

Does individual attention improve the effect of group treatment of adolescents with social phobia?¹

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(Received March 1, 2007 / Recibido 1 de marzo 2007)

(Accepted February 20, 2008 / Aceptado 20 de febrero 2008)

ABSTRACT. The objective of this experimental study is to provide empirical evidence on the efficacy-efficiency of individual attention in the treatment of adolescents with generalized social phobia. Individual attention is one of the components of the structured psychological treatment program known as *IAFS* (*Intervención en Adolescentes con Fobia Social* -Treatment for Adolescents with Social Phobia-). Fifty-seven subjects (63% female) between 14 and 18 years of age participated in this study. They were randomly assigned to three experimental conditions: a) the *IAFS* without individual attention, b) the *IAFS* with 6 sessions of individual attention, and c) the *IAFS* with 12 sessions of individual attention. The results show that the groups that included individual attention obtained better results in most of the measures assessing anxiety and social avoidance at 6- and 12-month follow-up, but not at posttest. The same trend was also found for the variables self-esteem and adaptation. However, costs are much higher in both treatment conditions.

KEYWORDS. Generalized social phobia. Adolescents. Individual attention. Experimental study.

¹ This research was possible thanks to the I+D Project of the Spanish Ministry of Education and Science, SEJ2004-01471/PSIC.

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RESUMEN. El objetivo de este estudio experimental es aportar evidencia empírica respecto de la relación eficacia-eficiencia de uno de los componentes (atención individualizada) del programa de tratamiento psicológico estructurado Intervención en Adolescentes con Fobia Social (IAFS) en jóvenes que presentan fobia social generalizada. Los cincuenta y siete sujetos participantes (63% mujeres), de edades comprendidas entre 14 y 18 años, fueron asignados al azar a tres condiciones experimentales: a) IAFS sin atención individualizada, b) IAFS con 6 sesiones de atención individualizada y c) IAFS con 12 sesiones de atención individualizada. Los resultados muestran que los grupos que incluyen sesiones de atención individualizada alcanzan mejores resultados en la mayor parte de las medidas que evalúan la ansiedad y evitación social en el seguimiento a los 6 y 12 meses, constatándose también esta tendencia en las variables autoestima y adaptación. Se discuten estos resultados a la luz del incremento de los costes que conlleva el seguimiento individualizado de los participantes frente a la condición sin este componente.

PALABRAS CLAVE. Fobia social generalizada. Adolescentes. Atención individualizada. Estudio experimental.

Social phobia is characterized by a strong and persistent fear of social situations or public performance. Its prevalence rates range between 3% and 13% (American Psychiatric Association, 2000), which makes it the most frequent anxiety disorder in the clinical and community population (Fairbrother, 2002; Scholling and Emmelkamp, 1996; Vera-Villaruel, Olivares, Kuhne, Rosa, Santibáñez, and López-Pina, 2007) and the third most diagnosed psychological disorder, behind major depression and alcohol dependence (Ameringen, Manzini, and Farvolden, 2003; Zubeidat, Fernández-Parra, Sierra, and Salinas, 2007). The treatment of social phobia occupies and preoccupies researchers both regarding adults (see Butler, Cullington, Munby, Amies, and Gelder, 1984; Mersch, 1995; Mortberg, Karlsson, Fyring, and Sundin, 2006; Olivares and García-López, 2002; Ruipérez, García-Palacios, and Botella, 2002; Van-Dam-Baggen and Kraaimaat, 2000) and children and adolescents (see Gallagher, Rabian, and McCloskey, 2004; García-López *et al.*, 2006; Olivares, Piqueras, and Rosa, 2006; Olivares, Rosa and Piqueras, 2005). However, treatments today must not only be efficacious –beneficial in controlled studies– but also effective –useful in common daily practice– and efficient, that is, more beneficial at a lower cost than other treatments that have also proven to be efficacious and effective (see Pérez-Álvarez, Fernández, Fernández, and Amigo, 2003; Rosa, Olivares, and Méndez, 2004). This approach led Olivares, Rosa, Piqueras, Méndez, and Ramos (2003) to study to what extent the specific treatments for social phobia in children and adolescents met the criteria of the Task Force on Promotion and Dissemination of Psychological Procedures (1995). The results showed that some programs for the treatment of social phobia in these populations already fulfilled the criteria to be considered “well established” (such as the case of the Cognitive Behavioral Group Therapy for Adolescents –CBGT-A–; Albano, Marten, and Holt, 1991) and “probably efficacious” (such as the Social Effectiveness Therapy for Children –SET-C–; Beidel, Turner, and Morris, 2000; the Cognitive Behavior Therapy; Spence, Donovan, and

Brechman-Toussaint, 2000; and the *Intervención en Adolescentes con Fobia Social, IAFS* (Treatment for Adolescents with Social Phobia; see Olivares, 2005). The results also showed that the *IAFS* was the only program that had always proven to be at least as efficacious as the other treatments but more efficient than them when applied to adolescents with social phobia (see García-López *et al.*, 2002; Olivares, García-López, Turner, LaGreca, and Beidel, 2002).

