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Emotional and Behavioral Adjustment in a Spanish Sample of Adolescents

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Introduction. The purpose of this study was to analyze the relationship between emotional and behavioral difficulties and suicidal ideation, bullying and cyberbullying, and substance use in adolescents.

Method. The sample consisted of a total of 1,664 participants ($M=16.12$ years, $SD=1.36$, range 14–19 years, 697 males), selected by stratified random sampling. The instruments used were the Strengths and Difficulties Questionnaire, the Paykel Suicide Scale, the Cyberbullying-Brief Questionnaire, the Modified Substance Consumption Questionnaire, and the Oviedo Infrequency Response Scale.

Results. The results showed that 7.7% of adolescents obtained risk scores of poor mental health, and 13.4% would be in the limit score range. In addition, the results indicated that adolescents who showed a possible risk of emotional and behavioral mental health problems also present greater suicidal ideation, behaviors related to bullying and cyberbullying (perception, victimization), and substance use, specifically tobacco and cannabis.

Conclusions. These results increase awareness of the importance of adolescents' mental health, improve the training of health professionals and guide the implementation of measures to promote health and reduce the risk factors for suicide, school bullying and of substance use and abuse.

Key words: Emotional Difficulties, Adolescence, Suicidal Ideation, Cyberbullying, Drug Use, Mental Health Risk

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Ajuste Emocional y Comportamental en una Muestra de Adolescentes Españoles

Introducción. El propósito de este estudio fue analizar la relación entre las dificultades en el ajuste emocional y comportamental y la ideación suicida, el acoso escolar (*bullying*, *ciberbullying*) y el consumo de sustancias en adolescentes.

Método. La muestra la formaron un total de 1.664 participantes ($M=16,12$ años; $DT=1,36$, rango 14–19 años, 697 varones), seleccionados mediante muestreo estratificado por conglomerados. Los instrumentos empleados fueron el Cuestionario de Capacidades y Dificultades, la Escala Paykel de Ideación Suicida, el Cuestionario de *Ciberbullying*-Breve, el Cuestionario de Consumo de Sustancias Modificado y la Escala Oviedo de Infrecuencia de Respuesta.

Resultados. Los resultados mostraron que el 7,7% de los adolescentes obtuvo puntuaciones de riesgo de problemas de salud mental, mientras que el 13,4% estaría en la franja de puntuación límite. Además, los adolescentes que mostraron dificultades en el ajuste emocional y comportamental también presentaron mayor ideación suicida, conductas relacionadas con el acoso escolar y ciberacoso (percepción, victimización), y consumo de sustancias, concretamente tabaco y cannabis.

Conclusiones. Estos resultados incrementan la concienciación sobre la importancia de la salud mental de los adolescentes, permiten mejorar la formación de los profesionales de la salud y guían la puesta en marcha de medidas para promocionar la salud y reducir los factores de riesgo suicida, de acoso escolar y de uso y abuso de sustancias.

Palabras clave: Dificultades Emocionales, Adolescencia, Ideación Suicida, Ciberbullying, Consumo de Drogas, Riesgo de Salud Mental

INTRODUCTION

Approximately 15–20% of children and adolescents will present some type of mental disorder in their life^{1–5}, beginning before the age of 18 in 75% of cases⁶. In the Spain National Health Survey 2006 (acronym ENSE in Spanish)^{7,8}, carried out with the hetero-report version of the Strengths and Difficulties Questionnaire (SDQ)⁹, it was found that between 19.2 and 26.6% of children and adolescents from 4 to 15 years old were at risk of suffering from poor mental health, and 4–6% of cases were severe. In addition to the high prevalence rates, mental disorders are among the leading causes of associated disability and burden of disease in the age group of 10 to 24 years,¹⁰ with significant social and health repercussions¹¹. Health and social assistance costs have increased in line with the growth of spending on mental health services^{10,12–15}. For example, in Spain they have a significant economic impact, since the costs associated with mental disorders have been calculated at 83,749 million euros per year, approximately 0.8% of the GDP¹⁶. Therefore, the analysis of different mental health indicators in young people is of the utmost importance since it enables us to uncover clues regarding their understanding, prevention and approach as well as the efficient management of resources.

