

Emotional and behavioral difficulties in adolescence: Relationship with emotional well-being, affect, and academic performance

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Título: Dificultades emocionales y comportamentales en la adolescencia: relación con bienestar emocional, afecto y rendimiento académico.

Resumen: El propósito de este estudio fue examinar las dificultades en el ajuste emocional comportamental y su relación con el bienestar emocional, el afecto positivo y negativo y el rendimiento académico en una muestra representativa de adolescentes no clínicos. La muestra la conformaron un total 1.664 de participantes ($M = 16.12$ años; $DT = 1.36$, rango 14-19 años), seleccionados mediante muestreo estratificado por conglomerados. Los instrumentos empleados fueron el *Strengths and Difficulties Questionnaire* (SDQ), el *Positive and Negative Affect Schedule for Children* (PANAS-C), el *Personal Well-being Index—School Children* (PWI-SC), un cuestionario *ad hoc* de rendimiento académico y la Escala Oviedo de Infrecuencia de Respuesta. Los resultados mostraron que el 7,7% de los adolescentes manifestaron posible riesgo de mala salud mental. Las dificultades emocionales y comportamentales correlacionaron de forma negativa con el bienestar emocional subjetivo y Afecto Positivo y de forma positiva Afecto Negativo. Además, los alumnos con un peor rendimiento académico informaron de mayores dificultades en ajuste emocional y comportamental. Estos resultados son convergentes con los encontrados en trabajos previos y tienen claras implicaciones, tanto a nivel sanitario como educativo, de cara a mejorar la promoción del bienestar emocional y prevención de los problemas psicológicos en este sector de la población.

Palabras clave: prevalencia, dificultades emocionales, adolescencia, afecto positivo, afecto negativo, rendimiento.

Abstract: The main purpose of this study was to examine difficulties in behavioral and emotional adjustment and their relationship to subjective well-being, positive and negative affect, and academic performance in a representative sample of nonclinical adolescents. The sample consisted of a total of 1,664 participants ($M = 16.12$ years, $SD = 1.36$, range 14-19 years), selected through stratified cluster sampling. The instruments used were the Strengths and Difficulties Questionnaire (SDQ), the Positive and Negative Affect Schedule for Children (PANAS-C), the Personal Wellbeing Index-School Children (PWI-SC), the ad hoc academic performance questionnaire, and the Oviedo Scale of Response Infrequency. In all, 7.7% of the adolescents showed a possible mental health risk. Emotional and behavioral difficulties were negatively correlated with emotional wellbeing and Positive Affect, and positively associated with Negative Affect. In addition, students with poorer academic performance reported greater emotional and behavioral difficulties. These results are consistent with those found in previous studies. They have clear implications, in both health and education, for improving the promotion of emotional wellbeing and the prevention of psychological problems in this population sector.

Keywords: prevalence, emotional Difficulties, adolescence, positive affect, negative affect, academic performance.

Introduction

Mental health disorders in the child-youth population have some of the highest levels of associated disability and economic consequences worldwide (Gore et al., 2011; Horton, 2012). Previous studies have shown that mental health problems during childhood and adolescence increase vulnerability to psychological symptoms and disorders in the short, medium, and long term (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003; Frías, Carrasco, Fernández, García, & García, 2009). Approximately 50% of all mental health disorders appear for the first time before the age of 14 (Cohen, 2008; Kessler et al., 2007), and they have continuity and consequences for mental health in adulthood (Fonseca-Pedrero & Debbané, 2017; Kessler et al., 2007). The life prevalence of mental health disorders in this stage of development is about 13.4% (Polanczyk, Salum, Sugaya, Caye, & Rohde, 2015). Specifically in Spain, according to the Spanish National

Health Survey, approximately 4% of the children and adolescents evaluated would present some type of emotional or behavioral problem (Basterra, 2016; Ortuño-Sierra, Aritio-Solana, & Fonseca-Pedrero, 2017).

