TERAPIA PSICOLÓGICA
2016, Vol. 34, Nº 1, 23-30

ISSN 0716-6184 (impresa) · ISSN 0718-4808 (en línea)

Community versus Clinical Cognitive-Behavioral Intervention in Young-Adult Spanish Population with Generalized Social Phobia

Intervención cognitivo-conductual comunitaria versus intervención clínica en jóvenes adultos españoles con fobia social generalizada

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Rec (15 junio 2015) Acept (28 febrero 2016)

Resumen

El objetivo del estudio es mejorar los resultados informados por las revisiones sobre el tratamiento de adultos con Fobia social generalizada. La muestra la integraron 91 participantes con Fobia social generalizada (EM: 19.90 años; DT: 1.05) asignados aleatoriamente a tres condiciones experimentales, evaluados antes y después del tratamiento, y a los 6, 12, y 24 meses en los grupos tratados. Los resultados muestran (a) la efectividad de la detección en el contexto comunitario versus la intervención clínica, en el corto y medio plazo, y (b) una mejora significativa de los efectos del tratamiento, frente a los de las revisiones de las intervenciones clínicas *ad hoc*, tanto en los abandonos como en las tasas de recuperación. Ello permite concluir que esta modalidad de aplicación del tratamiento cognitivo-conductual puede ser una estrategia complementaria a la convencional con la que mejorar los resultados actuales de la intervención psicológica en este trastorno.
Palabras clave: fobia social generalizada, jóvenes adultos españoles, tratamiento cognitivo-conductual, detección e intervención comunitaria, intervención clínica.

Abstract

The study investigates how to improve the results reported by the reviews on the effects of clinical interventions in adults with Generalized Social Phobia. The sample was composed of 91 participants (median age = 19.90 years, *SD* = 1.05) randomly assigned to three experimental conditions. The evaluations were conducted before and after treatment in all three groups and at 6-, 12-, and 24-month follow-up for the treatment groups. The results show (a) the effectiveness of the cognitive-behavioral strategy of detection and intervention, in a community context, versus clinical intervention both for the short and medium term; and (b) a significant improvement over the percentages of dropouts and of rates of complete recovery from the disorder. These findings allow us to conclude that the cognitive-behavioral strategy of detection and intervention, in a community context is shown to be a complementary intervention to the conventional and with high efficiency ratios.
Key words: generalized social phobia, young-adult Spanish population, cognitive-behavioral therapy, detection and community intervention, clinical intervention

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* Acknowledgements: To Deborah C. Beidel and Samuel M. Turner (in memoriam)

Introduction

Social phobia (SP) is characterized by a persistent and marked fear of social situations in which individuals are exposed to the observation and scrutiny of others (*Diagnostic and Statistical Manual of Mental Disorders-fifth edition* [DSM-V], American Psychiatric Association [APA], 2013). It is one of the most common psychological disorders with the greatest prevalence in western countries (Kessler & Üstun, 2008). Moreover, SP has important negative consequences for personal development, interpersonal relationships, and academic performance (Gültekin & Dereboy, 2011) and is responsible for work performance deterioration (Waghorn, Chant, White, & Whiteford, 2005). In addition, SP is an important risk factor for health (Buckner, Ecker, & Proctor, 2011) and quality of life (Wong, Sarver, & Beidel, 2012), resulting in high financial costs for healthcare systems (Acarturk, Smit et al., 2009).

"Despite the extent of distress and impairment, only about half of those with the disorder ever seek treatment, and those who do generally only seek treatment after 15–20 years of symptoms" (National Institute for Health and Care Excellence [NICE], 2013, p. 5). Therefore, the age interval between 15 and 25 years has been considered critical to develop interventions (Kessler, 2003), but the literature shows that, unfortunately, this has not been the case (Tilfors et al., 2008). As Acarturk, Cuijpers, van Straten, and de Graal (2009) point out, the extent and severity of the impairment caused by SP emphasizes the need to identify efficacious and cost-effective treatments for this disorder.

