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Efficacy of the trial-based thought record, a new cognitive therapy strategy designed to change core beliefs, in social phobia

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SUMMARY

What is known and Background: **Social anxiety disorder (SAD) often follows a chronic course and is associated with substantial impairment in functioning. Although results from clinical trials clearly establish evidence for efficacy of cognitive behavioural therapy in treating this disorder, up to 50% of patients with SAD show little or no improvement. Thus, new approaches that have promised in improving the efficacy of treatment for SAD are needed. One such approach is the trial-based thought record (TBTR), which targets the restructuring of patients' core beliefs.**

Objective: **To determine whether patients receiving TBTR would report fewer symptoms of social anxiety and general psychiatric distress following treatment, relative to conventional cognitive therapy (CCT).**

Methods: **A two-arm randomized trial comparing TBTR (n = 17) with a set of CCT techniques (n = 19), which included the standard seven-column dysfunctional thought record and the positive data log in SAD patients according to DSM-IV.**

Results: **Scores on many outcome measures decreased significantly across the course of treatment in both groups ($P < 0{\cdot}001$), including the Liebowitz Social Anxiety Scale, Fear of Negative Evaluation Scale (FNE), Social Avoidance and Distress Scale (SADS), Beck Anxiety Inventory, and Clinical Global Impression – Improvement. In addition, a one-way ancova, taking baseline values as covariates, showed that TBTR was significantly more efficacious than CCT in reducing the scores of FNE ($P = 0{\cdot}01$ at mid-treatment and $P = 0{\cdot}004$ at post-treatment), and SADS ($P = 0{\cdot}03$ at post-treatment).**

What is new and Conclusion: **This study provides preliminary evidence that TBTR is at least as efficacious as CCT in reducing symptoms of SAD, pointing to the need for additional studies of TBTR in SAD and other psychiatric disorders.**

WHAT IS KNOWN AND OBJECTIVE

Social anxiety disorder (SAD), the most common anxiety disorder, often follows a chronic course and is associated with substantial impairment in functioning. Over the past two decades, much effort has been devoted to developing cognitive behavioural approaches to treat this condition. Although results from clinical trials clearly establish evidence for cognitive behavioural therapy's (CBT) efficacy[1] (for a comprehensive meta-analysis), in many instances, 40–50% of patients with SAD show little or no improvement.[2] Recently, scholars have refined cognitive behavioural treatments to target, more specifically, cognitive processes believed to maintain and exacerbate symptomatology.[3,4] Results from these investigations suggest that these targeted protocols result in greater reductions in self-reported social anxiety than earlier cognitive behavioural protocols. Despite these gains, scholars have called for continued investigation into targeted cognitive behavioural strategies to maximize the efficacy of treatment and eliminating strategies that prove to be unnecessary.[5]

One approach that has the promise to be fruitful in the cognitive behavioural treatment of SAD is the modification of core beliefs. Core beliefs are global, rigid and fundamental beliefs that people have about themselves, the world and/or the future.[6] Core beliefs influence the types of cognitions that people experience in specific situations. For example, a person with the core belief, 'I am incompetent', will likely predict that he will be unable to function adequately during a job interview. A person with the core belief, 'I am unlikable', will likely predict that others will not be interested in what she has to say at a social gathering. As a result, both of these people would likely experience a great deal of social anxiety. Although patients receiving CBT usually report significant improvement after developing strategies to modify unhelpful situational cognitions, cognitive theory and clinical experience suggest that the greatest amount of change is usually observed when unhelpful core beliefs are identified and modified.[7]

Recently, a novel cognitive behavioural approach to address unhelpful core beliefs has been developed, called the trial-based thought record (TBTR),[8,9] which is part of a broader approach, trial-based cognitive therapy (TBCT).[10,11] This approach uses a judicial process as a metaphor, in which the therapist engages the patient in a simulation of a trial. By means of TBTR, patients re-activate unhelpful core beliefs and associated negative emotions and reduce their effect with disconfirmatory evidence. The repeated use of TBTR has the potential to result in deactivation of unhelpful core beliefs, modifying their structure and content. The ultimate outcome of the TBTR approach is the neutralization of unhelpful core beliefs as more credible evidence in support of helpful core beliefs is incorporated. TBTR includes several strategies already used in cognitive therapy (CT), labelled with courtroom nomenclature, including the *inquiry*

