study was to analyze how both variables are related to perceived emotional intelligence, including the role that teachers could play in this process. Specifically, we propose that EI is related to performance through its influence on social competence and, therefore, by the expectations raised in teachers (see figure 1).



**Figure 1.** Model for the relation among PEI, social attitudes and academic performance.

### *Objectives and hypothesis*

Our first objective was to analyze the relationship between prosocial behaviour and academic performance. To address this objective, we propose the following hypotheses: First, (H1) we hypothesize that there will be positive relationships between prosocial attitudes and academic performance. Also, we expect no relationship between antisocial and asocial attitudes to academic performance. Specifically, we believe that there would be positive relationships between prosocial attitudes (social sensitivity, help and cooperation, prosocial Leadership, Security and firmness in relationships) and academic performance. Also, there would not be relationship between antisocial (Dominance and Aggression-stubbornness) and asocial attitudes (anxiety-shyness and apathy-withdrawal) with academic performance.

Our second hypothesis (H2) states that prosocial attitudes would predict the academic performance of students assessed through positive academic qualifications; whereas antisocial and asocial attitudes would be related to negative academic qualifications.

In our second objective, we aimed to analyze the relationship between PEI, social attitudes and academic performance. Our H3 postulates the existence of statistically significant positive correlations between prosocial attitudes and students' PEI. Furthermore, we state that there would be positive relationships between PEI and students with better academic performance (H4).

Our last goal was to analyze the role or influence that teacher's assessments would have on academic performance. To address this goal we propose that (H5) that there would be positive and statistically significant relationship between the assessments made by teachers, social attitudes of students and academic performance achieved; being adapted and socially competent students, those at greatest prosocial attitudes and medium-high academic performance at the end of the course.

## **Method**

### *Participants*

One hundred ninety three students (50.7% male and 49.3 % female) from first and second cycle of secondary school participated in this study. Participants' ages ranged from 11 to



16 years old ( $M = 14.1$  years;  $DT = 1.39$ ). The entire sample was studying at a public school, located in a medium size city from Jaén (Spain).

### *Instruments*

To assess Emotional Intelligence we administered the Spanish version of the Trait Meta-MoodScale (TMMS-24; Fernández-Berrocal, Extremera & Ramos, 2004) that indicate the subjects' perceptions about their IE and therefore reflect an "Index of Perceived Emotional Intelligence" (IEP). The reliability for each component is: Attention,  $\alpha = .90$ ; Clarity,  $\alpha = .90$ , and Repair,  $\alpha = .86$ , and has also adequate-retest reliability tests (attention,  $\alpha = .60$ ; clarity,  $\alpha = .70$  and repair,  $\alpha = .83$ ) (Extremera & Fernández-Berrocal, 2005). The internal consistency index shows appropriate indexes in our sample, as in our study Cronbach's alpha for each component was: emotional attention  $\alpha = .80$ ; emotional clarity,  $\alpha = .72$ , and  $\alpha =$  emotional repair  $.80$ .

For the assessment of social attitudes we administered the *Attitudes and Social Cognitive Strategies Questionnaire* (AECS; Moraleta, M., Gonzalez, A. & García-Gallo, J., 1998) which is an objective assessment tool (scored on a Likert scale of 7 points) which aims to provide an overview of the social competence of adolescents, that is, those variables that facilitate or hinder social adjustment over the medium in which they live. The internal consistency index reflects appropriate values in our sample. Specifically, for each component was: Social Sensitivity  $\alpha = .75$ ; Help and collaboration  $\alpha = .70$ , security and firmness in the relationship  $\alpha = .65$ , Prosocial leadership  $\alpha = .75$ ; Dominance  $\alpha = .60$ ; Aggressiveness-Stubbornness  $\alpha = .67$ ; Anxiety shyness  $\alpha = .72$ ; Apathy-withdrawal  $\alpha = .70$ .

For the assessment of teachers' expectations, a brief report was administered to each group tutor at the end of the first quarter (when they knew their students and had enough information to make an assessment of each student). They were asked, in a Likert scale of three points, about their expectations on two indicators: the general adaptation levels the student reaches and their expected academic performance for each student. To assess students' performance, we used the academic qualifications of the compulsory subjects, not including electives ones.