Cognitive behavioral therapy (CBT) has been shown to be efficacious for SP and is considered the psychological intervention of first choice for the disorder (American Psychological Association, 2012). However, in spite of this, there is a general agreement about the need for further development of treatments for SP (Piet, Hougaard, Hecksher, & Rosenberg, 2010).

In this context, the empirical evidence shows that the current application mode of CBTs in clinical practice is associated with drop-out rates of 30 to 35% of the participants (Bados, Balaguer, & Saldaña, 2007) and between 9 and 21% for the treatment group (Hofmann & Smits, 2008), whereas the ratio of nonresponders ranged from 34 to 36% (Taylor, Abramowitz, & McKay, 2012). Furthermore, about 25% of cases of adult patients with SP treated in the clinic (McAleavey, Castonguay, & Goldfried, 2014) and between 40 and 50% treated in clinical trials (Hofmann & Bögels, 2006) show little or no improvement. Moreover, the prospects of psychopharmacological treatment are no better: approximately 50% of patients have not improved significantly after 6-16 months of treatment (Anderson, 2006).

These findings indicate the need to design and test strategies that would permit improving the results reported in the literature on the treatment of adults with SP. In this sense, whenever possible, detection and intervention in the community framework can be an alternative to allow moving from a passive attitude, based on pending "demand" to an active one, in which demand is detected and treatment provided to people with SP, thereby hopefully reducing/eliminating some of the most common barriers to treatment (McAleavey et al., 2014) and improving outcomes.

Moreover epidemiological data from studies of prevalence of mental disorders in college student populations have increased significantly (see for example Storrie, Ahern & Tuckett, 2010). These increases occur in some cases prevalence higher than in the general population (Stallman & Shochet, 2009) as is the case for the SP in Spanish university, in the study by Macià, Olivares-Olivares & Amorós-Boix (2012) compared to the data of Ministerio de Sanidad y Consumo (2006).

In this context, we wondered: (a) to what extent CBT applied in a framework of detection and intervention in a community setting (O´Donohue, Hanley, & Kasner, 1984) would permit the reduction/elimination of the high drop-out rate reported, while at the same time improving rates of complete remission of SP in its most severe form:

Generalized Social Phobia (GSP); (b) would a group treatment that includes an individual follow-up be more successful than a group treatment when both are applied within a program of detection and intervention in a community setting?

In order to answer these questions, we selected a treatment that combines group intervention with individual follow-up of the participants (Social Effectiveness Therapy [SET]; Turner, Beidel, & Cooley, 1994) and a treatment that is applied only in group format (Cognitive Behavioral Group Therapy [CBGT]; Heimberg, 1991) but which is considered the psychological intervention of choice for SP (American Psychological Association, 2012).

Consequently, we expected that the results of our intervention would (a) show that CBT applied in this mode will show better results than those reported in the ad hoc reviews with regard to the effect sizes (ESs) obtained, the drop-out rates, and rates of complete GSP remission; (b) yield greater benefits for the treatment modality that includes individual attention (SET).

Method

Participants

The group of participants comprised 91 college students enrolled in their first and second years at Murcia University who met the criteria required according to the *DSM-IV-TR* (APA, 2000) for the diagnosis of GSP. The mean age was 19.90 years (*SD* = 1.044, range: 18-22 years), and the majority of the participants were women (62.6%). The distribution of participants by age and gender for each group is shown in Table 1.

Table 1. *Sociodemographic Data*

		Groups		
		WLCG (n = 30)	SET (n = 31)	CBGT (n = 30)
Age (years):	M (SD)	19.77 (1.006)	19.90 (1.044)	20.03 (1.098)
Gender (%)	Male	10 (33.3%)	12 (38.7%)	12 (40%)
	Female	20 (66.7%)	19 (61.3%)	18 (60%)

Exclusion criteria: meeting the diagnostic criteria for severe psychopathology (for example, depression, borderline personality disorder, narcissistic disorder, paranoid disorder, schizophrenia, etc.), long history of substance abuse, aggressive behavior, missing three consecutive treatment sessions, and not having previously received psychological treatment. Inclusion criteria to be part of the sample and participate in the intervention were meeting the criteria for GSP.