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(downward arrow technique[12,13]), *prosecutor's plea* (evidence supporting the core belief[14]), *defense attorney's plea* (evidence not supporting the core belief[14]), *prosecutor's response to the defendant's plea* (point-counter-point by discounting the evidence[15]), *defense attorney's response to the prosecutor's plea* (sentence reversal[16]), *juror's verdict* (debriefing and upward arrow technique[13,17]) and *preparation for the appeal* [positive data log (PDL)[6,18]].

It is possible that TBTR is a cognitive behavioural approach that could improve the efficacy of CBT for SAD, as it focuses on the deepest level of cognition (i.e. core beliefs) that is theorized to drive the expression of socially anxious symptoms. Our objective was to compare TBTR[8,9] with conventional cognitive therapy (CCT) in patients who met DSM-IV criteria for generalized SAD.[19] Specific strategies implemented by therapists in CCT included the seven-column dysfunctional thought record (DTR)[14] and the PDL.[6,18] These two strategies were used in the CCT condition because they mirrored the tools used in TBTR. Specifically, TBTR is, in itself, a thought record that is modified to reflect the courtroom nomenclature. Moreover, the therapeutic work that takes place during the 'preparation for the appeal' is similar to the activity that is performed using the PDL, in that both tools require patients to record evidence that supports a new, more adaptive core belief. In other words, many of the therapeutic activities that take place in session are similar between the two conditions, but TBTR packages these tools in a conceptual framework that is designed to be particularly compelling, engaging and generalizable.

The purpose of this study was to assess the differential efficacy of TBTR and CCT in the treatment of social phobia. It was hypothesized that patients receiving TBTR would report decreased symptoms of social anxiety and psychiatric distress following treatment to at least the same degree as patients receiving CCT. Such a finding would suggest that TBTR is another targeted cognitive behavioural approach that has promise in improving the efficacy of treatment for SAD.

MATERIAL AND METHODS

Design

This is a two-arm clinical trial comparing TBTR with a set of CCT techniques, which included the standard seven-column DTR, as proposed by Greenberger and Padesky,[14] and the PDL, as demonstrated by Tompkins *et al*.[18] Concealment of random allocation was provided by an independent person not participating in the treatment protocol. Treatment was provided by five well-trained cognitive therapists (see description below), who followed a therapist manual for both TBTR and CCT. Because the purpose of this study was to assess the role of belief change on SAD symptoms, exposure was not actively encouraged.

Participants

Participants were recruited by means of advertisements in local newspapers and interviews by the first author in local radios and televisions about social anxiety. People who met DSM-IV[19] criteria for generalized SAD were included in the study. All patients were assessed at an anxiety disorders clinic in a university teaching hospital. The Ethics Committee at the University Hospital Professor Edgard Santos of Federal University of Bahia approved the study.

Participants who signed the informed consent form were assessed using the Mini International Neuropsychiatric Interview (MINI), a short structured diagnostic interview developed by psychiatrists and clinicians in the United States and Europe to determine DSM-IV and ICD-10 psychiatric disorders with an administration time of approximately 15 min.[20] The Brazilian version of the MINI showed satisfactory psychometric properties, with $\kappa > 0{\cdot}50$, sensitivity $> 0{\cdot}70$ and specificity $> 0{\cdot}70$).[21] This interview was conducted by three interviewers (MC, AG and ROM) who had extensive experience in using it in previous studies by our group.[22] To be included in the study, participants met the following criteria: fulfil DSM-IV criteria for SAD, generalized type; be of age 18–70; be able to read and write; and be able to understand and sign the informed consent. Exclusion criteria included major comorbid Axis I psychiatric disorders (e.g. major depression, schizophrenia and bipolar disorder), alcohol or substance use/abuse in the past 6 months; suicide risk; inability to read and write; and presently being in psychotherapy. Use of psychotropic medications was accepted if used in stable doses in the past month.

