Academic performance, emotional intelligence and academic engagement in adolescents

Usán Supervía, Pablo[1] y Salavera Bordás, Carlos[1]

[1] Departamento de Psicología y Sociología.
Universidad de Zaragoza

España

Correspondence: Pablo Usán Supervía. Dpto Psicología y Sociología. Universidad de Zaragoza. C/Pedro Cerbuna nº12. 50009 (Zaragoza) España. E-mail: pusan@unizar.es

Pablo Usán Supervía y Carlos Salavera Bordás

Abstract

Introduction: During the school stage of the students in their schools different personal and academic activities have a decisive influence on the personal and on the performance variables. Therefore, the study of variables such as emotional intelligence, engagement and academic performance will help to understand the relationships between these constructs. The objective of this paper was to analyze the relationship between emotional intelligence, academic engagement and school performance in a sample of 3512 adolescent students belonging to 18 compulsory secondary education schools.

Method: The instruments used the Spanish versions of the Traid Meta-Mood Scale-24 (TMMS-24), the Utrecht Work Engagement Scale-Student (UWES-S) and the school performance was quantified through the average mark of their student.

Results: The results showed positive relations of school performance with academic engagement and emotional intelligence, except with emotional perception, in turn, as a predictive value of the dedication to academic tasks.

Discussion or **Conclusion**: The need to promote adaptive behaviors in the classroom as facilitators of positive attitudes for school performance and social development of students was revealed.

Keywords: Emotional intelligence; academic engagement; school performance; students; adolescents.

Resumen

Introducción. Durante la etapa escolar del alumnado en los centros educativos se producen diferentes situaciones personales y académicas que influyen de manera determinante tanto en la personalidad como en el rendimiento del mismo. Por ello, el estudio de variables como la inteligencia emocional, el *engagement* así como el rendimiento escolar contribuirá a comprender las relaciones entre dichos constructos siendo el objetivo del presente trabajo analizar la relación entre la inteligencia emocional, el *engagement* académico y el rendimiento escolar en una muestra de 3512 estudiantes adolescentes pertenecientes a 18 centros de Educación Secundaria Obligatoria (ESO).

Método. El presente trabajo consistió en un estudio ex post-facto de carácter prospectivo con un diseño descriptivo simple, respondiendo a un muestreo aleatorio. Los instrumentos utilizados fueron las versiones españolas del *Traid Meta–Mood Scale-24* (TMMS-24), el *Utrecht Work Engagement Scale–Student* (UWES-S) y el rendimiento escolar se cuantificó a través de la nota media del alumnado.

Resultados. Los resultados mostraron relaciones positivas del rendimiento escolar con todas las dimensiones del *engagement* académico y la inteligencia emocional, salvo con la percepción emocional; actuando, a su vez, como valor predictivo de la dedicación a las tareas académicas.

Discusión y conclusiones. Se desprende la necesidad de promover comportamientos adaptativos en el aula como facilitadores de las actitudes positivas hacia el desempeño escolar y mejora del desarrollo integral y rendimiento escolar de los estudiantes.

Palabras Clave: Inteligencia emocional; *engagement* académico; rendimiento escolar; estudiantes; adolescentes.

Introduction

Today's research into education partially pays attention to mainly building new methodologies and ways to act that affect students' development and well-being (Baena & Granero, 2015). In students' schooling years, many personal and contextual circumstances arise in education centers that significantly affect their academic performance while they learn. Fulfilling secondary education objectives and coping with the typical changes of adolescence shape a vitally important life stage in people's lives (Gómez-Fraguela, Fernández, Romero & Luengo, 2008).

Academic performance has been traditionally linked to students' intellectual capacity to obtain good marks. Nowadays, however, individuals' personal balance and psychological aspects are also considered determining factors to achieve good academic performance. So knowing their own involved emotions and having suitable tools to deal with them when faced with difficulties are important for students' future in their education process (Ferragut & Fierro, 2012).

New conceptions about intelligence have appeared in recent decades which, taken as a general construct, come over as an insufficient and incomplete factor to predict overall success in different spheres of life. Since the 1990s, several intelligences have been examined which, like emotional intelligence, provide people with potentially relevant information (Mayer, Roberts & Barsade, 2008). This has led to a new broader intelligence concept being developed, which considers other aspects beyond purely rational ones, such as emotional factors (Pérez & Castejón, 2006).

Emotional Intelligence (EI) is known as someone's capacity to process the information obtained from the emotions that emerge in our surroundings (Mayer, Salovey & Caruso, 2000). Emotionally intelligent people are those who can deal with the emotions they perceive in their surroundings by understanding both their causes and consequences, and by developing strategies to regulate or handle various moods (Mayer & Salovey, 1997; Mayer, Salovey & Caruso, 2000; Pena & Extremera, 2012).

