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Peer Nomination Inventory of Depression: Characteristics in a Spanish Sample

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The Peer Nomination Inventory of Depression (PNID) was answered by 1,121 children from Barcelona in the fourth year of grammar school and by their teachers (n = 36) to analyze this questionnaire in a Spanish sample. The results indicated (1) high internal consistency; (2) discriminative power between depressed and nondepressed; (3) low concurrent validity; (4) convergent and discriminant validity; (5) a two-factor structure; and (6) that two discriminant functions could differentiate between depressed, dysthymic, and nondepressed subjects. The teacher's responses showed (1) moderate internal consistency; (2) discriminative power between depressed and nondepressed groups; (3) moderate concurrent validity; (4) and that two discriminant functions could differentiate between the diagnostic groups. The importance of the information given by the teacher to help detect severe depressive problems was pointed out.

While the study of childhood depression has increased in the last two decades, little cross-cultural data exist. The identification and knowledge of cultural variables may contribute to a better understanding of the manifestations of psychopathological syndromes and how these variables affect them.

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As Marsella, Sartorius, Jablensky, and Fenton (1985, p. 300) point out, cross-cultural research is a valuable strategy for extending our knowledge about "the universals and specifics in the etiology, expression and experience of depressive disorder." For this reason, large-scale studies are necessary to compare the characteristics of childhood psychopathology in different countries.

Controversy exists about the existence of depression worldwide. While some authors affirm that it is a common disorder (Schwab & Schwab, 1978), others assert that the manifestations of depressive disorder are related to the degree of "westernization" of a society (Marsella et al., 1985). According to them, the main symptoms of the depressive syndrome are universal, but differences among cultures exist in the range of manifestations. For instance, they point out that depressed mood, feelings of guilt, and suicidal ideas are not as common as somatic complaints in non-European cultures.

Several interviews and questionnaires for the assessment of childhood depression have recently been developed (Cantwell, 1983; Kazdin, 1981; Kazdin & Petti, 1982; Kovacs, 1981), with the majority designed for child or parent response. Few instruments have been designed to tap *other* sources of information, such as teachers and peers. Hoier and Kerr (1988) have discussed the value and advantages that nonfamilial informants can offer in the assessment of chilhood depression. Peer assessment has been defined by Kane and Lawler (1978, p. 555) as " the process in which the members of a group judge in which proportion each of the members of this group presents certain traits or behaviors." Peer assessments are valuable in that these judgments result from observations made in a natural context.

The Peer Nomination Inventory of Depression (PNID; Lefkowitz & Tesiny, 1980, 1981) is the only instrument for the evaluation of depression that uses peers as informants. Each child is asked to judge which classmates exhibit the behavior as indicated by each item on the instrument. Self-nominations are not permitted. It contains 23 items, 4 introductory items and 19 items encompassing three scales: Depression (13 items), Happiness (4 items), and Popularity (2 items). It was created for prepubertal children from the general population.

Lefkowitz and Tesiny (1980) and Tesiny and Lefkowitz (1982) presented data on the homogeneity (α = .85) and stability of the instrument (r = .79, two-month interval). The majority of the data available on validity pertain to concurrent validity, although content validity has also been determined. The PNID is only moderately correlated with other self-reports on depression, such as the Modified-Children's Depression Inventory, the Modified-Zung (Lefkowitz & Tesiny, 1980, 1985; Lefkowitz, Tesiny & Gordon, 1980), the Children's Depression Inventory (CDI; Kovacs, 1983a; Jacobsen, Lahey, & Strauss, 1983; Saylor, Finch, Spirito, & Bennett, 1984) and with locus of control (Lefkowitz & Tesiny, 1980, 1985; Lefkowitz et al., 1980;

Tensiny, Lefkowitz, & Gordon, 1980). Correlations with locus of control have ranged from .14 to .43.

The results of these studies indicated that high scores on the PNID are associated with low self-esteem, unhappiness, and unpopularity. High scores are also associated with evaluations of depression made by adults.

Factor analysis of the 23 items corresponding to the 3 scales (Depression, Happiness, and Popularity) in a sample of school children from the general population resulted in 4 factors which explained 54% of the common variance: loneliness, happiness, inadequacy, and depression (Lefkowitz & Tesiny, 1980).