Participants' characteristics are presented in Table 1.

Treatment protocol

Treatment comprised 12 one-hour individual sessions of either TBTR (experimental group) or CCT (contrast group) during 10 weeks and every 2 weeks during the last 4 weeks (4-month duration). Sessions 1–5 in both treatment conditions consisted of psychoeducation concerning the cognitive model and cognitive

Table 1. Patients demographic characteristics

Variable[a]	TBTR (n = 17)	CCT (n = 19)
Gender		
Women, n (%)	12 (70·6)	15 (78·9)
Age		
Mean (SD)	33·9 (9·9)	34·9 (13·4)
Range	19·0–56·0	19·0–68·0
Education, n (%)		
1st degree (8 years)	2 (11·8)	0 (0·0)
2nd degree (3 years)	9 (52·9)	12 (63·2)
College/university	6 (35·3)	7 (36·8)
Marital status, n (%)		
Married/living together	5 (29·4)	7 (36·8)
Divorced/widowed	2 (11·8)	2 (10·5)
Single	10 (58·8)	10 (52·6)
Ethnic status, n (%)		
White	6 (35·3)	8 (42·1)
Black	3 (17·6)	1 (5·3)
Mixed	8 (47·1)	10 (52·6)
Monthly family income[b]		
Mean (SD)	2286 (3714)	2036 (1711)
Employment/occupation		
Employed	8 (47·1)	7 (36·8)
Student	3 (17·6)	7 (36·8)
Homemaker	3 (17·6)	1 (2·8)
Sick-leave/Retired/Unemployed	3 (5·9)	4 (2·8)
Concurrent medication, n (%)	1 (5·9)	2 (10·5)

[a]No significant differences were found in any of the above variables.
[b]US$ equivalence to local currency (Brazilian 'real') in 4 October 2010: US$ 1·00 = R$ 1·67.

errors and completion of the conceptualization diagram.[6] From session 6 forward, both treatments focused on restructuring core beliefs by means of, respectively, the TBTR and CCT. TBTR differed from the contrast group in that, besides simulating a judicial trial, patients were actively encouraged to discount the positives after they gathered the evidence not supporting the unhelpful core belief and then, by means of the sentence-reversal approach,[17] were engaged in a second round searching for the evidence that supported the helpful core beliefs. This second round was not part of the conventional approach. TBTR also differed from the conventional approach in that the new core beliefs were uncovered by means of the 'upward arrow technique'.[13,17]

Therapists

Therapists were psychologists who had attended a two-year cognitive therapy specialization course organized by two of us (IRO and VBP). They were invited to participate because they were among those who had the best performance during their training. This course included 384 h of theoretical information, 60 h of clinical work with patients and 86 h of supervision. Also, knowledge and competence was assessed in a total of 23 monthly written exams. In addition to being certified by this specialization course, all therapists had at least 1 year of experience in private practice as certified cognitive therapists at the time of this clinical trial start-up. All the therapists had their training in the same group in the course; thus, therapists in both arms (i.e. TBCT and CCT) had equivalent experience and expertise.

Assessment

All measures completed by participants were self-report in nature, except the Clinical Global Impression – Improvement (CGI-I),[23] which is an observer-rated measure. The Liebowitz Social Anxiety Scale (LSAS)[24] and Beck Anxiety Inventory (BAI)[25] were assessed weekly during treatment and again at 12-month follow-up. The CGI-I was also assessed weekly and at post-treatment, but not at follow-up. The Fear of Negative Evaluation Scale (FNE)[26] and the Social Avoidance and Distress Scale (SADS)[26] were assessed at intake, mid-treatment, post-treatment and at 12-month follow-up assessments. The LSAS was the primary efficacy measure, and the remaining assessments were regarded as secondary efficacy measures.

