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ORIGINAL ARTICLE

Emotional intelligence and depressed mood in adolescence: A multilevel approach

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intelligence;
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Abstract The aim of the study was to analyze the relationship between individual emotional intelligence, group emotional intelligence and depressed mood in adolescence from a multilevel approach. The study sample comprised 2,182 adolescents (1,127 female and 1,055 male) aged between 12 and 18 years ($M = 14.51$, $SD = 1.55$). They attended 14 secondary schools in the Basque Country (northern Spain) and were grouped into 118 different classes. A two-level model (students nested in classes) with three predictor variables of level 1 (attention, clarity and repair of emotions) and one predictor variable of level 2 (class emotional intelligence) was used to examine their influence on depressed mood. The results indicated that clarity and the ability to regulate emotions at the individual level and emotional intelligence at the class level are important for explaining depressed mood. In this way, the study provides an integrative approach to research on the psychosocial well-being of adolescents that takes into account emotional variables located at different levels.

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PALABRAS CLAVE

Inteligencia
emocional;
Estado de ánimo
deprimido;
Análisis multinivel;
Adolescencia;
Estudio ex post facto

Resumen El objetivo del estudio consistió en analizar la relación entre la inteligencia emocional individual, la inteligencia emocional grupal y el estado de ánimo deprimido en la adolescencia desde una perspectiva multinivel. La muestra estuvo compuesta por 2.182 adolescentes (1.127 mujeres y 1.055 varones) con una edad comprendida entre los 12 y los 18 años ($M = 14,51$; $SD = 1,55$). Los participantes eran alumnos pertenecientes a 14 centros de Educación Secundaria del País Vasco (norte de España) y estaban agrupados en 118 aulas. Se utilizó un modelo de dos niveles (estudiantes anidados en clases) con tres covariables de nivel-1 (atención, claridad y reparación de las emociones) y una covariable de nivel-2 (inteligencia emocional).

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nal grupal) con el fin de estudiar su influencia sobre el estado de ánimo deprimido. Los resultados indicaron que la claridad y la habilidad para regular las emociones, a nivel individual, y la inteligencia emocional, a nivel de clase, son factores importantes para explicar el estado de ánimo deprimido. De esta forma, se proporciona un punto de vista integrador sobre el bienestar psicosocial de los adolescentes que toma en consideración variables emocionales situadas a diferentes niveles.

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Adolescence is a period of life in which the individual's subjective perception of his or her abilities may determine how these abilities are used. Furthermore, these self-perceptions can vary depending on the characteristics of the group in which the adolescent is immersed, and this can have a positive or negative influence on the use of coping behaviors (Skinner & Zimmer-Gembeck, 2007). In educational settings, adolescents are grouped into significant contexts, namely classes, in which interpersonal interaction requires the expression of emotions, the assignment of meaning to emotional experience and the regulation of feelings. These behaviors have been considered important coping abilities as they are particularly relevant to psychological and social adjustment in adolescence (Mavroveli, Petrides, Rieffe, & Bakker, 2007; Ruiz-Aranda, et al., 2012), and they also form the basis of individual emotional intelligence (EI; Mayer & Salovey, 1997).

However, despite the nested structure of educational settings (pupils nested in classes and schools), little research has been conducted from a multilevel perspective to examine the relationship between individual and group emotional traits (in other words, EI) and psychological health in the adolescent population. With the aim of filling this gap, the present study examines whether individual self-perceived EI is associated with depressed mood in adolescence and it also analyzes the extent to which this relationship is context-dependent, taking class EI as a higher-level influencing variable.