Within mental health problems, emotional symptoms (e.g., depression and anxiety), suicidal behaviour, bullying and substance abuse are among the most prevalent. Specifically, suicidal behaviours include a spectrum of behaviours that manifest as ideas, threats, attempts and completed suicides, and they are one of the main causes of death among young people aged 10 to 24 years^{10,15,17}. Suicidal behaviours are also one of the main public health problems worldwide,¹⁸ and the second leading cause of death in the age group of 15 to 29 years old¹⁹. Comorbidity, mainly with anxiety disorders, increases the risk of suicidal behaviour in adolescents²⁰. Having a mental disorder is, therefore, the main risk factor for suicide, since between 90% and 98% of suicidal individuals suffer from a mental disorder^{21–23}. To these data, we must also add the psychological and family impact, as well as the social and economic cost in the entire community^{10,12}.

The development and use of new technologies has produced another type of abuse, cyberbullying, which consists of the use of digital means of communication (Internet, mobile phones, video games, etc.) to harass a person or group of people, through personal attacks, assuming the identity of the victim, disclosing confidential or false information via other means with the intent to offend in a recurrent and repetitive manner^{24–26}. According to a recent study by the World Health Organization (WHO)²⁷ conducted on 219,460 students from 42 countries (including Spain), 8.5–11% of students reported having suffered and practiced, respectively, bullying at least four to six times during the last two

months. With the same frequency, 3% of the surveyed students reported having been victims of cyberbullying. Spain obtained lower than average levels of prevalence in traditional bullying (6 and 5% in perpetrators and victims, respectively), but slightly higher in cyberbullying (4% victims).

Bullying is also associated with mental health problems in adolescence, such as anxiety, depression and suicidal acts²⁸. School violence is also a public health problem, due to its frequency and associated damage²⁹. Several studies have found an association between bullying, and depression and anxiety^{30,31}, suicide^{29,32–34} and poorer academic performance and perceived school climate^{35–37}. Both young perpetrators and victims have worse health and risk behavior^{38–40}. Numerous investigations show that victims are more likely to have physical discomfort (e.g., headache, difficulty sleeping, abdominal pain, enuresis, lack of appetite, etc.) and psychological distress (anxiety, depression, low self-esteem, suicidal ideation, scarce social relations or isolation)^{41–50}. Perpetrators are more likely to have a personality disorder^{51–54}, to present a greater risk of delinquency⁵⁵ and to use drugs^{56–61}.

The abusive consumption of alcohol and other substances is another public health problem nationally and internationally. According to the State Survey on Drug Use in Secondary Education (ESTUDES 14–15)⁶² the most commonly consumed legal drugs are alcohol and tobacco (perceived by students as the most readily available) and cannabis is the most commonly used illegal drug. Approximately half of 16-year-olds had been drunk in the last year. Moreover, 1.7% of young people aged 14 to 18 had consumed alcohol daily in the last 30 days, with alcohol being the psychoactive substance perceived as the least dangerous. With regards to tobacco, according to ESTUDES 14–15, the percentage of the population that smokes daily has reached the lowest level in the last decade for both sexes. This decreasing tendency occurs in all age groups, but it is especially marked in young people. According to the Ministry of Health, Social Services and Equality⁶³, in 2014, 29.1% of survey participants had used cannabis *at some time in their lives*; young people presented a low perception of the risk associated with cannabis use, despite the evidence of its physical, psychological and social consequences. In addition, 14% of students admitted to having used new psychoactive substances at some time in their lives, and the pattern of polydrug use associated with high-risk consumption was widespread^{38,64}. In addition, the early consumption of tobacco is associated with a subsequent consumption of alcohol⁶⁵.

The difficulties and mental health problems in children and adolescents and their associated negative consequences are evident. However, few studies have analysed the relationship between difficulties in emotional and behavioural adjustment and other mental health risk behaviours. Within this research context, the main objective of this work was to

explore the relationship between emotional and behavioural difficulties and suicidal ideation, bullying and cyberbullying, and substance use, in a representative sample of Spanish adolescents. We expected to find, in accordance with the previous literature, that the adolescents with greater emotional and behavioural problems would report higher suicidal ideation, bullying-cyberbullying, and substance use behaviours.

METHOD

Participants

Stratified random sampling was carried out, by conglomerates, at the classroom level of the school, in a population of approximately 15,000 selected students from the Autonomous Community of La Rioja. The students belonged to different school centres (public and state-subsidized) and vocational training cycles (basic, intermediate and higher). The strata were created according to the type of school (public/private) and the school stage (ESO [Obligatory Secondary Studies], upper higher education, and Vocational Training), where the probability of selecting the classroom from the school was given based on the number of students.