Within this framework, the emotional wellbeing of children and adolescents is an important public health challenge throughout the world and an urgent issue for research and government policies (Fonseca-Pedrero et al., in press; Forsman, Ventus, Van Der Feltz-Cornelis, & Wahlbeck, 2014; Instituto de la Juventud, 2009). Specifically, emotional wellbeing refers to the overall assessment people make of their life opportunities, the course of events they face, and the experiences derived from them. In other words, it consists of how much a person likes the life s/he leads (Veenhoven, 1994). In fact, mental health also involves a state of positive emotional wellbeing (Inzunza, Valdenegro Egozcue, & Oyarzún Gómez, 2013), which is congruent with the contributions of the positive adolescent development approach (Benson, Scales, Hamilton, & Sesma, 2007; Damon, 2004; Oliva, 2015). These new models adopt a perspective focused on wellbeing, with a special emphasis on the existence of healthy conditions, and they expand the concept of health to include the necessary skills, behaviors, and competencies to

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be successful in social, academic, and professional life (Benson, Mannes, Pittman, & Ferber, 2013). Going beyond merely preventing problems, they promote healthy development (Oliva, 2015). For example, some studies have found that good health correlates with meeting life goals and having good social relationships (Dias, Bastos, Marxo & García del Castillo, 2017). In this regard, studies have shown that people who experience many positive events and very few negative ones present higher scores on subjective well-being than those who have to face numerous adversities (Limonero, Tomás-Sabado, Fernandez-Castro, Gomez-Romero, & Ardilla-Herrero, 2012; Solano, 2009; Viñas, González, García, Malo, & Casas, 2015). Other studies find that an individual has high subjective wellbeing or happiness if s/he expresses satisfaction with his/her life and frequent positive emotions, with negative emotions being infrequent (García Martín, 2002).

Previous studies have shown that difficulties in emotional adjustment in the child-youth population have been associated with a lower level of subjective emotional wellbeing and worse academic achievement (McLeod, Uemura & Rohrman, 2012; Tempelaar et al., 2014). For example, in the Spanish National Health Survey (Encuesta Nacional de Salud de España, ENSE) 2011-12 survey, children and adolescents at risk of poor mental health, according to the SDQ, reported less healthy behaviors, such as sedentary habits, not having breakfast every day before leaving home, or eating fast food more often (Ministry of Health, Social Services and Equality, 2014). Emotional adjustment difficulties have also been related to academic achievement problems (Ferragut & Fierro, 2012) and, in turn, low academic performance and scant personal resources (Garaigordobil & Oñederra, 2010; Rothon, Head, Klineberg, & Stansfeld, 2011). Worse academic results accompany behavior problems and less personal satisfaction (Inglés & Martínez-González, 2012). There is a clear interaction between health problems and the school context (Needham, Crosnoe, & Muller, 2004). The inverse relationship can also be found. Thus, various studies show that low school performance is associated with the appearance of mental health symptoms and disorders in adolescence (Kendler, Ohlsson, Mezuk, Sundquist, & Sundquist, 2016; MacCabe et al., 2013), whereas students with good school adjustment show better psychosocial adjustment (Casas et al., 2014; Martínez-Antón, Buelga, Cava, & De, 2007). Adequate adaptation to the school context contributes to increasing students' subjective wellbeing and satisfaction with life (Cava, Buelga, & Musitu, 2014; Gutiérrez & Gonçalves, 2013; Viñas et al., 2015).

Within this general research framework, this study analyzed the difficulties in emotional and behavioral adjustment and their relationship with emotional wellbeing, positive and negative affect, and academic achievement in a representative sample of adolescents. The specific objectives of the present study were: a) to analyze the prevalence of emotional and behavioral difficulties using the SDQ; b) to explore the relationship between emotional and behavioral difficul-

ties and subjective emotional wellbeing; c) to examine the relationship between emotional and behavioral difficulties and positive and negative affect; and d) to analyze the association between emotional and behavioral difficulties and academic performance.