In order to test the effectiveness and study the efficiency of the *IAFS*, Olivares *et al.* (2003) carried out a meta-analytical study. The study led them to conclude that, in children and adolescents, the efficacy of programs for the psychological treatment of social phobia was high, both in posttest ($d_+ = 1.52$) and follow-up measures ($d_+ = 1.68$). The greatest therapeutic benefits were shown by the *IAFS* Program ($d_+ = 1.90$), in spite of the fact that it involves fewer sessions than other programs and requires the least amount of time to be fully applied. The trend in the data showed better results when group and individual sessions were combined in the application of the treatment, which differed from the results obtained by other researchers (such as Barret, 1998). To provide data to help clarify this situation, Olivares, Rosa, and Olivares (2006) carried out a new study in which they tested the contribution of the component "one-to-one guidance or individual attention as a complement to group training." In this study, the adolescents were randomly assigned to two experimental conditions: the *IAFS* Program without individual sessions and the *IAFS* Program with 6 compulsory individual sessions. The results did not show statistically significant differences between both groups, which led its authors to state that, among other pending issues, research should check to what extent the results might be affected by an increase in the number of sessions of complementary individual attention. Such is the purpose of this study. This experimental study (Montero and León (2007) used the advices of Ramos-Álvarez, Valdés-Conroy y Catena (2006).

Method

Participants

The sample was formed by 57 adolescents who met the criteria of the DSM-IV-TR (American Psychiatric Association, 2000) for the diagnosis of generalized social phobia. Mean age was 15.30 years ($SD = .94$; range: 14-18). Most of the subjects were females (63%) in 3rd year of Compulsory Secondary Education (*Educación Secundaria Obligatoria, ESO*) (36.8%). None of the subjects had ever been treated for psychological disorders, and 68% of them did not have a family history of psychological disorders. Fifty-four (94.73%) subjects attended all the group treatment sessions, and 3 (5.27%) missed one session. No subjects missed any individual attention sessions. Table 1 shows other relevant data of the subjects for each experimental condition.

TABLE 1. Descriptive data of the experimental sample.

		<i>0 individual session group (n = 18)</i>	<i>6 individual session group (n = 20)</i>	<i>12 individual session group (n = 19)</i>	
Age (mean in years)		15.17	15.15	15.58	
Sex (percentage)	Males	7 (39%)	7 (35%)	7 (37%)	
	Females	11 (61%)	13 (65%)	12 (63%)	
School year	3 rd year ESO	55%	40%	26%	
	4 th year ESO	28%	30%	58%	
	1 st year <i>Bachillerato</i>	17%	30%	16%	
Number of feared situations		6.5	6.61	6.74	
Comorbidity (%)	Panic disorder	3 (17%)	5 (25%)	5 (26%)	
	Agoraphobia	0 (0%)	2 (10%)	2 (10.5%)	
	Avoidant personality disorder	4 (22%)	6 (30%)	5 (26%)	
	Selective mutism	2 (11%)	3 (15%)	3 (16%)	
	Generalized anxiety disorder	5 (28%)	6 (30%)	5 (26%)	
	Obsessive-compulsive disorder	0 (0%)	1 (5%)	1 (5%)	
	Obsessive-compulsive personality disorder	2 (11%)	3 (15%)	3 (16%)	
	Specific phobia	5 (28%)	3 (15%)	5 (26%)	
	Post-traumatic stress disorder	1 (5.5%)	3 (15%)	3 (16%)	
	Major depressive episode	1 (5.5%)	2 (10%)	2 (10%)	
	Disthymic disorder	2 (11%)	3 (15%)	2 (10%)	
	Alcohol abuse	0 (0%)	0 (0%)	0 (0%)	
	Substance abuse (caffeine, etc.)	0 (0%)	1 (5%)	2 (10.5%)	
	Treatment drop (%)		0%	0%	0%

Procedure

The subjects were recruited in three stages. In the first stage, the Social Phobia and Anxiety Inventory (SPAI) and the Social Anxiety Scale for Adolescents (SAS-A) were administered to a sample of 2,733 students in 3rd and 4th year of Compulsory Secondary Education (*Enseñanza Secundaria Obligatoria, ESO*), and 1st and 2nd year of non-Compulsory Secondary Education (*Bachillerato*) in 8 secondary education schools of the Region of Murcia and the South of the Valencia Region in Spain. The subjects had been randomly selected among those participating in our Early Detection and Treatment Program. Out of these, 66 (2.41%) were excluded because they had responded to some items incorrectly or were 18 years old or older. The final sample included 2,667 subjects: 1,420 females (53.3%) and 1,247 males (46.7%). The second stage involved correcting the questionnaires and selecting the subjects on the basis of previously established cutoff points (SPAI ≥ 97 ; SAS-A ≥ 57 ; Olivares *et al.*, 2002). At this stage, 368 subjects

(13.8%) scored above the cutoff points that imply a high probability of having social phobia. These subjects were assessed by means of the Anxiety Disorders Interview Schedule for DSM-IV, Child Version (ADIS-IV-C; Silverman and Albano, 1996). After the interview, the sample was formed by 203 (7.6%) subjects who met the criteria for the diagnosis of social phobia (specific social phobia in 125 subjects and generalized social phobia in 78 subjects). All the participants were informed of the results of the interview and the questionnaires, but only the subjects with generalized social phobia were selected for this study. In order to participate in the study, the latter needed the written consent of one or both parents, which also included permission to make and use audiovisual recordings in the treatment context only for clinical purposes. Fifty-seven adolescents (73%) accepted to participate, whereas 21 (27%) refused to, citing various reasons. The third stage included an informative session with subjects and parents to explain the contents, the length and the objectives of the program and clarify any questions about it. The subjects were then randomly assigned to the experimental conditions in 6 subgroups of 9-10 subjects each. This was followed by the pretest assessment, the treatment itself, and the posttest and follow-up assessments.