The initial sample was 1,881 students, although those participants who had a high score on the Oviedo Infrequency Scale (more than three points) ($n=104$) or were older than 19 years ($n=113$) were eliminated. Thus, the final sample consisted of a total of 1,664 students, 782 males (47%) and 882 (53%) females, belonging to 34 schools and 98 classrooms. The mean age was 16.12 years ($SD=1.36$), with the age range between 14 and 19 years. Due to the small number of participants in the group of 19-year-olds, it was decided to combine this group with that of the 18-year-olds, so the group of 18-19-year-olds was comprised of a total of

268 participants (16.1%). The final distribution of the sample according to gender and age is shown in table 1.

Instruments

Strengths and Difficulties Questionnaire-Self-Report Version, (SDQ)⁹

The SDQ is a measurement instrument used for the evaluation of behavioural and emotional difficulties, as well as the assessment of prosocial capacities⁶⁶. It has also been used as a tool for screening and epidemiological analysis of mental health status in children and adolescents⁶⁷.

The SDQ is composed of 25 items, in a Likert response format with three options (0= No, never, 1= Sometimes, 2= Yes, always). The items are grouped into five dimensions (each with five items): Emotional Symptoms, Behavioural Problems, Hyperactivity, Peer Relationship Problems, and Prosocial Behaviour. The first four subscales form a Total Difficulties score. The higher the score, the greater the level of emotional and behavioural difficulties, except for the subscale of Prosocial Behaviour, where lower scores indicate poorer adjustment.

In the present work, in order to improve the interpretation of the SDQ scores, and in accordance with the SDQ norms, different studies have been conducted in which scores can be recoded into three groups: A Total Difficulties score between 0-15 is considered as "no risk" or "no case", a score between 16-19 is in the "borderline" and a score between 20-40 is considered as a "abnormal" or "risk of poor mental health"⁶⁸.

	Years	Gender		Total
		Male	Female	
Age	14	91	133	224
	15	178	184	362
	16	197	212	409
	17	190	211	401
	18	89	103	192
	19	37	39	76
Total		782	882	1664

The psychometric properties of the SDQ have been analysed in previous international and national studies^{69,70}. For the present study, the adapted and translated into Spanish version of the instrument was used, which is available on the Internet (<http://www.sdqinfo.com>).

Paykel Suicide Scale, PSS⁷¹

This is a tool designed for the evaluation of suicidal ideation. It consists of a total of 5 items with a dichotomous response system Yes/No (scores 1 and 0, respectively). Specifically, it evaluates thoughts of death (items 1 and 2), suicidal ideation (items 3 and 4) and suicide attempts (item 5). The scores range from 0 to 5. The timeframe to which the questions refer is the last year. Higher scores indicate a higher frequency and severity of suicidal ideation. The PSS has been used previously with Spanish adolescents, showing an adequate psychometric quality^{1,38,72}.

Cuestionario de Cyberbullying Breve [Brief Cyberbullying Questionnaire] (Spanish acronym, CB)⁷³

The CB is an instrument that assesses bullying and cyberbullying behaviours. The CB is structured around a series of dimensions that must be taken into account: 1) Traditional Bullying; 2) Accessibility to Information and Communication Technologies (ICTs) (Internet and mobile phone); 3) Cyberbullying over the Internet; and 4) Cyberbullying via mobile phone. The psychometric properties of this measuring instrument have been analyzed⁷⁴. In the present work, eight questions were selected (2, 3, 4, 5, 6, 16 and 17) that collect information about harassment and cyberbullying behaviour. The CB has been widely used in previous work with adolescents^{75,76}.

Cuestionario de Consumo de Sustancias Modificado [Substance Consumption Questionnaire - Modified]

The substance use questionnaire used in the present investigation is an abbreviated modification of the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST v3.0)⁷⁷. The ASSIST is an interview that is used as a screening tool in the detection of drug users developed by WHO. The ASSIST consists of different items that evaluate, among other aspects, the frequency of consumption of different substances (alcohol, tobacco, cannabis, cocaine, etc.) in the three months prior to the completion of the questionnaire. The ASSIST has been translated and validated into Spanish⁷⁸.

In this study, we used two of the ASSIST questions that were applied in a self-report format. Item 1 asked: "Through-

out your life, which of the following substances have you ever consumed?" Participants had to answer in a dichotomous response format Yes/No for the following substances: a) Tobacco (cigarettes, cigars, chewing tobacco, pipe, etc.); b) Alcoholic beverages (beer, wine, liquors, spirits, etc.); c) Cannabis (marijuana, grass, hashish, etc.) and d) Others (e.g., cocaine, amphetamines, inhalants, hallucinogens, opiates, etc.). In the case of answering affirmatively to some of the substances in item 1, item 2 asked about the frequency of consumption in the last three months.