Many authors recommend the use of multiple informants in the study of childhood affective disorders (Achenbach, 1985; Cantwell, 1983; Finch & Saylor, 1984; Herjanic, 1984; Hill, 1985; Kaslow & Rehm, 1983; Kazdin, 1981; Poznanski, Cook, & Carroll, 1979; Weller & Weller, 1985). Childhood depression has both internal symptomatology (e.g., dysphoric mood), which is better reported by the patient, and external symptomatology (e.g., lost of appetite) that is observable and can be reported by other external sources. However, the inclusion of several sources of information bears an additional problem: the discordance between them. This topic has been widely discussed with regard to interviews (Edelbrock, Costello, Dulcan Calabro, & Kalas, 1986; Kashani, Orvaschel, Burk, & Reid, 1985; Kovacs, 1983b; Reich & Earls, 1987) and questionnaires (Kazdin, French, Unis, & Esveldt-Dawson, 1983; Weissman, Orvaschel, & Padian, 1980). It seems that different sources of information reflect different situational aspects of the syndrome and, that lack of agreement between them cannot be equated with unreliability (Achenbach, McConaughty, & Howell, 1987).

Few studies have addressed the topic of teacher-peer concordance. Recently, Achenbach *et al.* (1987) studied cross-informant agreement in behavioral and emotional problems meta-analytically. Of the 119 works reviewed from 1967 to 1985, 23 dealt with agreement between peers and teachers, but only 3 concerned depression. Teacher and peers might be expected to agree when the behavior to be assessed is observable, objective, and concrete. They share the same setting and they are exposed to similar social and work interactions. In the Achenbach et al. (1987) review the mean correlation between teachers and peers in the 23 studies was .44. The causes of discordance between these two sources of information can come from the distinct roles they have in the setting (teacher/pupil) and from their different levels of cognitive development.

Although the PNID was designed to be answered by peers, we also asked the teachers to respond to the depression and happiness scales to test the efficiency of the questionnaire when completed by the teacher. If the teacher questionnaire were to have similar to better psychometric characteristics than

the peer questionnaire, the savings in time and energy (by children and by the person who has to score the questionnaire) would be significant. The present paper reports the psychometric properties of the PNID, as responded to by the classmates and by the teacher, in a Spanish sample from the general population.

METHOD

Subjects

The PNID was used to evaluate a total of 1,121 children selected through an exhaustive clustered random sampling. The children were in 36 fourth-year grammar school classes from private and public schools in the city of Barcelona. The distribution of sex and age is displayed in Table I. The sample was a part of a study on the epidemiology of childhood depression in six Spanish cities (Doménech & Polaino, 1990).

After screening with the CDI, an in-depth clinical examination was conducted in a second phase with 76 children with CDI $\geq$ 19 and a sample of 135 children with CDI < 19. Based on different indicators of socioeconomic level (father's and mother's profession and education, size of the house, township district of residence, and minimum amount of money estimated as necessary for living), three socioeconomic categories were created with the following distribution: 16.6%, upper class; 45%, middle; and 38.4%, lower.

Material

The children completed the CDI, the Children's Depression Rating Scale-Revised, the Children's Attributional Style Questionnaire (KASTAN, CASQ), and the PNID. The teachers completed the Depressive Symptomatology Scale for the Teacher and the Depression and Happiness scales of the PNID (TNID) for all children in the class.

Table I. Distribution of Age and Sex

Sex	Age					Total
	8	9	10	11	12 & 13	
Boys	5	385	154	14	2	560 (50%)
Girls	5	387	147	20	2	561 (50%)
Total	10 (0.9%)	772 (68.9%)	301 (26.9%)	34 (3.0%)	4 (0.3%)	1, 121

The Children's Depression Rating Scale-Revised (CDRS-R; Poznanski et al., 1984) is a semistructured interview that specifically evaluates depression. It contains 14 items in which children report about their affective state and 4 items in which the conduct of each child is observed by the interviewer. The point scores range from 1 to 7 in the majority of the items. Poznanski et al. (1984) have reported test–retest reliability with an interval of 2 weeks of .86, and with an interval of 4 weeks of .81. Interrater reliability and criterion validity reached levels superior to .85.

The Children's Depression Inventory (CDI; Kovacs, 1983a) is the most commonly used self-report depression inventory for children. It includes 27 items with 3 possible alternatives that reflect the extent of each symptom. The content of the symptoms covers the cognitive, behavioral, and vegetative aspects of the depressive syndrome.