The treatment was applied by the first two authors, who are experienced psychologists in the treatment of social phobia. The assessment was carried out by 8 collaborators who had previously been trained for this purpose, grouped in male-female pairs. The first pair made the pretest assessment; the second pair made the posttest assessment, the third one was in charge of the 6-month follow-up and the fourth one did the 12-month follow-up. It was a blind assessment, as the full set of data for the various measures was only disclosed to the team after data regarding the second follow-up had been collected. The treatment was applied in the community context –the schools– in the framework of a Program for Early Detection and Treatment in Adolescent Subjects carried out in the Behavior Therapy Unit of the Applied Psychology Service of the University of Murcia, Spain.

Assessment instruments and strategies

All the subjects completed the following assessment instruments in the pretest, posttest and follow-up phases.

The Social Phobia and Anxiety Inventory (SPAI; Turner, Beidel, Dancu, and Stanley, 1989), which includes three scores: *Social phobia*, *Agoraphobia*, and *Difference*. Olivares, García-López, Hidalgo, Turner, and Beidel (1999) studied the psychometric properties of the SPAI in Spanish adolescents. They showed that it reached appropriate internal consistency coefficients (.95, .83 and .95 for the values *Social phobia*, *Agoraphobia*, and *Difference*, respectively).

The Social Anxiety Scale for Adolescents (SAS-A; LaGreca and López, 1998), adapted to the Spanish population by Olivares, Ruiz *et al.* (2005). This scale has a three-factor structure: *Fear of negative evaluation (FNE)*, *Social avoidance and distress in new situations (SAD-New)*, and *General social avoidance and distress (SAD-Genera-*

ral). The internal consistency of the total score was .91, and that of fear of negative evaluation was .94. Item-test correlation was always above .40.

The Personal Report of Confidence as a Speaker (PRCS), developed by Gilkinson and modified by Paul (1966) to assess both fear of public speaking and confidence in this task (before, during and after the performance). The results showed that the scale had high internal consistency (.87) and high concurrent validity (García-López, Olivares, and Vera-Villarroel, 2003).

The Self-Statements during Public Speaking Scale (SSPS; Hofmann and DiBartolo, 2000), which assesses cognitive responses to public speaking. The scale has two subscales: *Positive self-statements* and *Negative self-statements*. It has high internal consistency and test-retest reliability (.90) (García-López *et al.*, 2003).

The Inadaptation Scale (*Escala de Inadaptación EI*; Echeburúa and Corral, 1987), an instrument designed to assess to what extent a disorder may affect different daily living activities such as work, study, social life, free time, couple relationship and family life. In the Spanish adult population, Cronbach's alpha has showed a reliability coefficient of .94 (Echeburúa, Corral, and Fernández-Montalvo, 2000).

The Society and Adolescent Self Image (SASI; Rosenberg, 1965), developed to measure to what extent people are satisfied with themselves. The internal consistency of the total score was .92, and the test-retest reliability was .85. The psychometric properties of this scale in the Spanish adolescent population have not been determined.

The Anxiety Disorders Interview Schedule for Children (ADIS-IV-C; Silverman and Albano, 1996), which was used as a diagnostic interview and also to record the number of social situations involving performance or interaction pointed out as phobic in its section on social phobia. This figure was taken as a dependent variable to calculate the clinical significance of the effects of treatment. This interview has shown an excellent test-retest ($Kappa = .63-.80$) and between-judge reliability (.82-.95) when applied to social phobia (Silverman, Saavedra and Pina, 2001).

For further details on the instruments to assess social phobia validated for the Spanish-speaking population please consult the study by García-López *et al.* (2003).

Design

We chose a between-subject and multivariate design including three experimental groups, with independent measures in the factor number of individual sessions and multiple and repeated measures in the factor assessment. The first experimental condition (12 individual sessions) was formed by 19 subjects, the second one (6 individual sessions) was formed by 20 subjects and the third one (no individual sessions) was formed by 18 subjects. The quality of the treatment was controlled by means of a written manual (see Olivares, 2005). In order to facilitate participation and control experimental mortality, the treatment sessions took place in *ad hoc* designated places in the schools with a convenient schedule for students, always in the morning. No experimental mortality was recorded. The three experimental conditions were assessed before the treatment began, immediately after it finished and 6 and 12 months later.

Treatment

The program used was the *Intervención en Adolescentes con Fobia Social*, IAFS; (Treatment for Adolescents with Social Phobia, Olivares, 2005), which includes twelve 90-minute group treatment sessions held once a week. The basic components of the program are the following:

- Educational component. It implies providing information about the contents of the treatment, presenting an explanatory model of social phobia, planning the achievements the subject wishes to reach –target behaviors– and reviewing the subject’s expectations of the treatment and each of the target behaviors.
- Social skills training. It includes contents such as starting and maintaining conversations, assertiveness, paying and accepting compliments, making and keeping friends as well as training in public speaking.
- Exposure. It is the core of the program, and most activities revolve around it. Both in vivo –simulated and real– and imaginal types of exposure are used.
- Cognitive restructuring techniques. This component is aimed at teaching the participants to identify the negative automatic thoughts they generate when they evoke past situations, anticipate social situations or are immersed in a social situation that causes anxiety responses in them. It is based on Beck’s cognitive therapy and follows a process that includes an educational stage, a training stage and a stage in which the subjects apply the training they have received, as well as Ellis’ A-B-C format to discuss automatic and irrational thoughts.

At the end of the group sessions homework assignments are given. They involve in vivo exposure to natural contexts related to the content of the session(s) already held in the clinical setting. The Program includes the possibility of treating the participants in individual sessions, changing the contents and the length of these sessions depending on the specific needs of the subjects treated, within the range between 15 minutes/session (the minimum length predicted) and 30 minutes/session (the maximum length desirable). The sessions are devoted to monitoring the difficulties encountered in the homework assignments and dealing with issues related to the contents and activities of the group sessions. In this study, the component “Compulsory one-to-one guidance sessions or individual attention” was the independent variable. Three conditions or levels were established: no individual attention outside the group training context (“the IAFS without individual sessions”; compulsory individual attention, at a rate of one individual session every two training sessions (“the IAFS with 6 individual sessions) –always “at the request” of the therapists and in the even treatment session–; or 12 sessions of complementary individual attention (“the IAFS with 12 individual sessions, also “at the request” of the therapists).

