CLINICAL REPORT

Social Phobia With and Without Avoidant Personality Disorder: Preliminary Behavior Therapy Outcome Findings

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Abstract — The present study is the first psychotherapy outcome study comparing social phobic subjects with and without avoidant personality disorder (APD). Eight social phobic subjects with APD and eight phobic subjects without APD received 8 sessions of behaviorally oriented group therapy for their public speaking anxiety. Before and after treatment, severity measures were taken and subjects were asked to give a talk in front of a small audience. Treatment resulted in the same degree of improved social anxiety and fear of public speaking for both groups. These results add to the literature that questions the validity of distinguishing between avoidant personality disorder and social phobia.

With the publication of the DSM-III-R (American Psychiatric Association, 1987), it became possible to receive the diagnoses of avoidant personality disorder (APD) and social phobia simultaneously. The new diagnostic criteria stimulated research on the relationship between APD and social phobia.

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(Herbert, Hope, & Bellack, 1992; Holt, Heimberg, & Hope, 1992; Turner, Beidel, & Townsely, 1992). This research showed that APD and generalized social phobia (GSP) share core features in the DSM-III-R (Herbert, Hope, & Bellack, 1992; Turner, Beidel, & Townsely, 1992), and most subjects who fulfill criteria for APD also fulfill criteria for GSP (Herbert et al., 1992). In addition, few qualitative distinctions have been found between GSP and APD (Herbert et al., 1992; Holt et al., 1992; Turner et al., 1992). Instead, findings indicated that APD differed from GSP in terms of severity of social anxiety and social functioning (e.g., Holt et al., 1992; Schneier, Spitzer, Gibbon, Fryer, & Liebowitz, 1991; Turner et al., 1992). One weakness of this research is that subjects were generally recruited from within social phobia treatment clinics rather than from an independent sample of APD patients. It remains unclear whether the high overlap between APD and GSP would remain if recruitment for these two disorders were conducted independently. Nonetheless, findings of these studies have led to the suggestion that APD may be a more severe form of social phobia.

Parallels between anxiety response patterns of GSP subjects and social phobic subjects with APD can also be found in psychophysiological studies. One study showed that people with specific social phobia showed a greater heart rate response to public speaking situations than people with GSP (Levin et al., 1993). Similarly, another study showed that people whose fear was restricted to public speaking, had a greater heart rate response to their feared situation than generalized social phobic persons had to a social interaction challenge (Heimberg, Hope, Dodge & Becker, 1990). This same pattern was found when comparing social phobic subjects with and without APD during a feared public speaking task (Hofmann, Newman, Ehlers, & Roth, 1995). Similar to GSP subjects, social phobic subjects with APD showed greater subjective anxiety but smaller heart rate response than social phobic subjects without APD.

Despite the lack of findings pointing to qualitative differences, Herbert et al. (1992) have suggested that treatment response may be more likely to qualitatively discriminate social phobia with and without APD. To date, one study has compared DSM-III-R social phobia with and without APD on treatment outcome. This study found that avoidant symptoms in social phobia with and without APD improved with the medication alprazolam. However, once the medication was withdrawn, most avoidant symptoms were not different from baseline (Reich, Noyes, & Yates, 1989).

The present investigation was the first to compare social phobia with and without APD on psychotherapy treatment outcome. This study was a subanalysis of a larger data set (i.e., Newman, Hofmann, Roth, & Taylor, 1994). Treatment consisted of group behavior therapy for social phobic subjects whose greatest fear was public speaking anxiety. Differences or similarities in treatment outcome between phobic subjects with and without APD may further contribute to our understanding of the distinction between social phobia and avoidant personality disorder.
Subjects
Sixteen social phobic subjects were recruited by advertisements in the classified sections of local newspapers (Palo Alto, CA). These ads offered free treatment for public speaking anxiety. Subjects were considered for the study if they rated their public speaking anxiety as 7 or higher on a 10-point scale, and met DSM-III-R criteria for social phobia. Eight subjects (50%) also met the criteria for APD. Subjects were randomly assigned to specific therapy groups and those with and without APD did not differ on sociodemographic variables such as age, years of education, and marital and employment status. Half of the social phobic subjects without APD (50%) and 66.67% of social phobic subjects with APD were women. On average, subjects without APD reported 16 years of education and subjects with APD reported 16.60.