Method

Participants

Participants were selected using a stratified cluster sampling design, with the classroom as the sampling unit, from a population of 15,000 students in the region of La Rioja. The variables used to stratify the sample were school status (public or private) and school stage (Secondary, Baccalaureate, or Vocational training). The assignment of the classrooms was proportional to the number of students. In all, 34 secondary schools and 98 classes participated in the present study.

The initial sample consisted of 1,881 students, although participants who presented a high score on the Oviedo Infrequency Response Scale (INF-OV) (more than 3 points) ($n = 104$) or were older than 19 years ($n = 170$) were eliminated. Thus, the sample consisted of a total of 1,664 students, 782 men (47%) and 882 (53%) women. The mean age was 16.12 years ($SD = 1.36$ years), with the ages ranging between 14 and 19 years old. Due to the reduced number of 19-year-old participants, they were combined with the 18-year-old group. The 18- to 19-year-old group consisted of 268 participants (16.1%).

Most of the participants were of Spanish origin (89.9% Spanish, 3.7% Latin American, 2.4% Romanian, 1% Moroccan, .7% Portuguese, and 2% from other nationalities). Table 1 shows the age and gender distribution of the sample.

Table 1. Sample distribution by gender and age.

| | Gender | | Total |
|-------|--------|-------|-------|
| | Men | Women | |
| Age | | | |
| | 14 | 91 | 133 |
| | 15 | 178 | 184 |
| | 16 | 197 | 212 |
| | 17 | 190 | 211 |
| | 18 | 89 | 103 |
| | 19 | 37 | 39 |
| Total | 782 | 882 | 1664 |

Instruments

The Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997), self-report form. The SDQ is an instrument used to detect behavioral and emotional difficulties and assess different capacities in the social sphere (Fonseca-Pedrero, Paino, Lemos-Giráldez, & Muñiz, 2011, Ortuño-Sierra, Fonseca-Pedrero, Sastre & Muñiz, 2017). It has been used as a tool for the screening and epidemiological analysis of children and adolescents' mental health (Ortuño-Sierra, Fonseca-Pedrero, Inchausti, & Sastre i Riba, 2016).

The SDQ is made up of a total of 25 statements with a

Likert-type response format containing five options (1 = 'Strongly disagree' to 5 = 'Strongly agree'). The items are distributed across five subscales (each containing five items): Emotional Symptoms, Conduct Problems, Hyperactivity, Problems with Peers, and Prosocial Behavior. The first four subscales yield a Total Difficulties score. The higher the score, the greater the level of emotional and behavioral difficulties, except for the subscale of Prosocial Behavior, where a lower score corresponds to worse adjustment.

The psychometric properties of the SDQ have been examined in previous studies (Ortuño-Sierra, Chocarro, Fonseca-Pedrero, Sastre i Riba, & Muñiz, 2015, Ortuño-Sierra et al., 2015, Ortuño-Sierra, Fonseca-Pedrero, Paino, Sastre i Riba, & Muñiz, 2015). In the present study, the Cronbach's alpha coefficient for the Total Difficulties score was .75.

Personal Well-being Index-School Children (PWI-SC; Cummins & Lau, 2005). The PWI-SC was developed through the assessment of adults' subjective well-being in Australia (Cummins, Eckersley, Pallant, van Vugt, & Misajon, 2003). Subsequently, these authors developed alternative versions for different populations, including the PWI for school-age children and adolescents (PWI-SC) (Cummins & Lau, 2005; Tomy, Norrish, & Cummins, 2013). It comprises eight items, with response options ranging from 'Completely dissatisfied' (0) to 'Completely satisfied' (10). The PWI-SC items assess subjective satisfaction with a specific area of life in a relatively generic and abstract way. The first item on the scale analyzes "life as a whole". The other seven items assess satisfaction with the following life domains: standard of living, health, life achievements, relationships, safety, community-connectedness, and future security. The score on the global scale is the result of adding up the scores on these 7 items. Therefore, the total score can range from 0 to 70 points.