Internal consistency ranges from .71 to .94 and test–retest reliability oscillates between .41 and .87. Concurrent and discriminant vaility has been extensively demonstrated (Kovacs, 1983a, 1985; Saylor, Finch, Spirito, & Bennett, 1984).

The Children's Attributional Style Questionnaire (KASTAN, CASQ; Kaslow, Tanenbaum, & Seligman, 1978, 1981) contains 48 items which present a hypothetical situation with two possible attributions. The possible options correspond to the two extremes of an attributional dimension. Half of the situations refer to positive results and the other half to negative results. The attributional dimensions evaluated in the six subscales cover Internality-Externality, Stability-Instability, and Globality–Specificity in both the positive and negative situations. The alpha coefficient for the Positive Composite (PC) was .66 and for the Negative Composite (NC) was .50, whereas test–retest reliability with an interval of 6 months was .71 ans .66, respectively (Seligman et al., 1984). Concurrent validity with CDI ranged from. − .44 to − .53 for PC and from .33 to .50 for NC (Blumberg & Izard, 1985; Kaslow, Rehm, & Siegel, 1984; Seligman et al., 1984).

The Depressive Symptomatology Scale for the Teacher (DSST; Doménech, Monreal, & Ezpeleta, 1985) was created specifically for the epidemiological study of depression because an appropriate teacher instrument for depression did not exist to our knowledge. The DSST has 16 items with 3 response alternatives reflecting the extent of the symptoms in regard to mood and the cognitive, psychomotor, and social aspects of depression which can be observed by the teacher (see Appendix I). It has demonstrated a high internal consistency (α = .88) and criterion validity (r = .41 with CDI; r = .44 with CDRS-R; Ezpeleta & García, 1990; Polaino & Doménech, 1990).

The "type of school" variable was also registered (lay state school, lay private school, and religious private school), to see if the number of nominations were influenced by this factor.

Procedure

The PNID was back-translated by a bilingual translator (translation A). Another bilingual person blindly retranslated the translation A back into English. Finally, both translations were compared for equivalence (see Brislin, Lonner, & Thorndike, 1973).

The CDI was administered in groups of six children. Following the CDI, the PNID was given to all children in the class. The teacher was also asked to complete a copy of the questionnaire naming the children in their class who displayed the characteristics specified in each question. Later, the teacher completed the DSST referring to each of the second-phase children.

The children in the second phase were interviewed on the second day. In order to apply the CDRS-R, four psychologists were called upon who, after training according to Poznanski, Freeman, & Mokros (1985), alternated in their roles of "interviewer" and "observer." The evaluation with this instrument was doubly "blind" as the interviewers did not know the results of the CDI, PNID, and TNID, nor did the children know the real object of the interview.

Finally, all the selected children in the second phase from each class (maximum of 9) completed the KASTAN. The administrator read the items to each child individually where there was difficulty in reading.

Definition of Caseness

Information provided by the different informants (child, parents, and teacher) was used in the definition of caseness. All the items of the assessment instruments that reflected any of the DSM-III (American Psychiatric Association, 1980) criteria for major depression or dysthymic disorder were included in the operational definition of caseness. For an item to be included, agreement between two child psychiatrists and two clinical child psychologists was necessary. The frequency of response and the content of the alternatives of response were considered in determining the operational definition of caseness. Information given by the child (CDRS-R) was given priority in all the symptoms except psychomotor agitation or retardation, diminished concentration or speaking, social withdrawal, and irritability. Duration for dysthymic disorders was not possible to achieve. For this reason we will talk about "dysthymic disorder symptomatology" (DDS). The operational definition, which was constructed with the items of the instruments we used, required, as indicated in DSM-III (APA, 1980), dysphoric mood or loss of interest and four of the symptoms indicated in the B criterion for major depression. For dysthymic disorder, depressive mood or anhedonia plus three of the symptoms indicated in criterion D were necessary (see Appendix II). Following the operational definition, children were assigned to one of the

Table II. Diagnostic Classification of the Selected Groups

Diagnostic	Nondepressed	Dysthymic disorder	Major depression	Total
CDI ≥ 19	61	11	4	76
CDI < 19	121	12	2	135
Total	182	23	6	211

next categories: Nondepressed (ND), Dysthymic Disorder Symptomatology (DDS), and Major Depression (MD) (Table II).