Assessment

Self-report measures.

The *Structured Clinical Interview for DSM-IV* (SCID; First, Spitzer, Gibbon, & Williams, 1995). The comorbidity and record of the Number of Feared/Avoided Social Situations (NFASS) reported by the participants were used for the diagnosis of SP. The categories of anxiety-related disorders included in the interview are associated with a satisfactory level of reliability (kappa coefficients have ranged from .61 to .83; Lobbestael, Leurgans, & Arntz, 2011).

The *Social Phobia and Anxiety Inventory* (SPAI; Turner, Beidel, Dancu, & Stanley, 1989). This instrument has reported good internal consistency coefficients (α = .96 for the SP subscale) and high test-retest reliability (.89) at 12 weeks in young Spanish adults and college students (Olivares, Macià, & Olivares-Olivares, 2010).

The *Rathus Assertive Scale* (RAS; Rathus, 1973). The α coefficient varies between .73 and .86 for Spanish populations (Salaberría & Echeburúa, 1995).

The *Maladjustment Scale* (MS; Echeburúa, Corral, & Fernández-Montalvo, 2000). The authors have reported a reliability of .94 (Cronbach's α) in the Spanish population.

The Personal Report of Confidence as Speaker (PRCS; Gilkinson, 1942). Paul. (1966) version of this measurement was used, which has shown good internal consistency in the Spanish population (.95) and high test-retest reliability (.87) at 12 weeks in young Spanish adults and college students (Olivares et al., 2010).

Evaluation of expectations. An ad hoc scale was used for this measurement, which had only one item, on which participants rated from 1 (*Not at all*) to 9 (*Very much*) the expected degree of improvement as a result of the training.

Behavioral Assessment.

A confederate of approximately the same age and the opposite sex of the participant was trained to interact with the participant, who was asked to discuss a topic chosen from a list of four potential topics (their city, the benefits of sports, climate change, and college studies). Each participant had to initiate and maintain a conversation for 3 minutes. A different topic was used for each evaluation and had to be one of the four listed above. Two blinded raters were trained to independently record the time that each participant spent maintaining eye contact (EC).

Each participant's performance was filmed with a video camera to record the total duration of EC with the examiner during the verbal interaction. The recordings were viewed and coded by two independent observers previously trained for that purpose; inter-observer correlations were high (*r* = .91).

Procedure

All students they wanted voluntarily to participate in the study received an informative session where they were explained the objectives, structure, and detailed functioning of the treatment (including audiovisual recording), to clarify any questions about it and request the signing of informed consent to participate in the intervention.

Sample recruitment was conducted according to subjects' scores in the following instruments:

-The *SCID* (First et al., 1995) was administered, in which 121 participants met the criteria required for the diagnosis of

SP, of whom 99 also met the GSP criteria (3% out of 3,304). Eight participants declined to participate for various reasons.

- The *SPAI* (Turner et al., 1989) was administered during the screening process to individuals who voluntarily agreed to participate (n = 3.304). The assessment was provided in the college context, and 5% of the sample (n = 165) obtained scores higher than 98, which represent a cutoff value that was predetermined in a prior study (Olivares, Macià, & Olivares-Olivares, 2010).

Following the pre-treatment assessment, the participants were randomly assigned to the waiting-list control group (WLCG) or one of the two experimental conditions (SET and CBGT). Participants in the two treatment conditions were treated in groups of 10-11 participants in SET and CBGT, and 30 participants were assigned to the WLCG.