The PWI-SC has shown adequate psychometric properties in previous international and national studies (Cummins & Lau, 2005; González-Carrasco, Casas, Malo, Viñas, & Dinisman, 2017; Tomy et al., 2013). In the present study, the internal reliability of the scores estimated with the Cronbach's alpha coefficient for the total score was .83.

The 10-item Positive and Negative Affect Schedule for Children, PANAS-C (Ebesutani et al., 2012). This questionnaire consists of 10 items and two factors designed to measure Positive Affect (PA) and Negative Affect (NA). The items have a 5-point Likert response format with answers ranging from 1 ('Very little or nothing') to 5 ('Extremely or very much'). Five items evaluate PA through the following adjectives: happy, lively, happy, energetic, and proud; and the other five items evaluate NA through the following adjectives: depressed, angry, fearful, scared, and sad. The child/adolescent completes the PANAS-C by considering the way s/he has felt and/or behaved during the past few weeks.

PANAS-C scores have shown high internal consistency (PA = .86-.90, NA = .84-.87) (Melvin & Molloy, 2000). The two scales have shown a small correlation, ranging from .12 to .23 (Kercher, 1992; Watson, Clark, & Tellegen, 1988). This instrument has been adapted to Spanish following interna-

tional guidelines (Muñiz, Elosua, & Hambleton, 2013). In the present study, the reliability of the scores was .77 for PA and .80 for NA.

Assessment of academic performance. In order to assess the students' academic achievement, the following question was asked: "What was your average grade in the last school year?" with a 4-option Likert-format scale: Fail, Pass, Good, Above average, and Outstanding. This question was also added to the previous one: "Did you fail any subject in the previous academic evaluation?" with a Yes or No answer. If the answer was affirmative, the student had to specify the number of failed subjects. In the present study, only the previous year's grade was used as an indirect estimator of the students' academic performance.

The Oviedo Infrequency Scale (INF-OV) (Fonseca-Pedrero et al., 2009). INF-OV was administered to the participants to detect those who responded in a random, pseudorandom, or dishonest manner. The INF-OV instrument is a self-report composed of 12 items with a 5-point Likert-scale format (1 = 'Completely disagree'; 5 = 'Completely agree'). Students with more than three incorrect responses on the INF-OV scale were eliminated from the sample. This measurement instrument has been used in previous studies (Fonseca-Pedrero, Paino, Lemos-Giráldez, Sierra-Baigrie, et al., 2011).

Procedure

This research was approved by the Directorate General of Education of the Government of La Rioja and the Ethical Committee for Clinical Research of La Rioja (CEICLAR). Schools were contacted by phone, email, or mail.

In order to standardize the administration process, all the researchers were given a protocol that they had to carry out before, during, and after the administration of the measuring instruments. The instruments were administered in groups of 10-30 students during regular hours under the supervision of a researcher. A fully-equipped classroom was enabled for this purpose.

Confidentiality was guaranteed to all participants, who were free to withdraw from the study at any time. No incentive was provided for their participation. Whenever necessary, informed parental consent was requested before the adolescents' participation in the research. This study is part of a larger research study on mental health and emotional well-being in adolescents.

Data analyses

First, descriptive statistics for the entire sample were computed for the instruments (mean, standard deviation, asymmetry, and kurtosis). The percentages of participants located in each of the three ranges of SDQ scores (No Case, Limit, and Possible Risk) were also calculated. A total score of difficulties between 0-15 is considered "normal" or "no case"; a score from 16-19 is in the "limit" range; and a score from 20-40 is considered a "possible risk of poor mental

health". The cutoff points used in the present investigation are available online (<http://www.sdqinfo.com>).

Second, Pearson correlations were calculated to explore the relationship between emotional and behavioral difficulties and subjective emotional wellbeing, as well as between the PANAS-C and the SDQ.