Statistical analyses

All patients who provided at least one post-initial intervention assessment (sixth session onwards for LSAS and seventh session

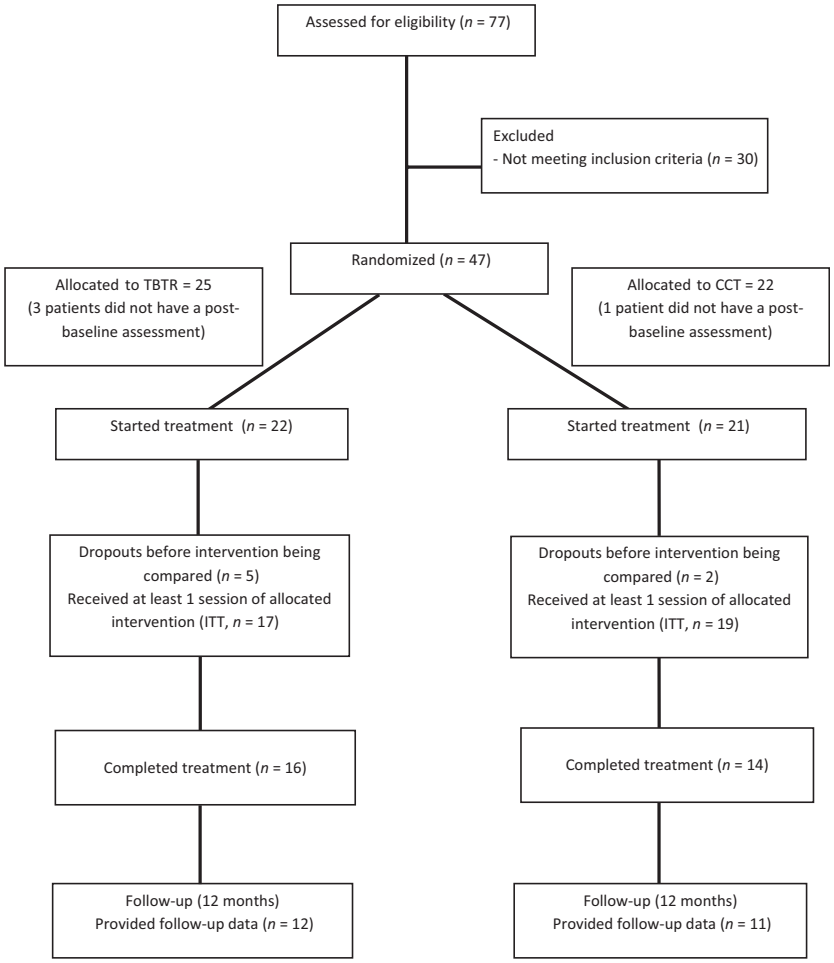

Fig. 1. Flow diagram of participants' progress through the phases of this randomized trial.

onwards for FNE and SADS) were included in the analyses with last observed data carried forward (LOCF). Data collected at intake (baseline), mid-treatment (7 weeks), post-treatment (4 months) and follow-up (12 months) were used for statistical analyses.

We used *t*-tests and chi-squared tests to identify differences between the groups in demographic and clinical variables. A mixed ANOVA was used to evaluate the effectiveness of the interventions during treatment and 12-month follow-up period, the number of evaluations being computed as within-subject factor (time) and treatment modality as a between-subject factor (group). The following assumptions were tested: independence of observations, normality and sphericity. When sphericity was violated, the degrees of freedom (d.f.) were adjusted using the Greenhouse-Greisser corrected values, a conservative approach to deal with multiple comparisons.[27] To assess any differences between groups at baseline, we used one-way analyses of variance (ANOVAS). Then, we used one-way analyses of covariance (ANCOVAS) with baseline scores as covariates. Level of significance was set at 0·05. All analyses were conducted with SPSS 13.0 software. Within-subjects Cohen's *d* effect sizes (ES) were also calculated.[28]