Individual emotional intelligence and depressed mood

Two recent meta-analysis indicated that, irrespective of gender, the higher the perceived EI, the better the mental health (Martins, Ramalho, & Morin, 2010; Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007). In adolescents, the EI trait increases the positive effects of active coping strategies and reduces the negative effects of avoidant coping strategies for mental health (Davis & Humphrey, 2012). EI also reduces negative mood states (Mikolajczak, Petrides, Coumans, & Luminet, 2009) and it is negatively related to perceived stress and depressive thoughts (Downey, Johnston, Hansen, Birney, & Stough, 2010; Zavala & Lopez, 2012). In a similar vein, Saklofske, Austin, and Minski (2003) reported a negative relationship between EI and depression-proneness, and a positive relationship between EI and subjective happiness and life satisfaction

among adolescents. In line with these findings, Ciarrochi, Deane, and Anderson (2002) showed that individuals who are able to manage the emotions of others seem to respond less intensively to stressful situations and also exhibit less depressive symptoms.

As regards the dimensions of EI, they show different patterns of association with depression. While emotional clarity and regulation have been shown to be negatively related to depressive symptoms, the findings for emotional attention have proven contradictory. Specifically, several studies have found that individuals who perceive greater emotional clarity and a greater ability to repair their own emotional states also report higher emotional adjustment (Berking, Orth, Wupperman, Meier, & Caspar, 2008) and higher levels of mental health and lower depression (Salovey, Woolery, Stroud, & Epel, 2002). Emotional repair has also been positively associated with the ability to control the ruminative thoughts that often accompany stressful situations and which may increase depressive symptoms (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995). Better emotional regulation is related to lower perceived stress and a better quality of life, which has clear implications in terms of preventing depressive states (Austin, Saklofske, & Egan, 2005). Emotional clarity has been associated with less depression and fatigue after an acute stressor, while emotional repair has been related to less depressive symptoms and anger one day after exposure to the same stressor (Ramos, Fernández-Berrocal, & Extremera, 2007). The latter authors found that when using measures of self-perceived EI, depressed individuals scored lower than non-depressed individuals on clarity and emotional repair (Fernández-Berrocal, Alcaide, Extremera, & Pizarro, 2006). Taking into account this rationale, we expected to find a negative association between both emotional clarity and emotional repair and depressed mood (Hypothesis 1).

With regard to emotional attention Salovey et al. (1995) showed that after a distressing event this dimension of EI did not predict either the likelihood of individuals rebounding from an induced negative mood or the tendency to show a decline in ruminative thoughts. In this context it should be noted that depressive individuals exhibit selective emotional attention to negative emotional stimuli such as sad faces, depression-related words or negative responses emitted by interaction partners (Glenberg, Havas, Becker, & Rinck, 2005). Therefore, although emotional attention is needed in order to understand emotions, too much attention of this kind may heighten the risk of ruminative thoughts which, in turn, could increase the likelihood of depressive

states. This may explain the contradictory results found in the literature. Consequently, no clear prediction can be made in terms of the relationship between this dimension of EI and depressed mood.

Group emotional intelligence in the classroom and depressed mood

Group EI is a well-known construct in the work and organizational psychology field (Härtel, Ashkanasy, & Zerbe, 2009) and a number of measures of group EI have been developed in such context (e.g., Jordan, Ashkanasy, Härtel, & Hooper, 2002). However, in the educational setting, research on group-emotions and, specifically, on group EI, as well as measures aimed at evaluating this variable are still scarce (Humphrey et al., 2011). One exception is the G-TMMS (Aritzeta et al., 2013), which was designed to measure perceived EI at the group level. The group EI examined here represents a group-level emotional trait that it is based on subjective emotional experiences shared by the class members. It may be defined as the perception of the students about the way in which their class pays attention to and values the feelings of classmates, is clear rather than confused about the emotions felt in the class and uses positive thinking to repair negative moods in the class.

In the educational context, adolescent students can be considered as members of a group (the class), which shares meaningful emotional experiences through processes such as emotional contagion (Totterdell, Kellet, Teuchmann, & Briner, 1998) or vicarious affect (Lazarus, 1991). Regarding the class structures in the educational system of the Basque Country -Northern Spain-, it is important to note that students stay with the same classmates from pre-school until high school. Furthermore, in high school adolescents have few class changes and share more than 70% of the time with the same classmates. This makes the class a fundamental group of reference. From this perspective, individual emotions can be influenced by group factors (Belli & Íñiguez-Rueda, 2008), and such factors could have an effect on emotional experience through the person's interaction with significant others.