RESULTS

The alpha reliability of the PNID was .80 for depression and happiness and .77 for popularity. However, the TNID scales showed very moderate internal concistency (depression: .56; happiness: .57; $N = 1,121$).

Table III. Discriminative Power of PNID and TNID (MANOVA)

	Group	N	Mean	First discriminant function		
				Global[a]	Contrast ND–DDS[a]	Contrast DDS–MD[a]
				PNID		
Depression	ND	182	.583	$b_1 = .706$	$b_1 = .744$	
	DDS	23	1.286	$r_1 = .811$	$r_1 = .833$	
	MD	6	.836			
Happiness	ND	182	.406	$b_2 = -.597$	$b_2 = -.605$	
	DDS	23	.122	$r_2 = -.720$	$r_2 = -.690$	
	MD	6	.147			
Popularity	ND	182	.215	$b_3 = .004$	$b_3 = .072$	
	DDS	23	.106	$r_3 = -.568$	$r_3 = -.515$	
	Wilks's lambda F			4.02	7.28	1.17
	Significance			$p = .001$	$p = .000$	n.s
	Canonical correlation			.318	.310	.129
				TNID		
Depression	ND	182	.7	$b_1 = .942$	$b_1 = .700$	$b_1 = .964$
	DDS	23	2.1	$r_1 = .970$	$r_1 = .934$	$r_1 = .984$
	MD	6	2.3			
Happiness	ND	182	.5	$b_2 = -.244$	$b_2 = -.327$	$b_2 = -.177$
	DDS	23	.1	$r_2 = -.352$	$r_2 = -.267$	$r_2 = -.288$
	MD	6	.2			
	Wilks's lambda F			7.33	11.57	4.39
	Significance			$p = .000$	$p = .000$	$p = .014$
	Canonical correlation			.357	.317	.202

[a] b_x = standardized coefficients of the discriminant function; r_x = correlation coefficients between dependent variables and canonical variables.

Table IV. Relations of the PNID and the TNID with Depression Measures: Canonical Analysis (N = 1121)

| | Multiple regression analysis | | | | | | | | | First canonical function | |
| | Depression | | | Happiness | | | Popularity | | | | |
	r	Beta	p	r	Beta	p	r	Beta	p	r_c	Alpha
						PNID					
DSST	.53	−.57	.000	−.39	−.32	.000	−.40	−.30	.000	.99	.97
CDRS-R	.20	−.004	n.s.	−.32	−.20	.015	−.34	−.19	.020	.52	.13
CDI	.13	−.07	n.s.	−.15	.10	n.s.	−.22	−.002	n.s.	.26	−.14
KASTAN	−.10	−.02	n.s.	.13	.04	n.s.	.12	−.005	n.s.	−.24	−.04
First canonical function	.86	.72		−.67	−.37		−.65	−.20		r_c = .61, WL = .59, F = 9.61, p = .000	
						TNID					
DSST	.61	.61	.000	−.35	−.31	.000				.98	.97
CDRS-R	.33	.11	n.s.	−.22	−.03	n.s.				.51	.17
CDI	.11	−.13	n.s.	−.19	.05	n.s.				.21	−.14
KASTAN	−.02	.10	n.s.	−.13	.02	n.s.				−.10	.11
First canonical function	.93	.87		−.50	−.37					r_c = .67, WL = .54, F = 17.84, p = .000	

The relationship between the PNID and TNID and the diagnosis of depression was analyzed with a MANOVA (Table III). The three scales of the PNID provided a significant main effect ($F(6, 412) = 4.02, p = .001$). The multivariate contrast between the ND and the DDS groups was significant ($F(3, 206) = 7.28; p < .001$) but not between the DDS group and the MD group ($F(3, 206) = 1.17; p = .322$). The standardized discriminant function coefficients showed the important contributions of the depression and happiness scales (in opposing directions). Thus, depression correlated positively with the canonical variable while happiness and popularity correlated negatively.