RESULTS

Of the 77 patients who provided informed consent and completed initial assessment (Fig. 1), 30 did not meet inclusion criteria. Therefore, 47 patients were randomized to the treatment groups – 25 were allocated to TBTR and 22 were allocated to CCT. However, four participants (three in the TBTR group and one in the CCT group) withdrew from the study before treatment. Of the 43 participants who started treatment, 13 (30%) terminated prematurely: two (one in the TBTR group and one in the CCT group) attended ≤25% of sessions, seven (five in the TBTR group and two in the CCT group) attended ≤50% of sessions, 10 (six in the TBTR group and four in the CCT group) attended ≤75% of sessions and 13 (six in the TBTR group and seven in the CCT group) attended ≤92% of sessions. Therefore, of the 43 patients who started treatment, the seven patients in both groups who attended ≤50% dropped out before strategies specific to the interventions being compared were offered (i.e. after session 5). These patients were not included in the LOCF analyses. The final number of patients included in the analyses involved 17 patients in the TBTR group and 19 patients in the CCT group. Thirty patients (70%) of those who started treatment (16 or 73% in the TBTR group, and 14 or 67% in the CCT group) completed treatment, meaning that they attended all 12 sessions.

Table 1 displays demographic variables, and Table 2 displays assessments scores as a function of group. There were no differences between groups in demographic variables or baseline scores on any of the assessments.

The mixed ANOVA, conducted to assess whether there were treatment and time differences in outcome measures, indicated a significant main effect of time in primary outcome [LSAS, $F(1{\cdot}84, 62{\cdot}69) = 27{\cdot}87$; $P < 0{\cdot}001$]. However, there was no main effect for treatment group, nor was there a significant treatment group by time interaction.

The mixed ANOVAS conducted to assess group differences in the secondary outcome measures yielded a different pattern of results. In addition to indicating a significant main effect of time [FNE, SADS, BAI, CGI-I, $Fs(2{\cdot}28, 77{\cdot}34) > 8{\cdot}95$; $P < 0{\cdot}001$], they also revealed a significant main effect for treatment group for the FNE [$F(1, 34) = 8{\cdot}16$; $P = 0{\cdot}01$]. A one-way ANCOVA showed that this effect was significant at mid-treatment [$F(1, 33) = 6{\cdot}73$; $P = 0{\cdot}01$], and at the post-treatment assessments [$F(1, 33) = 9{\cdot}81$; $P = 0{\cdot}004$], but not at 12-month follow-up. Although the mixed ANOVA did not show a main effect for treatment regarding SADS, the one-way ANCOVA also showed a significant treatment effect [$F(1, 33) = 5{\cdot}47$; $P = 0{\cdot}03$]. This pattern of results indicates that participants in the TBTR group scored lower on the FNE at mid-treatment and at post-treatment assessments than participants in the CCT group. There was no main effect for treatment group for scores on the SADS, the BAI and the CGI-I, nor a significant interaction (time × treatment effect) for any of the assessments.

Within-group ES (Cohen's *d*) – classified as small (0·20), medium (0·50), large (0·80), very large (1·10) and extremely large (≥1·40) – were calculated and are also presented in Table 2. The within-group ESs ranged between $d = 0{\cdot}81$ (CCT) and $d = 1{\cdot}09$ (TBTR) at the post-treatment and 12-month follow-up for the primary outcome measure (i.e. LSAS). For the secondary outcome measures, ESs were large to extremely large (*d*s between 0·98 and 1·56) for FNE, SADS and BAI in the TBTR group at post-treatment, and large ($d = 0{\cdot}85$) for SADS and BAI in the CCT group at post-treatment, but small for FNE ($d = 0{\cdot}24$) in this latter group at post-treatment. At the 12-month follow-up, ESs were medium ($d = 0{\cdot}62$) to very large ($d = 1{\cdot}10$) for FNE, SADS and BAI in the TBTR group, but medium (*d*s between 0·43 and 0·54) for the same measures in the CCT group.

DISCUSSION

TBTR is a novel cognitive behavioural approach to the treatment of SAD that is designed to identify and modify core beliefs in a structured format. Results from this study indicate that TBTR is at least as efficacious as CCT (i.e. DTR and PDL) in reducing scores on the LSAS, SADS, BAI and CGI-I, and more efficacious than CCT in reducing scores on the FNE. The latter finding is noteworthy, as more items on the FNE specifically assess cognition (e.g. worry about the opinions of others) relative to items on the other measures. Although both TBTR and CCT target-specific cognitions associated with social anxiety, it is possible that the conceptual framework used in TBTR resonates especially well with patients and facilitates the most pronounced cognitive change.