Escala Oviedo de Infrecuencia de Respuesta [Oviedo Infrequency Scale] (INF-OV)⁷⁹

The INF-OV was developed to detect the participants that respond in a random, pseudo-random or dishonest way to the administered measurement instruments. The INF-OV is a self-report type measuring instrument composed of 12 items in a Likert type format of five categories according to the degree of agreement (1= Strongly disagree, 2= Disagree, 3= Neither disagree nor agree; 4= Agree, and 5= Strongly agree). Once the items have been dichotomized, students who score more than two items on the INF-OV incorrectly are eliminated from the study. The INF-OV has been used in previous works⁸⁰.

Procedure

The research was approved by the General Directorate of Education of the Government of La Rioja and the Clinical Research Ethics Committee of La Rioja (*Comité Ético de Investigación Clínica de La Rioja*, CEICLAR). The contact with the schools was made by phone, email or by mail. The first contact with the school was made with the Headteacher, the Deputy Head, or with the Guidance Department.

In order to standardize the administration process, all the researchers were given a protocol and standards that they had to carry out before, during and after the administration of the measuring instruments. The administration of the questionnaires was done by computer and collectively in groups of between 10 and 30 participants.

The confidentiality of the answers was reported at all times, as well as the voluntary nature of participation, and no gratification was given for collaborating in the study. Whenever necessary, consent was requested to authorize the adolescent's participation in the research. This study is part of a larger project on the early detection of mental health problems.

Data analysis

In order to investigate the proposed objectives, the following data analyses were carried out. First, the percentages of participants who presented emotional and behavioural difficulties, suicidal ideation, bullying and cyberbullying, and substance use were analysed.

Secondly, three groups of participants were established according to the total score of difficulties on the SDQ. A univariate analysis of covariance (ANCOVA) was carried out to study the relationship between the three levels of emotional-behavioural difficulties and suicidal ideation. Given that gender and age can affect the expression of emotional and behavioural problems, they were considered as covariables. The partial eta squared statistic (*partial η²*) was used to calculate the effect size. For the study of the relationship between the three levels of risk of emotional and behavioural problems with bullying and cyberbullying on the one hand and with the consumption of substances on the other, contingency tables and the Kendall *tau b* statistic were used.

The data analyses were carried out with the statistical program SPSS v22⁸¹.

RESULTS

Descriptive statistics: prevalence data

The results showed that 7.7% of adolescents obtained risk scores for poor mental health (Total Difficulties score), 13.4% were in the borderline score range and 78.9% of the sample was in the group of no risk. Of the adolescents in the study, 4.1% indicated that at some point they had tried to take their own lives. It was found that 5.6% of students perceived bullying in their centre several times a week, while 2% of students said that cyberbullying had occurred several times a week in their school. The lifetime prevalence of sub-

stance use (having consumed at some time in their life) was 40.6% for tobacco, 79.4% for alcohol, and 23.6% for cannabis. Of all the participants in the sample, 15.7% reported drinking alcohol every week. In addition, 2.9% of participants had a monthly frequency of cannabis use, while 2% presented a pattern of weekly consumption.

Relationship between risk levels of emotional and behavioural difficulties and suicidal ideation

The ANCOVA revealed the existence of statistically significant differences between the three mental health groups and the total score in suicidal ideation. The results are presented in table 2. It can be observed that, as the level of risk of poor mental health increases, the level of suicidal ideation informed by the adolescents increases. It is worth mentioning that the PSS refers to thoughts of death, as well as suicidal ideation and previous suicide attempts. The effect size found was of large magnitude. The post hoc comparisons by Bonferroni showed statistically significant differences between the three mental health groups ($p \leq 0,01$).

Relationship between risk levels of emotional and behavioural difficulties and bullying

The relationship between the three mental health groups and bullying behaviours are shown in table 3. It can be observed that, as the risk of emotional and behavioural difficulties increases, bullying and cyberbullying behaviours increase both in general perception and as a victim or perpetrator. Students who have suffered bullying in the last two months have a risk of poor mental health of 1.14-2.22% and those who have suffered cyberbullying have a 0.36-0.96% risk.