In today's scientific study into EI, the skills model proposed by Mayer, Caruso and Salovey prevails (1999), which conceptualized EI as «*the capacity to assess and accurately express emotions, the capacity to access and generate feelings that facilitate thought, the capacity to understand emotions and emotional growth, and the capacity to regulate emotions and to promote emotional/intellectual knowledge*». Therefore, EI is made up of specific skills that play a key role in someone's subjective well-being; i.e., clarity, clarity and emotional regulation. Emotional attention is defined as the capacity to suitably perceive and express feelings. Emotional clarity is related with understanding moods, Emotional regulation is the capacity to properly regulate moods.

The scientific literature about EI in the education domain is plentiful. Most studies have focused on investigating the impact of EI on the well-being of Primary Education (Ferragut & Fierro, 2012), Compulsory Secondary Education (CSE) students (Extremera, Durán & Rey, 2009) and university students (Extremera, Salguero, & Fernández-Berrocal, 2011) and in adult education (Vergara, Alonso-Alberca, San-Juan, Aldás, & Vozmediano, 2015) by underlining the association linking students' EI and subjective well-being, satisfaction with life and academic happiness. EI has been studied in teacher samples in Primary (Arias, 2009), Secondary (Chan, 2006) and University (Augusto-Landa, López-Zafra, Martínez & Pulido, 2006) Education, along with other variables like occupational health, perceived efficacy or satisfaction with academic outcome.

Therefore, emotions play a vital role in students adapting to their education center insofar as they emotionally handle the personal/contextual variables that emerge throughout their school lives, which could determine important issues like academic happiness, personal well-being, academic performance, group interaction, etc.

Academic Engagement (AE) is taken as an adaptive pattern based on someone's strong points in the face of stress, anxiety and/or exhaustion situations to the detriment of academic burnout (Seligman, Steen, Park & Peterson, 2005). AE is characterized by vigor, dedication and absorption. Vigor refers to the high levels of energy and resistance that form part of academic demand, investing efforts in work, and showing persistence in the face of difficulties. Dedication indicates one's implication in and commitment to a given assignment or task, and in feelings of enthusiasm and positive evaluations. Absorption involves being im-

mersed in a given task that meets and exceeds students' expectations (Schaufeli & Bakker, 2004).

Hence AE is related to high levels of perceived academic self-efficacy (Bresó, Schaufeli & Salanova, 2011) and EI (Extremera *et al.,* 2007), low academic burnout levels (Schaufeli & Salanova, 2007), low rates of dropping out of school (Salanova *et al.,* 2014), optimum academic performance (Vera, Le Blanc, Taris & Salanova, 2014) and, generally speaking, students' academic happiness (Moyano & Riaño-Hernández, 2013). Finally, AE is considered an adaptive conduct pattern for students, and is characterized by feeling engaged in, and satisfaction with, performing academic activities.

Those studies that have linked AE and EI in schooling have evidenced a positive relation between both. Extremera, Durán and Rey (2007) indicate that emotional clarity and attention dimensions are associated with vigor and dedication, whereas emotional clarity is the only one linked to the absorption dimension. Esteban report positive correlations between the EI and AE dimensions, especially with clarity and emotional clarity. Pena, Rey and Extremera (2012) share the same position by indicating that all EI dimensions are related with AE.

Academic performance (AP) is one of the most important issues in the teaching- learning process (Garzón, Pinzón, Del Riesgo, Rojas & Salamanca, 2010), and is well accepted as a multidimensional, broad relative concept according to various objectives and expected results in educational action (Abalde, Barca, Muñoz & Fernando, 2009). Other studies consider it a measure of academic effectiveness or academic achievement (Niebla & Hernández, 2007; Tilano, Henao & Restrepo, 2009).

As numerical marks are one of the most widely used indicators as solid predictors of students' AP stability in the scientific literature (Barca, Peralbo, Porto, Marcos & Brenlla, 2011; Córdoba, García, Luengo, Vizuete & Feu, 2012; Risso, Migues & Peralbo, 2010), quantifying performance can be done in several ways; e.g. the amount of time spent on studying (Molleda & Herrero, 2009), number of fails (Díaz, 2003), repeated courses (Hernando, Oliva & Pertegal, 2012), standard tests (Carmona, Sánchez & Bakieva, 2011), and combinations of them (Rosário *et al.,* 2012).

Studies into AP have been conducted from different perspectives. Gónzalez (2013) has reviewed some works that identified and classified the most well studied factors and/or conditioning factors. This author indicates three main factors: students' personal factors; i.e., intelligence and aptitudes (Goleman, 2012); motivation to study (Pelechano, 2012) and self-concept (Long, Monoi, Harper, Knoblauch & Murphy, 2007); as well as learning styles (Ruíz, Trillos & Morales, 2006) and academic factors, like marks obtained from evaluation processes, or even the school climate (Prieto & Carrillo, 2009). Finally, some psycho-social factors come into play; i.e., the family's level of education (Marchesi & Martín, 2002), socio-economic and cultural levels (Sirin, 2005), and other socio-family variables (Oliva, Parra, Sánchez-Queija & López, 2007).