Finally, a Multivariate Analysis of Covariance (MANCOVA) was performed to examine the relationship between emotional and behavioral difficulties and academic performance. In the MANCOVA, the Total Difficulties score on the SDQ was considered a dependent variable, and the previous year's grade was considered a fixed factor. Because gender and age can affect the expression of emotional and behavioral problems, they were considered covariates. To estimate the effect of all the variables of the model taken as a whole, Wilks' Lambda value was used. The eta square partial statistic (partial η^2) was used to calculate the effect size. In the present study, statistical significance was set at the conventional value ($p < .05$).

All data analyses were conducted using the statistical program SPSS v22 (IBM Corp Released, 2013).

Results

Descriptive statistics and prevalence of mental health difficulties

Table 2 shows the descriptive statistics for the scores of the measurement instruments used in the study. In the case of the scores on the SDQ subscales, 13.5% had high scores on Emotional Difficulties, 8.5% on Behavioral Problems, 6.1% on Problems with Peers, 16.5% on Hyperactivity Disorders, and 1.7% on Prosocial Behavior. In addition, considering the Total Difficulties score, the results showed that 7.7% of the adolescents were at risk of poor mental health, 13.4% were in the "limit" score range, and 78.9% were in the no-case group.

Table 2. Descriptive statistics of the study variables.

| | Mean | SD | Asymmetry | Kurtosis |
|-------------------------|-------|------|-----------|----------|
| Emotional Problems SDQ | 3.51 | 2.44 | .51 | -.49 |
| Behavioral Problems SDQ | 2.02 | 1.70 | .96 | .99 |
| Peers Problems SDQ | 1.54 | 1.58 | 1.35 | 2.05 |
| Hyperactivity SDQ | 4.34 | 2.18 | .11 | -.49 |
| Prosocial Behavior SDQ | 8.56 | 1.49 | -1.29 | 1.96 |
| Total Difficulties SDQ | 11.40 | 5.26 | .46 | .08 |
| Total PWI-SC | 55.11 | 8.96 | -1.02 | 1.42 |
| PANAS-C Positive Affect | 18.05 | 2.84 | -1.93 | 3.62 |
| PANAS-C Negative Affect | 10.71 | 3.6 | .46 | -.44 |

Note. SDQ: Strengths and Difficulties Questionnaire; PANAS-C: Positive and Negative Affect Schedule for Children; PWI-SC: Personal Wellbeing Index–School Children. SD: Standard Deviation.

Relationship between mental health and subjective well-being

Next, the relationships between emotional and behavioral difficulties and perceived subjective wellbeing (both for item 1 and for the total PWI-SC score) were examined through Pearson correlations. As Table 3 shows, the correla-

tion between the SDQ and the PWI-SC scores was moderate and negative, except for the Prosocial Behavior subscale. These results indicate that higher scores on emotional and behavioral difficulties are associated with lower levels of reported emotional wellbeing and satisfaction with life. Prosocial Behavior showed a weak-to-moderate association with emotional wellbeing.

Table 3. Pearson Correlations between the Strengths and Difficulties Questionnaire (SDQ) and the Personal Wellbeing Index–School Children (PWI-SC).

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------------------------------|-------|-------|------|-------|-------|-------|-------|
| 1. Item 1 PWI-SC | | | | | | | |
| 2. Total PWI-SC | .70* | | | | | | |
| 3. Emotional Problems | -.46* | -.48* | | | | | |
| 4. Behavioral Problems | -.19* | -.19* | .18* | | | | |
| 5. Problems with peers | -.35* | -.39* | .35* | .24* | | | |
| 6. Hyperactivity Difficulties | -.18* | -.18* | .23* | .39* | .11* | | |
| 7. Prosocial Behavior | .16* | .20* | -.02 | -.29* | -.19* | -.10* | |
| 8. Total difficulties SDQ | -.45* | -.47* | .72* | .64* | .58* | .68* | -.20* |

Note. * $p \leq .01$ (bilateral).