The TNID also had a significant main effect ($F(4, 414) = 7.33, p < .001$) for the two scales. The multivariate contrast showed a significant difference between the ND and DDS groups ($F(2, 107) = 11.57; p < .001$) and between the DDS and the MD ($F(2, 107) = p = .014$). A close examination of the standardized discriminant function coefficients confirmed the bipolarity of these functions although in this case the depression scale had greater importance in the canonical variable.

Table IV presents a multivariate analysis of the relations between the PNID scales and other instruments through a canonical analysis complemented with multiple regressions.

The highest correlation coefficient was obtained with the DSST. The depression scale had a very low correlation with CDRS-R ($r = .20, p < .01$) and a nonsignificant correlation with the CDI. The happiness and the popularity scales correlated significatively negatively with the CDRS-R and the CDI, although in the regression equation the CDI was excluded.

Only the first canonical function, which explained 91.4% of the total variance, was significant (Wilks's lambda = .59, $F(12, 527) = 9.61, p < .001$). The canonical correlation between the dependent (depression, happiness, and popularity) and the independent (DSST, CDRS-R, CDI, KASTAN) variables was $r_c = .61$. The examination of the standardized canonical coefficients (alpha) of the dependent variables showed the contribution of the DSST in the canonical function. The standardized coefficients (beta) of the independent variables indicated the considerable contribution of the depression scale in the canonical function, together with a less important contribution of happiness and popularity.

Table IV also presents the above analysis for the depression and happiness scales of the TNID. The results obtained are very similar to those obtained with the PNID.

Table V presents a multitrait-multimethod matrix (Campbell & Fiske, 1959) constructed with the depression and happiness scales (traits) obtained with the PNID from two different evaluators (methods): teachers and pupils. Alpha reliabilities are on the main diagonal. The values contained in the multitrait-multimethod triangle (dashes) and the multitrait–monomethod (line)

Table V. Multitrait–Multimethod Matrix ($N = 1,121$)

		Teacher		Peers	
		Depression	Happiness	Depression	Happiness
Teacher	Depression	(.56)			
	Happiness	−.054	(.57)		
Peers	Depression	.436[a]	−.049	(.80)	
	Happiness	−.038	.320[a]	−.045	(.81)

[a] $p < .001$.

indicate the total absence of covariation between the depression and happiness traits, whether the evaluations are produced by the same evaluator or whether they are produced by different evaluators. The significant values of the validity diagonal (.43 and .32, $p < .001$) show an acceptable degree of convergence between the measurements of the same trait registered by different evaluators.

A principal components factor analysis of the items of the PNID resulted in two factors which grouped: on the one hand, the items belonging to the depression scale and, on the other hand, those items belonging to the happiness and popularity scales. These two factors explained the 43.1% of common variance (Table VI).

Table VI. Principal Components Analysis of PNID Items (Varimax Rotated Factor Loadings) ($N = 1,121$)

	Factor 1	Factor 2
8. Who often looks lonely?	.79	−.09
21. Who often looks sad?	.75	−.07
18. Who doesn't have much fun?	.75	−.11
15. Who doesn't play?	.73	.00
5. Who often plays alone?	.71	−.05
17. Who doesn't take part in things?	.71	−.05
20. Who thinks others don't like them?	.69	−.07
10. Who says they can't do things?	.58	−.10
11. Who often cries?	.45	.05
7. Who often sleeps in class?	.43	−.05
6. Who doesn't try again when they lose?	.24	.10
9. Who often says they don't feel well?	.21	.02
12. Who often looks happy?	−.05	.83
19. Who is often cheerful?	−.05	.80
22. Who would you like to sit next to in class?	−.12	.74
23. Who are the children you would like to have for your best friends?	−.11	.72
16. Who often smiles?	−.00	.71
13. Who likes to do a lot of things?	−.02	.69
14. Who worries a lot?	.17	.41

Finally, two discriminant analyses were applied separately to the items of the PNID and TNID. With the PNID, we have found two significant discriminant functions (Table VII). The first function, with a .45 canonical correlation, seperated the children with MD from those ND or with DDS. The classification obtained from these two discriminant functions had a very low sensitivity level both for the diagnosis of major depression (Se = .33) and for symptomatology of dysthymic disorder (Se = .26).

