

Self-reported competences and problems in Spanish adolescents: A normative study of the YSR

Marta Sandoval, Serafín Lemos* y Guillermo Vallejo*
Universidad Autónoma de Madrid and * Universidad de Oviedo

The aim of the study was to provide a standardization of self-reported competences and emotional/behavioural problems in Spanish adolescents, using the Achenbach's Youth Self-Report (YSR), and to compare our results to those from other countries. The YSR was completed by 2822 adolescents aged 11-18 years, recruited from secondary schools in two regions of Spain. There were significant differences in Total behaviour problems and in most problem scales in boys and girls, scoring boys higher on externalizing syndromes, whereas girls score higher on internalizing syndromes. Males' mean scores were higher than females' scores for social competence. Age effects also showed significant differences with respect to internalizing problems, thought problems, social problems and depression. Cut-off points based on the 90th and 98th percentile developed from this sample are presented for the competences and the problem scales. To test the overall range of variations across cultures, comparisons were made between broad band and narrow band measures of the YSR in Spanish adolescents and those from other countries. Gender differences in the YSR were similar to those found across different cultures; there is a consistent trend to increase behavioural problems with age; and social competence seem to be a relevant protective factor against behavioural problems.

Competencias y problemas autoinformados por adolescentes en el YSR. El objeto del estudio consistió en estandarizar las competencias y los problemas emocionales/comportamentales autoinformados mediante el Youth Self-Report (YSR) de Achenbach, en una muestra de 2.822 adolescentes de 11-18 años de dos regiones españolas, y comparar nuestros resultados con los observados en otros países. Se han encontrado diferencias significativas entre varones y mujeres en la puntuación total de problemas de conducta y en la mayor parte de las escalas, puntuando los varones más alto en los síndromes externalizantes y las mujeres en los síndromes internalizantes. Los varones obtuvieron puntuaciones medias más altas que las mujeres en competencia social. Se han observado también diferencias significativas en problemas internalizantes, problemas del pensamiento, problemas sociales y depresión, comparando grupos de edad. Se presentan puntos de corte basados en los percentiles 90 y 98 para las escalas de competencias y de conductas problema. Se presentan, además, comparaciones de las medidas de la psicopatología de banda ancha y banda estrecha del YSR entre los adolescentes españoles y los de otros países. Las diferencias intersexos en el YSR fueron similares a las encontradas en diferentes culturas; se ha observado una clara tendencia a aumentar los problemas de conducta con la edad; y la competencia social parece ser una protección importante frente a los problemas de conducta.

Adolescents' psychopathology could be assessed according to categorical or dimensional approaches, although none of them are free of difficulties, since two unstable entities must be considered: the adolescence developmental stage, and behavioural problems.

The assumption of a continuum model of abnormal experiences, thoughts, emotions, and patterns of behaviour, emphasizing the phenomenological similarities across normality, anxiety disorders and psychoses, requires the use of multivariate statistical methods for research in psychopathology. According to this model, each

particular case could be located within a set of dimensions, in contrast to current official categorical taxonomies, based on present-absent criteria (ICD 10 and DSM –IV-R).

One of the most promising possibilities of multivariate methods to assess child and adolescence psychopathology lies in Achenbach's dimensional system called Achenbach System of Empirically Based Assessment (ASEBA), which includes several diagnostic questionnaires to be filled by multiple informants: parents, teachers, trained observers, and the adolescent concerned. All instruments yield continuous empirical syndrome scales with excellent scientific guarantee and the added value of international impact; and they make direct comparisons of research results across cultures possible.

The Youth Self-Report (YSR) (Achenbach, 1991) is a tool designed to be filled by adolescents who are 11 to 18 years old, which allows the assessment of their own psychosocial competences

and emotional and behavioural problems in a standardized format (social competence and problem scales).

Reliability and validity studies have shown the YSR to be a useful and effective instrument for studying emotional and behavioural problems in young people (Achenbach, 1991; Fitzpatric & Deehan, 2001; Heyerdahl, Kvernmo, & Wichsterom, 2004). The YSR is therefore a screening tool, which permits the identification of adolescents having behavioural or emotional signs, potential predictors of different levels of clinical disorders. Consequently, this tool is intended to serve as one component of multi-axial empirically-based assessment, has been widely used in clinical practice as well as for research purposes, and it is also valuable in providing a quantitative taxonomy consisting of several narrowband scales or syndromes empirically based, as they are derived from factor analyses, and two second-order broadband factors or general syndromes termed Internalizing and Externalizing, characterized as disturbances of emotion vs. behavioural deficits.