The scientific literature contains studies that have related EI and AP in adolescent students, but with very different results. Some research works establish a relation between both these variables. That by Mestre, Guil and Gil-Olarte (2004) indicates statistically significant correlations between EI and AP, which remain regardless of the influence that personality, general intelligence, or the combined effect of both, may have on students' marks. Miranda, Rodriguez and Montemayor (2007) relate EI and AP, but find that only the attention factor is related to AP. Vallejo-Sánchez, Martínez, García and Rodríguez (2012) conclude that AP is influenced by EI, and indicate differences between students with less EI and those whose EI is excellent. They report no differences between suitable/average EI and the other two. Some international studies follow this EI+AP relation linked to other variables, like generally feeling more satisfied with life or students' psychological well-being (Buenrostro *et al.,* 2012).

Nevertheless, some research works indicate quite the opposite to what the above-mentioned works report. Jiménez and López-Zafra (2009) have conducted a study about how emotions impact the education context. They report inconsistent results and propose new study methodologies. Sánchez, Rodríguez and Padilla (2007) deny the predictive capacity of EI on adolescent students' AP. Martínez (2010) report no significant relations between EI and AP, and also indicate that those students with high AP levels tend to acquire lower EI levels, and *vice versa*.

The scientific literature on the AE construct offers some studies that relate it with AP. García *et al.* (2015) indicate a positive relation linking engagement levels, subjective well-being and AP. Casuso-Holgado *et al.,* (2013) find positive associations between engagement

(particularly the vigor and dedication dimensions) and AP. Wintre *et al.,* (2011) refer to a relation between greater subjective well-being, vigor, dedication and absorption and lower stress levels and more AP.

Following Caballero, Hederich and García (2015), what all this reveals is that more studies are needed to extend our understanding and knowledge of the interrelation between various psychological constructs of students' academic lives, such as AP, EI and AE in the interest of students' personal and academic development at school.

Objectives and hypotheses

For all these reasons, and as very few studies have directly related the aforementioned variables, our main study objective was to focus on analyzing the relation that links AP, EI and AE with a sample of adolescent CSE students.

In this way, and in line with our study objective, the following hypotheses are put forward: (a) students with higher EI levels will display more AE and better AP because they are adaptive conducts; (b) AP will act as a positive predictor of both CSE students' EI and AE.

Method

Participants

This study recruited 1756 students from 18 public CSE centers in the spanish city of Zaragoza. Their ages ranged between 12 and 18 years (M=14.55; SD=1.68). The sample was formed by 914 males (52.05%) and 842 females (47.94%).

Table 1. *Students' age and academic year.*

		N	*%*
Age	12 years	307	17.89
	13 years	293	16.54
	14 years	403	24.02
	15 years	417	23.93
	16 years	269	14.03
	17 years	56	2.71
	18 years	11	.88
Academic year	1º ESO	338	20.09
	2º ESO	436	25.63
	3º ESO	567	32.11
	4º ESO	415	22.17

Instruments

Three questionnaires were utilized to collect information and to deal with the study objective.

In order to know the students' EI, *Trait Meta-Mood Scale-24* (TMMS-24) (Salovey, Mayer, Goldman, Turvey & Palfai, 1995) was used. This scale comprises three dimensions with 8 items each: *Emotional attention* (5) (α=.89) (i.e. "I pay much attention to my feelings"); *Emotional clarity* (5) (α=.90) (i.e. "I am usually very clear about my feelings") and *Emotional repair* (5) (α=.86) (i.e. "When I am upset, I think of the pleasure of life"). The responses are arranged on a Likert-type scale, which ranges from "I strongly disagree" (1) to "I strongly agree" (5).

The Spanish version of *Utrecht Work Engagement Scale – Student* (UWES-S) was employed (Schaufeli *et al.,* 2002) to find out about students' AE. This instrument comprises

17 items distributed in three dimensions: *Vigor* (6) (α=.81) (i.e. "When I study, I feel I am bursting with energy); *Dedication* (5) (α=.79) (i.e. "My studies inspire me") and *Absorption* (6) (α=.80) (i.e. "I feel happy when I'm studying intensively"). Responses vary from "I completely disagree" (1) to "I completely agree" (5) and are given on a Likert-type scale.

Students' AP was obtained from their mean mark, as indicated in their 3-monthly reports, based on tests on a scale from 0 points (minimum) to 10 points (maximum), with two decimal places. This is one of the most widespread procedures and it acts as a predictor of students' greater AP stability (Barca, Peralbo, Porto, Marcos & Brenlla, 2011; Córdoba, García, Luengo, Vizuete & Feu, 2012; Risso, Migues & Peralbo, 2010). This variable's reliability is indicated by Cronbach's alpha, which was .85 in the present research work.