PROCEDURE
Interviews
Subjects were screened for this study with a brief phone contact and a face-to-face SCID interview (Spitzer, Williams, Gibbon, & First, 1989) conducted by an experienced clinician. Additionally, subjects were given an unstructured interview to assess DSM-III-R criteria for avoidant personality disorder (APD). This unstructured interview was conducted by the first author of this study (S.G.H.). In a previous study, (Hofmann et al., 1995) diagnostic interviews conducted by this individual (S.G.H.) were audiotaped, and a blind independent rater listened to a random selection of half of the tapes (14 presumed social phobics and 11 presumed controls). Agreement between the blind rater and the interviewer was 100% for the diagnosis of social phobia and 93% for the diagnosis of APD. As part of this interview, subjects were asked to rate their fear of numerous social situations (e.g., eating in public, writing in public, being introduced, talking on the phone) on a scale from 0 (not at all) to 10 (very much) and were asked which social situation they most feared. Those who rated their fear of public speaking as 7 or higher, who indicated that public speaking was their worst fear, and who met criteria for social phobia were assigned to the public speaking anxious group. We chose the 7 or above cutoff because public speaking anxiety is commonly reported, and in a previous study (Hofmann et al., 1995) we found this to be a useful screening criterion for the selection of subjects with social phobia. Those who met inclusion criteria were scheduled for a behavioral and cognitive assessment designed to measure various social phobia parameters. Because some individuals with social phobia are afraid to interact with a member of the opposite sex, experimenter’s sex and subject’s sex were always identical. Following the behavioral and cognitive assessment, subjects were randomly assigned to groups.
Behavioral Assessment

A behavioral assessment test, similar to one used by Beidel, Tumer, Jacob, and Cooley (1989), was conducted within 2 weeks of the beginning of treatment. This test consisted of the following four standard tasks: (a) subject sat in a chair while the experimenter was outside of the room (baseline); (b) subject prepared a talk with experimenter outside of the room; (c) subject sat in front of an audience with one male and one female audience member; (d) subject gave a talk in front of the audience. Three min were allocated for the first three tasks. During the preparation period, subjects were allowed to jot down some notes. However, they were informed that they would be unable to refer to these notes during the speech. During the fourth task, subjects were given a list of five topics (nuclear power, corporal punishment in schools, mandatory seat belt laws, abortion, and American health system) and were told to pick up to three topics for a 10-min speech. Subjects were told it was unimportant how many of the three topics they spoke about or how long they spent on one topic. They were also told that they should try to speak for the full 10 min but could end their speech at any time if they were experiencing significant distress. To end the speech, the subject held up an index card upon which was written “STOP.”

One male and one female member of the V.A. research staff served as the audience. At least one audience member was always an experienced clinician, and the other was working on an undergraduate or graduate degree. Audience members were told to rate the following questions on a scale from 0 (not at all) to 10 (extremely): “How good was the talk?” and “How anxious was the speaker?” Audience members were given a short training session on the use of the coding items and achieved interrater reliability between \( r(15) = .72 \) and \( r(15) = .80 \) for good talk ratings and between \( r(15) = .60 \) and \( r(15) = .65 \) for ratings of behavioral anxiety. Both audience members were always unknown to the subject and blind to the condition to which the subject was assigned, preventing familiarity. A videorecorder placed between the two audience members was turned on prior to the speech. At posttreatment, subjects were asked to use the same scale to rate whether they thought their posttreatment speech was better than their pretreatment speech. Following the speech, subjects filled out the subjective and cognitive measures.

The posttreatment assessment was identical to the pretreatment assessment with the exception that speech topics were different to eliminate a practice effect. The posttreatment assessment was conducted within two weeks of treatment termination. Because the study focused on the therapy process, no follow-up data were obtained.

Self-Report Measures

Immediately following the behavioral assessment test, the State Trait Anxiety Inventory (STAI) state and trait forms (Spielberger, Gorsuch & Lushene, 1970) were used to measure state and trait anxiety; the the experi-
menter-developed Cognitions During the Talk Questionnaire (CT; Hofmann, 1993) was used to measure speech anxiety related cognitions; and the Personal Report of Confidence as a Speaker Questionnaire (PRCS; Paul 1966) was administered to measure speech anxiety.

Additionally, subjects were asked to fill out several questionnaires at home. The Social Avoidance and Distress Scale (SAD; Watson & Friend, 1969) was used to assess social avoidance and social anxiety; the Fear of Negative Evaluation Scale (FNE; Watson & Friend, 1969) measured apprehension about others' evaluations; the Social Phobia and Anxiety Inventory (SPAI; Turner, Beidel, Dancu, & Stanley, 1989) assessed severity of social phobia; and the State Trait Anxiety Inventory, trait form (STAI-trait; Spielberger, Gorsuch & Lushene, 1970) was used to measure trait anxiety.

Cognitions During the Talk scale (CT; Hofmann, 1993). This experimenter-developed questionnaire is an adaptation of the SISST, with items changed to reflect cognitions prior to, during, and following public speaking. It is a 30-item scale with ratings of 0 (do not agree at all) to 5 (strongly agree.) Nineteen of the 30 items are keyed true, and 11 are keyed false, yielding a maximum score of 150 and a minimum score of 0. The inventory is scored by summing the scale scores. Subjects with a high score on this questionnaire focus their attention less on positive thoughts and more on negative thoughts. This scale has good face validity with items such as: “What I say will probably sound stupid” and “It would crush me if the audience didn’t respond to me” as well as “I’m beginning to feel more at ease.” In a previous study, the reliability estimation (Cronbach alpha) showed high coefficients for the patient group (.88), and the control group (.85). Criterion validity of this questionnaire was demonstrated by high correlations with the PRCS (PRCS; Paul 1966), r = .51, and the SISST (negative cognitions; Glass, Merluzzi, Biever, & Larson, 1982), r = .48, and low correlations with the Agoraphobic Cognitions Questionnaire (Chambless, Caputo, Bright, & Gallagher, 1984), r = .15, the Body Symptoms Questionnaire (Chambless et al., 1984), r = .10., and the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), r = .10. Known groups validity was demonstrated by discriminating public speaking phobics from controls, p < .05 (Hofmann, 1993).