The YSR consists of two parts: the first includes a social competence scale exploring social activities, social interests, and the average of performance in seven academic subjects; the second part includes 112 items, 96 of which assess problem patterns of behaviour and 16 refer to socially desirable patterns of behaviour. All items of the second part are worded in the first person, and must be answered by circling 0 if the item is not true; 1 if the item is somewhat or sometimes true; and 2 if the item is very true or often true.

The eight narrowband or first order syndromes found by Achenbach (1991) were Withdrawn, Somatic Complaints, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Delinquent Behaviour, and Aggressive Behaviour. The broadband or second-order factors refer to two behaviour syndromes, termed Internalizing and Externalizing. The analyses were performed for both genders separately, since statistically significant differences were found in the behaviour profiles and syndromes, but not in age groups.

The author also suggests the use of cut-off scores to classify individuals as normal or pathological (when the score is above the 98th percentile in the problem scales and above the 90th percentile in the broadband factors).

In the last years in Spain, we have conducted studies with the YSR (Lemos, Fidalgo, Calvo, & Menéndez, 1994), and particularly three factor studies with the aim of adapting Achenbach's taxonomic system to empirically syndrome groupings with the YSR (Lemos Giráldez, Vallejo Seco, & Sandoval Mena, 2002; Lemos, 1997; Lemos, Fidalgo, Calvo, & Menéndez, 1992). Our results in 1992 showed a broadband Internalizing factor consisting of the following narrowband factors: Depression, Somatic Complaints, Social Problems and Anxiety (the last factor only present in boys); whereas the Externalizing broadband factor consisted of factors such as Antisocial Behaviour, Delinquent Behaviour, Attention Seeking, and Aggressive Behaviour. A mixed scale consisting of Thought Problems was found.

In a second factorial study of the YSR in 1997, we found a broadband Internalizing factor consisting of the following first order factors: Depression/Anxiety, Social Problems, and Somatic Complaints. The Externalizing factor consisted of the Delinquent Behaviour, Aggressive Behaviour and Attention Seeking factors. Again, a mixed scale consisting of Thought Problems was found.

Finally, in our 2002 study, from the analysis of the common items found in nine first-order factors derived for each gender, the following core syndromes were found: Depression, Verbal Aggression,

Delinquent Behaviour, Conduct Disorders, Thought Problems, Somatic Complaints, Social (withdrawn) Problems, Attention-seeking Behaviour, and Phobic-anxious Behaviour. The broadband Internalizing factor consisted of Depression, Phobic-anxiety Behaviour, Social Problems, and Somatic Complaints, whereas the Externalizing factor consisted of Delinquent Behaviour, Conduct Disorders, Attention-seeking Behaviour, and Verbal Aggression. A mixed scale consisting of Thought Problems was also found.

The purpose of this paper is to offer normative data of the YSR in Spanish adolescents, by gender, since the diagnostic procedure must be standardized within each culture. The data available for the present analyses were derived from a previous study (Lemos, 1997) and another carried out in 2002.

It was expected that, as it was found in another studies (Abad, Forns & Gómez, 2002; Broberg et al., 2001; Fitzpatric & Deehan, 2001; Helstelä & Sourander, 2001; Heyerdahl et al., 2004; Roussos et al., 2001; Slobodskaya, 1999), (1) girls will present more internalising problems than boys and, conversely, boys are more prone to externalizing problems; (2) internalising and externalising syndromes will show a significant covariation (positive correlation); and (3) social competence is an important protection factor against psychopathology.

Finally, cross-cultural comparisons of YSR scale scores are also an objective of this study, despite variations in education, language and socioeconomic circumstances.