Procedure

This study received approval from the CSO centers, and also from students' parents/guardians via informed consent to participate in the present research. On 1 day a week, which was agreed on with the Head of Studies beforehand, questionnaires were completed in class in all 18 centers. Both the subjects and their parents/guardians had previously received information about the nature of the study and that it was voluntary. This practice respects the ethical guidelines that correspond to the Declaration of Helsinki (AMM, 2000) as far as all its terms are concerned.

Design

In line with Ato, López and Benavente (2013), this research work was a prospective *ex post-facto* study with a simple descriptive design that employed random sampling.

Data analysis

Descriptive statistics were done to know the sample's socio-demographic data and the various studied variables. Correlations were carried out among the EI, AE and AP scores, and were processed and analyzed by the IBM SPSS v22.0 statistics package. A linear regression analysis was used to estimate the performance prediction on EI and AE. A structural equations model was done by means of the maximum likelihood extraction method. This enabled

us to validate and quantify the relations among EI, AE and AP using v24 of the AMOS software. A p≤0.05 level of significance and a 95% CI were taken for all these operations.

Results

The results obtained with the several studied variables are presented below.

A correlation analysis among the variables EI, AE and AP

First of all, a correlation analysis was carried out between the psychological variables included herein and AP (see Table 2). This table shows how the scores of the different variables are heterogeneous. The EI dimensions positively correlate with the AE dimensions. Moreover, the EI dimensions that correlated with AP were clarity ($r=.121$) and regulation ($r=.123$), while the following dimensions correlated for AE: vigor ($r=.216$), dedication ($r=.303$) and absorption ($r=.261$).

Table 2. *Relation among the variables EI, AE and AP*

Variables		**1**	**2**	**3**	**4**	**5**	**6**	**7**
Emotional intelligence	1. Attention	1						
	2. Clarity	.15**	1					
	3. Regulation	.05	.45**	1				
Academic engagement	4. Vigor	.08*	.30**	.37**	1			
	5. Dedication	.07*	.30**	.42**	.72**	1		
	6. Absorption	.12**	.25**	.29**	.71**	.71**	1	
Academic performance	7. Mean mark	-.01	.12**	.12**	.216**	.30**	.26**	1
	Mean	3.44	3.41	3.56	2.75	3.21	2.84	6.32
	SD	.75	.72	.75	1.02	1.03	.90	1.62
	Cronbach´s alpha	.89	.90	.86	.81	.79	.80	.85

The regression analysis of AP on EI and AE

Next a linear regression analysis was performed to observe the predictive value of AP (the dependent variable) on the EI and AE dimensions (the independent variables). Table 3 shows that the only significant variable was task dedication (the AE dimension), with 30% of explained variance.

Table 3. EI and AE as predictors of AP

	B	s.e.	R^2	t	Sig.
(Constant)	2.027	.124		16.388	.000
Academic engagement – Dedication	.341	.037	.305	9.273	.000

Model of the structural equations among the variables EI, AE and AP

Finally, Figure 1 illustrates the results of the analysis by means of structural equations, done by the maximum likelihood extraction method. It confirmed the suitability of the model made up of the constructs set out herein and indicates a correlation between EI and AP (*r*=.57). This revealed that the EI levels were paired with those of AE. This model also indicated how engagement influences performance (*r*=.31), and the poor correlation between engagement and EI (*r*=.01), if we bear in mind the relevance of the three study object variables as a whole. Thus the various fit indices is adequate for the model's fits, and the proposed model about the factorial structure among EI, AE and AP is feasible: χ^2 (12) = 25.806, p < 0.001; χ^2 /df =2.15; CFI = 0.99; NFI = 0.98; TLI = 0.98; RMSEA = 0.46 95%CI (0.026–0.067).
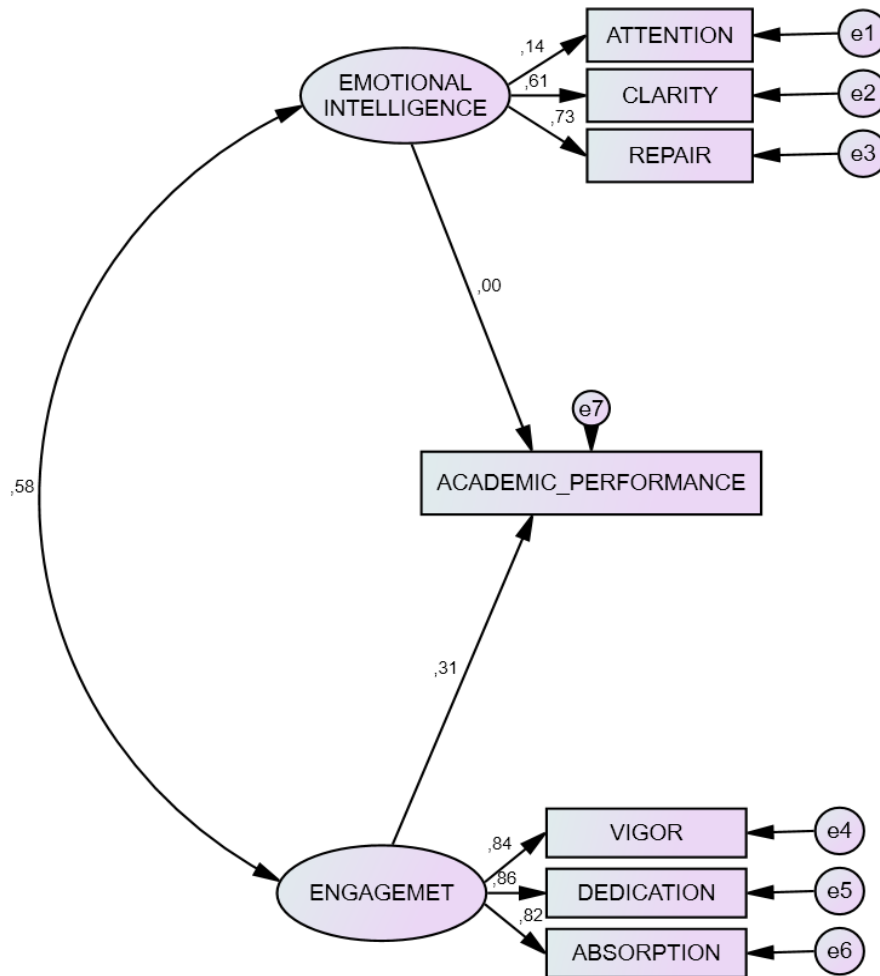
Figure 1. *Model of the structural equations among the variables EI, AE and AP.*