### *Procedure*

After obtaining the necessary permits and the center that participates in our study, we got in touch with the director. In a meeting with the teachers responsible for the groups selected through stratified random sampling, we provided a detailed report on the study objectives. The evaluation was conducted at the beginning of the academic year (two sessions of one hour duration each) respecting the ethical standards that includes the code of ethics in psychology. The order of application was counterbalanced to control for possible order effects. The evaluation of teachers' expectations was performed before examination periods for students.

### *Data analyses*

Correlation and regression analysis analyses were performed. SPSS v.19 software, specially designed for application to the social sciences, was used for the analyses.

### **Results**

To test the H1 about the relationships between variables, Pearson correlations were performed. Results showed the existence of a positive statistically significant relationship between the academic results obtained during each quarter and the scales assessing prosocial attitudes, such as social sensitivity, help and cooperation, prosocial leadership and security and firmness social relations (see Table 1). However, no significant correlations emerged with antisocial and asocial attitudes.

**Table 1. Correlations between Attitudes (A) and Grades (G).**

		G1	G2	G3	TG
Prosocial Attitudes	S	.24*	.32**	.25*	.29**
	HC	.35**	.38**	.30**	.37**
	PL	.37**	.35**	.33**	.38**
	SF	.27*	.24*	.25*	.27*
Antisocial Attitudes	D	-.00	-.03	-.02	-.02
	AT	.03	-.03	-.00	-.00
Asocial Attitudes	AR	.02	-.00	.03	.01
	AT	.05	.00	.06	.04

Nota: \* =  $p < .05$  y \*\* =  $p < .001$

Note: meaning of the acronym for the dimensions of attitudes: S= Social sensitivity; HC= Help and Collaboration; PL= Prosocial Leadership; SF= security and firmness; D= Dominance; AS= Agressivness-Stubbornness; AW=Apathy-withdrawal;AS=Anxiety-shyness. G1= Average qualification for the first quarter; G2= Average qualification for the second quarter; G3= Average qualification for the third quarter; TG= average grade for the whole academic year.

To address H2 regression analyzes were performed using the stepwise procedure. As predictors variables prosocial, antisocial and asocial attitudes were included and the average academic performance as criterion variable. Results showed that only prosocial attitudes accounted for average performance of students ( $\beta = .36$ ;  $t = 2.66$ ;  $p < .011$ ). To further explore this result, we analyzed the differences in the various attitudes comprising prosocial attitudes, taking into account the level of performance (high or low). We grouped the students into two groups: the low performance group (N = 93) that included all students with an average grade less than 5, and the medium and high performance group (N = 100) which included all students whose average academic grade was equal and greater than 5.

We analyzed mean differences between the two groups, confirming the existence of statistically significant differences in all prosocial attitudes among students who have a medium to high performance and those with a low academic performance. Students with higher academic performance scored significantly higher in prosocial attitudes than students with lower degrees (see Table 2).

**Table 2. Attitudinal differences by academic performance.**

Prosocial Attitudes	Low Performance M (sd)	High Performance M (sd)	T	p<.
Social sensitivity	40.76 (7.81)	46.18 (5.34)	-3.64	.01
Help and Colaboration	46.29 (9.46)	54.22 (7.26)	-4.30	.00
Prosocial Leadership	16.09 (4.35)	19.86 (4.46)	-3.61	.00
Security and Firmness	43.62 (9.44)	50.92 (7.28)	-3.95	.00

In order to clarify the differential influence each prosocial attitudes could have on the performance of students, we conducted a multiple stepwise regression analysis including prosocial attitudes (social sensitivity, Help and Collaboration, Leadership prosocial, security and firmness in social relations and compliance with standards) as predictors and academic performance as the criterion variable. The multiple regression analysis provided a total of 5 models (see Table 3). The second model is the most relevant accounting for the 32% of the variance of the average grade of the student and incorporates the variable help and collaboration, with a typified regression coefficient  $\beta = .55$ . Also, part and partial correlations of the models show that help and collaboration is the prosocial attitude that produces a greater increase in  $R^2$ , thus, this is the variable with a highest predictive power over the student achievement.