Method

Sample

A total of 2822 subjects formed part of the study (1514 girls and 1308 boys), between the ages of 11 and 18; they were drawn from public schools in areas of Asturias (northern Spain) and Madrid. Total sample characteristics by age and sex are presented in Table 1. This sample to a great extent represents the adolescent population of the given geographical areas. The questionnaire was anonymously completed by participants in the groups; and the assessment was shortened to 2518 subjects (1157 boys and 1361 girls) for the competence scales of the instrument.

Data analyses

Data analyses were carried out by means of the SPSS for Windows, version 11. As all the data are normally distributed,

Table 1
Sample characteristics by age and sex

Age groups	Boys	Girls	Total
11	71 (56,3%)	55 (43,7%)	126
12	73 (55,7%)	58 (44,3%)	131
13	144 (44%)	183 (56%)	327
14	246 (45,6%)	294 (54,4%)	540
15	295 (42,8%)	395 (57,2%)	690
16	320 (48,3%)	343 (51,7%)	663
17	138 (46,9%)	156 (53,1%)	294
18	21 (41,2%)	30 (58,8%)	51
Total	1,308 (46,4%)	1,514 (53,6%)	2,822

parametric statistics were used to analyse the results. When our analyses focus on group comparisons, multivariate analyses of variance (MANOVAs) were conducted to determine whether there were overall sex or age group differences in the YSR measures. If the overall Wilks' λ was significant, univariate F s were computed to determine group differences in individual factors. As an index of effect size we report eta square (η^2). When $\eta^2 > .15$ effects are 'large' in magnitude, and when $\eta^2 > .06$, effects are 'medium' (Cohen & Cohen, 1983).

Pearson correlation coefficients were obtained to examine the associations between the YSR scales or factors.

Results

Social competence

MANOVA results proved to be significant when comparing YSR competence scores in boys and girls (Wilks' $\lambda = 0.535$, $p = .000$), with a higher mean score found in boys. As displayed in Table 2, both groups significantly differed ($p = .000$) on mean scores for the competence scales (Activities, Social and Total Competence), where boys scored higher than girls.

Problem scales

Omnibus MANOVAs revealed significant sex effects when comparing YSR problem patterns of behaviour in boys and girls, with Wilks' $\lambda = 0.810$, $p = .000$, girls scoring higher than boys in Total Problems. Therefore, we examined each of the problem measures using univariate ANOVAs.

In relation to YSR syndromes, it can be seen that one-way analyses of variance showed statistically significant differences between both sex groups in almost all the first-order factors displayed in Table 2, with the exception of Thought Problems ($F = 1.76$; $p > .05$). Girls scored higher on Verbal Aggression, Somatic Complaints, Social (withdrawn) Problems, Phobic-anxious Behaviour and Depression, whereas boys scored higher on Delinquent Behaviour and Attention-seeking Behaviour.

It can also be seen that girls scored higher than boys on the Internalizing second-order factor. Conversely, the relationship shows a significant statistical difference in the broadband Externalizing syndrome ($F = 5.89$; $p > .015$) in favour of the boys.

Finally, it is worth noting that, although statistically significant, its effect size indices are, to a great extent, low in magnitude, but rather medium in the Internalizing factor, and in Delinquent Behaviour and Somatic Complaints scales.

Behaviour scales and age groups

In order to make comparisons between age groups, we divided the sample into two parts: a lower age group of 11-14 year-olds, and a higher age group of 15-18 year-olds. This division was made according to theoretical differences in social competences obtained in the two stages of compulsory secondary education in Spain.

Omnibus MANOVAs revealed significant age effects when YSR Total Problem patterns of behaviour were compared in younger and older students, the last group scoring higher (Wilks' $\lambda = .933$; $p = .000$).

We examined each of the problem and competence measures using univariate ANOVAs and, as Table 3 displays, the analyses revealed significant differences with respect to Verbal Aggression, Thought Problems, Social Problems, Depression, Internalizing problems and Total problems scores. Whereas older students scored higher on these factors, the younger group scored significantly higher on competence Scales. Again, effect size indices were also rather low in magnitude.

Co-occurrence of Problem and Competence scales

Internalizing and Externalizing broadband factors correlate significantly ($\alpha < .000$) in boys and as well as in girls ($r = .435$ and $r = .371$, respectively). Correlations between Verbal Aggression and Phobic-anxious Behaviour ($r = .283$; $p < .000$), and between Verbal Aggression and Depression ($r = .255$; $p < .000$), in the group of boys, are somewhat noticeable, as well as the association between Delinquent Behaviour and Depression ($r = .131$; $p < .000$).

