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Child depression in the school context

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Abstract

The aims were to analyze depression rates in 8-12 year olds in a Spanish sample, to explore the relationship between depression and school adjustment, and to study teachers' competence in detecting depression symptoms.

The sample comprised 1102 students who filled out the Behaviour Assessment System for Children (BASC), and the Children's Depression Scale (CDS). Teachers completed an adapted version of the Teacher's Report Form (TRF).

About 4% of the sample presented clinically significant depressive symptoms. The findings show that school maladjustment predicts depression. Self-esteem is also a predictive factor for girls, but not for boys. Teachers' assessment correlated with girls' self-reports.

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1. Introduction

Child depression has attracted a good deal of research attention in recent years, both from the clinical point of view and in relation to its effects on school activity. The European regional office of the World Health Organization (WHO) recently published a report on the impact of health and healthy behaviours on school performance (Suhrcke & de Paz Nieves, 2011). This report highlighted findings on the direct effects of health on education through the analysis of a series of risk factors, including mental disorders, and specifically problems of anxiety and depression, which according to the report have a negative and significant effect on short and long-term educational outcomes, but have nevertheless received scant attention from research. Moreover, other WHO reports have identified depression as the second cause of illness among the population aged 15 to 44 in both sexes (WHO, 2011). These figures suggest that depression actually starts earlier than was thought, making it especially important to study the school-age period. Thus, the present work emerges from an interest in transmitting psychological knowledge about child depression to schools, with a view to helping teachers identify depressive symptoms in schoolchildren and detect this pathology at an early stage.

Studies based on diagnoses according to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) (APA, 2000) that include both major depression and dysthymic disorder indicate prevalence rates ranging from 0.3% to 6.4% (Angold et al., 2002a; Cohen et al., 1993; Costello et al., 1996; Fleming & Offord, 1990; Polaino-Lorente & Domenech, 1993; Puura et al., 1997). Research also shows that around 10-15% of the child population in Primary Education present significant depressive symptoms (Hammen & Rudolph, 1996; Liu et al., 1999), whilst other studies report figures of 23.6% (Steinhausen & Winkler Metzke, 2003), or even 25.2% (Vinaccia et al., 2006). While prevalence rates differ depending on the methodology employed (sample, instruments, informants, etc.), the truth is that childhood depression is one of the most undertreated and debilitating psychological disorders (Cicchetti & Toth, 1998).

Although depressive symptoms increase over time, research has found that the first symptoms of major depression emerge around age 11-12, and that less severe symptoms can be observed in children as young as 7-8 (Del Barrio, 2000; Kovacs, Freinberg, Crouse-Novak, Paulauskas, & Filkenstein, 1984). As regards possible differences by sex, various studies have found greater prevalence of depressive symptoms in boys than in girls aged between 6 and 12 (López Soler & López-Pina, 1998; Torres, 1992; Vinaccia et al., 2006). From age 12 onwards, on the other hand, the prevalence of depressive symptomatology tends to be higher in girls, reaching a ratio of as much as 2:1 with respect to boys (Angold, Erkanli, Silberg, Eaves, & Costello, 2002; Del Barrio, Moreno, & López, 1997; Lynch, Glod, & Fitzgerald, 2001).

The school adjustment of children with depressive symptomatology is a matter of great importance, since this variable includes aspects such as school performance, adaptation of behaviour to the school (Torres, 1992), negative attitude toward teachers and negative attitude toward the school (Reynolds & Kamphaus, 2004). Previous studies have found that teachers considered that potentially depressed students showed poorer adjustment, that is, their school behaviour was poorer, they worked and learned less, their academic performance was lower and they tended to need special classes, with no differences according to sex (Torres, 1992). But while children's mood state can affect their academic performance (Roeser, Van der Wolf, & Strobel, 2001), it is no less true that poor academic performance is a risk factor for suffering from depression (Herman, Lambert, Ialongo, & Ostrander, 2007), since it feeds the negative self-concept that the child may be developing during his or her years in school. Moreover, some studies affirm that risk of depression is cumulative, since pupils' academic failure contributes to increasing their perceived lack of competence (Cole, 1990), and indeed, academic self-concept has been identified as a predictor of academic performance (Marsh & Hau, 2003). There is general agreement that both children and adolescents with depressive symptomatology have lower self-esteem than those who are not depressed (Bos, Huijding, Muris, Vogel, & Biesheuvel, 2010; Kaslow, Brown, & Mee, 1994; Orth, Robins, & Roberts, 2008). As regards differences by sex, some studies indicate that girls tend to show poorer self-esteem than boys, especially after age 12 (Amezcuca & Pichardo, 2000; Crain, 1996; Wilgenbusch & Merrell, 1999).