Relationship between mental health and negative and positive affect

Table 4 shows the relationship between the SDQ and the PANAS-C scores. As the table reveals, all the correla-

tions were statistically significant ($p < .05$). On the one hand, the Positive Affect (PA) subscale from the PANAS-C was negatively correlated with the Emotional and Behavioral Problems subscales of the SDQ. On the other hand, the Negative Affect (NA) subscale of the PANAS-C was posi-

tively correlated with the different emotional and behavioral problems from the SDQ. Therefore, high levels of PA were associated with low emotional and behavioral difficulties, and high NA scores were associated with greater emotional and behavioral difficulties. Prosocial Behavior was positively and mildly associated with PA from the PANAS-C.

Table 4. Pearson Correlations between the Strengths and Difficulties Questionnaire (SDQ) and the Positive and Negative Affect Schedule for Children (PANAS-C).

| SDQ | PANAS-C | |
|----------------------------|-----------------|-----------------|
| | Positive Affect | Negative Affect |
| Emotional Problems | -.47** | .60** |
| Behavioral Problems | -.16** | .26** |
| Problems with peers | -.35** | .27** |
| Hyperactivity Difficulties | -.15** | .26** |
| Prosocial Behavior | .14** | -.05 |
| Total difficulties SDQ | -.44** | .55** |

Note. ** $p \leq .01$ (bilateral).

Relationship between mental health and academic performance

Academic performance was estimated by the average grade obtained in the previous school year. The participants' distribution according to their academic performance was: Fail $n = 120$ (7.21%); Pass $n = 298$ (17.9%); Good $n = 534$ (32.09%); Above average $n = 569$ (34.19%); and Outstanding $n = 143$ (8.59%).

Regarding the relationship between emotional and behavioral difficulties and academic performance, the MANCOVA showed statistically significant differences ($F(4, 1664) = 19.264, p < .001, \text{partial } \eta^2 = .044$). As Figure 1 shows, as academic performance improved, there was a decrease in self-reported emotional and behavioral problems. The Bonferroni post-hoc comparisons showed statistically significant differences between the four performance groups ($p < .01$) on the SDQ Total Difficulty score, with the exception of the comparison of the Fail and Pass groups.