Results

We carried out within-group and between-group comparative analysis. In the between-group analysis, we checked first whether there were any differences between the experimental conditions at the pretest stage. We did so by comparing means or frequencies

(ANOVA or Pearson's Chi-Square test) depending on the type of variable measured. The results show that the groups were initially at the same level. Next, we made the between-group assessment of the effects of the treatment at the posttest stage and in the two follow-ups by means of ANOVAs and *post-hoc* comparisons when the differences were statistically significant. We also calculated the effect sizes (standardized mean difference d , Hedges and Olkin, 1985) resulting from comparing the following differences: pretest-posttest, pretest-6-month follow-up, and pretest-12-month follow-up of the 12 individual session group compared to those of the 6 and 0 individual session group and the 6 individual session group compared to the 0 individual session group. Positive d_+ values reflected an improvement of the first group compared to the rest. The analyses were carried out with the SPSS 11.0 statistical package and MetaWin 2.0 (Rosenberg, Adams, and Gurevitch, 2000). For the within-group comparisons we carried out a repeated measures ANOVA in the various dependent variables; after this, we analyzed the comparisons two by two using the Bonferroni procedure. Finally, we explored the clinical significance of the treatment using two criteria: a) total remission of the requirements for the diagnosis or social phobia, that is to say, reduction to zero of the number of phobic social situations included in the social phobia section of the ADIS-IV-C; and b) partial remission, that is, a 75% decrease from the initial number of feared social situations reported in the pretest. We used Pearson's Chi-Square test to analyze these data.

Between-group comparisons

The means, standard deviations and level of statistical significance of the ANOVA of the variables measuring social anxiety and avoidance are shown in Table 2. As we can see, only some variables showed statistically significant differences at posttest (SAS-A: SAD-General, SAD-New and SAS-A-Total). However, as time went by, the number of variables in which the groups differed increased in the follow-up measures (SPAI-Social phobia, SPAI-Difference, SAS-A-General, SAS-A-Total, and PRCS). The *post-hoc* analysis showed that the best scores at follow-up were obtained by the 12 individual session group compared to the 0 individual session group in the variables SPAI-Social phobia, SPAI-Difference, SAS-A (SAD-General; SAS-A-Total) and PRCS. No significant differences were found between the 6- and 12- individual session groups, nor between the groups regarding the number of phobic situations at any of the assessment stages in time.

TABLE 2. Social anxiety and avoidance responses.

		<i>IAFS without individual sessions</i>		<i>IAFS + 6 individual sessions</i>		<i>IAFS + 12 individual sessions</i>	
		<i>n</i>	<i>M (SD)</i>	<i>n</i>	<i>M (SD)</i>	<i>n</i>	<i>M (SD)</i>
SPAI-Social phobia	Pretest	18	115.5 (14.21)	20	119.45 (12.08)	19	118.11 (13.99)
	$F_{(2, 56)} = .41; p = .669$						
	Posttest	18	68.78 (14.76)	20	64.4 (14.77)	19	57.47 (14.13)
	$F_{(2, 56)} = 2.93; p = .062$						
	Follow-up 6	18	64.5 (15.84)	20	58.45 (15.43)	19	50.37 (15.32)
	$F_{(2, 56)} = 3.86; p = .027$						
	Follow-up 12	18	65.11 (15.84)	20	58.35 (15.65)	19	49.95 (15.49)
	$F_{(2, 56)} = 4.36; p = .018$						
SPAI-Difference	Pretest	18	93.33 (11.01)	20	96.05 (9.95)	19	96. (11.59)
	$F_{(2, 56)} = .38; p = .686$						
	Posttest	18	57.56 (14.04)	20	54.2 (13.62)	19	46.84 (13.59)
	$F_{(2, 56)} = 2.96; p = .060$						
	Follow-up 6	18	55.22 (12.61)	20	50.70 (12.75)	19	43.79 (13.33)
	$F_{(2, 56)} = 3.70; p = .031$						
	Follow-up 12	18	56.06 (12.60)	20	50.75 (12.45)	19	42.79 (13.38)
	$F_{(2, 56)} = 5.04; p = .011$						
SPAI-Agoraphobia	Pretest	18	20.17 (6.95)	20	26.4 (9.33)	19	22.11 (12.29)
	$F_{(2, 56)} = 2.03; p = .141$						
	Posttest	18	10.5 (4.87)	20	10.45 (4.61)	19	9.89 (4.89)
	$F_{(2, 56)} = .09; p = .911$						
	Follow-up 6	18	9.17 (4.60)	20	7.75 (4.05)	19	6.58 (4.42)
	$F_{(2, 56)} = 1.63; p = .205$						
	Follow-up 12	18	8.72 (4.87)	20	7.60 (4.58)	19	7.58 (4.3)
	$F_{(2, 56)} = .38; p = .692$						
SAS-A (SAD-General)	Pretest	18	12.5 (1.34)	20	12.55 (1.09)	19	12.11 (1.1)
	$F_{(2, 56)} = .81; p = .448$						
	Posttest	18	9.44 (2.06)	20	8.60 (2.01)	19	7.47 (1.68)
	$F_{(2, 56)} = 4.89; p = .011$						
	Follow-up 6	18	9.17 (2.09)	20	8.30 (1.83)	19	7.32 (1.6)
	$F_{(2, 56)} = 4.64; p = .014$						
	Follow-up 12	18	9.67 (2.63)	20	8.85 (2.49)	19	7.32 (2.0)
	$F_{(2, 56)} = 4.64; p = .014$						
SAS-A (SAD-New)	Pretest	18	21.67 (1.28)	20	22.00 (1.48)	19	21.84 (1.42)
	$F_{(2, 56)} = .27; p = .767$						
	Posttest	18	15.22 (1.63)	20	14.65 (1.95)	19	13.47 (2.2)
	$F_{(2, 56)} = 3.91; p = .026$						
	Follow-up 6	18	14.67 (1.78)	20	14.3 (2.13)	19	13.16 (2.01)
	$F_{(2, 56)} = 2.94; p = .061$						
	Follow-up 12	18	15.22 (2.41)	20	14.55 (2.35)	19	13.53 (2.09)
	$F_{(2, 56)} = 2.59; p = .085$						
SAS-A-Total	Pretest	18	63.11 (3.93)	20	64.2 (3.28)	19	62.89 (3.26)
	$F_{(2, 56)} = .78; p = .463$						
	Posttest	18	46.11 (5.83)	20	44.40 (6.12)	19	40.63 (5.82)
	$F_{(2, 56)} = 4.17; p = .021$						
	Follow-up 6	18	44.28 (5.91)	20	42.70 (5.82)	19	39.47 (5.36)