**Table 3. Multiple regression analyses by sucesive steps.**

Model	R	R <sup>2</sup> C	Beta	t	Prob	Partial Co- relation	Semipartial Correlation
Model 1	.49	.23					
Social sensitivity			.49	.48	.00	.49	.49
Model 2	.58	.32					
Social Sensitivity			.03	.20	.84	.24	.20
Help and Colaboration			.55	3.13	.00	.34	.30

Model 3	.58	.31					
Social Sensitivity			.01	.09	.92	.01	.00
Help and Colaboration			.51	2.7	.00	.31	.26
Prosocial Leadership			.08	.67	.50	.08	.06
Model 4	.59	.31					
Social Sensitivity			.04	.23	.81	.02	.02
Help and Colaboration			.54	2.8	.00	.32	.37
Prosocial Leadership			.12	.90	.37	.10	.08
Security & Firmness			-.12	-.88	.38	-.10	-.08
Model 5	.59	.30					
Social Sensitivity			.07	.41	.68	.05	.04
Help and Colaboration			.57	2.95	.00	.33	.28
Prosocial Leadership			.09	.66	.49	.08	.06
Security & Firmness			-.07	-.49	.62	-.06	-.04
Conformity to norms			-.10	-.75	.45	-.09	-.74

R<sup>2</sup>C = Adjusted determination coefficient.

To analyze H3, correlation analyzes were performed. These analyses showed the existence of a positive and statistically significant relation ( $r = .535, p < .01$ ) between prosocial attitudes and level of PEI. As for the predictive power of prosocial attitudes on PEI level, regression analysis using the stepwise procedure yielded results that confirmed our initial hypothesis.

As shown in Table 4, for the three predictor variables entered (prosocial, asocial and anti-social attitude) for perceived emotional intelligence as the criterion variable, prosocial attitudes accounted for 29% of the total variance while asocial and antisocial attitudes, whose values were negative, were excluded from the analysis.

**Table 4. Multiple regression analysis with social attitudes as predictors and Perceived Emotional Intelligence (IEP) as criterion.**

	Beta	T	p
Prosocial Attitudes	.55	4.41	.00
Asocial Attitudes	-.14	-1.13	.26
Antisocial Attitudes	-.06	-.49	.62

Nota. R = .55; R<sup>2</sup>C = .29

R<sup>2</sup>C = Adjusted determination coefficient.

As for the H4, correlation analysis were not significant in any of the cases. However, as shown in Table 5, when students were classified according to their average grades, into two groups (high and low performance), the *t-test* showed that students in the high performance group, scored significantly higher than those in the low performance group in the TMMS dimensions of emotional attention and repair.

**Table 5. Differences in PEI between medium-high and low performance groups**

Dimension	High Performance Group M (SD)	Medium-High performance Group M (SD)	T	P
Attention	23.38 (5.68)	28.73 (4.29)	2.39	.01
Clarity	27.36 (5.13)	28.79 (4.31)	.61	.46
Regulation	25.39 (6.39)	30.45 (4.27)	2.41	.02

Finally, for the H5, correlation analyzes indicated the existence of a significant positive relationship between prosocial attitudes and expectations of the teacher on the student's overall adaptation to school and their expected performance (see Table 6).

**Table 6. Correlations between Teachers' Expectancies and student's attitudes.**

Attitudes	Prosocial				Asocial		Anti-social	
	S	HC	PL	SF	AW	AS	D	AS
EXPECTANCIES								
Global Adaptation	.28**	.43**	.27**	.15	.11	.10	.02	.10
Expected performance level	.28**	.29**	.23*	.22*	.00	.12	-.01	.00

Note. N =193; \* p < .05; \*\*p < .01; S= Social sensitivity; HC= Help and Colaboration; PL= Prosocial Leadership; SF= security and firmness; AW=Apathy-withdrawal;AS=Anxiety-shyness; D= Dominance; AS= Agres-siviness-Stubborness.