Table 2
ANOVAs comparing mean (SD) problem and competence scores in boys and girls

Behaviour scales	Boys (n= 1308)	Girls (n= 1514)	F	p	η^2
Verbal aggression	4.65 (2.68)	5.28 (2.70)	34.52	.000	.013
Delinquent behaviour	1.40 (1.91)	.76 (1.35)	97.09	.000	.037
Thought problems	1.64 (2.03)	1.75 (2.12)	1.76	n.s. ($p = .184$)	.001
Somatic complaints	1.29 (1.54)	1.88 (1.89)	79.34	.000	.030
Social (withdrawn) problems	3.19 (1.89)	3.40 (1.82)	8.11	.004	.003
Attention-seeking behaviour	1.73 (1.61)	1.31 (1.37)	48.96	.000	.019
Phobic-anxious behaviour	2.52 (1.76)	3.08 (1.76)	63.66	.000	.025
Depression	2.79 (2.84)	4.17 (3.61)	110.65	.000	.042
Internalizing	9.79 (5.58)	12.53 (6.41)	129.65	.000	.049
Externalizing	7.78 (4.74)	7.35 (4.09)	5.89	.015	.002
Total problems	44.15 (19.84)	47.03 (19.72)	13.25	.000	.005
Activities	5.25 (2.31)	4.92 (2.31)	13.14	.000	.005
Social	8.45 (2.31)	7.78 (2.19)	56.23	.000	.022
Total competence	15.35 (3.98)	14.34 (3.83)	42.18	.000	.016

As for the girls' group, statistically significant associations were found between Depression and Attention-seeking Behaviour ($r = .325; p < .000$), and between Depression and Verbal Aggression ($r = .283; p < .000$).

A negative significant correlation was found between Total Social Competence and the Internalizing second-order factor ($r = -.104; p < .000$) in the combined sample, but a positive correlation was observed between Total Competence and the Externalizing factor ($r = .072; p < .000$). This particular tendency runs parallel to the negative association between Total Competence and Social (withdrawn) Problems ($r = -.076; p < .000$), and Depression ($r = -.127; p < .000$). Accordingly, the more highly adolescents score on the anxiety and withdrawal factors (and, as a consequence, on the Internalizing syndrome), the lower social competence they seem to display.

Cut-off scores

The purpose of calculating cut-off scores is that adolescents showing psychopathology can be counted, when scoring above or below the scales' cut-offs; so that the description of the frequency and distribution of a given disorder, as well as the analysis of other factors related with them, are possible applications of such indices. Accordingly, cut-off scores could allow us to statistically classify individuals scoring below or above a given scale as normal or pathological, respectively.

In our study, cut-off scores were calculated according to Achenbach's suggestion that the clinical range should be placed above 98% for the problem scales, and above 90% for the broadband factors. For the competence scales, cut-off scores were calculated at the 2nd and 10th percentiles respectively (Table 4).

Table 3
Results of ANOVAs comparing problem and competence mean scores (and SDs) for 11-14 and 15-18 age groups

Behaviour scales	11-14 years (n= 1125)	15-18 years (n= 1698)	F	p	η^2
Verbal aggression	4.83 (2.76)	5.09 (2.67)	5.77	.015	.003
Delinquent behaviour	1.14 (1.77)	1.05 (1.64)	0.20	n.s.	.002
Thought problems	1.48 (1.93)	1.96 (2.19)	34.70	.000	.013
Somatic complaints	1.59 (1.65)	1.68 (1.71)	2.12	n.s.	.000
Social (withdrawn) problems	3.00 (1.83)	3.50 (1.83)	49.85	.000	.021
Attention-seeking behaviour	1.52 (1.50)	1.49 (1.47)	0.38	n.s.	.000
Phobic-anxious behaviour	2.83 (1.76)	2.78 (1.78)	0.62	n.s.	.000
Depression	3.32 (3.28)	3.69 (3.41)	8.08	.004	.004
Internalizing	10.74 (6.04)	11.65 (6.29)	14.47	.000	.007
Externalizing	7.50 (4.66)	7.63 (4.23)	.56	n.s.	.000
Total Problems	43.69 (19.76)	47.14 (19.78)	18.69	.000	.007
Activities	5.18 (2.23)	4.99 (2.37)	3.37	.047	.002
Social	8.20 (2.30)	8.00 (2.24)	4.73	.030	.002
Total competence	15.15 (3.86)	14.54 (3.96)	14.87	.000	.006