Follow-up evaluations were performed after 6, 12, and 24 months for participants treated with SET and CBGT.

The self-report measurements were independently conducted by five pairs of evaluators (a man and woman) specifically trained for this purpose. These pairs were randomly assigned to the groups and blinded with regard to the existence of other evaluators and groups. Four pairs assessed the two treatment groups, that is, two pairs assessed the subjects from the SET Group (one pair assessed the pretest and 6- and 12-month follow-ups, and the other pair assessed the posttest and the 24-month follow-up); the other two pairs assessed the CBGT Group (in the same way as the assessors of the SET group). The fifth pair assessed the pre- and posttest of the WLCG.

The WLCG participants only completed self-report measurements at pre- and posttest, whereas participants in the SET and CBGT groups completed the measurements at pretest, posttest, and follow-up.

The clinical interview (SCID) was administered by three clinical psychologists (blinded to treatment condition). Inter-rater reliability for SP diagnosis was satisfactory (κ = .80).

The clinical significance of the outcome was assessed by examining the percentage of participants in each group who no longer met diagnostic criteria for SP after applying the SCID (posttest and follow-ups).

During each of the follow-up evaluations, participants were asked whether they were receiving additional psychopharmacological or psychological treatment. We used a behavioral test to assess Eye Contact (EC). Inter-rater reliability was satisfactory (κ = .78).

Treatment

The treatment sessions were carried out in the morning. The treatment was provided to each group by two different-gender clinical psychologists who had more than two years of experience in the treatment of GSP. These psychologists were randomly assigned to the roles of therapist and co-therapist and were then assigned to each of the treatment groups.

To ensure that participants assigned to CBGT were receiving such treatment and not the SET, and vice versa, treatment integrity was monitored by an observer who did not know which treatment was supposed to be provided, who listened to the treatment recordings and verified that elements of the correct treatment were present in the session while elements of the incorrect treatment were not.

CBGT has five components: psycho-education, in vivo exposure, cognitive restructuring, scheduled practice, and relapse prevention. The therapeutic intervention was conducted over 12 weekly sessions that lasted 2.5 hours each and accomplished the following phases: education, self-observation, cognitive restructuring, exposure through role-playing during the sessions, self-exposure in homework, and relapse prevention.

SET is composed of four components: psycho-education, social skills training, exposure, and scheduled practice. The distribution of the number of training sessions per week, duration, and format were as follows: (1) educational phase: one 2-hour group session; (2) social skills training phase: two group sessions per week for four weeks; (3) exposure phase: two sessions per week for eight weeks, combining eight individual training sessions and eight group sessions; (4) programmed practice: one 2-hour weekly individual session during the final four weeks. Phases 2, 3 and 4 required approximately 40 hours of additional treatment with the therapists.

For ethical reasons, the WLCG participants and those who met the diagnostic criteria of Specific Social Phobia were given the option to receive treatment outside of the study.

Statistical Analysis

For the between-group analysis (WLCG, SET, and CBGT), we initially examined potential group differences at pretreatment using analysis of variance (*ANOVA*). Subsequently, the differences at the posttest and follow-up phases were analyzed for the two experimental groups.

The ESs resulting from comparing the posttreatment group differences and the SET and CBGT groups in the follow-up measurements were calculated. For practical significance, we obtained Cohen's d (Cohen, 1998), in which .20 corresponds to a low effect size, .50 is considered a medium effect size, and .80 is considered a high effect size.