Additionally, to analyze the relationship between teacher expectations and student's performance we conducted mean comparisons for independent groups. Results showed that students with low performance during the academic year, were less valued by their teachers at the beginning of the course (lower expectations on their performance and general adaptation),

compared with medium-high performance students. Furthermore, these differences were significant in all cases (see Table 7).

**Table 7. Descriptive scores for teacher expectations for low and high performance groups and results of the tests.**

	Low Performance group M (Sd)	High performance group M (Sd)	T	P
General Adaptation	1.90 (.61)	2.36 (.52)	-3.76	.00
Expected Performance	1.40 (.54)	2.52 (.50)	-10.12	.00

## Discussion and Conclusions

The study of variables that influence academic achievement is and will be a goal of ongoing research in educational psychology. In this study we analyzed the relationship between performance, social attitudes and perceived emotional intelligence.

Our first objective was to analyze whether there were relationships between academic performance and social attitudes of adolescents. Results are in agreement with other studies (i.e. Inglés et al., 2009) showing the relationship between prosocial behavior and academic performance. Students who exhibit prosocial attitudes, that is, showing a more sensitive, empathetic and collaborative (and ultimately, they are more socially competent) behaviour in class, also obtained higher academic achievement than peers that submitted antisocial behaviors (of apathy and withdrawal) and antisocial (dominant and aggressive). Moreover, regression analysis showed that medium-high performance students also obtained significantly higher scores on all prosocial attitudes, corroborating bidirectional relationship between the two variables identified by Inglés et al., (2009). Thus, out of all pro-social attitudes assessed (social sensitivity, support and collaboration, prosocial leadership and safety and firm in social relations), help and cooperation was the attitude that had the highest predictive ability on academic performance. This implies that students that are collaborators, participatory, that like to work in groups and show a more democratic attitude, obtained academic scored significantly higher than those achieved by their peers.

As noted by Mestre et al., (2006), social adjustment and students academic success involve knowing how to establish harmonious relationships with peers and teachers. Emotional skills influence the type of social interaction showed by students in the classroom, and as a result, their level of school adjustment. People sensitive to the needs of others, who are altruistic and have a conciliatory and cooperative in their interpersonal relationships and respect for social norms, achieve a higher performance, which reflects, in our view, that to get a good result at the school, not only is necessary to demonstrate certain cognitive abilities, but it's very important social behavior.

Our second objective was to analyze the relationship between the student's perception of their emotional skills or PEI and social attitudes. Results allow us to confirm our third hypothesis, as there were positive statistically significant correlations, between the two variables. Moreover, prosocial attitudes predict the students PEI level. Our results are in line with other studies that suggest that emotional abilities are positively associated with the quality of social interactions and prosocial behavior (Mestre, 2006; Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006). Adolescents who reported paying attention to their emotions, greater clarity in understanding and repairing their affective states and that, ultimately, perceive themselves as emotionally competent, have attitudes and behaviors that favor appropriate social interaction with their peers. Thus, high scores on emotional repair can compensate for the detrimental effect that paying excessive attention to emotions may have. However, this EI dimension has negative effects if scores are very high, as the trend to attend emotional states facilitates perception and, therefore, the activation of emotional regulation strategies. Thus, emotion regulation can facilitate the control of attention and self-regulation of impulsive reactions that hinder social and emotional adaptation and implementation of strategies to help reduce discomfort or negative emotions associated with learning situations, that interfere or hinder learning. In a similar vein, other studies with adolescents show increases in academic success of students who have higher levels of EI, outstanding from their peers in a better regulation of certain negative states (anxiety, anger, frustration) in school tasks (Chong, Elias, Mahyuddin, & Uli, 2004).

Numerous studies have analyzed the influence of emotional intelligence on academic performance (Jimenez, 2009). However, results have been inconsistent and even contradictory due to conceptual and methodological differences (Humphrey, Curran, Morris, Farrel & Woods, 2007). Thus, our third objective was to analyze the relationship between PEI and aca-



ademic performance. Correlation analyses between PEI and performance work did not confirm our hypothesis 4, as we found no statistically significant relationships between the two variables. However, when classifying students based on their academic performance (low vs. high performance), results showed differences. Students who reported higher levels of emotional attention and higher repair of negative affective states, obtained a higher academic performance.