Table VII. Rotated Standardized Coefficients of the Discriminant Functions and Centroid Groups of the PNID and TNID Items (N = 1,121)

	Function 1	Function 2
PNID		
18. Don't have much fun	.72	− .05
10. Say they can't do things	.63	.10
5. Play alone	− .48	.06
12. Look happy	− .38	− .01
6. Don't try again when they lose	− .33	.08
7. Sleep in class	− .27	− .22
17. Don't take part in things	.02	− 1.00
15. Don't play	− .03	.83
11. Cry	.14	.50
9. Say they don't feel well	.26	.27
PCT variance	71.5	28.5
Canonical correlation	.45	.30
Wilks's lambda	.73	.91
Significance	.000	.022
TNID		
18. Don't have much fun	.72	.30
8. Look lonely	− .55	.12
15. Don't play	.47	.07
5. Play alone	− .40	.01
10. Say they can't do things	.29	.35
21. Look sad	.28	− .03
14. Worry a lot	− .25	.13
11. Cry	− .01	.63
15. Don't take part in things	− .03	.43
20. Think others don't like them	− .08	− .43
13. Like to do a lot of things	.15	− .24
19. Are cheerful	− .07	− .20
PCT Variance	74.3	25.7
Canonical correlation	.56	.37
Wilks's lambda	.60	.87
Significance	.000	.002
Centroid Nondepressed	− .14	− .18
Groups Dysthymic disorders sympt.	.19	1.28
Major depression	3.53	.75

With the TNID, two significant discriminant functions were found (Table VII). The first function, with a .56 canonical correlation, separated the children with MD from those with DDS and the ND. The second function, with a .37 canonical correlation, separated the ND from the MD and DDS groups. The sensitivity of the classification obtained from these two discriminant functions was very low in detecting dysthymic symptomatology (Se = .13), but considerably higher in the diagnosis of major depression (Se = .67).

Finally, we found that the type of school (lay state, religious, lay private) affected the number of nominations found in the PNID and TNID scales. Table VIII shows that the children in lay state schools made more nominations than those in religious schools on all three scales. Children attending religious schools produced the least number of nominations. Similar directionality was found in the teachers' nominations. Teachers of religious schools nominated the least, while the teachers of private schools nominated significantly more.

DISCUSSION

The major contributions of this paper are that (1) it is the first work that studies extensively the psychometric properties of the PNID; (2) it is one of the few studies that has addressed the issue of the agreement betweeen

Table VIII. Statistics and Mean Comparisons of the Number of Nominations through the Different Scales (N = 1,121)

	Public school (Group 1)		Lay school (Group 2)		Religious school (Group 3)		T-test		
	M	SD	M	SD	M	SD	Groups	t	p
				PNID					
Depression	0.46	0.60	0.38	0.56	0.33	0.45	1 > 3	3.63	.000
Happiness	0.30	0.30	0.24	0.26	0.20	0.25	1 > 2	2.60	.009
							1 > 3	4.98	.000
							2 > 3	2.07	.04
Popularity	0.20	0.19	0.20	0.17	0.15	0.15	1 > 3	4.52	.000
							2 > 3	4.18	.000
				TNID					
Depression	.63	1.09	.72	1.20	.30	.76	1 > 3	5.04	.000
							2 > 3	5.28	.000
Happiness	.31	.72	.44	.82	.25	.63	1 < 2	2.25	.025
							2 > 3	3.41	.001

teacher and peers in the assessment of childhood depression; and (3) that these previous points have been approached cross-culturally.

The reliability and concurrent validity of the PNID in a Spanish sample were very close to those of the American samples. The alpha coefficients were adequate for the three scales. In the TNID, the level of internal consistency reached was only moderate. This could be due to an excess of "0" answers, as the teacher only nominated a minority of the children of the class.

Our results concerning concurrent validity are also similiar to previous studies which indicated an absence of relationships or low relationships with self-report of depression (CDI, CDRS-R, KASTAN) (Jacobson et al., 1983; Lefkowitz & Tesiny, 1980; Saylor et al., 1984; Tesiny et al., 1980). A possible explanation is that the different sources of information (the child and the classmates) appreciate depressive symptomatology in different ways. As Achenbach et al. (1987) have pointed out, lack of agreement between sources of information can be explained by situational specificity. It may be also due to the content of each of these scales, since the CDI and the CDRS-R present a more cognitive and internal content, the KASTAN evaluates attributional style, and the PNID evaluates more behavioral and observable aspects of depression.