TABLE 4. Other related measures.

		<i>IAFS without individual sessions</i>		<i>IAFS + 6 individual sessions</i>		<i>IAFS + 12 individual sessions</i>	
		<i>n</i>	<i>M (SD)</i>	<i>n</i>	<i>M (SD)</i>	<i>n</i>	<i>M (SD)</i>
Self-esteem	Pretest	18	24.83 (1.94)	20	25.15 (1.89)	19	25.21 (2.22)
	$F_{(2, 56)} = .18; p = .833$						
	Posttest	18	29.5 (1.72)	20	29.15 (2.32)	19	30.53 (2.48)
	$F_{(2, 56)} = 2.02; p = .143$						
	Follow-up 6	18	28.56 (1.88)	20	29.25 (2.05)	19	30.42 (1.57)
	$F_{(2, 56)} = 4.83; p = .012$						
Adaptation	Follow-up 12	18	29.5 (1.68)	20	29.30 (1.81)	19	30.74 (1.66)
	$F_{(2, 56)} = 3.91; p = .026$						
	Pretest	18	20.67 (2.05)	20	20.45 (1.95)	19	19.74 (1.75)
	$F_{(2, 56)} = 1.19; p = .311$						
	Posttest	18	14.72 (2.19)	20	14.40 (2.56)	19	13. (1.76)
	$F_{(2, 56)} = 3.24; p = .051$						
	Follow-up 6	18	15.78 (2.13)	20	14.95 (2.3)	19	14.21 (1.87)
	$F_{(2, 56)} = 2.54; p = .088$						
	Follow-up 12	18	14.22 (1.98)	20	13.95 (1.98)	19	12.68 (1.49)
	$F_{(2, 56)} = 3.76; p = .030$						

Table 5 shows the values reached in the measures of other related correlates or variables such as self-esteem and adaptation. Again, the data show differences in the variable Adaptation at posttest and the variables Self-Esteem and Adaptation at both follow-ups in favor of the 12 individual session group compared to the 0 individual session group. *ES* are also medium and high in the variables and between the groups.

TABLE 5. Effect sizes between groups at different points in time.

<i>Instruments</i>	<i>Point in time</i>	<i>12 vs. 6 individual session group</i>	<i>12 vs. 0 individual session group</i>	<i>6 vs. 0 individual session group</i>
SPAI-Social phobia	Posttest	.469	.766	.290
	Follow-up 6	.514	.886	.377
	Follow-up 12	.528	.946	.420
SPAI-Difference	Posttest	.529	.758	.238
	Follow-up 6	.519	.860	.348
	Follow-up 12	.603	.997	.415
SPAI-Agoraphobia	Posttest	.115	.122	.010
	Follow-up 6	.270	.561	.321
	Follow-up 12	.004	.243	.232
SAS-A (SAD-General)	Posttest	.595	1.027	.404
	Follow-up 6	.557	.975	.435
	Follow-up 12	.661	.986	.313
SAS-A (SAD-New)	Posttest	.556	.879	.309
	Follow-up 6	.538	.776	.183
	Follow-up 12	.448	.733	.275

TABLE 5. Effect sizes between groups at different points in time (*cont.*).

<i>Instruments</i>	<i>Point in time</i>	<i>12 vs. 6 individual session group</i>	<i>12 vs. 0 individual session group</i>	<i>6 vs. 0 individual session group</i>
SAS-A-Total	Posttest	.617	.919	.279
	Follow-up 6	.564	2.395	.263
	Follow-up 12	.667	.792	.126
PRCS	Posttest	.346	.706	.328
	Follow-up 6	.504	0.937	.372
	Follow-up 12	.416	.987	.458
No. of phobic social situations	Posttest	.027	.638	.626
	Follow-up 6	.050	.444	.427
	Follow-up 12	.033	.436	.419
SSPS	Posttest	.135	.438	.281
	Follow-up 6	.373	.664	.258
	Follow-up 12	.619	.959	.221
SAS-A (SAD-FNES)	Posttest	.640	.771	.127
	Follow-up 6	.624	.662	.017
	Follow-up 12	.576	.602	.006
Self-esteem	Posttest	.563	.469	-.166
	Follow-up 6	.625	1.052	.303
	Follow-up 12	.810	.726	-.112
Adaptation	Posttest	.620	.848	.131
	Follow-up 6	.344	.767	.365
	Follow-up 12	.706	.862	.133

Note. SPAI: Social Phobia and Anxiety Inventory; SAS-A: Social Anxiety Scale for Adolescents; PRCS: Personal Report of Confidence as a Speaker. SSPS: Self-Statements during Public Speaking; SAS-A (FNE): Social Anxiety Scale for Adolescents -Fear of Negative Evaluation Subscale-.