Results obtained in this sample, have shown that emotional intelligence and academic performance are not directly related, since results depend on the instrument used and vary according to the statistical analysis or methodology. This does not imply that there is no relationship, but that emotional intelligence influences performance indirectly exerting its effect through its relationship with psychological adjustment and social competence level, which according to recent studies seem to be very closely related (Jiménez & Lopez-Zafra, 2011). Nevertheless, previous studies have shown a relationship between student performance and teacher expectations (Jimenez & Lopez-Zafra, 2010).

Thus, we analyzed, in our fourth objective, the relationship between teacher expectations and attitudes and academic performance of our sample of students. Results showed the existence of significant positive correlations between students' social attitudes and teacher expectations. Teachers reported higher expectations on the academic performance of students with prosocial attitudes. Thus, and in line with classical works, the students who generated higher expectations on their teachers at the beginning of the course, were those who achieved higher grades at the end of the course. These results show the great influence of students' social competence level on the perception that teachers have about them. In our society, there are many beliefs about which characteristics are associated (which is termed *implicit theories of personality*) and there is also a tendency to assume that a person who have a good quality also have other positive qualities, which is known as *halo effect* (Lopez-Zafra, Berrios & Augusto, 2008). Therefore, these results suggest that possibly, when teachers perceive socially desirable behavior in their students they associate this to other positive characteristics and to higher expectations about their academic performance. These results seem to show the important influence of teacher expectations on performance assessment of students.

Bear in mind that the expectations and opinions that teachers have of their pupils, direct their attention and organize memory so that the teacher remember especially the informa-

tion concerning the student, and interact with him/her in a consistent way with their initial expectations producing the *effect of self-fulfilling prophecy*. This effect was called Pygmalion Effect by Rosenthal and Jacobson (1968), who found that there is some truth when a teacher expects the student to achieve a certain level that had been previously estimated. In experiments carried out, Rosenthal and Jacobson (1971) showed that students who were previously classified as "good students" and that were presented as students with excellent academic achievement (although they did not, for being selected randomly), finally obtained better qualifications than other students. Therefore, it was concluded that when a teacher has a positive expectation on their students, they tend to improve their academic performance. This phenomenon is still present and those students upon which have higher expectations, eventually obtain a higher achievement (Woolfolk, 1999).

Thus, it is more likely that students, who have difficulties in handling their emotions, attitudes, show asocial and/or antisocial attitudes and, therefore, have a greater chance of experiencing difficulties in their adaptation to their social environment. It is likely that these students generate low expectations in their teachers and finally, as a consequence, lower academic performance. By contrast, abilities related to the expression and regulation of positive emotions, helping behavior, empathy and ultimately the use of effective social interaction strategies, could generate positive expectations on teachers. Finally, regarding the predictive power of prosocial attitudes about emotional intelligence and performance, our results indicate that, although the three variables are interrelated, only prosocial attitude accounted for student performance and PEI. Finally, our results provide evidence for the interrelationship between social competence, perceived emotional intelligence and academic achievement. However, there are some limitations that should be taken into consideration and should be addressed in future studies. The first limitation concerns the cross-sectional design of this study, which does not allow for a causal relationship between the variables analyzed. A second limitation concerns the using of self-report measures to assess social competence, which may imply the existence of social desirability bias. Despite these limitations and considerations, the present study provides empirical evidence in this field of research. Prosocial attitudes are positive and significant predictor not only of academic success, but also for the level of emotional intelligence of students. Thus, students reporting high levels of PEI and prosocial attitudes show a positively valuate behaviour by their teachers and also a higher academic performance. Further studies will be necessary in this field to be applied to the Social Psy-

chology of Education, so that we can deepen in the role of emotions in the educational context and the psychosocial development of students (see Lopez- Zafra & Jiménez, 2012).