Table 4
Cut-off scores for YSR problem and competence scales

Behaviour scales	Boys		Girls	
	90%	98%	90%	98%
Somatic Complaints	3	6	4	7
Social Problems	6	7	6	7
Attention-Seeking Behaviour	4	6	3	5
Phobic-anxious Behaviour	5	6	5	7
Depression	7	11	9	14
Verbal aggression	8	11	9	11
Delinquent behaviour	5	8	3	6
Thought problems	4	8	5	8
Internalizing	17	23	22	28
Externalizing	15	21	14	18
Total Problems	67.81 10%	93.83 2%	73.40 10%	92 2%
Activities	2	.7	0	1
Social	5.6	4	5	4
Total Competence	10	7	9.4	7

Finally, we also find it interesting to offer a comparison chart presenting mean scores in YSR problem scales found in our Spanish adolescents sample and scores found in American and Greek studies (Achenbach, 1991; Roussos et al., 2001) and in a combined research with 7,137 adolescents from seven countries (Australia, China, Israel, Jamaica, The Netherlands, Turkey and the United States) (Verhulst et al., 2003). Note that items composing each factor were the original ones described by Achenbach. Generally considered, the Externalizing score of Spanish girls, and total problems scores of both sexes are in between American and Greek values, but the Internalizing score of Spanish boys nearly reaches the Greek mean score (Table 5).

When comparing narrowband and broadband mean scores of Spanish adolescents with those of seven countries, higher levels of psychopathology were found in our sample, particularly in anxiety/depression, attention problems, and aggressive behaviour.

Discussion

As expected, significant differences were found in Total behaviour problems and in most problem scales in boys and girls, scoring boys higher on externalizing syndromes, whereas girls score higher on internalizing syndromes. Males' mean scores were also higher than females' scores for social competence.

Gender differences found in our study on Total YSR problems score were similar to those found in another study in Spain (Abad et al., 2002) and across different cultures; this is also the case with Swedish (Broberg et al., 2001), Greek (Roussos et al., 2001), Russian (Slobodskaya, 1999), Finnish (Helstelä & Sourander, 2001), Norwegian (Heyerdahl et al., 2004), and Irish adolescents (Fitzpatric & Deehan, 2001). Multicultural comparisons usually offer statistically significant differences in Total behavioural problems, girls scoring higher. However, in some other studies, no significant differences were observed between the two gender groups, although women always get a higher score (Fitzpatric & Deehan, 2001; Murad, Joung, Lenthe, Bengi-Arslan, & Crijnen, 2003).

Allegedly, the cross-cultural data consistency showing that girls usually get a higher score in Total behaviour problems could also be related to their lower levels on social competence subscales, as compared to boys. It is conceivable that social competence could

play an important role as a protective factor when coping with emotionally problems, and in psychopathology prevention. In fact, interpersonal difficulties in adolescence show a positive association with neuroticism (Inglés, Hidalgo, & Méndez, 2005). However, the increase in the perceived maladjustment could be also related to a greater capacity for reflective thought and criticism, characteristics that appear earlier in females (Abad et al., 2002).

In our study, the significant higher score found in girls in emotional problems is evident in the internalizing syndrome, as compared to boys, which also coincides to a great extent with results observed in Swedish, Finnish and Irish female adolescents (Broberg et al., 2001; Fitzpatric & Deehan, 2001; Helstelä & Sourander, 2001). On the contrary, the mean score of Spanish boys in the behavioural or externalizing syndrome was higher, but did not reach statistical significance. This result was also similar to that found in Swedish and Greek adolescents (Broberg et al., 2001; Roussos et al., 2001). Gender differences may be a result of either different maturity processes, with girls experiencing more challenges in early adolescence, or different response styles to stressful events, with boys preferring emotional distraction methods and girls focusing attention more to their emotional experience (Abad et al., 2002).