Within-group comparisons

The analysis of the within-group measures (repeated measures ANOVA and Student's *t*-test) showed that, in all the groups, the subjects' social anxiety and avoidance scores decreased, whereas their self-esteem and adaptation scores increased. Significant differences with a very high level of significance ($p \leq .001$) were found at post-test and follow-up compared to pretest. In some variables (SPAI-Social phobia, SPAI-Difference, SAS-A (FNE), SAS-A-Total, PRCS, SSPS and Adaptation) there were also differences between posttest and both follow-ups in the three treatment groups.

Clinical significance

The clinical significance of the changes was calculated using the percentage of subjects for whom the number of feared social situations reported at pretest had decreased at posttest and follow-up. Regarding 100% remission at posttest –the fact of no longer meeting the criteria for the diagnosis of social phobia– the results showed significant differences between the groups with individual sessions and the group without such sessions ($p < .05$); the number of subjects with total remission was higher in the 12 individual session group (9 subjects) than in the 6 individual session group (8 subjects)

and 0 individual session group (5 subjects). The same results were found in the 6- and 12-month follow-ups. The partial remission data (75%-99.99%) replicated those found between the groups mentioned above both at posttest and follow-ups; the only statistically significant differences were found between the 12 individual session group and the 0 individual session group ($p < .05$), although the data followed the same trend as above (6 subjects in the 12 individual session group, 4 in the 6 individual session group and 2 in the 0 individual session group).

Discussion and conclusions

Our results show that introducing "Compulsory one-to-one guidance sessions or individual attention" shows significant effects in subjects in the medium and long term (6- and 12-month follow-up) when comparing those who receive it in all the program sessions (12 individual sessions) and the condition without individual sessions ("0 individual guidance sessions"). However, these statistically significant differences are only found in some of the variables related to anxiety and social avoidance (SPAI-Social phobia, SPAI-Difference, SAS-A -SAD-General; SAS-A-Total-, PRCS and SSPS) and in the correlates (Self-Esteem and Adaptation). This matches the previous findings of Olivares *et al.* (2006). At posttest and follow-ups, the values of the scores obtained in the self-reports were better in the "12 individual session group" than in the other two experimental conditions. Yet, no significant differences were found between the 0 individual session group and the 12 individual session group, or between the 6 individual session group and the 0 individual session group. The trend in the data suggests that a lower number of individual sessions leads to worse scores in subjects. However, this difference was significant only in the measures obtained at follow-ups, given that the differences were only found in four of the measured variables at posttest.

As regards clinical significance ("The elimination/reduction of the number of feared social situations reported at pretest"), we found statistically significant differences between two of the experimental conditions (0 individual sessions *vs.* 12 individual sessions) at posttest and 6- and 12- month follow-ups. The condition "12 individual session group" showed the greatest reduction, followed by the condition "6 individual session group." This leads us to underline that introducing "Compulsory one-to-one guidance sessions or individual attention" may lead to higher recovery rates both at posttest and follow-ups, which is also consistent with previous findings (Olivares *et al.*, 2006). As for effect size, the results followed the expected order ($TE_{12 \text{ individual sessions}} \geq TE_{6 \text{ individual sessions}} \geq TE_{\text{no individual sessions}}$), which also matches the results of our previous study (Olivares *et al.*, 2006).

Regarding within-group comparisons, it should be noted that the three groups improved significantly both at posttest and follow-ups in all the variables related to social anxiety and avoidance, which is consistent with the findings of earlier research (for example, see Salaberría and Echeburúa, 1995). These improvements also apply to other correlates such as self-esteem and adaptation, which matches the findings of earlier studies (such as Piqueras, 2005). Finally, the number of feared social situations also decreased after the treatment, which agrees with the results of other studies with

equivalent scores using the clinical severity ratings of the ADIS-IV-C/P (for example, Beidel, Turner, Hamlin, and Morris, 2000). In all the conditions there was a decrease in the number of feared social situations at all the assessment stages in time.

To conclude, we can state that the IAFS Program is still efficacious in the treatment of adolescents with generalized social phobia, with or without the complement of individual attention. Still, the trend in the data shows that the treatment is generally more efficacious in the short, medium and long term if “compulsory one-to-one guidance or individual attention” sessions are included, as long as there is a high number of sessions (12 sessions). However, we must not forget that the greater efficacy in the results is counteracted by the higher time costs required for a successful outcome. This is not of secondary importance given that it implies a considerable increase in financial costs derived from a greater dedication of therapists –up to 114 hours more for our group taking as a reference 30 minutes/session, the greatest length desirable for individual attention. This finding is important because our objective is to assess the possibility of reducing these costs as much as possible without decreasing the Program’s efficacy. The aim is to maximize the chances that the Program will be applied in the daily practice of psychologists working in educational settings. The relevance of the increase in time costs for adolescents is that many of them refuse to participate because they – usually for reasons intrinsic to the disorder itself –and their parents may consider the time required is “unnecessary or excessive” at the expense of time devoted to study; we must not forget that although the subjects already meet the criteria required for the diagnosis of social phobia, when subjects are detected early the disorder does not yet interfere in the daily activities of the adolescent in a very alarming way for adults; besides, adults consider it is “good” for their children to devote as much time possible to their studies (especially when they “want to”), without realizing that in these cases this may be hiding an avoidance response to the performance and social interaction involved in their participation in the Program.