## References

- Adell, M. A. (2006). *Estrategias para mejorar el rendimiento académico de los adolescentes*. [Estrategies to improve adolescent's academic performance]. Madrid: Pirámide.
- Aguilar-Luzón, M. C., & Augusto-Landa, J. M. (2009). Relación entre inteligencia emocional percibida, personalidad y capacidad empática en estudiantes de enfermería [Relationship between perceived emotional intelligence, personality and empathy in nursing students]. *Psicología Conductual*, 17(2), 351-364.
- Álvarez, J., Aguilar, J. M., & Lorenzo, J. J. (2012). La ansiedad ante los exámenes en estudiantes universitarios: relaciones con variables personales y académicas [Anxiety in exams in undergraduates: relations with personal and academic variables]. *Electronic Journal of Research*, 10(1), 333-354.
- Augusto, J. M., PulidoMartos, M., & Lopez-Zafra, E. (2011). Does perceived emotional intelligence and optimism/pessimism predict psychological well-being? *Journal of Happiness Studies*, 12, 463-474.
- Brackett, M., Rivers, S., Shiffman, S., Lerner, N., & Salovey, P. (2006). Relating emotional abilities to social functioning: a comparison of self-report and performance measures of emotional intelligence. *Journal of Personality and Social Psychology*, 91(4), 780-795.
- Chong, M., Elias, H., Mahyudding, R., & Uli, J. (2004). Emotional Intelligence and academic achievement among Malaysian secondary students. *Pakistan Journal of Psychological Research*, 19(3-4), 105-121.
- Eisenberg, N., & Fabes, R. (2006). Emotion regulation and childrens Socioemotional Competence. En L. Balter and C. Tamis-LeMonda (Eds.), *Childs psychology: A handbook of contemporary issues* (pp. 357-381). Nueva York: Psychology Press.
- Extremera, N., & Fernández-Berrocal, P. (2004). El papel de la Inteligencia emocional en el alumnado: evidencias empíricas [The role of Emotional Intelligence in students: empirical evidences] *Revista Electrónica de Investigación Educativa*, 6(2). Extraído de <http://redie/uabc.mx/vol6no2/contenido-extremera.html> (Consultado el 21/05/2012)
- Extremera, N., & Fernández-Berrocal, P. (2006). Emotional Intelligence as Predictor of Mental, Social and Physical Health in University Students. *The Spanish Journal of Psychology*, 9(1), 45-51.

- Extremera, N., Fernández-Berrocal, P., Mestre, J., & Guil, R. (2004). Medidas de evaluación de la Inteligencia emocional [Assessment instruments of emotional Intelligence]. *Revista Latinoamericana de Psicología*, 36(2), 209-228.
- Fernández-Berrocal, P., Extremera, N., & Ramos, N. (2004). Validity and reliability of the Spanish modified version of the Trait Meta Mood Scale. *Psychological Reports*, 94, 751-755.
- Fernández-Berrocal, P., & Ruiz, D. (2008). La inteligencia emocional en la educación [Emotional Intelligence in the educational context]. *Electronic Journal of Research in Educational Psychology*, 6(2), 421-436.
- Fernández-Berrocal, P., Ruiz, D., Extremera, N., & Cabello, R. (2009). ¿Es posible crear una escuela emocionalmente inteligente? [Is it posible to create an emotional intelligence school?] In J. M. Augusto (Coord), *Estudios en el ámbito de la Inteligencia emocional*, (pp. 37-54). Jaén: Servicio de Publicaciones de la Universidad de Jaén.
- Fernández-Berrocal, P., & Extremera, N. (2010). Más Aristóteles y Menos Prozac (More Aristóteles and less Prozac). *Encuentros en Psicología Social*, 5 (1), 40-51.
- Gaeta, M.L., Teruel, M. P., & Orejudo, S. (2012). Aspectos motivacionales, volitivos y metacognitivos del aprendizaje autorregulado (Motivational aspects, volition and metacognitions in self-regulated learning). *Electronic Journal of Research in Educational Psychology*, 10(1), 73-94.
- García-León, A., & Lopez-Zafra, E. (2009). Una revisión de los modelos e instrumentos de evaluación de la Inteligencia Emocional [A revisión of models and assessment instruments in Emotional Intelligence]. In J. M. Augusto (Coord.), *Estudios en el ámbito de la Inteligencia Emocional* (pp. 15-36). Jaén: Servicio de Publicaciones de la Universidad de Jaén.
- Gilar, R., Miñano, P., & Castejón, J. L. (2008). Inteligencia emocional y empatía: su influencia en la competencia social en Educación Secundaria Obligatoria [Emotional Intelligence and empathy: its influence in social competence in secondary school]. *SUMMA Psicológica UST*, 5(1), 21-32.
- Goleman, D. (2005). *Emotional intelligence*. New York: Knopf Publishing Group.
- Guil, R., Gil-Olarte, P., Mestre, J.M., & Nuñez, I. (2006). Inteligencia emocional y adaptación socio-escolar [Emotional Intelligence and socio-school adaptation]. *Revista Electrónica de Motivación y Emoción*, 9 (22). Retrieved from <http://reme.uji.es> (12/06/2012)
- Hintsanen, M., Hintsanen, T., Merjonen, P., Leino, M., & Keltikangas-Järvinen, L. (2011). Factores familiares y escolares de alumnos de 9 a 15 años, como predictores de su logro

