Does prior psychotherapy experience affect the course of cognitive-behavioural group therapy for social anxiety disorder?

Delsignore, A
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Abstract

OBJECTIVE: To examine whether and how different patterns of psychotherapy history (no prior therapy, successful therapy experience, and unsuccessful therapy experience) affect the outcome of future treatment among patients undergoing cognitive-behavioural group therapy for social anxiety disorder. METHOD: Fifty-seven patients with varying histories of psychotherapy participating in cognitive-behavioural group treatment for social anxiety disorder were included in the study. Symptom severity (including anxiety, depression, self-efficacy, and global symptom severity) was assessed at pre- and posttreatment. A therapist-rated measure of patient therapy engagement was included as a process variable. RESULTS: First-time therapy patients showed more favourable pretreatment variables and achieved greater benefit from group therapy. Among patients with unsuccessful therapy experience, substantial gains were attained by those who were able to actively engage in the therapy process. Patients rating previous therapies as successful could benefit the least and tended to stagnate. Possible explanations for group differences and clinical implications are discussed. CONCLUSIONS: Prior psychotherapy experience affects the course of cognitive-behavioural group therapy in patients with social phobias. While patients with negative therapy experience may need extensive support in being and remaining actively engaged, those rating previous therapies as successful should be assessed very carefully and may benefit from a major focus on relational aspects.
Does prior psychotherapy experience affect the course of cognitive-behavioural group therapy for social anxiety disorder?

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**Objective:** To examine whether and how different patterns of psychotherapy history (no prior therapy, successful therapy experience, unsuccessful therapy experience) affect outcome of future treatment among patients undergoing cognitive-behavioural group therapy for social anxiety disorder.

**Method:** Fifty-seven patients with varying histories of psychotherapy participating in cognitive-behavioural group treatment for social anxiety disorder were included in the study. Symptom severity (including anxiety, depression, self-efficacy and global symptom severity) was assessed at pre- and post-treatment. A therapist-rated measure of patient therapy engagement was included as a process variable.

**Results:** First-time therapy patients showed more favourable pre-treatment variables and achieved greater benefit from group therapy. Among patients with unsuccessful therapy experience, substantial gains were attained by those who were able to actively engage in the therapy process. Patients rating previous therapies as successful could benefit the least and tended to stagnate. Possible explanations for group differences and clinical implications are discussed.

**Conclusions:** Prior psychotherapy experience affects the course of cognitive-behavioural group therapy in social phobic patients. While patients with negative therapy experience may need extensive support in being and remaining actively engaged, those rating previous therapies as successful should be assessed very carefully and may benefit from a major focus on relational aspects.
Clinical implications

- Differentiating between patients with successful and unsuccessful psychotherapy histories can be of crucial importance for clinicians.
- Patients with prior unsuccessful therapy experience can achieve satisfying gains but need to be supported in their efforts to actively engage in therapy.
- Not only unsuccessful therapies, but also successful treatments in the past should be discussed before starting a new psychotherapy. In particular, clinicians should explore the reasons why patients rate prior therapies as successful, why they seek a new treatment and what they expect from future therapy.

Limitations

- The study sample did not include patients deciding not to start a new therapy.
- The findings on patients rating prior therapies as successful may be accentuated in the study sample (social anxiety disorder) compared to the rest of psychiatric patients.
- Generalization to other diagnostic groups, therapeutic orientations and therapy settings needs to be confirmed by future studies.
**Key Words:** psychotherapy history, psychotherapy experience, prior psychotherapy, therapy success, cognitive-behavioural therapy, group therapy, social anxiety disorder, social phobia
An important portion of psychotherapy patients has a prior history of inpatient or outpatient treatment. Substance abusers for instance often undertake more than one treatment attempt. Among patients suffering from eating disorders, repeated psychotherapy experiences are more often a rule than an exception\(^1\).