Taking into account all of this research, it is clear that the school context is one of great relevance for the detection and prevention of child depression, given that if this problem is not detected in time, the depressive symptomatology can become consolidated and chronic in subsequent developmental stages (adolescence and

adulthood). Therefore, it is important to explore the question of whether the information provided by teachers about the depressive symptomatology of their pupils coincides with that provided by the pupils themselves in self-reports. Some studies indicate that teachers tend not to detect students with internalizing problems, the children themselves or their mothers being better informants (Loeber, Green, & Lahey, 1990). Woo et al. (2007) found greater prevalence of depressive symptomatology on using self-reports than on using teachers' reports. In the same line, other studies have found positive but quite low correlations between teachers' reports (through the Teachers' Report Form; TRF, Achenbach, 1991) and children's self-reports. Thus, for example, Worchel, Hughes, Hall, Stanton and Little (1990) found a correlation between the TRF and the Child Depression Inventory (CDI) (Kovacs, 1992) of $r = .13$, whilst Wolfe et al. (1987) found a correlation of $r = .17$, and Roussos et al. (1999) found low and moderate correlations (ranging from .11 to .39) between the Child Behavior Checklist (CBCL, Achenbach & Edelbrock, 1991) and the TRF.

The three goals of the present study were as follows: 1) to analyze the rate of depressive symptomatology in a sample of schoolchildren from the Basque Country in Spain, taking into account participants' sex and age; 2) to examine the relations between child depressive symptomatology, school maladjustment, academic performance and self-esteem, considering sex and age; and 3) to explore the relation between children's self-reports and teachers' reports on their pupils' depressive symptomatology.

With these goals in mind, five hypotheses were proposed: 1) rates of child depression have increased in the last 20 years according to comparisons with the results of previous studies carried out in the Basque Country; 2) boys will present lower levels of depressive symptomatology as they get older; 3) students with higher levels of depressive symptomatology will show higher levels of school maladjustment and lower levels of academic performance and self-esteem; 4) not only school maladjustment and academic performance, but also self-esteem, will be predictive factors for depressive symptomatology in schoolchildren; and 5) the results of students' self-reports about their depressive symptomatology will correlate positively with the results of their class teachers' reports.

2. Method

2.1. Participants

The sample was made up of 1102 schoolchildren, 575 girls and 527 boys aged between 8 and 12 years ($M = 9.7$; $SD = 1.2$). Of those participating, 793 took the diagnostic tests in Basque and 309 in Spanish. The sample was taken from eight public and grant-assisted schools in the Basque Country. Twenty-four per cent of the students were in grade 3 of Primary Education, 24% in grade 4, 28% in grade 5 and 24% in grade 6.

2.2. Assessment instruments

2.2.1. Behavior assessment system for children (BASC; Reynolds & Kamphaus, 1992, Spanish adaptation by González, Fernández, Pérez & Santamaría, 2004). The BASC is a multidimensional assessment system designed for rating both positive dimensions (adaptive scales) and negative dimensions (clinical scales) of behaviour and personality in children and adolescents. In the present study the personality self-report S2 was used. This questionnaire is aimed at children aged 8 to 12, and comprises 146 statements and 12 scales, grouped in 8 clinical scales and four adaptive scales. The clinical scales are as follows: negative attitude toward the school (feelings of alienation, hostility and dissatisfaction in relation to the school), negative attitude toward the teachers (feelings of antipathy toward the teachers; beliefs that the teachers are unfair, that they fail to pay sufficient attention to pupils, or that they are too demanding), atypicality (tendency to exhibit sharp mood swings, to present strange ideas, to have unusual experiences or obsessive-compulsive thoughts or to behave "oddly"), locus of control (belief that rewards and punishments are controlled by external events or by other persons), social stress (stress level experienced by the children in their interactions with others), anxiety (feelings of nervousness, worry and fear; tendency to feel overwhelmed by problems), depression (usual depressive symptoms, including feelings of loneliness and sadness and inability to enjoy life), and sense of incapacity (perceptions of failure at school, difficulty in achieving one's own objectives and general incapacity). The four adaptive scales are as follows: interpersonal relations (perception of having good social relations and friendships with peers), relations with parents (positive consideration of one's parents and feeling that one is appreciated by them), self-esteem (feelings of self-esteem, self-respect and self-acceptance) and self-confidence (confidence in one's own ability to solve problems, belief in one's own independence and in one's ability to decide for oneself).