Finally, if we interpret our results looking at cost-efficacy, we recommend applying the IAFS program without the “Compulsory one-to-one guidance or individual attention” sessions, given that the improvements obtained are not so relevant considering the cost increase for participants and therapists. However, in order to be able to state our conclusions more categorically, more research is needed on the role of individual attention as a complement to group treatment at an early age. Studies should select larger samples and compare the role of “optional or free individual sessions,” that is, “at the request of adolescents” to “compulsory individual sessions,” already introduced, and use clinical samples.

References

- Albano, A.M., Marten, P.A., and Holt, C.S. (1991). *Therapist’s manual for cognitive-behavioral group therapy for adolescent social phobia*. Unpublished manuscript.
- American Psychiatric Association (2000). *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition, revised text). Washington, DC: APA.

- Ameringen, M., Manzini, C., and Farvolden, P. (2003). The impact of anxiety disorders on educational achievement. *Journal of Anxiety Disorders*, 17, 561-571.
- Beidel, D.C., Turner, S.M., Hamlin, V., and Morris, T.L. (2000). The Social Phobia and Anxiety Inventory for Children (SPAI-C): External and discriminative validity. *Behavior Therapy*, 31, 75-87.
- Beidel, D.C., Turner, S.M., and Morris, T.L. (2000). Behavioral treatment of childhood social phobia. *Journal of Consulting and Clinical Psychology*, 68, 1072-1080.
- Barret, P.M. (1998). Evaluation of cognitive-behavioral group treatments for childhood anxiety disorders. *Journal of Clinical Child Psychology*, 27, 459-468.
- Butler, G., Cullington, A., Munby, M., Amies, P., and Gelder, M. (1984). Exposure and anxiety management in the treatment of social phobia. *Journal of Consulting and Clinical Psychology*, 53, 642-650.
- Echeburúa, E. and Corral, P. (1987). *Escala de Inadaptación*. Unpublished manuscript.
- Echeburúa, E. Corral, P., and Fernández-Montalvo, J. (2000). Escala de Inadaptación (EI): Propiedades psicométricas en contextos clínicos. *Análisis y Modificación de Conducta*, 26, 325-340.
- Fairbrother, N. (2002). The treatment of social phobia. 100 years ago. *Behaviour Research and Therapy*, 40, 1291-1304.
- Gallagher, H., Rabian, B., and McCloskey, M. (2004). A brief group cognitive-behavioral intervention for social phobia in childhood. *Journal of Anxiety Disorders*, 18, 459-479.
- García-López, L.J., Olivares, J., Beidel, D.C., Albano, A.M., Turner, S.M., and Rosa, A.I. (2006). Efficacy of three treatment protocols for adolescents with social anxiety disorder: A 5-year follow-up assessment. *Journal of Anxiety Disorders*, 20, 175-191.
- García-López, L.J., Olivares, J., Turner, S.M., Beidel, D.C., Albano, A.M., and Sánchez-Meca, J. (2002). Results at long-term among three psychological treatments for adolescents with generalized social phobia (II): Clinical significance and effect size. *Psicología Conductual*, 10, 165-179.
- García-López, L.J., Olivares, J., and Vera-Villarroel, P. (2003). Revisión de instrumentos de evaluación de la fobia social validados para población de habla hispana. *Revista Latinoamericana de Psicología*, 35, 151-160.
- Hedges, L.V. and Olkin, I. (1985). *Statistical methods for meta-analysis*. Orlando, FL: Academic Press.
- Hofmann, S.G. and DiBartolo, P.M. (2000). An instrument to assess self-statements during public speaking: Scale development and preliminary psychometric properties. *Behavior Therapy*, 31, 499-515.
- LaGreca, A.M. and López, N. (1998). Social anxiety among adolescents: Linkages with peer relations and friendships. *Journal of Abnormal Child Psychology*, 26, 83-94.
- Mersch, P.P. (1995). The treatment of social phobia. The differential effectiveness of exposure in vivo and an integration of exposure in vivo, Rational Emotive Therapy and social skills training. *Behaviour Research and Therapy*, 33, 259-269.
- Montero, I. and León, O.G. (2007). A guide for naming research studies in Psychology. *International Journal of Clinical and Health Psychology*, 7, 847-862.
- Mortberg, E., Karlsson, A., Fyring, C., and Sundin, O. (2006). Intensive cognitive-behavioral group treatment (CBGT) of social phobia: A randomized controlled study. *Journal of Anxiety Disorders*, 20, 646-660.
- Olivares, J. (Ed.) (2005). *Programa IAFA. Protocolo para el tratamiento de la fobia social en adolescentes* Madrid: Pirámide.
- Olivares, J. and García-López, L.J. (2002). Resultados a largo plazo de un tratamiento en grupo para el miedo a hablar en público. *Psicothema*, 14, 405-409.