- académico como adultos: Un estudio de seguimiento durante 27 años [Family and school factors in students from 9 to 15 years, as predictors of academic achievement: a longitudinal study along 27 years]. *Electronic Journal of Research in Educational Psychology*, 9 (2), 523-540.
- Humphrey, N., Curran, A. Morris, E., Farrel, P., & Woods, K. (2007). Emotional Intelligence and Education: A critical review. *Educational Psychology*, 27(2), 235-254.
- Inglés, C., Benavides, G., Redondo, J., García-Fernández, J., Ruiz-Esteban, C., Estévez, C., & Huescar, E. (2009). Conducta prosocial y rendimiento académico en estudiantes españoles de educación secundaria Obligatoria [Prosocial behaviour and academic performance in spanish secondary school students]. *Anales de Psicología*, 25(1), 93-101.
- Jiménez, M. I. (2009). *Inteligencia Emocional y Rendimiento académico en estudiantes de enseñanza Secundaria: Relación entre variables psicosociales y estudio experimental sobre la aplicación de un programa de Educación Emocional* [Emotional intelligence and academic performance in secondary school students: relationship among psychosocial variables and experimental study about the implementation of an Emotional Education program]. Tesis Doctoral no publicada.
- Jiménez, M. I., & López-Zafra, E. (2009). Inteligencia Emocional y Rendimiento escolar: estado actual de la cuestión [Emotional Intelligence and school performance: An updated overview]. *Revista Latinoamericana de Psicología*, 41(1), 66-77.
- Jiménez, M. I., & López-Zafra, E. (2010). Inteligencia Emocional Percibida y rendimiento Académico en estudiantes Españoles de Enseñanza Secundaria Obligatoria [Emotional intelligence and academic performance in secondary school students]. En J. J. Gázquez y M<sup>a</sup>. C. Pérez (Coords.), *Investigación en Convivencia Escolar: variables relacionadas* (pp. 505-508). Granada GEU.
- Jiménez, M. I., & Lopez-Zafra, E. (2011). Actitudes sociales y adaptación socioescolar en adolescentes españoles: el papel de la inteligencia emocional percibida [Social attitudes and social adaptation among spanish adolescents: the role of perceived emotional intelligence]. *Revista de Psicología Social*, 26(1), 105-118.
- Juntilla, N., Voeten, M., kaukianen, A., & Vauras, M. (2006). Multisource assessment of children's social competent. *Emotional and Psychological Measurement*, 66(5), 874-895.
- Lopez-Zafra, E., Berrios, M. P., & Augusto, J. M. (2008). *Introducción a la Psicología Social* [Introduction to Social Psychology]. Jaén: Edición del Lunar.