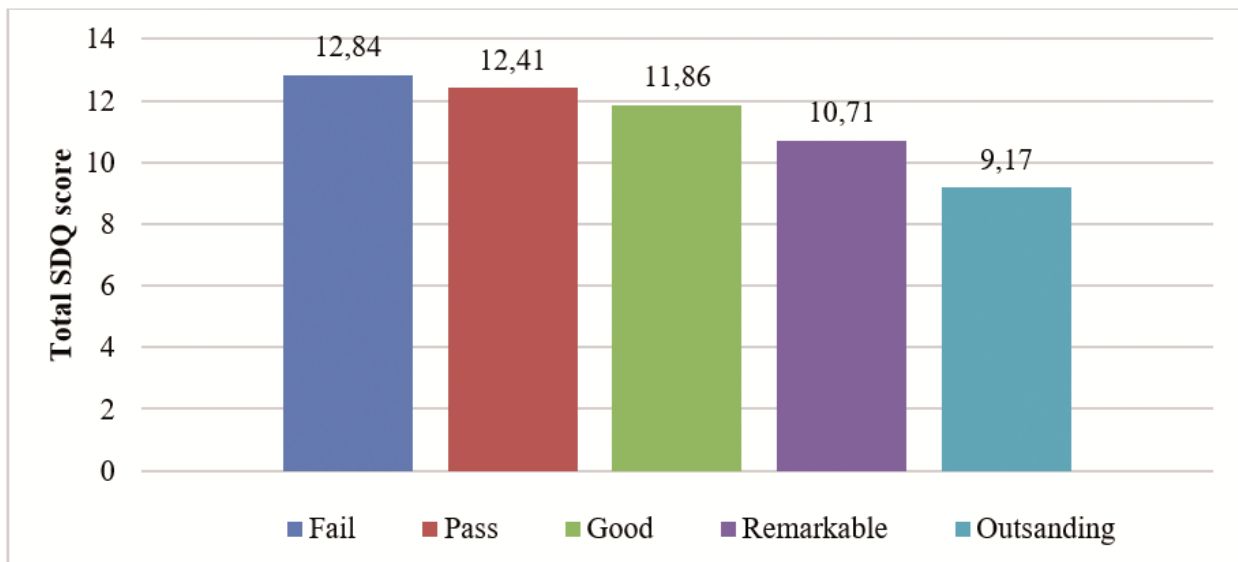


Figure 1. Relationship between emotional and behavioral difficulties. Total Difficulties score on the *Strengths and Difficulties Questionnaire* (SDQ) and academic performance.

Discussion and conclusions

The main objective was to examine the emotional and behavioral adjustment difficulties, and their relationship with emotional wellbeing, positive and negative affect, and academic performance, in a representative sample of non-clinical adolescents. Below, we discuss the main findings.

First, 7.7% of the adolescents from the sample showed psychological characteristics of risk of poor mental health. The analysis of the SDQ subscales revealed that between 1.7% (Prosocial Behavior) and 16.5% (Hyperactivity Difficulties) would fall in the range of possible risk. The results are comparable to previous studies at both the national and international levels (Costello, Foley, & Angold, 2006; Fonse-

ca-Pedrero, Paino, Lemos-Giráldez, & Muñiz, 2011; Frías et al., 2009; Goodman, 2001; Gore et al., 2011; Ortuño-Sierra et al., 2017; Polanczyk et al., 2015). For example, the ENSE 2006, carried out with the hetero-report version of the SDQ, found that between 19.2% and 26.6% of the children and adolescents from 4 to 15 years old presented a risk of poor mental health, with this being serious in 4-6% of the cases. In agreement with Basterra (2016), analyzing the results of the ENSE 2011/2012, approximately 4% of the children and adolescents evaluated presented some type of emotional and/or behavioral problem.

Second, the greater the subjective emotional wellbeing – satisfaction with life– the fewer the emotional and behavioral difficulties reported by the adolescents. Less satisfaction

with life was found as more difficulties in emotional and behavioral adjustment were observed. These findings are clearly congruent with previous studies (Casas, 2011; Cummins, Eckersley, Pallant, Van Vugt, & Misajon, 2003; Diener, 2013; Park, Peterson, & Sun, 2013; Park, 2004; Tomy et al., 2013; Viner et al., 2012; Yiengprugsawan, Seubsman, Khamman, Lim, & Sleight, 2010). For example, Limonero (2012) found that people with greater satisfaction with life presented higher levels of emotional regulation or resilience. Frías (2009) proposed that coping strategies such as focusing on the positive, physical distraction, being engaged/focused, and being successful are associated with greater personal wellbeing, whereas blaming oneself and keeping things to oneself are associated with worse personal wellbeing. Park et al. (2013) showed that life satisfaction was related to good adaptation and optimal mental health in young people. Moreover, individuals who had a high perception of their own health tended to have greater life expectancy, be free from chronic diseases, feel better, enjoy life (Park, 2004), have better social relationships, and be more productive (Diener, 2013).