Relationship between risk levels of emotional and behavioural difficulties and substance use

Table 2	Comparisons in total suicide ideation scores according to mental health groups								
	Mental health groups						F	p	Partial η ²
No risk		Borderline		Risk of poor mental health					
n=1,313		n=223		n=128					
M	DT	M	DT	M	DT				
Suicide Ideation (PSS)	0.61	1.07	1.57	1.52	2.58	1.68	194.67	≤0.001	0.19

PSS: Paykel Suicide Scale

Table 3	Number of participants in the response options of the bullying and cyberbullying items according to mental health groups	Mental health groups		
		Response options	No risk	Borderline
1 Have there been harassment phenomena (picking on someone, bullying) in the last two months at your secondary school? Kendall's $Tau b = 0.132$; $p < 0.001$	0	739	98	46
	1	433	98	42
	2	83	9	21
	3	58	18	19
2 How many times you been picked on or harassed in the last two months? Kendall's $Tau b = 0.242$; $p < 0.001$	0	1162	167	70
	1	127	42	39
	2	15	8	10
	3	9	6	9
3 Have you picked on someone or harassed someone in the last two months? Kendall's $Tau b = 0.133$; $p < 0.001$	0	1152	181	89
	1	145	35	28
	2	12	4	8
	3	4	3	3
4 Now, thinking only about Cyberbullying, has this phenomenon happened in the last two months? Kendall's $Tau b = 0.087$; $p < 0.001$	0	1116	181	91
	1	144	25	28
	2	36	7	3
	3	17	10	6
5 How many times have you been picked on or harassed via your mobile phone in the last two months? Kendall's $Tau b = 0.224$; $p < 0.001$	0	1248	191	92
	1	58	22	27
	2	6	9	6
	3	1	1	3
6 Have you picked on someone or harassed someone in the last two months via mobile phone? Kendall's $Tau b = 0.119$; $p < 0.001$	0	1263	206	110
	1	46	15	13
	2	3	1	3
	3	1	1	2
7 How many times have you been picked on or harassed over the Internet in the last two months? Kendall's $Tau b = 0.229$; $p < 0.001$	0	1266	194	97
	1	42	21	26
	2	4	6	2
	3	1	2	3
8 Have you picked on or harassed someone, via the Internet, in the last two months? Kendall's $Tau b = 0.136$; $p < 0.001$	0	1282	211	111
	1	29	10	13
	2	1	1	1
	3	1	1	3

Table 4	Number of participants in prevalence of substance use according to mental health groups							
	Mental health groups						Kendall's Tau <i>b</i>	<i>p</i>
	No risk		Borderline		Risk of poor mental health			
	No	Yes	No	Yes	No	Yes		
Tobacco	806	507	122	101	60	68	0.081	0.002
Alcohol	272	1041	51	172	20	108	0.009	0.697
Cannabis	1030	283	155	68	87	41	0.090	0.001

It can be observed that the risk group of poor mental health presented a higher frequency of lifetime consumption of tobacco and cannabis compared to the other two groups. No statistically significant differences were found in alcohol consumption among the mental health groups. The results are shown in table 4.

CONCLUSIONS

The main objective of this work was to explore the relationship between emotional and behavioural difficulties and suicidal ideation, bullying and cyberbullying and the consumption of substances in a representative sample of Spanish adolescents. The results have shown, in accordance with the previous literature, that adolescents who report more emotional and behavioural problems report more suicidal ideation, more bullying and cyberbullying behaviours (both as victim and perpetrator), and greater consumption of tobacco and cannabis.

The results showed that 7.7% of adolescents showed a risk of poor mental health. These are comparable with the National Health Surveys ENSE 2006 and 2011/12^{66,82,83}. Also in the international arena, it is considered that the lifetime prevalence of mental disorders at this stage of development is around 13.4%^{2,10,84-86}.

The risk of problems in emotional and behavioural adjustment was related to greater suicidal ideation. Specifically, our sample reported that approximately 4% had attempted to take their own lives in the past year. Several previous studies also indicate the positive relationship between mental health difficulties and suicide attempts^{17,22,87,88}. Balázs et al.²⁰ highlight the importance of early identification of depression and anxiety in minimizing the risk of suicide (in a sample of 12,395 adolescents from 11 countries). There is

also evidence of an increased risk of suicidal behaviours in, for example, comorbid bipolar disorders, alcohol abuse, and eating behaviour disorders^{38,89-96}. Hawton²¹ adds that adolescents who are more impulsive and have negative self-esteem also seem to be more exposed to the risk of self-harm. Other research conducted in the United States identified that problems relating to others, recent crises, mental health problems, couple problems, and bullying were the most common precipitating factors⁹⁷.