As in many previous national (Abad et al., 2002) and international studies, a closer perusal of Table 3 shows that there is a consistent trend to increase behavioural problems with age (Broberg et al., 2001; Fitzpatric & Deehan, 2001; Roussos et al., 2001), according to overall statistically significant differences found between the two ages' groups. In the YSR syndrome scales, significant differences can be observed between the two age groups in Thought problems, Social problems, Depression, and the Internalizing syndrome, older adolescents scoring higher. Additionally, higher significant scores in competence scales are present in the younger group which, once more, emphasizes the role of social competence as a very relevant protective factor against behavioural problems. Although mounting evidence supports this idea, the precise mechanisms underlying abnormality prevention remain unknown. In any case, this stresses the importance of applying specific social skills training programs in primary schools, in order to avoid or minimize behavioural problems in subsequent stages of education.

Table 5
Mean scores (and SDs) on YSR behaviour problem scales compared between Greek (Roussos et al., 2001), American (Achenbach, 1991), Spanish adolescents by sex and a combined sample from seven countries (Verhulst et al., 2003)

Behaviour Scales	Girls			Boys			Girls + Boys	
	Greece	USA	Spain	Greece	USA	Spain	Spain	Seven countries
Withdrawn	4.4 (2.5)	4.0 (2.4)	4.0 (2.4)	3.6 (2.5)	3.4 (2.2)	3.6 (2.4)	3.8 (2.4)	3.5 (2.4)
Somatic Complaints	3.8 (2.9)	2.9 (2.9)	3.1 (2.6)	2.6 (2.4)	2.2 (2.3)	2.3 (2.2)	2.7 (2.5)	2.7 (2.7)
Anxious/Depressed	11 (5.5)	6.4 (5.1)	9.4 (5.4)	7.6 (5.0)	5.1 (4.2)	7.2 (4.7)	8.4 (5.2)	6.4 (4.9)
Social Problems	3.1 (2.3)	2.5 (2.1)	2.9 (2.2)	3.1 (2.4)	2.6 (2.0)	3.0 (2.3)	3.0 (2.2)	2.8 (2.3)
Thought Problems	2.7 (2.2)	2.4 (2.3)	2.6 (2.5)	2.5 (2.3)	2.3 (2.1)	2.5 (2.4)	2.6 (2.5)	2.0 (2.1)
Attention Problems	6.2 (2.9)	4.6 (3.0)	6.8 (2.9)	6.0 (3.1)	4.8 (3.0)	6.3 (2.9)	6.6 (2.9)	4.6 (3.1)
Delinquent Behaviour	3.5 (2.7)	2.5 (2.2)	2.9 (2.4)	4.9 (3.7)	3.2 (2.5)	3.4 (2.9)	3.2 (2.7)	2.7 (2.4)
Aggressive Behaviour	10.4 (5.3)	7.9 (4.9)	9.0 (4.8)	11 (6.3)	8.5 (5.2)	9.4 (5.5)	9.2 (5.1)	7.7 (5.2)
Internalizing	18.5 (8.7)	12.9 (8.5)	16.5 (8.6)	13.4 (7.9)	10.5 (7.0)	13.1 (7.7)	15.0 (8.3)	12.2 (8.1)
Externalizing	13.8 (7.3)	10.3 (6.3)	11.9 (6.4)	15.9 (9.3)	11.6 (7.0)	12.8 (7.5)	12.4 (7.0)	10.4 (6.9)
Total problems	51.7 (20.6)	38.9 (21.3)	47.0 (19.7)	48.2 (22.6)	37.3 (19.1)	44.1 (19.8)	45.8 (19.8)	37.6 (21.0)

Since most studies (Achenbach, 1991; Broberg et al., 2001; Fitzpatrick & Deehan, 2001; Roussos et al., 2001; Slobodskaya, 1999) observed a strong association between externalizing and internalizing syndromes, we also hypothesize that significant correlations could be found between particular syndromes. Specifically, in our study, the externalizing syndrome of Verbal aggression in boys was tightly associated with internalizing syndromes such as Depression and Phobic-anxious behaviour; whereas Verbal aggression and Attention-seeking behaviour were also significantly associated with Depression in girls. Accordingly, even though there is substantial evidence showing that, at a statistical

level, there are significant gender differences in psychopathology shown by boys and girls, coexistence of internalizing and externalizing behaviour problems must not be discarded and, as a consequence, flexible intervention programs must be implemented in clinical and educational settings for each gender groups.