Third, having few emotional and behavioral difficulties was related to higher levels of Positive Affect (PA) and lower levels of Negative Affect (NA). Once again, the results were congruent with findings from previous studies in both child-adolescent and adult populations (Cohen, 2008; Diener, 2013; Ebesutani et al., 2012; Ortuño-Sierra, Chocarro, Fonseca-Pedrero, Sastre i Riba, & Muñiz, 2015; Vázquez, Hervás, Rahona, & Gómez, 2009; Viñas et al., 2015). Furthermore, as would be expected, prosocial behaviors were positively associated with PA and negatively with NA, and these results are similar to those found in previous studies (Fonseca-Pedrero, Paino, Lemos-Giráldez, & Muñiz, 2011; Giannakopoulos et al., 2009; Prior, Virasinghe, & Smart, 2005; Yao et al., 2009). For example, prosocial behavior has been found to be a positive and significant predictor of high self-esteem (Inglés & Martínez-González, 2012). In another study, Vázquez et al. (2009) explained that both PA and satisfaction with life seemed to predict positive results related to health. As Diener (2013) states, wellbeing seems to have a direct relationship with health, and fomenting positive emotions could strengthen health. Lyubomirsky (2005) showed that PA contributed to providing resources to promote one's own health. However, the experience of NA, such as fear or anxiety, sadness, guilt, hostility, pessimism, or nervousness, seems to lead to greater problems or somatic complaints, dissatisfaction, and a negative impression of oneself or others (Ebesutani et al., 2012). When young people blame themselves more, do not focus on the positive, are more reserved, and lack coping strategies, they obtain worse scores on PA (Viñas et al., 2015).

Fourth, the findings show that having fewer emotional and behavioral difficulties is related to better academic achievement. This study reveals, as hypothesized, that young people who achieve good academic results (estimated with the average grade in the previous school year) also have few-

er socio-emotional adjustment problems. The students with failing grades present worse mental health compared to students who get good grades. The results of this study are relatively consistent with those found in other studies. Thus, Casas et al. (2014) found that students with good school adaptation not only showed better psychosocial adjustment in other contexts, but that this school adaptation also contributed to increasing their subjective wellbeing and satisfaction with life. Along the same lines, Martínez-Antón et al. (2007) found that high self-esteem, being valued by the teacher, and an appropriate social climate in the classroom favored better school performance. However, and as the present study reveals, worse academic grades are related to poor emotional and behavioral adjustment, a finding that is corroborated in other previous studies. For example, it is estimated that students' depressive symptoms are associated with a 25-30% probability of abandoning their studies (Fletcher, 2010). According to studies by McLeod et al. (2012), the specific problems that most strongly predict low educational levels are related to attention, depression, delinquency, and drug use. Different studies associate a relative reduction in cognitive performance in adolescence and adulthood, particularly on verbal ability, with a greater risk of psychosis in adulthood (MacCabe et al., 2013). Other studies show that a delay in academic progress (low school achievement) can be an indicator of mental health risk in adolescence (Tempelaar et al., 2014). The present study yields interesting results about the associations between mental health, emotional wellbeing, and academic achievement, suggesting the need to continue to examine both the complex relationships established between them and their possible impact at many levels (e.g., family, social, healthcare).

This study presents some limitations that should be taken into account when interpreting and generalizing the results. First, the conclusions of the present study are limited by the measurement instruments used, which are mainly self-reports. Both the prevalence of mental health and the different indicators of wellbeing, affect, and achievement are based on self-report measures, with their well-known limitations in generalizing and extrapolating the results. Second, the effects of other variables that could affect the results found were not controlled, such as the parents' employment situation (employed or unemployed) and other family variables (structure, marital status of the parents, presence of siblings or other family members in the home, such as grandparents, etc.). Third, the study was carried out through stratified random cluster sampling at the classroom level. However, the results are limited by the fact that all the participants belong to the same Autonomous Region, in this case La Rioja, which limits the generalization of the results to other Spanish regions. Fourth, this is a cross-sectional study, so that caution must be used when establishing possible cause-effect relationships.

In summary, the different difficulties in emotional and behavioral adjustment reported by the young people are associated with less emotional wellbeing, higher levels of nega-

tive affect, lower levels of positive affect, and worse academic performance. This study allows us to improve our understanding of the state of mental health of young people. Knowledge about this reality makes it possible to design and implement action strategies within the educational, social, and healthcare policies, in order to improve the mental health and emotional wellbeing of the child-adolescent population. It also helps to optimize the management of resources, mitigate the impact of mental health problems at different levels (e.g., personal, school, family, social, or health), and raise consciousness and awareness about questions related to the stigma associated with people with men-

tal health disorders. Our young people are an important social capital.

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