In the field of education, emotions have come to be regarded as central in terms of exploring class interactions and for understanding patterns of coping behaviors among students (Beilock & Ramirez, 2011). Depending on the context (i.e., the class) to which individuals are exposed they tacitly acquire different information about emotional behavior. This means that emotional phenomena (including depressed mood) have a social component which makes emotional states open to change (Monroe & Harkness, 2011). Studies examining emotional contagion have shown that students in a class show a tendency to automatically mimic and synchronize depressive emotional states with those of other group members, which may help to explain why non-depressed students are more likely to experience negative affect after interactions with depressed significant others (Hatfield, Cacioppo, & Rapson, 1994).

Similarly, research examining class emotional climate showed that consistently negative and non-supportive

climates were associated with avoidance, disruptive, and cheating behavior, whereas supportive ones were related to goal motivation (Patrick, Turner, Meyer, & Midgley, 2003). Class emotional climate, therefore, has been considered an important moderator of psychological and behavioral adjustment (Avant, Gazelle, & Faldowski, 2011). The conclusion to be drawn from these findings is that the positive or negative emotional climate in a classroom generates a group-level component of shared emotional experience that can be particularly relevant for students' psychological well-being.

Taking into account the aforementioned evidence, we would expect that being exposed to a group whose members are able to appropriately understand, express and manage their own emotions and those of other members (e.g., groups with high levels of EI) could generate an emotional context in which individuals are able to vent and release their sadness and to temper their emotions, thereby resulting in more positive emotional responses. Consequently, we expected to find a negative association between class-level EI and depressed mood (Hypothesis 2). Finally, although we have not found studies exploring cross-level interaction between class level EI and individual EI dimensions, we exploratory could expect class-level EI to strengthen the negative relationship that emotional clarity and emotional repair have with depressed mood (Hypothesis 3).

Method

Participants

The sample comprised 2,182 adolescents (1,127 female and 1,055 male students) aged between 12 and 18 years ($M = 14.51$; $SD = 1.55$). Three percent of the students didn't live with their biological mother and 11.6 percent of them didn't live with their biological father. Two hundred and twenty seven students belonged to families with separated or divorced parents and 57 students had suffered the death of one of their parents. They attended 14 secondary private schools in the Basque Country (northern Spain) and were grouped into 118 different classes. Regarding to school level, 22.5% of the sample were taking the 1st year of Compulsory Secondary Education (*Educación Secundaria Obligatoria, ESO*), 21% the 2nd year, 20.7% the 3rd year, 15.8% the 4th year and 20% were attending the 1st course of Post-Compulsory Schooling (*Bachillerato*). The selection of schools was made from the population of non-university education centres of the Autonomous Community of the Basque Country affiliated to a private association of centres whose teaching language was Basque. After informing the aims of the study to the schools affiliated to the association, those which expressed an interest in participating were selected.

Instruments

- Short Version of the Trait Meta-Mood Scale for Adolescents (TMMS-23; Salguero, Fernández-Berrocá, Balluerka, & Aritzeta, 2010; in its Basque version Gorostiaga, Balluerka, Aritzeta, Haranburu, & Alonso-Arbiol, 2011). The TMMS-