The adaptive scales (e.g., Self-esteem) include items such as “I like the way I look”, while an example of an item from the clinical scales (e.g., Depression) would be “I just don’t care anymore”. The 12 scales defined are grouped in four global dimensions: emotional symptoms, personal adjustment, clinical maladjustment and school maladjustment. The reliability analyses showed good internal consistency of clinical maladjustment ($\alpha = .87$), personal adjustment ($\alpha = .70$), school maladjustment ($\alpha = .75$) and emotional symptoms ($\alpha = .81$), since they exceeded Nunnally’s (1978) criterion of $\alpha \geq .70$ for considering reliability as acceptable. We used two versions of the BASC-S2: the Spanish adaptation of the instrument with the non-bilingual students, and the Basque adaptation with the Basque speakers (Jaureguizar, Bernaras, Ibabe, & Sarasa, 2011).

2.2.2. Children’s Depression Scale (CDS; Lang & Tisher, 1983, Spanish adaptation by Seisdedos, 2003). This is an instrument for the global and specific assessment of depression in children aged 8 to 16. It has 66 items, 48 relating to depression and 18 to positive aspects. These two sets of items are grouped in two independent general subscales: total depressive (TD, e.g., “Often I feel nobody cares for me”) and total positive (TP, e.g., “I enjoy the things I do”). The TD scale comprises six subscales: Affective Response, Social Problems, Self-Esteem, Preoccupation with Sickness and Death, Guilt and Miscellaneous Depression (includes aspects of a depressive type that could not be grouped to form a unit). The TP scale is made up of two subscales: Pleasure-Enjoyment and Miscellaneous Positive (includes aspects of a positive nature that could be grouped to form a unit, and whose absence may result in substantial depressive manifestations in the child). The Basque-speaking students were administered the version of this instrument adapted to Basque by Balluerka, Gorostiaga and Haranburu (under review). In this study the internal consistency of the Total Depressive dimension ($\alpha = .93$) was excellent, whilst the Total Positive dimension yielded an acceptable value ($\alpha = .71$). Following the criteria of previous research, in order to consider the clinically significant score obtained in the Total Depressive (TD) dimension we used decatype 8 (raw score = 167).

2.2.3. Teacher’s Report Form (TRF; Achenbach & Rescorla, 2001). The TRF is a questionnaire to be completed by teachers who are familiar with children’s functioning in school, and provides an efficient and economical way to quickly obtain a picture of children’s functioning. It includes a list of problems children can have (e.g., “Cries a lot”, “Would rather be alone than with others” or “Overtired without reason”), for which the teacher must respond: 0 = not true, 1 = somewhat or sometimes true, and 2 = very true or often true for each of his/her pupils. The instrument was adapted for this study by selecting only those items referring to internalizing symptoms, specifically the “Anxious-Depressed”, “Withdrawn-Depressed” and “Somatic Complaints” scales. Thus, the questionnaire to be completed by class teachers comprised a total of 31 items. The adaptation of the TRF employed in this study showed acceptable internal consistency: $\alpha = .82$. The scale with the highest consistency was “Anxious-Depressed” ($\alpha = .78$), the reliability being lower for the “Withdrawn-Depressed” scale ($\alpha = .66$) and the “Somatic Complaints” scale ($\alpha = .60$).

Furthermore, teachers were asked to provide information on the academic performance of their pupils. Class teachers were required to indicate the academic level of each of their pupils in comparison to the mean performance of their classmates on a Likert-type scale of 5 points: 1 = well below the class mean, 2 = below the class mean, 3 = on the class mean, 4 = above the class mean, and 5 = well above the class mean.

2.3. Procedure

The study used a descriptive, comparative and correlational methodology in a cross-sectional approach. It was presented to the head teachers of the schools, who in turn presented it to their staff. It was agreed with those schools that gave their approval to send the informed consent protocols to parents. The participating students returned the signed informed consent protocols to their teachers and the application of the instruments began. In order to measure depressive symptomatology we administered collectively, and in a single session, two instruments for pupil assessment (BASC S-2 and CDS), in Basque or Spanish depending on the pupil’s linguistic profile. The instructions for the questionnaires were read out aloud. Students filled out the questionnaires during normal class time, taking roughly 1 hour to do so. Class teachers completed the brief version of the TRF and provided the information on their pupils’ academic performance. Application of the instruments was carried out by psychologists and research assistants trained for this purpose. The PASW Statistics 18 package was used for the data analysis. All those cases that failed to meet the validity criteria in accordance with the F and V indices of the BASC were removed.