- Lopez-Zafra, E., & Jiménez, M. I. (2012). Psicología Social de la Educación: el papel de la Inteligencia Emocional en el Aula [Social Psychology of Education: the role of Emotional Intelligence in the classroom]. En A. V. Arias, J. F. Morales, E. Nouvillas y J. L. Martínez (Eds.), *Psicología Social Aplicada (Applied Social Psychology)* (pp. 183-200). Madrid: Panamericana.
- Martín, E., Martínez-Arias, R., Marchesi, A., & Pérez, E. (2008). Variables that Predict Academic Achievement in the Spanish Compulsory Secondary Educational System: A Longitudinal, Multy-Level Analysis. *The Spanish Journal of Psychology*, *11*(2), 400-413.
- Mavroveli, S., & Sanchez-Ruiz, M. J. (2011). Trait emotional intelligence influences on academic achievement and school behavior. *British Journal of Educational Psychology*, *81*, 112–134
- Mayer, J. D., Roberts, R. D., & Barsade, S. G. (2008). Human abilities: Emotional Intelligence. *Annual Review of Psychology*, *59*, 507-536.
- Mestre, J., Guil, R., Lopes, P., Salovey, P., & Gil-Olarte, P. (2006). Emotional Intelligence and social and academic adaptation to school. *Psicothema*, *18*, 112-117.
- Mestre, J. M., Palmero, F., & Guil, R. (2004) Inteligencia emocional: una explicación integradora desde los procesos psicológicos básicos [Emotional Intelligence: an integrative explanation from basic psychological processes]. In J. M. Maestre and F. Palmero (Coords.), *Procesos psicológicos básicos: una guía académica para los estudios en Psicopedagogía, Psicología y Pedagogía* (pp. 249-280). Madrid: McGraw-Hill.
- Miñano, P., & Castejón, J. L. (2008). Capacidad predictiva de las variables cognitivo-motivacionales sobre el rendimiento académico [Predictive power of cognitive-motivational variables on academic performance]. *Revista Electrónica de Motivación y Emoción*, *11*(28), 1-7. <http://reme.uji.es> (Consultado 12/04/2012)
- Moraleda, M., González, A., & García-Gallo, J. (1998). *Manual de Actitudes y Estrategias Cognitivas Sociales* [Attitudes and Sociocognitive strategies Manual] Madrid: TEA
- Muncer, S., & Ling, J. (2006). Psychometric analysis of the empathy quotient (EQ) scale. *Personality and Individual Differences*, *40*, 1111-19.
- Newsome, S., Day, A., & Catano, V. (2000). Assessing the predictive validity of emotional intelligence. *Personality and Individual Differences*, *29*, 1005-1016.
- Parker, J., Creque, R., Barnhart, D., Harris, J., Majeski, S., Wood, L., Bond, B. & Hogan, M. (2004). Academic achievement in high school: does emotional intelligence matter. *Personality and Individual Differences*, *37*(7), 1321-1330.

- Pena, M. & Repetto, E. (2008). Estado de la investigación en España sobre Inteligencia Emocional en el ámbito educativo [State of the research about emotional intelligence at the school in Spain]. *Electronic Journal of Research in Educational Psychology*, 6(2), 400-420.
- Pérez, M. (2011). Profesional Especializado frente al no especializado: la paradoja del profesor orientador [Specialized professional vs no specialized: the paradox of the orientation teacher]. *Papeles del Psicólogo*, 32, 232-241.
- Petrides, K., Frederickson, N., & Furham, A. (2004). The role of trait emotional intelligence in academic performance and deviant behavior at school. *Personality and Individual Differences*, 36(2), 277-293.
- Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectations and pupil's intellectual development*, New York: Holt, Rinehart and Winston.
- 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 [Emotional intelligence and psychosocial adjustment in adolescence: the role of emotional perception]. *European Journal of Education and Psychology* 4(2), 143-152.
- Woolfolk, A. (1999). *Psicología Educativa* [Educational Psychology] Mexico: Prentice Hall.
- Zeidner, M., Roberts, R. & Matthews, G. (2008). The Science of Emotional Intelligence: current consensus and controversies. *European Psychologist*, 13(1), 64-78.
- Zeidner, M., Matthews, G. & Roberts, R. (2009). *What We Know about Emotional Intelligence: How It Affects Learning, Work, Relationship, and our Mental Health*. Londres: MIT Press.

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