However, we found a moderate relationship between the PNID and the DSST, that is, between the depressive symptomology reported by the peers and by the teacher. Both informants were observers in the same classroom. The agreement in the report of depressive symptomology in the classroom indicates that depressed children show depressive behavior which is manifested in the school and that teachers and peers can identify it through questionnaires. Furthermore, several studies have shown the relation between childhood depression and acedemic deficits (Blechman, McEnroe, Carella, & Audette, 1986; Kaslow, Tanenbaum, Abramson, Peterson, & Seligman, 1983; Sacco & Graves, 1984; Seagull & Weishank, 1984; Strauss, Forehand, Frame, & Smith, 1984).

The teacher report was consistent between TNID and DSST. It is remarkable that, throughout the study , the teacher seemed to be a better informant than the peers, as demonstrated by the ability of the teacher questionnaire to discriminate between the diagnostic groups.

The multitrait–multimethod matrix demonstrated convergent and discriminant validity as there was agreement between teacher and peers and because the traits of depression and happiness were independent.

The principal components analysis corroborated the independence of depression and happiness. The grouping of the items in the two factors (depression/happiness-popularity) reflected almost entirely the theoretical item cluster. The only item misclassified was "Who worries a lot?" This item, originally pertaining to the depression scale, had its contribution in the second factor (positive aspects). When we asked the children about the item, we found

that "worry" had, for them, a positive meaning, indicating to them that those children were very responsible and "worried" in the sense that they had to accomplish the task.

The failure of the scales in discriminating MD from DDS might be explained in several ways. One is that the PNID does not include all the symptoms described in the DSM-III for these disorders. Moreover, this questionnaire has not been validated against a clinical diagnosis of depression and it was therefore not known whether it could discriminate between children affected by different depressive syndromes and normal children (Ezpeleta, Doménech, & Polaino, 1988). Another explanation could be that we failed in registering the 1-year duration for the dysthymic disorder, and duration could be a very important variable in the differentiation between the two syndromes. However, the TNID did discriminate between MD and DDS. Thus, the quality of the source of information may be more important than the diagnostic criteria covered by the questionnaire.

The low percentage of correct classifications given by the discriminant functions with the PNID suggests that either the clinical value of the test is not very strong or that classmates are not capable of identifying other children with MD or DDS, although they can recognize depressive symptoms in general.

The TNID was more effective at classifying children with MD, although it was a poorer detector of DDS. The implication is that the teacher was capable of identifying a severe problem such as MD. It did, however, lack sensitivity for cases which were less severe and more heterogeneous and which tended toward chronicity, such as dysthymic disorder.

The type of school was of importance as far as the number of nominations is concerned. We have no knowledge of other studies on this point, but our results showed that the children and teachers in private religious schools gave a significantly lower number of nominations that those of public and private lay schools. In general, in Spain, lay schooling promotes the idea of "freedom" in education, whereby the children could be giving more spontaneous answers, while religious education favors moral aspects and personal self-control. The differences between schools could also be explained by self-selection, that is, certain types of children, parents, and teachers select certain types of schools. Since the PNID is based precisely on the number of nominations, these results make its use inappropriate if the goal of the researcher is to make a comparison of results in a mixed sample of children in lay and religious schools.

Although our data illustrate good reliability for the PNID, its validity is only of moderate to low level, leaving in question its clinical utility. The great amount of time necessary for the application and scoring of the questionnaire along with its poor discriminative power dissuade us of its use as

the main, or one of the main, assessment instruments in any research on childhood depression. However, the PNID can be considered as an *auxiliary* instrument with which to contrast the information proceeding from other sources.

Because of its low reliability, we are not able to recommend the use of the TNID over the PNID. However, it is clear from the data of this study that through the questions of the PNID the teacher is a better informant than the peers.