Discussion and Conclusions

Our study objective was to analyze the relation that links EI, AE and AP with a sample of adolescent students studying CSE.

Our first hypothesis was that the students with more EI would be positively related with all the AE dimensions and with AP in a line of more adaptive conducts. This hypothesis was met because our research results revealed a close relation among these variables. Hence

these students with high EI prevalences showed not only high AE, but also higher AP in a clear line of adaptive conducts.

The scientific literature does not offer us any research works that directly encompass the object variables included herein, although other works can be found that have followed our same research line.

Some studies indicate a relation between EI and AE. Extremera *et al.* (2009) present a pattern of conduct for Secondary Education students, characterized by greater vigor and dedication to academic tasks, and linked to greater EI. Our results fall in line with Bresó, Schaufeli and Salanova (2011), who indicate a close relation between both variables and their corresponding dimensions. Palacio, Caballero, González, Gravini and Contreras (2012) confirm a positive relation between high levels of EI and AE, as well as negative relations with physical/emotional exhaustion and cynicism of burnout. Extremera *et al.* (2007) report a relation between dimensions of attention and emotional clarity and vigor and dedication, while emotional clarity was the only one related with the absorption dimension, a fact that complements our results. Serrano and Andreu (2016) share this same idea by referring to a strong link between the EI dimensions and AE, which ends up influencing students' personal well-being and happiness, and contributes to them making favorable academic progress in their academic lives (Moyano & Riaño-Hernández, 2013).

Other works stress the relation between AP and EI and AE. Miranda *et al.* (2007) confirm an association between EI and AP in their study into different personality styles in adolescents. Vallejo-Sánchez *et al.* (2012) conclude that performance is influenced by EI, and indicate differences between students with high and low EI. Other international studies emphasize this same relation between EI and AP in relation to other variables, like students' psychological well-being or feeling more satisfied with life (Buenrostro *et al.,* 2012). In the university setting, the works by Fernández-Berrocal, Extremera and Ramos (2004), and those by Montero, Villalobos and Valverde (2007), also maintain this relation between both variables.

The relations between AE and AP tend to corroborate that a positive association exists between both. Ferragut and Fierro (2012) indicate this same relation by stressing a link with positive coping styles. Lyubomirsky, King and Diener (2005) associate subjective well-being

with high levels of AE that lead to higher AP. Casuso-Holgado *et al.* (2013) report positive associations between AE (particularly the vigor and dedication dimensions) and AP.

Our second research hypothesis referred to predicting AP by measuring the EI and AE dimensions. This hypothesis was partly met. The obtained results confirmed the AP prediction with dedication to academic tasks, the AE dimension. This was the only significant dimension between the variables EI and AE. So from a predictive and non correlational viewpoint, Martínez (2010) show that the relation between AP and EI actually depends on each student's idiosyncrasy, but do not indicate a explicit link between both. In their study about how emotions influence the education context, Jiménez *et al.* (2009) provide some inconsistent results and propose exploring new alternatives. Regarding AE, most studies confirm a relation with performance for two of its dimensions or more. In the present research work, only dedication to academic tasks confirms this relation. Casuso-Holgado *et al.* (2013) confirm the prediction of AP from students' dedication and vigor. Vera *et al.* (2014) associate optimum AP with the AE dimensions. Finally, Wintre *et al.* (2011) report a relation between higher vigor, dedication and absorption and lower levels of perceived stress and better AP.