Table 2. *ANOVA (Pretest), ANCOVA (Posttest and follow-ups), and Effect Sizes*

	Stage	WLCG* M (SD)	SET** M (SD)	CBGT** M (SD)	*F*	P	ES
Expectations	Pretest		2.97 (1.43)	2.93 (1.11)	0.01	.92	
	Pretest	142.37 (17.30)	153.84 (16.45)	142.47 (16.53)	4.75	.01	
	Posttest	144.70 (14.96)	107.65 (16.66)	103.33 (21.69)	75.64	.00	.72
SPAI- SP	6 months[1]		82.10 (18.26)	89.43 (15.44)	4.59	.01	.14
	12 months[1]		61.55 (17.74)	71.33 (15.80)	2.69	.08	.08
	24 months[1]		45.48 (17.99)	57.97 (20.10)	3.30	.04	.10
	Pretest	34.40 (8.72)	32.23 (10.01)	31.50 (12.02)	0.64	.53	
	Posttest	32.5 (10.00)	62.16 (14.74)	56.67 (11.99)	118.37	.00	.80
PRCS	6 months		86.81 (16.22)	75.63 (12.23)	10.40	.00	.26
	12 months		107.61 (16.66)	93.17 (12.25)	10.71	.00	.27
	24 months		122.77 (9.81)	109.90 (15.19)	9.79	.00	.25
	Pretest	7.53 (1.70)	8.71 (1.90)	7.07 (2.30)	5.58	.00	
	Posttest	8.07 (1.48)	2.00 (1.79)	1.70 (1.51)	306.62	.00	.91
NFASS	6 months		0.23 (0.42)	0.33 (0.61)	20.32	.00	.41
	12 months		0.00 (0.00)	0.13 (0.35)	7.85	.01	.21
	24 months		0.00 (0.00)	0.07 (0.25)	5.40		.16
	Pretest	27.30 (5.02)	29.81 (5.64)	25.13 (5.53)	5.71	.00	
	Posttest	28.90 (4.96)	18.39 (3.9)	17.80 (3.81)	186.52	.00	.86
MS	6 months		12.48 (2.67)	14.30 (2.82)	13.23	.00	.31
	12 months		9.74 (1.81)	11.30 (3.06)	11.10	.00	.28
	24 months		9.03 (1.45)	10.83 (2.89)	9.23	.00	.24
	Pretest	-31.87 (13.32)	-43.42 (15.04)	-35.77 (13.21)	5.47	.01	
	Posttest	-35.80 (12.78)	-9.23 (9.75)	-6.53 (11.40)	123.03	.00	.81
RAS	6 months		12.39 (14.60)	11.50 (14.95)	12.55	.00	.30
	12 months		29.55 (14.00)	27.70 (16.76)	9.74	.00	.25
	24 months		47.81 (14.96)	46.73 (18.21)	4.40	.02	.13
	Pretest	0.17 (0.38)	0.16 (0.37)	0.23 (0.43)	0.31	.73	
	Posttest	0.03 (0.18)	7.00 (1.83)	7.30 (2.60)	114.54	.00	.80
EC	6 months		9.81 (1.51)	9.13 (1.99)	7.90	.00	.21
	12 months		11.68 (0.47)	11.27 (1.28)	1.46	.24	.50
	24 months		11.81 (0.40)	11.73 (0.45)	1.21	.30	.04

Note. 1Follow-up measurements obtained at 6, 12, and 24 months, *n = 30, **n = 31, ***n = 30.

SPAI- SP: The Social Phobia and Anxiety Inventory- Social Phobia Subscale. PRCS: Personal Report of Confidence as Speaker. NFASS: Number of Feared/Avoided Social Situations. MS: Maladjustment Scale. RAS: Rathus Assertive Scale. EC= Eye contact. ES = Effect Size.

Results

There were no significant gender differences in any variables or in participants' expectations of treatment outcome.

Table 2 shows the means and standard deviations for each group and variable at each of the evaluation times, as well as the results from the pretest ANOVA, the posttest ANCOVA, the 6-, 12-, and 24-month follow-ups, statistical significance, and effect sizes.

No pretest differences were observed in the PRCS or EC ($p < .5$). However, differences were observed for the remaining variables.

The SET group had higher pretest scores than the CBGT group, although the differences were not statistically significant in all cases. However, because of these differences, the pretest score was used as a covariate when assessing group differences (see Table 2).