Psychotherapy history, together with a diagnosis of obsessive-compulsive disorder, predicted high-intensive use of mental health services among anxious patients\(^2\). Comorbidity and concomitant personality disorders are known as factors related to more extensive histories of psychiatric treatment\(^3\). Furthermore, previous psychotherapy experience can affect attitudes towards future treatments. In a sample of depressed elderly patients, the degree of satisfaction with prior psychotherapy was associated with current preference for psychotherapy over pharmacological treatment\(^4\). Among anxiety disorders patients, those with psychotherapy history in the past 5 years rated pharmacological treatment (but not psychotherapy) as more credible compared to patients without recent psychotherapy history\(^5\). Similarly, a positive effect of treatment history was found among parents of anxious children in regards to medication treatment but not in regards to cognitive-behavioural therapy\(^6\).

Empirical data available up to date does not allow for a firm conclusion on whether and how prior psychotherapy experience affects the course of future treatments. In a sample of 148 female sexual abuse survivors undergoing group therapy, those with previous psychotherapy experience achieved greater pre-post-
treatment changes on the SCL-90\textsuperscript{7}. Similar findings are reported for long-term group therapy, where dropouts were more likely to have no previous experience of psychotherapy and more often had an axis II diagnosis than treatment completers\textsuperscript{8}. A recent study on several thousand patients receiving behavioural health treatment did not however confirm prior outpatient treatment history as a factor influencing outcome\textsuperscript{6}. Among anxiety disorders patients treated with cognitive-behavioural therapy, equivalent short- and long-term improvement was observed for those with or without therapy history in the last 5 years\textsuperscript{5}.

One possible explanation for the inconsistency of research literature on this matter is that, rather than prior psychotherapy itself, the degree of satisfaction with prior psychotherapy attempts may have a differential impact on the course of future treatments. One study provided positive results in this direction: substance abuse patients with successful treatment histories showed improved cocaine abstention after a 14-weeks cognitive-behavioural therapy program and marginally better attendance than patients with negative psychotherapy experiences\textsuperscript{9}. Based on these findings, it might be worth differentiating between patients perceiving prior therapy as helpful and those rating it as unhelpful. A comparison of these two groups with the group of patients seeking treatment for the first time may lead to more consistent results in regards to whether the variable “therapy experience” affects the benefit of future treatments.
Moreover, the inclusion of process variables highlighting possible mechanisms through which patients with different experiences may achieve more or less favourable outcomes has been neglected in past studies. Findings on whether and how such variables predict psychotherapy outcome would have strong implications for clinical practice as they could assist therapists in detecting patients with less favourable pre-treatment conditions. This would allow the planning of additional interventions such as specific pre-treatment trainings. The main purpose of the present study was to examine the patterns of past psychotherapy experience in a sample of patients with social anxiety disorder and to analyze how this variable affects the course of cognitive-behavioral group therapy. Patients with previous history of psychiatric treatment (especially a negative one) were expected to have more severe initial symptomatology than first-time therapy patients. The second hypothesis was that patients with negative psychotherapy experiences in the past would reach poorer outcomes compared to patients who rated previous treatments as effective and to those without psychotherapy experience. Finally, the differential effect of prior psychotherapy history on actual outcome as a function of the process variable therapy engagement was explored.
Method

Sample

Study subjects were 57 consecutive outpatients (49% women) undergoing cognitive-behavioural group treatment for social anxiety disorder. All participants met DSM-IV criteria for social phobia and had Liebowitz Social Anxiety Scale (LSAS) intake scores within the social phobia range (M = 69, SD 26, 10). The average age was 35 years (SD 11). A minority of patients (n = 11, 19%) had no previous psychotherapy experience; 61% (n = 28) of those who had been in therapy before rated previous treatment as helpful and 49% (n= 18) as not helpful. About half of the patients (n = 29, 51%) sought group therapy on own initiative; 21 patients (37%) were referred by an external psychotherapist and the rest was referred by a primary care physician (N = 5, 9%) or by a family member (n = 2, 3%).

Eight patients (14%) terminated group therapy prematurely after a mean of 2.1 sessions (SD 1.5). Post-treatment assessments were completed by 47 patients. In terms of pre-treatment variables, no significant differences were found between patients with missing data and those who completed all the assessments.
**Intervention**

Treatment consisted of 10 sessions of cognitive-behavioural group therapy for social anxiety disorder over a 3-month period (the first five sessions weekly, sessions 6 to 10 on alternating weeks). Sessions lasted 90 minutes and there were 6 to 8 participants in each group.