3. Results

First of all, the rates of child depression in the present sample were studied. The results obtained with the CDS questionnaire indicate that 4.3% of the sample presents clinically significant depressive symptomatology (\geq decatype 8).

The second question to be analyzed was whether there were lower levels of depressive symptomatology in boys with increasing age. The clinical diagnosis of the CDS revealed differences by sex, $\chi^2(1, N = 895) = 6.9; p = .007$: boys (6%) presented a higher percentage of depression than girls (3%). A 2 x 3 ANOVA was carried out with participant's sex (boy vs. girl) x age (8-9 years; 10-11 years; and 12 years), and the dependent variable being depression. The results showed a significant main effect of age [$F(2, 887) = 3.81, p = .02$] and a significant interaction between sex and age [$F(2, 887) = 3.56, p = .03$] (see Figure 1). Post-hoc tests revealed no significant differences between boys and girls from the same age group. Nevertheless, as Figure 1 shows, the course of depressive symptomatology is different in boys and girls: while in boys the levels fall as they get older, in girls a slight upturn at the age of 12 can be observed (though without statistically significant differences with respect to earlier ages).

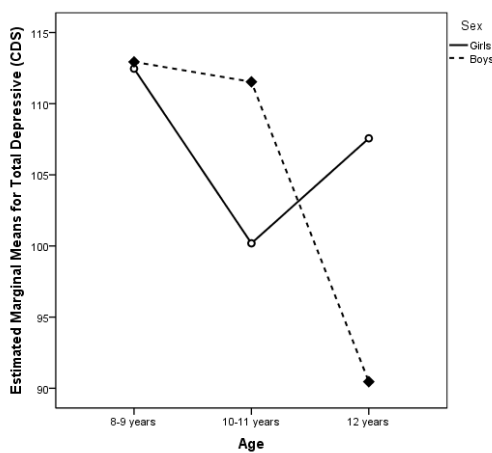


Figure 1. Levels of depressive symptomatology (CDS) according to sex and age

The third issue explored was whether schoolchildren with higher levels of depressive symptomatology show greater school maladjustment and lower levels of academic performance and self-esteem (measured with the BASC). Table 1 shows the matrix of correlations between all the variables analyzed. It can be seen that depressive symptomatology is positively correlated with school maladjustment, and negatively with academic performance and self-esteem.

Table 1. Means, standard deviations and correlations between the variables studied

Variables	M	SD	1	2	3	4
1. Depression	108.19	44.84	-			
2. Academic performance	3.34	1.04	-.10**	-		
3. School maladjustment	52.55	9.00	.18**	-.17**	-	
4. Self-esteem	50.43	8.59	-.18**	.12**	-.25**	-

** The correlation is significant at the 0.01 level (bilateral).

The results referring to the relations between depressive symptomatology and the other three variables studied (academic performance, school maladjustment and self-esteem), taking into account sex and age are described below:

a) As regards the relation between depression and school maladjustment, the positive correlation was maintained in both boys ($r = .15$) and girls ($r = .23$), though in the case of girls the association was stronger. However, in general, the levels of school maladjustment were higher in boys ($M = 54.51$; $SD = 9.75$) than in girls ($M = 50.74$; $SD = 7.84$) [$t(1004.12) = 7.01$; $p < .000$]. Likewise, a positive correlation was found between depression and school maladjustment in all age groups (8-9 years, $r = .22$; 10-11 years, $r = .17$), except at the age of 12 (the correlation is not significant).

b) With regard to the relation between depression and academic performance, this was similar in the cases of boys ($r = -.11$) and girls ($r = -.09$). Taking into account age, the relation between these two variables was somewhat stronger at the age of 8-9 years ($r = -.15$) than at the age of 10-11 ($r = -.11$). No significant correlation was found between depression and academic performance at the age of 12.

c) The relation between depressive symptomatology and self-esteem was stronger in the case of girls ($r = -.32$) than in that of boys ($r = -.12$), and in older children ($r = -.17$ at age 8-9, $r = -.19$ at age 10-11 and $r = -.35$ at the age of 12).