23 is a self-report tool comprising three subscales that assess the extent to which people: a) pay attention to and value their feelings (*Attention*: e.g., “I think about my mood constantly”), b) feel clear rather than confused about their feelings (*Clarity*: e.g., “I almost always know exactly how I am feeling”), and c) use positive thinking to repair negative moods (*Repair*: e.g., “Although I am sometimes sad, I have a mostly optimistic outlook”). These three dimensions form the basis of individual emotional intelligence. It includes 23 items to be answered on a 5-point Likert scale, with options ranging from “Strongly disagree” to “Strongly agree”. The tool has shown good psychometric properties (Gorostiaga et al., 2011). The three-factor model showed a good fit, with values of GFI (.97), AGFI (.96), NNFI (.96), CFI (.96) and RMSEA (.05). The alpha coefficients were .84, .80 and .82 for the subscales of *Attention*, *Clarity*, and *Repair*, respectively, and the test-retest Pearson correlation values were .73 (*Attention*), .68 (*Clarity*), and .68 (*Repair*). It also showed adequate evidence of convergent validity and external validity based on differences in the TMMS-23 dimensions according to participants’ self-concept, gender, and age.

- The Basque Group Trait Meta-Mood Scale (G-TMMS; Aritzeta et al., 2013) includes 16 items to be answered on a 5-point Likert scale, with options ranging from “Strongly disagree” to “Strongly agree”. It assesses the extent to which, on average, students belonging to a stable class perceive that their group attends to and values their feelings, feels clear rather than confused about such feelings and uses positive thinking to repair negative group moods (e.g., “In this class we pay attention to how we feel”). As it is a self-perceived measure, it does not reflect real abilities in themselves but the subjective perception of emotional traits. The G-TMMS has shown adequate reliability and validity in a population of classes at secondary school level (Aritzeta et al., 2013). Specifically, it has shown an underlying one-factor structure -BBNNFI (.93), CFI (.94), IFI (.94) and RMSEA (.05)-, adequate internal consistency (alpha coefficient = .84), temporal stability (test-retest correlation = .87), convergent validity and external validity based on relationships of Group EI with academic achievement, percentage of girls in the class, and the class tutor gender.
- Children’s Depression Scale (CDS; Lang & Tisher, 1978; in its short Basque version, Balluerka & Gorostiaga, 2012). The CDS is a self-report tool that assesses depression in children and adolescents aged between 8 and 16 years. The short Basque version was developed from the long Basque version of the scale (Balluerka, Gorostiaga, & Haranburu, 2012) and consists of 37 items to be answered on a 5-point Likert scale, with options ranging from “Strongly agree” to “Strongly disagree”. It includes a Depressive dimension (27 items) and a Positive dimension (10 reversed items). In both dimensions higher scores indicate a higher level of depression. The depressive dimension includes items which refer to negative affective responses, to difficulties in social interaction, to isolation and solitude of the child, to negative feelings, concepts and attitudes towards his/her own self-esteem and value, to dreams and fantasies in relation to illness and death,

and to feelings of self-punishment (e.g., “Sometimes I wish I was dead”). For its part, Positive dimension refers to an absence of happiness, fun and joy in the life of the child or to the child’s inability to experience these feelings (e.g., “Often I enjoy myself at school”). The latter dimension can reflect deep sadness or a lack of well-being in the child’s life. As our sample was not a clinical sample, we considered it appropriate to use only the positive dimension with the aim of identifying the level of the depressed mood showed by the participants. The short Basque version of the CDS has suitable psychometric properties (Balluerka & Gorostiaga, 2012). The two-factor model showed an adequate fit, with values of CFI (.92), TLI (.91) and RMSEA (.07). The alpha coefficients were .95, and .84 for the Depressive and Positive dimensions, respectively, and the test-retest Pearson correlation values were .75 (Depressive dimension) and .73 (Positive dimension). It also showed adequate evidence of external validity based on the relationship of depression dimensions with personality, gender, emotional intelligence, academic achievement and attachment.

Procedure

Data collection was carried out in whole-group classroom sessions during normal school days by two psychologists. Informed consent was obtained from the school authorities, the pupils and their parents. The study followed the ethical guidelines of the Spanish Psychological Society and was approved by the Ethics Committee for Research Involving Humans of the University of the Basque Country. In the data collection, the order for administering the tools was: G-TMMS, TMMS-23 and CDS.