The multimodal manualized treatment was based on the approaches of Hope, Heimberg and Stravynski\(^ {11,12} \) as well as on the evaluation of previous group therapies\(^ {13,14} \) and is routinely held at our Anxiety Disorders Unit. The main components of the group treatment included 1) applying the cognitive-behavioural model for social anxiety disorder to typical situations experienced by the patients; 2) graded in-session exposures to feared social interactions (e.g. role playing of real situations, video feedback, shifting attention outward) as well as individualized exposures in real life and in vivo exposures in town; 3) addressing misconceptions of social situations and, based on new experiences, cognitive restructuring by identifying and challenging dysfunctional schemas (e.g. unrelenting standards or abandonment schemas); 4) developing personal strategies and identifying resources; 5) planning of realistic goals for the time after therapy; 6) relapse prevention.

Group therapy was delivered by three cognitive-behavioural therapists (two clinical psychologists and one psychiatrist), all of whom had extensive prior
experience with group therapy for anxiety disorders. Each group was led by two of the three therapists.

**Measures**

*Prior psychotherapy experience.* Patients were asked to answer the following two questions with yes or no: “Have you been in psychotherapy before?”; “If yes, was psychotherapy helpful to you?”.

*Anxiety.* The self-rating version of the Liebowitz Social Anxiety Scale (LSAS)\(^{10}\) was administered for assessing social anxiety and avoidance in typical social situations. The total score ranges from 0 to 144. General anxiety levels were measured with the Beck Anxiety Inventory BAI\(^{15}\).

*Self-efficacy.* The Generalized Self-Efficacy Scale\(^{16}\) was included as a global measure of patients’ belief that their actions are responsible for successful outcomes. The global score ranges from 10 to 40.

*Depression.* Depressive symptomatology was measured with the Beck Depression Inventory BDI\(^{17}\).

*Global symptom severity.* A short version of the Symptom-Checklist (SCL-K-9)\(^ {18}\) was included as a measure of global symptom severity. The SCL-K-9 is a 9-item scale with good psychometric properties showing a high correlation (r = .93) with the GSI-90. The global score ranges from 0 to 4.
Process variable “therapy engagement”. Patient engagement was assessed by the therapists on the two-item, seven-point Likert scale “effort” (range: -3 to +3) of the Bernese post-session Report (Regli D., Grawe K. The Bernese post-session report, a process and quality measure instrument). With the “effort” scale therapists are asked to rate patient engagement a) during the session und b) between the sessions (through the planning and evaluating of homework tasks therapists get quite a lot of information on how intensively and engaged each patient worked on his goals in real life). The internal consistency of the therapy engagement scale was Cronbach’s alpha = 0.89. Interrater reliability, based on 34 ratings provided by two of the therapists, was calculated with two-way mixed models for random people effects and fixed target effects. The intraclass correlation coefficients (ICC, consistency type) was ICC = .84 (95%-CI range = .62 to .94) at the fifth session and ICC = .78 (95%-CI = .50 to .91) at post-treatment.

Procedure
Patient eligibility for group therapy and for the study was evaluated by the therapists during two intake sessions. Besides confirming the diagnosis of social anxiety disorder (clinical interview according to DSM-IV criteria for social phobia and LSAS), assessing axis I and II comorbidity and evaluating the indication and motivation for group treatment, three specific therapy goals were
defined with each patient. The study was approved by the institutional review board (Zurich/Switzerland, Psychiatry board) and all participants provided written informed consent.

Patients and therapists completed the assessment measures during the intake and after session 10 (post-treatment). Patient engagement (effort) was rated at session 5 and 10, the individual mean score of the two assessment points was used for analyses.

**Statistical analyses**

Group comparisons were examined with t-tests, univariate analyses of variance and $X^2$ tests. In order to test the contribution of pre-treatment variables (comorbidity, self-referral, medication) on therapy outcome, each outcome measure was regressed on each pre-treatment variable. Based on these findings, the effect of pre-treatment variables was then controlled in later analyses where necessary. General linear models for repeated measures were used to compare outcome between groups (no psychotherapy experience, prior successful therapy, prior unsuccessful therapy). Since the main focus of this study was to compare therapy progress between groups, only group x time interaction effects are reported in the results section.