Problems in emotional and behavioural adjustment were also associated with a greater number of harassment behaviours rated at 5.6% both for victimization and for perpetration in the educational centre. The bullying phenomenon also seems to be linked to negative effects on the mental health of adolescents. Our study confirmed that, as the risk of poor mental health increases, the cases of bullying and cyberbullying increase, both in general perception and as victim and perpetrator. In numerous investigations, it has been shown that adolescents who have been harassed have more physical alterations, psychosomatic problems, depression, anxiety, suicidal ideation or suicide attempts^{28,33,43,44,98,99}, low self-esteem^{100,101}; serious social relationship problems, isolation, deficit of social skills and self-control^{35,48,50,75,102}; poorer academic performance and worse concentration^{36,39} and even school absenteeism⁴⁰. For example, Kowalski et al.³⁹ correlate traditional bullying and cyberbullying with high rates of anxiety, depression, low self-esteem, dropping out of school, suicidal ideation, and health problems. In another study, Bannink et al.³² corroborate an increased risk of mental health problems among girls suffering from cyberbullying.

A third result found is that emotional and behavioural difficulties are related to a higher consumption of tobacco and cannabis, but not alcohol. Our sample presented a 2% pattern of weekly cannabis use. These results are partially

convergent with those found in previous studies^{62,66}. For example, tobacco use by adolescents carries a higher risk of mental problems¹⁰³ such as anxiety, depression^{95,104,105}, personality disorder¹⁰⁶⁻¹¹⁰, and suicidal tendencies^{38,92,111-113}. According to Baek et al.¹⁰⁶ the current consumption of cigarettes can predict suicide attempts in a representative sample of the community of people with bipolar disorder. With regards to cannabis, in a longitudinal study Fergusson et al.¹¹⁴ examined the associations between the frequency of consumption and psychosocial outcomes in adolescence and youth, between the ages of 14-21 years. They confirm that the use of cannabis was associated with higher rates in a series of problems of adaptation, delinquency, depression, and suicidal behaviour. The WHO considers that cannabis has a negative impact on mental health because it seems to be capable of causing a syndrome of dependence, similar to that of other drugs, inducing psychoses of its own, causing amotivational syndrome, and exacerbating the course of schizophrenia, as well as precipitating its onset¹¹⁵. It is likely that cannabis use increases the risk of developing schizophrenia and other psychoses; the greater the use, the greater the risk^{116,117}. The use of cannabis and the volume of white matter were additive and interactive in predicting depressive symptoms among adolescents¹¹⁸ and even in a longitudinal study, cannabis use was associated with an increased risk of suicide¹¹⁹. For example, Carli et al.¹ explored the prevalence of risk behaviours (excessive consumption of alcohol, consumption of illegal drugs, excessive smoking, reduced sleep, low weight, overweight, sedentarism, high use of the Internet, TV, video games, and school absenteeism) and their association with self-destructive behaviours, in a sample of 12,395 adolescents. They identified three groups of adolescents: a low-risk group, a high-risk group and a third group of "invisible" risk (5.9% prevalence of suicide attempts) with high levels of risk behaviours that had almost the same prevalence as the high-risk group.

The present work is not without its limitations, some of which are discussed below. First, the mental health indicators were evaluated using self-report instruments with the corresponding limitations of this type of tool. Second, the sample belongs to a Spanish autonomous community (La Rioja), an aspect that, despite the fact that random sampling stratified by conglomerates was carried out, partially limits the generalization of the results to the entire Spanish territory. Third, it is a cross-sectional study, so no causal relationships can be established. Fourth, it would have been interesting to collect data on other possible demographic risk factors (e.g., economic status) and information on the presence or history of symptoms or mental disorders, which are all aspects that could be modulating the results found.

This study aims to shed light on the relationship between different mental health problems, with the goal of improving the emotional well-being of our young people.

Future studies should examine the psychological mechanisms that are related to the transition to a mental disorder, and longitudinal studies should be performed that enable us to analyse the predictive capacity of these indicators. Similarly, it would be extremely interesting to implement new information technologies (e.g., smartphones, apps) as well as new psychometric models in the study of mental health, such as network models^{120,121}.

In the last two decades, interest in the study of mental health and the emotional well-being of children and adolescents has increased, although efforts to this end are still insufficient. It is clear that many issues remain to be addressed and resolved.

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CONFLICT OF INTERESTS

There are no conflicts of interest.

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