Data analysis

Data were analyzed using the MIXED procedure of SPSS and by applying a multilevel regression model (Raudenbush & Bryk, 2002). Full information maximum likelihood was used as estimation method. We began by specifying the null (or no predictors) model (Model 0) and continued by building two random intercept models with the three dimensions of EI at the individual level (Model 1) and class level EI (Model 2) as covariates (predictor variables). The second-level covariate was created averaging the scores in the G-TMMS from individuals belonging to the same class. In order to ensure that mean scores adequately represented emotional intelligence at the class level (e.g., group emotional intelligence) and that students belonging to the same class had quite similar perceptions about the construct, James indices of inter-coder reliability (James, Demaree, & Wolf, 1993) were previously calculated. We then added two randomly varying slopes to the model (Model 3) and finished by specifying a more complex random slopes and intercepts model, including two interaction terms between class level EI and clarity of feelings and between class level EI and mood repair (Model 4). All the covariates were centered on the grand mean.

For each model the estimated values and standard errors of the fixed parameters and variance components were calculated, as was the deviance (the fit of the model). The difference between the deviance values divided by the

Table 1 Descriptive statistics of variables included in the multilevel regression models.

	Attention	Clarity	Repair	Group EI	Depressed mood
Mean	28.04	28.19	25.59	53.10	21.54
SD	6.03	5.72	5.39	8.9	6.03
Skewness	-.26	-.33	-.41	-.42	.59
S.E. of Skewness	.05	.05	.05	.05	.05
Kurtosis	-.27	-.12	-.19	.45	.64
S.E. of Kurtosis	.10	.10	.10	.10	.10
Minimum	9	8	7	20	10
Maximum	40	40	35	79	40

EI, Emotional Intelligence; SD, Standard Deviation.

difference between the degrees of freedom was used to establish which of the models showed the best fit to the data. If the initial model constitutes a reduced version of the subsequent model, this ratio follows a chi-squared distribution with as many degrees of freedom as the number of parameters in the extended model minus the number in the reduced model. As the large sample size used in this study made easier to reach statistical significance (Balluerka, Gómez, & Hidalgo, 2005; Balluerka, Vergara, & Arnau, 2009), the proportion of variance accounted for at individual and at class level by predictive variables were estimated as effect size indexes.

In order to check for potential confounding variables, before carrying out the multilevel analysis we examined whether in our study sample there were differences between boys and girls in the positive dimension of the CDS by means of a Student's *t* test. Furthermore, Pearson correlation coefficient was used in order to analyze the relationship between age and depressed mood.

Results

The value obtained in the Student's *t* test was statistically significant ($t_{2182} = 2.27$; $p = .023$), but the effect size for the difference between boys' and girls' mean scores was very small (Cohen's $d = 0.10$). In the same way, the value of Pearson correlation coefficient ($r = .28$) showed that there was a small relationship between age and depressed mood. Based on these results we decided not to include gender and age as covariates in the multilevel models. Table 1 shows the descriptive statistics of variables included in the multilevel regression models.

Table 2 presents the results of the multilevel regression models described above, with depressed mood score as the criterion variable.

The first model, the intercept-only model (Model 0), serves as a baseline and showed that the total variance was divided into two parts: 31.8 at student level and 4.61 at class level. This information was then used to calculate the intra-class correlation coefficient, in other words, the proportion of variance accounted for at class level. This coefficient indicated that approximately 13% of the total variability in depressed mood scores occurred between classes. The next model (Model 1) showed that clarity of

feelings and mood repair explained a substantial part of this variation at the individual (22%) and class (48%) levels, substantially improving the fit of the model ($\Delta\chi^2/\Delta df = 201.113$; $p \leq .0001$). Both variables had a negative relationship with depressed mood, thereby confirming Hypothesis 1. Emotional attention did not show a statistically significant relationship with depressed mood.