The predictive ability of the process variable “therapy engagement” on outcome was first explored with a series of regression analyses using a residualized
outcome score as the dependent variable. In order to be able to perform analyses with the whole sample, therapy history was recoded in two dummy variables (success and no success), where patients without therapy history served as the reference group. In the regression analyses, after controlling for the baseline score, therapy history (success and no success) and therapy engagement were entered separately or together.

The impact of therapy engagement in relation to the five outcome measures was then tested in an additional set of hierarchical regression analyses for each group (no therapy experience, prior successful therapy, prior unsuccessful therapy) and for the whole sample as well. To control for patient’s pre-treatment level of distress, the initial score on each outcome measure being tested was entered in step 1 of the analyses (together with baseline depression levels where necessary). The process variable “therapy engagement” was then added in the second step. All significance tests were 2-tailed. Data were analyzed with SPSS 12.0.1 for Windows.
Results

Pre-treatment variables

A global comparison between patients with and without psychotherapy history showed that the first group was more depressed (BDI: M = 19.0, SD 10.3 vs. M = 11.7, SD 3.8; t = -3.87, df = 54; P < 0.001) and more often prescribed psychotropic medication (58% vs. 25%; \( \chi^2 = 4.07, \) df = 1, \( P < 0.05 \)). On some measures, a general trend towards more severe baseline symptoms was found among patients with prior therapy experience (especially when this was rated as unsuccessful) and is shown in Table 1. However, differences between the three groups did not reach statistical significance on any of the symptom measures.

Significant group differences were found with respect to comorbidity, where psychotherapy history was more often associated with the presence of comorbid diagnoses. Also, self-referral rates were higher among patients seeking therapy for the first time and lowest among patients with unsuccessful psychotherapy history.

Possible effects of pre-treatment variables on outcome were tested by regressing each outcome measure on each pre-treatment variable. After controlling for pre-treatment scores, the variables comorbidity, axis II comorbidity, self-referral and medication were not found to be associated with any of the outcome measures. The only exception was found for baseline depression scores, which predicted post-treatment LSAS (\( R^2 \) change = 0.05; F change = 4.7, \( P < 0.05 \)), SCL-K-9 (\( R^2 \)
change = 0.09; F change = 9.5, \( P < 0.01 \) and SE scores (\( R^2 \) change = 0.12; F change = 9.9, \( P < 0.01 \)).

**Dropouts**

Dropouts were evenly distributed among the three groups (\( X^2 = 0.23, df = 2, P > 0.05 \)), showing that therapy history did not differentiate dropouts from completers.

**Post-treatment outcome**

Univariate analyses of variance revealed significant group x time effects for anxiety (BAI: \( F[2, 44] = 3.89, P < 0.05, \eta^2 = 0.15 \)) and depression (BDI: \( F[2, 44] = 3.80, P < 0.05, \eta^2 = 0.15 \)). After controlling for initial depression levels, group x time effects were also confirmed for global symptom severity (SCL-K-9: \( F[2, 43] = 4.18, P < 0.05, \eta^2 = 0.16 \)). As shown in Figure 1, patients with prior history of successful psychotherapy tended to improve the least (stagnation), while patients with negative psychotherapy experience were able to achieve substantial benefits. No significant group x time effects were found for the dependent variables social anxiety (LSAS) and self-efficacy (SE).

**Outcome predictors**

Further analyses were carried out to test the predictive ability of pre-treatment symptom severity, therapy history and the process variable “therapy engagement”.
A first series of regression analyses was performed with the whole sample by using a residualized post-treatment outcome score for the dependent variable. After controlling for the baseline score, therapy history (dummy variables success and no success) and therapy engagement were entered separately or together in the analyses. Results confirmed the predictive value of psychotherapy history ($R^2$ change = .09, $F\text{ change}[2, 41] = 6.5, P < 0.01$), therapy engagement ($R^2$ change = .07, $F\text{ change}[1, 42] = 9.1, P < 0.01$) and of the combination of the two ($R^2$ change = .13, $F\text{ change}[3, 40] = 7.0, P < 0.01$).