Finally, the comparisons made between reported problems by Spanish adolescents and youths of different cultures enhances the validity of the YSR as an assessment tool for epidemiological studies, and particularly to identify similarities and differences in the rates of problems between one culture and another, as well as for gender studies across cultures.

References

- Abad, J., Forns, M., & Gómez, J. (2002). Emotional and behavioral problems as measured by YSR: Gender and age differences in Spanish adolescents. *European Journal of Psychological Assessment, 18*, 149-157.
- Achenbach, T.M. (1991). *Manual for the Youth Self Report and 1991 profile*. Burlington, VT: University of Vermont.
- Broberg, A.G., Ekeröth, K., Gustafsson, P.A., Hansson, K., Hägglöf, B., Ivarsson, T., et al. (2001). Self-reported competences and problems among Swedish adolescents: A normative study of the YSR. *European Child & Adolescent Psychiatry, 10*, 186-193.
- Cohen, J., & Cohen, P. (1983). *Applied multivariate regression/correlation analysis for the behavioral sciences (2nd ed.)*. Hillsdale, NJ: Erlbaum.
- Fitzpatrick, C., & Deehan, A. (2001). Competences and problems of Irish children and adolescents. *European Child & Adolescent Psychiatry, 8*, 17-23.
- Helstelä, L., & Sourander, A. (2001). Self-reported competence and emotional and behavioural problems in a sample of Finnish adolescents. *Nordic Journal of Psychiatry, 55*, 381-385.
- Heyerdahl, S., Kvernmo, S., & Wichsterom, L. (2004). Self-reported behavioural/emotional problems in Norwegian adolescents from multiethnic areas. *European Child & Adolescent Psychiatry, 13*, 64-73.
- Inglés, C.J., Hidalgo, M.D., & Méndez, F.X. (2005). Interpersonal difficulties in adolescence: A new self-report measure. *European Journal of Psychological Assessment, 21*, 11-22.
- Lemos Giráldez, S., Vallejo Seco, G., & Sandoval Mena, M. (2002). Estructura factorial del Youth Self-Report (YSR). *Psicothema, 14*, 816-822.
- Lemos, S. (1997). *Estructura factorial del YSR en una muestra de adolescentes (Factorial structure of the YSR in an adolescents sample)*. Paper presented at the EAPCP Congress, Madrid.
- Lemos, S., Fidalgo, A.M., Calvo, P., & Menéndez, P. (1992). Estructura factorial de la prueba YSR y su utilidad en psicopatología infanto-juvenil. *Análisis y Modificación de Conducta, 18*, 883-905.
- Lemos, S., Fidalgo, A.M., Calvo, P., & Menéndez, P. (1994). Personality traits and self-reported competencies in adolescents. In B. De Raad, W.K.B. Hofstee & G.L. Van Heck (eds.): *Personality psychology in Europe (vol. 5)* (pp. 228-234). Tilburg: Tilburg University Press.
- Murad, D.S., Joung, I.M.A., Lenthe, F.J., Bengi-Arslan, L., & Crijnen, A.A.M. (2003). Predictors of self-reported problem behaviours in Turkish immigrant and Dutch adolescents in the Netherlands. *Journal of Child Psychology and Psychiatry, 44*, 412-423.
- Roussos, A., Francis, K., Zoubou, V., Kiprianos, S., Prokopiou, A., & Richardson, C. (2001). The standardization of Achenbach's Youth Self-Report in Greece in a national sample of high school students. *European Child & Adolescent Psychiatry, 10*, 47-53.
- Slobodskaya, H. (1999). Competence, emotional and behavioural problems in Russian adolescents. *European Child & Adolescent Psychiatry, 8*, 173-180.
- Verhulst, F.C., Achenbach, T.M., van der Ende, M.S., Erol, N., Lambert, M.C., Leung, P.W.L., et al. (2003). Comparisons of problems reported by youths from seven countries. *American Journal of Psychiatry, 160*, 1479-1485.