In general, students with high levels of depressive symptomatology (\geq decatype 8) presented higher levels of school maladjustment [$t(886) = -2.69$; $p = .007$] and lower levels of self-esteem [$t(37.57) = 2.53$; $p = .02$] than those with low levels of depressive symptomatology. No statistically significant differences were found between the mean academic performance of students with high and low levels of depressive symptomatology [$t(853) = .91$; $p = .36$] (see Table 2).

Table 2. Difference of means in school maladjustment, self-esteem and academic performance in students with high and low levels of depressive symptomatology

Variables	Low depression		High depression		<i>T</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
School maladjustment	52.38	9.09	56.46	7.71	-2.69**
Self-esteem	50.79	8.47	45.76	11.99	2.53*
Academic performance	3.40	1.03	3.24	1.06	.91

** $p < .01$; * $p < .05$

Fourthly, the analysis focused on the question of whether school maladjustment, academic performance and self-esteem are predictive factors of depressive symptomatology in schoolchildren. Different regression models were obtained for boys and girls (see Table 3). In the case of girls, school maladjustment, self-esteem and age were found to be predictive factors for depressive symptomatology, but not academic performance. In the case of boys, only school maladjustment was a significant predictor of depressive symptomatology. In the boys' group the proportion of variance explained by the model was much lower [$R^2 = .04$; $F(4, 405) = 4.94$, $p < .01$] than in the girls' group [$R^2 = .13$; $F(4, 434) = 16.84$, $p < .001$].

Table 3. Linear regression models predictive of depressive symptomatology in girls and boys

Model	Girls				Boys			
	Non-standardized coefficients		Standardized coefficients	<i>t</i>	Non-standardized coefficients		Standardized coefficients	<i>t</i>
	B	Standard error	Beta		B	Standard error	Beta	
Constant	166.75	19.22		8.68**	151.65	36.63		4.14**
School maladjustment	.48	.18	.13	2.66*	.78	.29	.13	2.64*
Self-esteem	-.84	.15	-.26	-5.40**	-.60	.34	-.09	-1.77
Academic performance	-.93	1.33	-.03	-.70	-4.82	2.69	-.09	-1.79
Age	-4.03	1.08	-.17	-3.74**	-3.71	2.43	-.07	-1.53

Dependent variable: Total Depressive

** $p \leq .001$; * $p \leq .01$

In fifth and final place, the issue analyzed was the relation between the results of the self-reports (CDS) and the class teachers' reports (TRF) on the students' depressive symptomatology. No significant correlations were found between the self-reports obtained by means of the CDS and the teachers' reports provided through the TRF for the total sample. Analyzing the correlations separately for boys and girls, it was found that the results for the class teachers' reports and the girls' self-reports correlated positively ($r = .13$), but no significant correlation was found in the case of the boys' group.

4. Discussion

The first objective of the present study was to analyze the rate of depressive symptomatology in a sample of schoolchildren from the Basque Country, starting out from the hypothesis that child depression rates in that Region had increased over the last twenty years (compared to those found by Torres in 1992). In Torres's (1992) study, 3.9% of schoolchildren in the Basque province of Gipuzkoa presented depression, and according to the results of our study 4.3% of the school population analyzed showed depressive symptomatology. The percentages are very similar, despite the fact that the comparability of the data obtained in the present work is relative, since, on the one hand, the population studied covered the entire Basque Region (the provinces of Bizkaia, Gipuzkoa and Araba), and on the other, the instruments used for the diagnosis of depression were different in the two studies (CDS in this study and CDI in the study by Torres, 1992).

The results on the percentage of depressive symptomatology found in this work are very similar to those obtained in research carried out in other countries and with other cultures (Angold, et al., 2002a; Cohen et al., 1993; Costello et al., 1996; Fleming & Offord, 1990; Polaino-Lorente & Domenech, 1993; Puura et al., 1997). However, these percentages differ considerably from those found in other studies, which indicate that between 10 and 15% of the child population in Primary Education present significant depressive symptoms (Hammen & Rudolph, 1996; Liu et al., 1999, Vinaccia et al., 2006); indeed, some even put the figure as high as 23.6% (Steinhausen & Winkler Metzke, 2003). The differences found can most probably be explained by the use of different diagnostic tests and the different cultures studied, together with aspects related to the populations involved (clinical samples or general population). The results of the present study do not indicate the existence of an "epidemic" of depressive disorder in children; more likely, and as Costello et al. (2006) suggest, the slightly higher percentages found in this study are the result of improvements in clinical practice, greater awareness of the disorder and better procedures for its diagnosis.