Comparison of the posttest outcomes reveals that both treatment groups improved significantly in comparison to the WLCG (see Table 2). However, there were no differences between the treatment groups, with the exception of the NFASS ($p < .02$) and MS ($p < .001$) variables. The ESs (Cohen, 1998) were large for four of the measurements (PRCS, NFASS, MS, and RAS), and moderate for two of the measurements (SPAI-SP and EC).

In the comparisons between the SET and CBGT groups, statistically significant differences were observed for all of the follow-up measurements. In the case of EC, differences were apparent only at the 6-month follow-up, with no differences at 12 and 24 months. The following ESs were observed small or very small: (a) the effect size of SPAI-SP was small ($d < .02$); (b) the between-group effect sizes were small for the PRCS and the MS, as well as for the 6- and 12-month follow-ups of the NFASS, and the RAS; and (c) the effect size of EC was small at the 6-month follow-up and even smaller at the 12- and 24-month follow-ups ($d < .02$).

Table 3. *Intragroup Comparisons*

	SET (n = 31)			CBGT (n = 30)		
	F	***p***	**ES**	***F***	***p***	**ES**
SPAI- SP	302.15	.00	0.91	128.82	.00	.82
PRCS	463.87	.00	0.94	321.45	.00	.92
NFASS	433.10	.00	0.94	239.21	.00	.89
MS	317.90	.00	0.91	184.92	.00	.86
RAS	458.48	.00	0.94	374.02	.00	.93
EC	756.87	.00	0.96	325.71	.00	.92

Note. SPAI- SP: The Social Phobia and Anxiety Inventory- Social Phobia Subscale. PRCS: Personal Report of Confidence as Speaker. NFASS: Number of Feared/Avoided Social Situations. MS: Maladjustment Scale. RAS: Rathus Assertive Scale. EC = Eye contact. ES = Effect Size.

As shown in Table 3, all intragroup comparisons (pretest-posttest) of the treatment groups (SET and CBGT) presented a high effect size for all the studied dependent variables.

Clinical significance of the outcome was assessed by examining the percentage of participants in each group that no longer met diagnostic criteria for SP. The degree of remission observed in the participants fell within the following ranges: 99.99-75%, 74.99-50%, and 49.99-0%. Focusing on complete posttest remission, we observed significant differences between the two treatment groups and the WLCG ($p \leq .05$), with improvements ranging between 29 and 27% in the treated participants versus 0% in the WLCG.

Table 4. *The Progression of the Number of Feared/Avoided Social Situations*

		Remission			
	GROUP	Complete (100%)	99.99-75%	74.99-50%	49.99-0%
Post-test	SET	9 (29%)	9 (29%)	13 (42%)	0
	CBGT	8 (27%)	9 (30%)	13 (43%)	0
	WLCG	0	0	0	2 (7%)
Follow-up at 6 months	SET	24 (77%)	7 (23%)	0	0
	CBGT	22 (73%)	8 (27%)	0	0
Follow-up at 12 months	SET	31 (100%)	0	0	0
	CBGT	26 (87%)	4 (13%)	0	0
Follow-up at 24 months	SET	31 (100%)	0	0	0
	CBGT	28 (93%)	2 (7%)	0	0

Note. SET: The Social Effectiveness Therapy. CBGT: Cognitive Behavioral Group Therapy. WLCG: Waiting-list control group.

The improvement observed in the members of both treatment groups increased at 6 months (77 and 73% for SET and CBGT, respectively) and at 12 months (100 and 87% for SET and CBGT, respectively). At 24 months, the improvements observed in the SET group were maintained, while an increase of up to 93% was observed in the CBGT group.