Separate regression analyses for each outcome measure indicated that pre-treatment scores were all strong outcome predictors of post-treatment outcome in the whole sample (Table 2). Interestingly, this relationship was found to reach significance among patients with previous (especially positive) therapy experience, while post-treatment symptom level among first-time therapy patients was not associated with initial symptom severity.

Patient therapy engagement (“effort”) significantly increased outcome prediction in the whole sample and among patients with unsuccessful psychotherapy history, explaining additionally for up to 37% (BDI) of the outcome variance in this subgroup.
**Discussion**

The main goal of this study was to examine how psychotherapy history affects short-term cognitive-behavioural group treatment and to explore whether patients with different psychotherapy experiences show different patterns in regards to how they benefit from group therapy.

The findings presented in the previous section, based on a sample of patients undergoing group cognitive-behavioural therapy for social anxiety disorder, support the main hypothesis that experience and satisfaction with previous psychotherapy influence the course of future treatment.

With lower baseline depression scores, less comorbidity and scarce use of psychotropic medication, patients seeking treatment for the first time in their life showed more favourable pre-treatment conditions than patients with repeated psychotherapy experiences. Furthermore, lower self-referral rates were observed among patients who rated prior therapy as unsuccessful compared to those with positive psychotherapy experience and to new patients. However, after controlling for pre-treatment confounding variables, patients with successful therapy history (and not those with unsuccessful therapy experience) were shown to be the ones achieving less favourable outcomes.

Pre-treatment symptom severity was confirmed to be a strong outcome predictor for patients with previous treatment history and especially for those with positive experience but not for patients seeking therapy for the first time. Therefore, more
severely symptomatic patients with successful psychotherapy history seem to be particularly at risk not to benefit from group therapy.

At a process level in addition to pre-treatment symptom severity, patient effort put into therapy was shown to predict outcome only in patients with unsuccessful therapy histories (Table 2): in this group, those who were able to actively work during and between sessions achieved the best results.

In summary, first-time therapy patients were shown to benefit most from group therapy and to be the least vulnerable subgroup in terms of risk factors. Their therapy success was not influenced by pre-treatment symptom severity, maybe suggesting a more neutral attitude towards therapy and a greater ability in letting the therapy process work. It is also possible that through the lower comorbidity rates and depression level this group of patients had more resources to invest in group therapy. Although no group difference was found in terms of self-efficacy at baseline, patients without therapy history were more often self-referred. This could reflect a greater ability in attributing (even small) progress to one’s own efforts, which would promote a sense of mastery and facilitate change.

As expected, patients with negative psychotherapy history had partially unfavourable starting conditions. However, results show that they could achieve substantial gains as long as they were able to actively engage and to remain engaged in the therapy process. This does not confirm the assumption that patients with negative psychotherapy experience in the past tend to benefit less from
future treatments. It is possible that these patients are disappointed from prior therapists and therefore feel more responsible for clinical improvement, but not all of them find a way of actively modify their situation. From a clinical point of view, the relevance of the process variable “therapy engagement” suggests that in this group of patients it might be particularly important to reinforce their initiative, to support possibilities to actively engage and to openly discuss reasons for not engaging.

Surprisingly, patients with successful therapy history were the ones benefiting the least from group therapy. As shown in Figure 1 in the results section, these patients seemed to stagnate or to progress very slowly. In contrast to other patients, their outcome was mostly influenced by initial symptom severity, while the process variable “therapy engagement” did not significantly affect clinical improvement. It is possible that for some of these patients with positive prior experience the current therapy proved to be a relative disappointment, translating into poorer outcome. The unexpected findings concerning first-time therapy patients also raise the questions of how successful their prior therapies were in actuality, and whether the subjectivity of the success ratings constituted a bias. The hypothesis can be made that some of these patients might have been driven by loyalty feelings towards their prior therapist and did not want to question his or her ability or efficacy; maybe preferring to blame themselves instead of their therapist or the therapy process. Another possibility is that some subjects may
have provided a socially desirable response to show that they are “good” or “acceptable” patients” to the current therapist. It may be the case that such tendencies are particularly accentuated among patients with social anxiety disorder, characterized by the effort to please or at least not to disappoint others, by dependence from other people’s opinions and by impaired self-efficacy. By putting their efforts into impression management, some patients might have tried to keep their rejection anxiety at a tolerable level. This assumption is consistent with the lack of predictive power of concrete engagement for clinical improvement in the subgroup of patients with positive psychotherapy history, possibly reflecting a stronger need for a trustful therapeutic relationship rather than a need for mastery like in the group of patients with negative experiences. Additional process variables including therapeutic alliance may have been relevant for testing this interpretation and should be included in future studies on this topic.