What all this reveals is that the EI and AE dimensions impact adolescent students' AP. Indeed these variables, along with others of a personal/contextual type, form a compendium of psychological variables that affect students' future while they are at school as they condition their performance and their link with the education center itself (Ervasti *et al.,* 2011). So managing such variables is essential for accomplishing optimum development in students' academic lives (Salanova *et al.,* 2014).

Study limitations

Our study limitations are related with both its cross-section design and collecting data from the participants at a given spatio-temporal time point. Gender was controlled, but no differences between males and females were analyzed. These data could affect sample representativeness despite its size. The prevalences of EI, AE and AP could vary between academic years in accordance with students' personal/contextual circumstances in their group and/or class.

Future prospects

One interesting future prospect would be to conduct longitudinal studies to evaluate how the studied constructs evolve over a longer period of time. Other education stages should also be included, like Higher Secondary Education and Primary Education, different university degrees and adult education. Likewise, it would be relevant to cover other variables related to those studied here, such as gender, academic year or type of education center, plus other psychological aspects like student satisfaction and well-being.

Practical implications

This work could have practical implications that may lead to didactic strategies being adopted with students to be managed by teachers or by career advisers from early ages, which focus on knowledge about emotions, personal well-being, and on promoting effort in and dedication to tasks. These are all key aspects that contribute to optimum academic/psychological development, and they could help students to suitably face academic tasks and day-to-day problems and uncertainties.

Moreover, intervention programs led by professionals from the education domain to be used by the Public Administration and/or education centers could be contemplated so they can work alongside adolescents on the variables that emerge, or with others to contribute to their overall and educational training, help early academic abandonment rates to lower, and even favor their AP. In practice, barely any time is spent in classroom of education centers on teaching students about the importance of acquiring emotions not only at school, but also in all spheres of life.

Finally, our research results encourage us to continue investigating and searching for new questions to help us devise methodologies that allow progress in adolescent students' building personal/social development.

Referencias

Abalde, E., Barca, A., Muñoz, J.M. y Fernando, M. (2009). Rendimiento académico y enfoques de aprendizaje: una aproximación a la realidad de la enseñanza superior brasileña en la región norte. *Revista de Investigación Educativa, 27*(2), 303-3019.

Arias, N. (2009). El síndrome de *burnout* en los docentes. *Electronic Journal of Research in Educational Psychology,* 18, 829-848.

Asociación Médica Mundial (AMM) (2000). Declaración de Helsinki. Principios éticos para las investigaciones con los seres humanos. Seúl (Corea).

Ato, M., López, J. y Benavente, A. (2013). Un sistema de clasificación de los diseños de investigación en psicología. *Anales de psicología, 29*(3), 1038-1059.

Augusto-Landa, J. M., López-Zafra, E., Martínez, R. y Pulido, M. (2006). Perceived Emotional Intelligence and Life Satisfaction among University Teachers. *Psicothema,* 18, suppl., 152-157.

Baena, A. y Granero, A. (2015). Modelo de predicción de la satisfacción con la educación física y la escuela. *Revista de Psicodidáctica, 20*(1), 177-192.

Bresó, E., Schaufeli, W. y Salanova, M. (2011). Can a self-efficacy-based intervention decrease burnout, increase engagement, and enhance performance? A quasi-experimental study. *Higher Education, 61*, 339-355.

Buenrostro, A.E., Valadez, M.D., Soltero, R., Nava, G., Zambrano, R., y García, A. (2012). Inteligencia emocional y rendimiento académico en adolescentes. *Revista de Educación y Desarrollo, 20*, 29-37.

Caballero, C., Hederich, C. y García, A. (2015). Relación entre burnout y engagement académicos con variables sociodemográficas y académicas. *Psicología desde el Caribe, 32*(2), 254-267.

Carmona, C., Sánchez, P. y Bakieva, M. (2011). Actividades extraescolares y rendimiento académico: diferencias en autoconcepto y género. *Revista de Investigación Educativa, 29*(2), 447-465.

Casuso-Holgado, M. J., Cuesta-Vargas, A. I., Moreno-Morales, N., Labajos-Manzanares, M. T., Barón-López, F. J., y Vega-Cuesta, M. (2013). The association between academic

engagement and achievement in health sciences students. *BMC Medical Education, 13*(1), 13-33. doi: 10.1186/1472-6920-13-33.

Chan, D.W. (2006). Emotional Intelligence and Components of Burnout among Chinese Secondary School Teachers in Hong Kong. *Teaching and Teacher Education,* 22, 1042-1054.

Córdoba, L., García, V., Luengo, L., Vizuete, M. y Feu, S. (2012). How academic career and habits related to the school environment influence on academic performance in the physical education subject. *Retos. Nuevas tendencias en Educación Física, Deporte y Recreación*, 21, 9-13.

Díaz, A.L (2003). Factores personales, familiares y académicos que afectan al fracaso escolar en la Educación Secundaria. *Electronic journal of research in educational psychology, 1*(1), 43-66.