TBTR differed from the contrast group in that patients were actively stimulated to disqualify the evidence gathered by the defence attorney, and then, in a second round, by means of the upward arrow technique,[13] searching for the evidence supporting the helpful core beliefs. It is possible that this second round accounts for group differences in scores on the FNE, as it was not part of CCT, and it involves a detailed process of uncovering a helpful core belief by new meanings attributed to events gathered in TBTR.[8,9] Indeed, in a previous pilot study conducted in our service,[8] TBTR reduced mean percentage of credit in the negative core belief from 76·1% to 40·7 (first round), then to 26·8% (second round), in the same session. Thus, an additional round of the application of cognitive strategies has incremental utility in restructuring unhelpful core beliefs.

It is important to highlight that within-group ESs for scores on the FNE, SADS and BAI were 'very large' to 'extremely large' in the TBTR group post-treatment, whereas these ESs were only 'large' in the CCT group post-treatment. However, ESs were 'extremely large' for both approaches on the CGI-I

Table 2. Sample and group means, standard deviations, effect sizes and effects for primary and secondary outcomes measures (TBTR, n = 17; CCT, n = 19)

	Pretreatment		Mid-treatment		Post-treatment		Follow-up		ES	
Measures	Mean	SD	Mean	SD	Mean	SD	Mean	SD	(MT/PT/FU)	Mixed ANOVA
LSAS										
TBTR	86·82	28·83	77·12	33·55	55·65	33·02	53·88	31·39	0·31/1·01/1·09	F(1·84, 62·69) = 27·87[a]**
CCT	82·58	24·31	75·95	30·62	61·68	25·83	61·89	26·51	0·24/0·83/0·81	F(1·84, 62·69) = 1·33[b]
ANCOVA[c]	F(1, 34) = 0·23[d]	P = 0·64	F(1, 33) = 0·30	P = 0·59	F(1, 33) = 1·37	P = 0·25	F(1, 33) = 1·62	P = 0·21		F(1, 34) = 0·06[e]
FNE										
TBTR	23·76	5·87	21·76	6·51	17·41	7·08	19·41	7·99	0·32/0·98/0·62	F(2·28, 77·34) = 8·95[a]**
CCT	26·16	4·27	26·79	2·99	24·95	5·65	23·42	6·59	−0·17/0·24/0·49	F(2·28, 77·34) = 2·76[b]
ANCOVA[c]	F(1, 34) = 1·99[d]	P = 0·17	F(1, 33) = 6·73	P = **0·01**	F(1, 33) = 9·81	P = **0·004**	F(1, 33) = 1·27	P = 0·27		F(1, 34) = 8·16[e]*
SADS										
TBTR	21·88	6·32	18·29	7·86	12·18	8·44	15·12	8·84	0·50/1·30/0·88	F(2·38, 80·98) = 19·10[a]**
CCT	22·16	4·27	20·95	5·57	17·47	6·57	19·21	6·36	0·24/0·85/0·54	F(2·38, 80·98) = 2·31[b]
ANCOVA[c]	F(1, 34) = 0·02[d]	P = 0·88	F(1, 33) = 1·97	P = 0·17	F(1, 33) = 5·47	P = **0·03**	F(1, 33) = 2·84	P = 0·10		F(1, 34) = 2·54[e]
BAI										
TBTR	18·76	9·4	9·76	6·28	6·71	5·53	9·29	7·78	1·13/1·56/1·10	F(2·28, 77·57) = 22·93[a]**
CCT	21·21	12·53	12·05	10·81	11·11	11·19	16	11·71	0·78/0·85/0·43	F(2·28, 77·57) = 1·05[b]
ANCOVA[c]	F(1, 34) = 0·43[d]	P = 0·52	F(1, 33) = 0·20	P = 0·66	F(1, 33) = 1·78	P = 0·19	F(1, 33) = 3·49	P = 0·07		F(1, 34) = 2·03[e]
CGI-I										
TBTR	4·06	1·09	2·53	0·87	1·88	1·22	–	–	1·55/1·88/–	F(1·67, 56·65) = 42·79[a]**
CCT	4·1	1·15	2·84	0·9	2·26	1·1	–	–	1·22/1·63/–	F(1·67, 56·65) = 0·32[b]
ANCOVA[c]	F(1, 34) = 0·02[d]	P = 0·90	F(1, 33) = 1·09	P = 0·30	F(1, 33) = 0·94	P = 0·34	–	–		F(1, 34) = 1·02[e]