Discussion

Regarding our first hypothesis, the results show that in the pretest-posttest comparisons, when CBT is applied in a community context, it achieves high ESs in the between-group comparisons in five of the variables studied, and medium ES's in the other variables (see Table 2), whereas in the studies conducted by Hofmann and Smits (2008), the ESs ranged between .62 and .80. In the study by Acarturk et al. (2009), the mean effect size of social anxiety measures was .70, whereas in our study, they were all over .90 for the SET group, and, in the CBGT group, three ESs were over .90, despite being the most severe condition of SP (see Table 3).

Likewise, in the SET and CBGT groups of our study when treatment was applied in the community setting and in the framework of a detection process, there was no experimental attrition (withdrawals), as commonly occurs in clinical practice (Bados, et al., 2007; Taylor et al., 2012) despite involving adults who voluntarily seek treatment. Whereas between 30 and 50% of adult patients with SP who receive treatment show little to no improvement (Hofmann & Bögels, 2006), the treatment outcomes provided in the format proposed by this study showed that nearly all of the participants assigned to the two treatments no longer met diagnostic criteria at the 24-month follow-up (see Table 4). Among other reasons, these results could be explained as a consequence of the reduction/elimination of some barriers that may be involved in seeking help, irregular attendance of training sessions, and withdrawals (McAleavey et al., 2014; Taylor et al., 2012).

In line with the observations of Olfson, Guardino, Struening, Schneier, Hellman, and Klein, (2000), these results indicate that treatment access may be improved easing the psychological and financial burden of entering treatment, which can help to significantly improve the results of psychological intervention. Furthermore, our evidence suggests that current results of psychological intervention with adults in SP may improve considerably if detection and intervention is applied at the community level wherever possible. This should be a part of the public mental health policy to address its high prevalence (Kessler & Üstun, 2008), the important negative consequences for personal development, interpersonal relationships, and academic performance (Gültekin & Dereboy, 2011), the deterioration of work performance (Waghorn et al., 2005), and the high financial costs for healthcare systems (Acarturk et al., 2009).

We also expected that including individual attention and follow-up in SET would lead to greater participant benefits compared to CBGT. This assumption was also confirmed but not sufficiently to demonstrate the net superiority of one treatment over the other; the ESs are either small or irrelevant. The data of clinical significance are consistent with those of statistical significance (see Table 4).

Therefore, in light of the data obtained, we conclude that both treatment modalities appear to be efficient for the treatment of GSP in a Spanish population of young adults. Additionally, SET was shown to be more efficient in

absolute—but not relative—terms because CBGT achieved excellent results without exceeding the 40 hours of individual attention used in SET and without lengthening the fading phase of the treatment during four sessions (scheduled practice). These two results could explain the differences observed, statistically and clinically, as was expected. Similarly, the absence of major differences in the results between the treatments could be largely due to the fact that their components have common therapeutic elements, as they are both cognitive-behavioral treatments.

We must note that none of the participants reported receiving additional psychopharmacological or psychological treatment during the follow-up phase. However, these results could be affected by life circumstances leading to "relapses" and "setbacks" that can occur during a longer follow-up period. Moreover, this study must take into account that once treated with CBT, individuals with SP may be more vulnerable than the normal population, despite the confirmed increase of quality of life (Eng, Coles, Heimberg, & Safren, 2005).

The outcome of this investigation is consistent with the outcomes of other studies indicating that patients treated with cognitive-behavior therapy continue to show improvement at the follow-up phase (Mörtberg, Clark, & Bejerot, 2011). In addition the results obtained emphasize that CBT is very effective for the treatment of GSP. However, if the need to increase efficacy and effectiveness is considered, application of CBT in a strategic framework of detection and intervention in a community context (when its application is possible) seems to markedly improve both treatment modalities.

Limitations

This study has three limitations that should be considered in future investigations. First, the external validity of the study is limited to the college population of a particular region in Spain. Second, it should be noted that this study does not incorporate data regarding the social validity of the changes. Third, the characteristics of the sample may have contributed to increase adherence and thus explain part of the results, so that a replication is necessary using samples with different populations and characteristics.

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