The differences in depressive symptomatology by sex and age were explored, since the starting hypothesis was that boys would present lower levels of depressive symptoms as they got older. Whilst no significant differences were found among the different age groups, an interaction was indeed found between sex and age, suggesting a different course of depressive symptomatology in boys and girls in relation to age; this, in turn, endorses the developmental perspective on child depression (Cicchetti et al., 1994; Compas et al., 1995). In general, boys showed higher levels of depressive symptomatology than girls, but the tendency appears to become reversed as children approach adolescence. Many studies have found that from the age of 12 it tends to be girls who present the higher levels of depression (Angold et al., 2002b; Del Barrio et al., 1997; Lynch et al., 2001), so that the results obtained in the present study would be in line with those of previous research. Nevertheless, the levels of depressive symptomatology found at early ages (8-9 years) should not be ignored, since they are quite high, and very similar in boys and girls. These results are congruent with those indicating high levels of internalizing emotional symptoms at the age of 8-9 (López Soler, Alcántara, Fernández, Castro, & López Pina, 2010). Therefore, it is necessary to pay special attention to the 8-9 age group and to the different course of the disorder in boys and girls, since it is at these ages that the basis of depressive disorders can begin to become consolidated.

A second objective of the study was to analyze the relations between child depressive symptomatology, school maladjustment, academic performance and self-esteem. The hypothesis postulating that higher levels of depressive symptomatology in children will be associated with greater school maladjustment, poorer academic performance and lower self-esteem was confirmed. The results indicate inverse and significant correlations between depressive symptomatology, academic performance and self-esteem, and a positive correlation between depressive symptomatology and school maladjustment, coinciding with the results obtained in previous studies (Bos et al., 2010; Cole, 1990, Herman et al., 2007; Kaslow, et al., 1994; Orth, et al., 2008; Torres, 1992). These correlations were maintained in both the boys' and girls' groups, but with slight differences. It should be highlighted that although in general boys presented higher levels of school maladjustment than girls (negative attitude toward the

school, negative attitude toward teachers, etc.), the association with depression is greater in girls: it would seem that problems of school adjustment affect girls more than boys. The relation between self-esteem and depression was also found to be stronger in older pupils and in girls. It could be postulated that the level of self-awareness and reflection is higher in girls than in boys at these ages, and that it increases as children get older.

The fourth hypothesis – that school maladjustment, academic performance and self-esteem would be predictive factors of depressive symptomatology in the schoolchildren – was partially confirmed. In the case of girls, both school maladjustment and self-esteem emerged as predictive factors of depressive symptoms, but not academic performance; in the case of boys, only school maladjustment turned out to be predictive. It may be that girls feel more incapable of responding adequately to the demands of school and that their perceived lack of success increases, resulting in a reduction of their self-esteem and self-confidence.

The third and final goal of this study was to explore the relation between children's self-reports and teachers' reports about depressive symptomatology in their pupils, starting out from the hypothesis that the results of the two reports would correlate positively. The hypothesis was partially confirmed, the results having indicated a positive but weak correlation between the depressive symptomatology detected by teachers and the self-reports ($r = .13$), but only in the case of girls. The finding of a positive correlation between self-reports and the teachers' reports coincides with the results from Roussos et al. (1999), Wolfe, et al. (1987) and Worchel, et al. (1990). Other authors, in contrast, have found that teachers tend not to detect pupils with internalizing problems (Loeber et al., 1990; Woo et al., 2007). It is important to bear in mind that while the school context is where children spend most of their day, the fact that teachers are unaware of or lack information on these disorders can result in a failure to diagnose children with such symptoms in time, so that the early-onset symptoms which mask depression start to become consolidated. Therefore, there is a clear need for further research on instruments for the detection of child symptomatology through different informants, and to this end it is important to be aware of the different ways in which boys and girls manifest their emotional distress at different developmental stages.

Finally, and looking to the future, two possible research lines can be proposed: 1) the drawing up and assessment of prevention programmes for early-age depression, given that rates of depressive symptomatology reach considerably high levels as early as age 8 in both boys and girls; and 2) the design and standardization of instruments for the assessment of depressive symptomatology for use by teachers, which should take into account differences in depressive symptomatology by sex and age.

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