Ervasti, J., Kivima, M., Puusniekka, R., Luopa, P., Pentti, J., Suominen, S. y Virtanen, M. (2011). Students'school satisfaction as predictor ofteachers' sickness absence: A prospective cohort study. *The European Journal of Public Health*, *22*(2), 215-219.

Esteban, B. (2014). Una aproximación a la influencia de la Inteligencia Emocional Percibida en su relación con los niveles de Burnout y Engagement en el desempeño del Trabajo Social. *Azarbe. Revista Internacional de Trabajo Social y Bienestar,* 3, 123-131.

Extremera, N., Durán, A., y Rey, L. (2007). Inteligencia emocional y su relación con los niveles de *burnout*, *engagement* y estrés en estudiantes universitarios. *Revista de Educación, 342*(2), 239-256.

Extremera, N., Durán, A., y Rey, L. (2009). The moderating effect of trait meta-mood and perceived stress on life satisfaction. *Personality and Individual Differences, 47*(2), 116-121. doi: 10.1016/j.paid.2009.02.007

Extremera, N., Salguero, J. M. y Fernández-Berrocal, P. (2011). Trait Meta-Mood and subjective happiness: A 7-week prospective study. *Journal of Happiness Studies, 12*(3)*,* 509-517*.* doi: 10.1007/s10902-010-9233-7

Fernández-Berrocal, P., Extremera, N., y Ramos, N. (2004). Validity and reliability of the Spanish modified version of the Trait Meta-Mood Scale. *Psychological Reports, 94*(3), 751-755.

Ferragut, M., y Fierro, A. (2012). Inteligencia emocional, bienestar personal y rendimiento académico en preadolescentes. *Revista Latinoamericana de Psicología*, *44*(3), 95-104.

Garzón, R., Rojas, M.O., Del Riesgo, L., Pinzón, M. y Salamanca, A.L. (2010) Factores que pueden influir en el rendimiento académico de estudiantes de Bioquímica que ingresan en el programa de Medicina de la Universidad del Rosario (Colombia). *Educ Mec, 13*(2), 85-96.

Goleman, D. (2012). *Inteligencia emocional.* Editorial Kairós SA.

Gómez-Fraguela, J.A., Fernández, N., Romero, E. y Luengo, A. (2008). El botellón y el consumo de alcohol y otras drogas en la juventud. *Trastornos Adictivos*, *20*(2), 211-217.

Hernando, A., Oliva, A. y Pertegal, M. (2012). Variables familiares y rendimiento académico en la adolescencia. *Estudios de Psicología, 33*(1), 51-65.

Jiménez, I. y López-Zafra, E. (2009). Inteligencia emocional y rendimiento escolar: estado actual de la cuestión. *Revista Latinoamericana de Psicología, 41(1), 69-79.*

Long, J.F., Monoi, S., Harper, B., Knoblauch, D. y Murphy, P. K. (2007). Academic motivation and achievement among urban adolescents. *Urban Education, 42*(3), 196-222.

Marchesi, A. y Martin, E. (2002). *Evaluación de la Educación Secundaria: Fotografía de una etapa polémica.* Madrid: SM.

Martínez, A. (2010). Relación entre la inteligencia emocional y el rendimiento académico universitario en el contexto del espacio europeo de educación super*ior. Cuadernos de Educación y Desarrollo, 2(18),* 67-74.

Mayer, J. D., Caruso, D. R., y Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence, 27*(4), 267-298. doi: 10.1016/S0160-2896(99)00016-1.

Mayer, J.D., Roberts, R.D., y Barsade, S.G. (2008). Human abilities: Emotional intelligence. *Annual Review of Psychology, 59*(1), 507-536. doi: 10.1146/ annurev.psych.59.103006.093646

Mayer, J.D., Salovey, P., y Caruso, D.R. (2000). Models of emotional intelligence. En R. J. Sternberg (Ed.), *Handbook of intelligence* (pp. 396-420). Cambridge: Cambridge University Press.

Mayer, J.D., y Salovey, P. (1997). What is emotional intelligence? En P. Salovey y D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational applications* (pp. 3-31). New York: Basic Books.

Mestre, J., Guil, M. y Gil-Olarte, P. (2004). Inteligencia emocional: Algunas respuestas empíricas y su papel en la adaptación escolar en una muestra de alumnos de secundaria. *Revista Electrónica de Motivación y Emoción, VI (16).* Universidad de Cádiz, España.

Miranda, M., Rodríguez, C. y Padilla, V.M. (2007). ¿La inteligencia emocional está relacionada con el aprendizaje académico? *IPyE: Psicología y Educación, 1*(1), 54-66.

Molleda, C.B. y Herrero, F.J. (2009). Responsabilidad y comportamiento antisocial del adolescente como factores asociados al rendimiento escolar. *Acta colombiana de psicología, 12*(2), 69-76.