TBTR, trial-based thought record; CCT, conventional cognitive therapy; MT/PT/FU, mid-treatment/post-treatment/follow-up; LSAS, Liebowitz Social Anxiety Scale; FNE, Fear of Negative Evaluation Scale; SADS, Social Avoidance and Discomfort Scale; BAI, Beck Anxiety Scale; CGI-I, clinical global impression – improvement; ES, within-group effect size (Cohen's d) is computed by the formula $d = t_c[2(1 - r)/n]^{1/2}$, based on the mean change from pre- to mid-, to post-treatment and to 12-month follow-up; ANOVA, analysis of variance.

[a]Overall time effect.

[b]Interaction (time × treatment) effect.

[c]ANCOVA: one-way analysis of covariance taking pretreatment assessments as covariates.

[d]One-way analysis of variance (ANOVA).

[e]Treatment (group) effect.

*$P \leq 0{\cdot}01$; **$P \leq 0{\cdot}001$.

Bold values indicate statistically significant P-values.

scores, $d = 1{\cdot}88$ and $d = 1{\cdot}63$ in the TBTR and CCT groups, respectively, at post-treatment. The 'large' to 'extremely large' within-group ESs that we obtained for the TBTR condition compare favourably with the effects demonstrated in the meta-analysis of 35 studies by Acarturk *et al*.,[1] who reported pre–post treatment $d = 0{\cdot}86$ on social anxiety measures for traditional CBT, social skills training, relaxation and/or exposure compared with waiting-list controls. In fact, they approach the ones for another targeted CT protocol reported by Clark *et al*.[3] ($d = 1{\cdot}35$ to $d = 1{\cdot}79$). Comparisons between clinical trials should be taken with caution because of differences in selection criteria, patient demographics and measurement approaches. Nevertheless, these findings raise the possibility that TBTR has the potential to be another targeted cognitive behavioural approach that will increase the efficacy of treatment of SAD.

Results from this study must be interpreted in the light of its many limitations. Clearly, results must be regarded as preliminary because of the small number of patients enrolled in the trial. In addition, because patients were recruited by means of advertisements and interviews in local radios and televisions, this sample may not be representative of the treatment-seeking SAD population. A third limitation raising questions about the representativeness of this clinical sample is the preponderance of female patients (75%) relative to male patients. Although the reason for this observation is not clear, we tend to consider this as a characteristic of clinical samples in our local culture, where women seem to search more for mental health care than man. For example, in a previous study conducted by our group on comorbid anxiety and depression disorders in 400 patients with chronic pain,[22] 82·8% were women and only 17·2% were men. On the other hand, all enrolled participants fulfilled DSM-IV criteria for generalized SAD, so their social anxiety was causing clinically significant life interference and/or substantial distress in their lives. A fourth limitation is the possibility that patients received the same intervention in the initial phase of the study (i.e. first five sessions), so the short duration of the comparison period (weeks 6–12) might not have allowed enough time for significant differences to appear be detected on the primary outcome variable. Nevertheless, this short duration allowed for some significant differences to emerge on secondary outcome measures. Finally, we did not include a method to calculate responder status, and results were based on patients' self-reports. The only observer-rated assessment (CGI-I) was not assessed by an independent and blind observer.

WHAT IS NEW AND CONCLUSION

The preliminary, but promising, results of this small study suggest that TBTR is at least as efficacious as a CCT approach in reducing social anxiety and that it may be particularly efficacious in reducing fear of negative evaluation. These results suggest that it would be fruitful to investigate the efficacy of TBTR,[8,9] as well as the broader approach, TBCT,[10,11] in a larger sample of patients with SAD, as well as in patients with other psychiatric disorders characterized by unhelpful core beliefs.

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