Some practical implications can be drawn from the findings concerning the particular group of patients rating previous therapies as successful. First, it seems particularly important for clinicians to carefully assess not only past therapy failures but also to explore the reasons why a patient with successful therapy history seeks a new treatment. It might be essential for these patients to get the possibility to openly talk about previous therapy processes and to discuss their attitudes and expectations towards future treatments or therapists. Second,
therapists should be particularly vigilant in regularly and critically checking with
this group of patients on how they experience the therapy process.

Some limitations of the present study should be considered as well. The main
limitation is that our sample of patients with psychotherapy history does not
represent all those who attempted therapy before. Since we have no information
on those who chose not to try therapy again, our sample may differ from the
entireness of patients with previous experience in terms of motivation, self-
efficacy and maybe better support through family or primary care physician in
being encouraged for a new therapy attempt. A prospective study focusing on
future utilization of psychotherapy among all patients with psychotherapy history
could complement the results presented here. Further, it should be borne in mind
that this study is based on a sample of social phobics undergoing cognitive-
behavioural group therapy. Future research should assess whether the presented
findings can be generalized to other diagnostic groups and whether similar
patterns can be confirmed for individual therapy. Finally, it might be worth
improving the specificity of the central variable “previous therapy experience” in
future studies. Assessing the kind of previous therapy (including details on
orientation, setting and length) could provide further information on the
differential impact of specific successful vs. unsuccessful therapy forms.

Additionally, the inclusion of broader success ratings (e.g., based on 5- or 7-point
scales) would allow analyses of the whole sample and result in increased power.
As a conclusion, the present study confirms that patients seeking therapy for the first time tend to benefit more from group therapy but also shows that it is essential to differentiate between the types of prior therapy experience. While patients with negative experiences seem to need special support in increasing their active therapy engagement, patients rating previous therapies as successful may need specific pre-treatment assessments and a more careful focus on the therapeutic relationship.

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References

Figure 1

Interaction between prior psychotherapy history and time with regard to symptom level
### Table 1.

**Pre-treatment characteristics (n = 57)**

<table>
<thead>
<tr>
<th>Psychotherapy history</th>
<th>None (n = 11)</th>
<th>Successful (n = 28)</th>
<th>Unsuccessful (n = 18)</th>
<th>F (df = 56)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M  SD</td>
<td>M  SD</td>
<td>M  SD</td>
<td></td>
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</tr>
<tr>
<td>LSAS</td>
<td>61.3 13.4</td>
<td>70.2 20.8</td>
<td>77.7 20.3</td>
<td>2.30</td>
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<tr>
<td>BAI</td>
<td>16.8 4.9</td>
<td>18.0 10.1</td>
<td>21.8 11.3</td>
<td>1.18</td>
<td>ns</td>
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<tr>
<td>BDI</td>
<td>12.2 3.4</td>
<td>18.5 11.7</td>
<td>19.1 8.3</td>
<td>2.08</td>
<td>ns</td>
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<tr>
<td>SCL</td>
<td>1.4 .6</td>
<td>1.6 .8</td>
<td>1.9 .7</td>
<td>1.32</td>
<td>ns</td>
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<tr>
<td>SE</td>
<td>20.9 2.0</td>
<td>22.2 4.9</td>
<td>21.8 4.4</td>
<td>.34</td>
<td>ns</td>
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<tr>
<td>Age</td>
<td>28.6 7.6</td>
<td>34.9 10.5</td>
<td>38.3 13.0</td>
<td>2.65</td>
<td>(*)</td>
</tr>
<tr>
<td>Sex (females)</td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
<td>X^2 (df=2)</td>
<td>P</td>
</tr>
<tr>
<td>Medication</td>
<td>3 27%</td>
<td>16 57%</td>
<td>9 50%</td>
<td>2.83</td>
<td>ns</td>
</tr>
<tr>
<td>Comorbidity</td>
<td>2 18%</td>
<td>23 82%</td>
<td>15 83%</td>
<td>17.61</td>
<td>***</td>
</tr>
<tr>
<td>Axis I</td>
<td>1 9%</td>
<td>16 57%</td>
<td>6 33%</td>
<td>8.11</td>
<td>*</td>
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<tr>
<td>Axis II</td>
<td>1 9%</td>
<td>16 57%</td>
<td>12 66%</td>
<td>9.92</td>
<td>**</td>
</tr>
<tr>
<td>Self-referral</td>
<td>8 73%</td>
<td>16 57%</td>
<td>5 28%</td>
<td>6.38</td>
<td>*</td>
</tr>
</tbody>
</table>