APPENDIX I: DSST

(Check the appropriate box)	Almost never	Sometimes	Almost always
1. The child is sad			
2. The child has difficulty being attentive in class			
3. The child is alone during recess			
4. The child cries			
5. The child understands explanations in class			
6. Peers accept the child			
7. The child looks tired			
8. The child enjoys himself/herself			
9. The child feels inferior to others			
10. The child argues and fights			
11. The child feels guilty			
12. The child has difficulty making decisions			
13. Child's mood changes easily			
14. The child works energetically			
15. The child's school achievement is good			
16. The child takes part in games with friends			

APPENDIX II: OPERATIONAL DEFINITIONS

Criteria for Major Depression

A1.   Dysphoric mood:
At least 1: $CDRS11 \geq 3$, $CDRS14 \geq 4$, $CDRS15 \geq 3$, $CDRS18 \geq 2$
OR (at least 2: $CBC14 = 2$, $CBC87 = 2$, $CBC103 \geq 1$
AND at least 2: $DSST1 = 2$, $DSST4 = 2$, $DSST13 = 2$

A2. Loss of interest or pleasure: CDRS2 ≥ 4 OR DSST8 = 2
B1. Appetite changes: CDRS5 ≥ 3 OR
B2. Insomnia/hypersomnia:
CDRS4 ≥ 3
OR at least 2: CBC76 ≥ 1, CBC77 ≥ 1, CBC100 = 2
B3. Psychomotor agitation/retardation:
CBC102 = 2 AND DSST14 = 2
OR CDRS17 ≥ 3 AND (CBC102 = 2 OR DSST14 = 2)
B4. Loss of interest or pleasure: See A2
B5. Loss of energy or fatigue:
CDRS6 ≥ 3
OR DSST7 = 2 AND (CBC ≥ 1 OR CBC102 = 2)
B6. Worthlessness or guilt:
CDRS9 ≥ 3
OR DSST11 = 2 AND at least 2: CBC31 = 2 CBC35 ≥ 1, CBC52 ≥ 1
B7. Diminished concentration:
(CBC8 = 2 AND CBC13 = 2) AND at least 2: DSST2 = 2, DSST5
= 2, DSST12 = 2
OR CDRS1 ≥ 4 AND ((CBC8 = 2 AND CBC13 = 2) OR at least
2: DSST2 = 2, DSST5 = 2, DSST12 = 2)
B8. Suicidal ideation:
CDRS12 ≥ 3 OR CDRS13 ≥ 4 OR

Criteria for Dysthymic Disorder Symptomatology

C1. Dysphoric mood: see A1
C2. Loss of interest or pleasure: see A2
D1. Insomnia or hypersomnia: see B2
D2. Fatigue or low energy: see B5
D3. Low self-esteem:
CDRS10 ≥ 4
OR (CBC33 ≥ 1 AND CBC35 ≥ 1) OR DSST9 = 2
D4. Diminished achievement in the school:
DSST15 = 2 AND CBC61 = 2
OR CDRS1 ≥ 4 AND (DSST15 = 2 OR CBC61 = 2)
D5. Poor concentration or attention span:
CBC8 = 2 AND CBC13 = 2 AND DSST2 = 2 AND DSST5 = 2
OR CDRS1 ≥ 4 AND ((CBC8 = 2 AND CBC13 = 2) OR (DSST2
= 2 AND DSST5 = 2))
D6. Social withdrawal:
At least 2: CBC11 = 2, CBC12 ≥ 1, CBC42 = 2, CBC75 = 2, CBC111
= 2 AND

at least 2: DSST3 = 2, DSST6 = 2, DSST16 = 2
OR CDRS3 ≥ 3 AND ((at least 2: CBC11 = 2, CBC12 ≥ 1, CBC42
= 2, CBC75 = 2, CBC111 = 2) OR (at least 2: DSST3 = 2, DSST6
= 2, DSST16 = 2))

D7. Loss of interest or pleasure: see A2
D8. Irritability:
  (CBC86 = 2 OR CBC88 = 2) AND DSST10 = 2
  OR CDRS8 ≥ 4 AND (CBC86 = 2 OR CBC88 = 2 OR DSST10 = 2)
D9. Inability to respond to reinforcement: No items
D10. Diminish activity, speech, slowness, or restlessness:
  CBC102 = 2 AND DSST12 = 2
  OR CDRS16 ≥ 3 AND (CBC102 = 2 OR DSST12 = 2)
D11. Hopelessness, rumination:
  CBC112 ≥ 1
D12. Crying:
  CDRS14 ≥ 4
  OR CBC14 = 2 AND DSST4 = 2
D13. Suicidal ideation: see B8

Definition of Major Depression

A1 OR A2 AND (at least 4 from B1 to B8)

Definition of Dysthymic Disorder Symptomatology

C1 OR C2 AND (at least 3 from D1 to D13)

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