- Olivares, J., García-López, L.J., Hidalgo, M.D., Turner, S.M., and Beidel, D.C. (1999). The Social Phobia and Anxiety Inventory: Reliability and validity in an adolescent Spanish population. *Journal of Psychopathology and Behavioral Assessment*, 21, 67-78.
- Olivares, J., García-López, L.J., Turner, S., La Greca, A.M., and Beidel, D. (2002). A pilot study on normative data for two social anxiety measures: The Social Phobia and Anxiety Inventory and the Social Anxiety Scale for Adolescents. *International Journal of Clinical and Health Psychology*, 2, 467-476.
- Olivares, J., Piqueras, J.A., and Rosa, A. I. (2006). Características sociodemográficas y psicológicas de la fobia social en adolescentes. *Psicothema*, 18, 207-212.
- Olivares, J., Rosa, A.I., Caballo, V.E., García-López, L.J., Orgilés, M., and López-Gollonet, C. (2003). El tratamiento de la fobia social en niños y adolescentes: una revisión meta-analítica. *Psicología Conductual*, 11, 599-622.
- Olivares, J., Rosa, A.I., and Olivares, P.J. (2006) Atención individualizada y tratamiento en grupo de adolescentes con fobia social generalizada. *International Journal of Clinical and Health Psychology*, 6, 565-580.
- Olivares, J., Rosa, A.I., and Piqueras, J.A. (2005). Detección temprana y tratamiento de adolescentes con fobia social generalizada. *Psicothema*, 17, 1-8.
- Olivares, J., Rosa, A.I., Piqueras, J.A., Méndez, X., and Ramos, V. (2003). Guía de tratamientos eficaces para la fobia social y la timidez en niños adolescentes. In M. Pérez-Álvarez, R. Fernández, C. Fernández, and I. Amigo (Eds.), *Guía de tratamientos psicológicos eficaces III. Infancia y adolescencia* (pp. 87-110). Madrid: Pirámide.
- Olivares, J., Ruiz, J., Hidalgo, M.D., García-López, L.J., Rosa, A.I., and Piqueras, J. A. (2005). Social Anxiety Scale for Adolescents (SAS-A): Psychometric proprieties in a Spanish-speaking population. *International Journal of Clinical and Health Psychology*, 5, 85-97.
- Paul, G. (1966). *Insight vs. Desensibilization in psychotherapy*. Stanford, CA: Stanford University Press.
- Pérez-Álvarez, M., Fernández, J.R., Fernández, C., and Amigo, I. (Eds.) (2003). *Guía de tratamientos psicológicos eficaces, vol. I and II*. Madrid: Pirámide.
- Piqueras, J.A. (2005). *Análisis de la eficacia de la Intervención en Adolescentes con Fobia Social en función de una nueva propuesta de subdivisión and operacionalización del subtipo generalizado*. Unpublished Doctoral Dissertation. University of Murcia, Spain.
- Ramos-Alvarez, M.M., Valdés-Conroy, B., and Catena, A. (2006). Criteria of the peer-review process for publication of experimental and quasi-experimental research in Psychology. *International Journal of Clinical and Health Psychology*, 6, 773-787.
- Rosa, A.I., Olivares, J., and Méndez, F.X. (2004). *Introducción a las técnicas de intervención y tratamiento psicológico*. Madrid: Pirámide.
- Rosenberg, M. (1965). *Society and the Adolescent Self Image*. Princeton: Princeton University Press.
- Rosenberg, M., Adams, D.C., and Gurevitch, J. (2000). *MetaWin 2.0: Statistical software for meta-analysis*. Sunderland, MA: Sinauer Assoc.
- Ruipérez, M.A., García-Palacios, A., and Botella, C. (2002). Clinical features and treatment response in social phobia: Axis II comorbidity and social phobia subtypes. *Psicothema*, 14, 426-433.
- Salaberría, K. and Echeburúa, E. (1995). Tratamiento psicológico de la fobia social: Un estudio experimental. *Análisis y Modificación de Conducta*, 21, 151-179.
- Scholing, A. and Emmelkamp, P.M.G. (1996). Treatment of generalized social phobia: Results at long-term follow-up. *Behaviour Research and Therapy*, 34, 447-452.
- Silverman, W. and Albano, A. M. (1996). *Anxiety Disorders Interview Schedule for DSM-IV. Child Interview Schedule (ADIS-IV-C)*. New York: Graywind Publications.

- Silverman, W., Saavedra, L., and Pina, A. (2001). Test-retest reliability of anxiety and diagnoses with the Anxiety Disorders Interview Schedule for DSM-IV: Child and parent version. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 937-944.
- Spence, S.H., Donovan, C., and Brechman-Toussaint, M. (2000). The treatment of childhood social phobia: The effectiveness of a social skills training based cognitive-behavioral intervention, with and without parental involvement. *Journal of Child Psychology and Psychiatry, 41*, 713-726.
- Task Force on Promotion and Dissemination of Psychological Procedures (1995). Training and dissemination of empirically-validated psychosocial treatments: Report and recommendations. *The Clinical Psychologist, 48*, 3-23.
- Turner, S.M., Beidel, D.C., Dancu, C.V., and Stanley, M.A. (1989). An empirically derived inventory to measure social fears and anxiety: The Social Phobia and Anxiety Inventory. *Psychological Assessment, 1*, 35-40.
- Van-Dam-Baggen, R. and Kraaimaat, F. (2000). Group social skills training or cognitive group therapy as the clinical treatment of choice for generalized social phobia? *Journal of Anxiety Disorders, 14*, 437-451.
- Vera-Villarroel, P., Olivares, J., Kuhne, W., Rosa, A.I., Santibáñez, C., and López-Pina, J.A. (2007). Propiedades psicométricas de la escala para la Detección de la Ansiedad Social (EDAS) en una muestra de adolescentes chilenos. *International Journal of Clinical and Health Psychology, 3*, 795-806.
- Zubeidat, I., Fernández-Parra, A., Sierra, J.C., and Salinas, J. M. (2007). Ansiedad social específica y generalizada. ¿Variantes de un mismo trastorno o categorías diferentes con características similares? *International Journal of Clinical and Health Psychology, 3*, 709-724.