Montero, E., Villalobos, J. y Valverde, A. (2007). Factores institucionales, pedagógicos, psicosociales y sociodemográficos asociados al rendimiento académico en la Universidad de Costa Rica: Un análisis multinivel. *Revista Electrónica de Investigación y Evaluación Educativa (RELIEVE), 13*(2).

Moyano, N. y Riaño-Hernández, D. (2013). Burnout escolar en adolescentes españoles: Adaptación y validación del School Burnout Inventory. Ansiedad y Estrés, 19, 95-103.

Oliva, A., Parra, A. y Sánchez-Queija, I. (2008). Consumo de sustancias durante la adolescencia: trayectorias evolutivas y consecuencias para el ajuste psicológico. *International Journal of Clinical and Health Psychology, 8*(1), 153-169.

Palacio, S., Caballero, C., González, O., Gravini, M. y Contreras, K. (2012). Relación del burnout y las estrategias de afrontamiento con el rendimiento académico en estudiantes universitarios. *Universytas Psychological, 11*(2), 178-186.

Pena, M., Rey, L., y Extremera, N. (2012). Life satisfaction and engagement in elementary and primary educators: Differences in emotional intelligence and gender. *Revista de Psicodidáctica, 17*(2), 341-358. doi: 10.1387/Rev.Psicodidact.1220

Pérez, N. y Castejón, J. (2006). Relaciones entre la inteligencia emocional y el cociente intelectual con el rendimiento académico en estudiantes universitarios. *Revista Electrónica de Motivación y Emoción, IX (22).* Universidad de Alicante

Portolés, A. y González, J. (2015). Rendimiento académico y correspondencias con indicadores de salud física y psicológica. *Sportis, 1*(2), 164-181.

Prieto, M.T. y Carrillo, J.C. (2009). Fracaso escolar y su vínculo con el maltrato entre alumnos: el aula como escenario de la vida afectiva. *Revista Iberoamericana de Educación, 49*(1).

Rosário, P., Lourenço, A., Paiva, O., Rodrigues, A., Arias, A.V. y Herrero, E.T. (2012). Predicción del rendimiento en matemáticas: efecto de variables personales, socioeducativas y del contexto escolar. *Psicothema, 24*(2), 289-295.

Ruíz, B.L., Trillos, J. y Morales, J. (2006). Estilos de aprendizaje y rendimiento académico en estudiantes universitarios. *Revista gallegoportuguesa de psicoloxía e educación: revista de estudios e investigación en psicología y educación, 13*, 441-460.

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. En J.W. Pennebaker (Ed.), *Emotion, disclosure and health* (pp. 125-154). Washington: American Psychological Association. doi: 10.1037/10182-006

Sánchez, M., Rodríguez, M. y Padilla, V. (2007). ¿La inteligencia emocional está relacionada con el rendimiento académico? *IP y E: Psicología y Educación,* 1*(1).45-52.*

Schaufeli, W. y Bakker, A. (2004). Job demands, job resources, and relationship with burnout and engagement: a multisample study. *Journal of Organizational Behavior*, *25*(3), pp. 293.

Schaufeli, W. y Salanova, M. (2007). Efficacy or inefficacy, that's the question: Burnout and work engagement, and their relationships with efficacy believes. *Anxiety, Stress and Coping, 20*, 177-196.

Schaufeli, W., Martínez, I., Marques-Pinto, A., Salanova, M. y Bakker, A. (2002). Burnout and engagement in university students: A crossnational study. *Journal of Cross-Cultural Psychology, 33*(5), 464-468.

Seligman, M., Steen, T., Park, N. y Peterson, C. (2005). Positive psychology progress. Empirical validation of interventions. *American Psychologist, 60*, 410- 421.

Serrano, C. y Andreu, Y. (2016). Inteligencia emocional percibida, bienestar subjetivo, estrés percibido, engagement y rendimiento académico de adolescentes. Revista de Psicodidáctica, *21*(2), 357-374.

Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of educational research, 3*(75), 417-453.

Tilano, L.M., Henao, G. y Restrepo, J. (2009). Prácticas educativas familiares y desempeño académico en adolescentes escolarizados en el grado noveno de instituciones educativas oficiales del municipio de Envigado. *El Ágora, 9*(1), 35-51.

Vallejo-Sánchez, B., Martínez, J., García, C. y Rodríguez, C. (2012). *Influencia* de la inteligencia emocional en el rendimiento escolar. *Comunicación científica. XIII Congreso virtual de psiquiatría.*

Vera, M., Le Blanc, P., Taris, T. y Salanova, M. (2014). Patterns of engagement: the relationship between efficacy beliefs and task engagement at the individual versus collective level. *Journal of Applied Social Psychology, 44*, 133-144.

Vergara, A.I., Alonso, N., San-Juan, C., Aldas, J., y Vozmediano, L. (2015). Be water: Direct and indirect relations between perceived emotional intelligence and subjective well-being. *Australian Journal of Psychology, 67*(1), 47-54. doi: 10.1111/ajpy.12065