When class-level EI was included in the model (Model 2) the fit again improved notably ($\Delta\chi^2/\Delta df = 13.55$; $p \leq .005$). This explanatory variable had an important influence on depressed mood score reducing considerably the variance component at the class level (18%). As expected, and as in the case of emotional clarity and repair, there was a negative relationship between class EI and students' depressed mood, thereby confirming Hypothesis 2.

Since individual clarity of feelings and emotional repair were significantly related to depressed mood we decided to test, in the next model, whether the slopes (i.e., the relationships between clarity and depressed mood and between repair and depressed mood) varied across classes. Model 3 showed that allowing slopes to vary randomly did not improve the fit of the model. The variance component at the class level reduced slightly (4%). All the fixed effects showed similar values to those in the previous model. The variance components related to slopes were close to zero. Likewise, the covariances between intercepts and slopes and between slopes were negligible. Finally, in Model 4, we introduced the cross-level interactions between class-level EI and clarity of feelings and between class-level EI and emotional repair in order to examine whether the negative relationships of clarity of feelings and emotional repair with depressed mood were influenced by this contextual-level covariate. None of the interaction terms was statistically significant. The variance components remained the same at both the individual and group levels, and the fit of the model showed no change. Thus, class-level EI did not improve the influence of emotional clarity and repair on depressed mood not giving support to the effect we had anticipated in Hypothesis 3 in an exploratory way.

Discussion

The results of this study show that high levels of emotional clarity and repair are related to lower levels of depressed

Table 2 Results of the Multilevel Analyses for the sequence of models with emotional intelligence at individual and group levels as predictor variables and depressed mood as the criterion variable.

Effect	Model 0	Model 1	Model 2	Model 3	Model 4
<i>Fixed effects</i>					
Intercept (γ_{00})	21.61 (0.23)	21.60 (0.18)	21.60 (0.17)	21.59 (0.17)	21.58 (0.17)
<i>Pupil variables</i>					
Attention		0.01 (0.02)	0.02 (0.02)	0.01 (0.02)	0.02 (0.02)
Clarity		-0.18** (0.02)	-0.18** (0.02)	-0.18** (0.02)	-0.18** (0.02)
Repair		-0.44** (0.02)	-0.43** (0.02)	-0.43** (0.02)	-0.43** (0.02)
<i>Classroom variables</i>					
Group EI (GEI)			-0.16** (0.04)	-0.16** (0.04)	-0.15** (0.04)
<i>Interactions</i>					
GEI x Clarity					-0.009 (0.005)
GEI x Repair					0.01 (0.006)
<i>Variance components</i>					
Within-subject (σ^2_e)	31.80** (0.99)	24.65** (0.77)	24.65** (0.77)	23.75** (0.78)	23.76** (0.78)
Between-subjects (τ_{00}) Intercepts	4.61** (0.84)	2.42** (0.51)	1.98** (0.45)	1.96** (0.45)	1.95** (0.45)
Between-subjects (τ_{21}) Slopes				0.02 (0.01)	0.02 (0.02)
Between-subjects (τ_{31}) Slopes				0.01 (0.02)	0.01 (0.02)
Intercepts-Slopes Covariance (τ_{02})				0.04 (0.05)	0.04 (0.05)
Intercepts-Slopes Covariance (τ_{03})				-0.02 (0.04)	-0.02 (0.04)
Covariance between slopes (τ_{23})				-0.02 (0.02)	-0.01 (0.02)
<i>Model fit</i>					
Model deviance	13847.82	13244.49	13230.94	13212.24	13208.46
Δ Deviance (1-0)		603.33**			
Δ Deviance (2-1)			13.55*		
Δ Deviance (3-2)				18.7	
Δ Deviance (4-3)					3.78
Δ df		3	1	5	2

EI, Emotional Intelligence.