LSAS = Liebowitz Social Anxiety Scale; BAI = Beck Anxiety Inventory; BDI = Beck Depression Inventory; SCL = Symptom-Checklist (9-item version); SE = Schwarzer Self-Efficacy Scale.

X^2 = Pearson Chi Square

(*) P < 0.10; * P < 0.05; ** P < 0.01; *** P < 0.001.
Table 2 Summary of hierarchical regression analyses for pre-treatment and process variables predicting post-treatment outcome

<table>
<thead>
<tr>
<th></th>
<th>Whole sample</th>
<th>No psychotherapy history</th>
<th>Successful psychotherapy history</th>
<th>Unsuccessful psychotherapy history</th>
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<td></td>
<td>$R^2_{\text{change}}$</td>
<td>$F_{\text{change}}$</td>
<td>$R^2_{\text{change}}$</td>
<td>$F_{\text{change}}$</td>
</tr>
<tr>
<td>LSAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-treatment LSAS, BDIa</td>
<td>.56</td>
<td>27.6***</td>
<td>.29</td>
<td>1.2</td>
</tr>
<tr>
<td>Therapy engagement</td>
<td>.07</td>
<td>7.5*</td>
<td>.29</td>
<td>3.5</td>
</tr>
<tr>
<td>BAI</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pre-treatment BAI</td>
<td>.47</td>
<td>39.1***</td>
<td>&lt;.01</td>
<td>&lt;.1</td>
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<tr>
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<td>.15</td>
<td>16.7***</td>
<td>.14</td>
<td>1.0</td>
</tr>
<tr>
<td>BDI</td>
<td></td>
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</tr>
<tr>
<td>Pre-treatment BDI</td>
<td>.64</td>
<td>80.1***</td>
<td>.17</td>
<td>1.5</td>
</tr>
<tr>
<td>Therapy engagement</td>
<td>.05</td>
<td>7.1*</td>
<td>.04</td>
<td>3</td>
</tr>
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<td>SCL</td>
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<tr>
<td>Pre-treatment SCL, BDIa</td>
<td>.58</td>
<td>30.0***</td>
<td>.23</td>
<td>92</td>
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<tr>
<td>Therapy engagement</td>
<td>.07</td>
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<td>.18</td>
<td>1.5</td>
</tr>
<tr>
<td>SE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-treatment SE, BDIa</td>
<td>.37</td>
<td>20.9***</td>
<td>.07</td>
<td>2</td>
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<tr>
<td>Therapy engagement</td>
<td>.01</td>
<td>1.1</td>
<td>.16</td>
<td>1.1</td>
</tr>
</tbody>
</table>

a To control for pre-treatment level of depression, initial BDI score was entered in step 1 of the analyses (together with the pre-treatment score on each outcome measure being tested)

LSAS = Liebowitz Social Anxiety Scale; BAI = Beck Anxiety Inventory; BDI = Beck Depression Inventory; SCL = Symptom-Checklist (9-item version); SE = Schwarzer Self-Efficacy Scale.

(*) $P < 0.10$; * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$.  

To control for pre-treatment level of depression, initial BDI score was entered in step 1 of the analyses (together with the pre-treatment score on each outcome measure being tested)