Note. All predictor variables were centered over the grand mean. Standard errors are listed parenthetically; γ_{00} = Population mean of the average intercept; σ^2_e = Within-subject variance; τ_{00} = Variance of the intercepts (between-subjects variance); τ_{21} and τ_{31} = Variances of the slopes (between-subjects variances); τ_{02} and τ_{03} = Covariances between intercepts and slopes; τ_{23} = Covariance between slopes; * $p < .05$; ** $p < .0001$.

mood in adolescents, a finding that is consistent with previous research. For example, Fernández-Berrocal et al. (2006) found that adolescents who reported a greater ability to discriminate clearly among feelings and to regulate emotional states showed less anxiety and depression, regardless of their level of self-esteem. The present results are also in line with studies that associate EI with social support, which constitutes an important factor not only in terms of reducing depressive symptoms (Kwako, Szanton, Saligan, & Gill, 2011) and perceived stress and depressive thoughts in the adolescent population (Downey et al., 2010; Mikolajczak, Petrides, & Hurry, 2009), but also for improving social adaptation (Mavroveli et al., 2007). Emotional attention did not show a significant relationship with depressed mood. The relationship between emotional attention and depressed mood is not straightforward. Low levels of emotional attention limit the capacity to comprehend and regulate emotional states, while high levels activate ruminative and self-focused processes, which in turn would maintain, rather than relieve negative moods (Fernández-Berrocal & Extremera, 2008).

The observed negative relationship between class EI and depressed mood is consistent with the results obtained in studies based on flow theory (Patrick et al., 2003) and with research analyzing students coping behavior and classroom interactions (Monroe & Harkness, 2011). Thus, in agreement with other authors (Avant et al., 2011), our findings confirm that class emotional intelligence is related with psychological adjustment.

On the other hand, we were unable to confirm that this contextual-level covariate influenced in an important way the relationships observed at the individual level between clarity of feelings and depressed mood and between emotional repair and depressed mood. Although individual depressed mood is context dependent, its relationship with individual EI is not greatly affected by class EI, which leads us to think that this relationship may also depend on other factors not examined in the present study.

Based on our findings and in line with the effects observed in programs enhancing school positive emotional climate (Sawyer et al., 2010) and in programs promoting social and emotional learning (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011), we can conclude that increasing EI in

the class could help to reduce depressed mood in adolescence. Moreover, accepting that emotional disorders are linked to different types of affect (Watson, Clark, & Stasik, 2011) and that students' emotions derive, in part, from their affective context (the class) might help to better explain and predict individual emotions and emotional disorders in educational contexts.

The study has a number of limitations that should be mentioned. Firstly, it was based on self-report measures of EI that focus on individual beliefs about EI but which do not examine emotional abilities. Although we consider that future studies should include both ability measures and self-report measures of EI, the self-report approach to measuring EI is nonetheless a useful tool for predicting psychological adjustment (Saklofske et al., 2003).

A second limitation refers to mono-method bias. Although the use of questionnaires to evaluate depressed mood and emotional intelligence is a customary practice, the relationships between variables measured with the same method might be inflated due to the action of common method variance (CMV). In future studies, it would be recommendable including other assessment methods to avoid such bias.

A third limitation of the study is that its correlational nature prevents us from determining the direction of the effect with complete certainty. We have argued that individuals high in self-reported EI might be capable of understanding and regulating negative affect appropriately. However, it is also possible that those students who report higher levels of depressed mood find it more difficult to understand and regulate their emotions, as negative affect may impair cognitive and emotional abilities.

Finally, regarding the effect of class EI, it should be pointed out that it may be only generalizable to such contexts in which students share the same class for a long duration.

While acknowledging these limitations the study nevertheless demonstrates that both individual and group level EI are important for predicting adolescents' mental health, recalling those studies which confirm the positive effects of EI training for inpatients suffering from depressive disorders (Jahangard et al., 2012). Furthermore, it provides a way of explaining differences in adolescents' psychosocial adaptation by considering the class as a relevant context of reference, which has been understudied in the educational field. Consequently, we believe that when analyzing the effect of emotional variables on adolescents' depressed mood, adding a group-level covariate to the individual-level covariates constitutes a more complete and integrative approach to the study of adolescents' psychosocial well-being in educational settings.

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