Treatment

The therapists consisted of a male and female doctoral or postdoctoral student with training in behavioral therapy and the specific treatment procedures used in this study. Therapists were blind to APD diagnosis. To insure consistency across groups, sessions were conducted according to a detailed speech phobia treatment manual (Hofmann & Newman, 1992). A sample of tapes were reviewed to ensure that therapists adhered to the behavioral treatment manual.

A treatment specific to speech anxiety was chosen because our sample of subjects indicated that public speaking anxiety was their worst fear. Each treat-
ment group contained six subjects (three social phobics with APD and three without APD) and met for 2 hr each week for a period of 8 weeks. Subjects were told that if they missed more than two sessions they would be dropped from the group. In the first session, therapists presented a behavioral model of speech phobia emphasizing the learned nature of social anxiety and the reciprocal influence of avoidance behavior and physiological components of anxiety. Subjects were taught that avoidance of any feared situation leads to increased anxiety associated with that situation. Therefore, the emphasis of treatment was on exposure to anxiety-inducing situations and a reduction of avoidance behavior. Half of sessions 3 to 4 included didactic components teaching skills related to speaking (i.e., where to focus your eyes, how to stand, effective use of voice tone, how to structure a good speech, how to create effective visual aids, how to handle hostile questions) as well as reiteration of the behavioral model. Sessions 2 to 8 devoted time to exposure and homework assignments. For each weekly exposure, subjects were asked to prepare a 3-min speech, which was presented in front of the rest of the group members. At times, group members were asked to play the role of disinterested or hostile audience members. This speech was also video-taped and replayed immediately following the speech. Subjects were asked to rate their own performance following the videotape. Group members and therapists served as the audience and were also encouraged to give the speaker behavioral feedback. Such feedback included references to voice modulation and animation, body position, gestures, appearance of nervousness or comfort, clarity of speech, etc.

The importance of exposing oneself to anxiety-inducing situations in real life was emphasized. Homework assignments were made throughout treatment to facilitate this process. Early assignments incorporated imaginal exposure during role play of speech practice (i.e., imagining self speaking in front of an intimidating group). Later assignments were more closely tied to in vivo exposure. These assignments were individualized and depended somewhat on each person’s opportunities for public speaking as well as individual speaking fears. Thus exposure homework involved formal and informal speaking related to small and large groups of people at work and social situations (i.e., verbally participating in a meeting at work or PTA, a dinner party, lunch gathering, as well as formal presentations in front of a large group). Patients were asked to place themselves in situations that were previously avoided or tolerated only with excessive anxiety. They were asked to remain in these situations until their anxiety went down. The final session spent time reviewing what patients had learned and how this learning could be applied in the future.

RESULTS

To determine effects of treatment with regard to subjective, cognitive, and behavioral anxiety, separate 2 (Group; subjects with and without APD) × 2 (Therapy; pretreatment vs. posttreatment) ANOVAs were conducted for each dependent measure with Group serving as the between-subjects factor and
Time (therapy effect) as the within-subjects factor. In addition, to control for the effect of chance baseline differences on outcome differences between social phobic subjects with and without APD, analyses of covariance were conducted for each measure with baseline as the covariate. Results are outlined in Table 1.

**Behavioral assessment.** Results of observer ratings of speakers’ anxiety, $F(1,13) = 57.34, p < .0001$, and talk quality, $F(1,13) = 8.25, p < .02$, revealed significant effects of therapy. With therapy, behavioral anxiety improved in both groups. There were no effects associated with length of speech. Moreover, neither the ANOVA nor the ANCOVA showed a differential effect of therapy on behavioral anxiety of those with and without APD.

**Questionnaire data**

Ratings of anxiety during the speech showed a main effect of therapy on the STAI-state, $F(1,13) = 12.08, p < .004$, the CT, $F(1,13) = 13.24, p < .003$, and the PRCS, $F(1,13) = 19.38, p < .0007$. Analysis of the FNE, $F(1,13) = 13.43, p < .003$, the SPAI social phobia subscale, $F(1,13) = 11.53, p < .004$, and the total SPAI score, $F(1,13) = 12.39, p < .004$, also revealed significant effects of therapy for the two groups. Subjects reported fewer anxiety-related cognitions, less fear of negative evaluation, less public speaking anxiety, and less social fear at posttreatment than at pretreatment. No therapy effect was found for STAI-trait and SADS.

Significant Group effects were found for the STAI-state, $F(1,13) = 5.62, p < .04$. Social phobic persons with APD reported greater state anxiety than phobics without APD when giving a talk. Furthermore, phobics with APD tended to have relatively greater scores on the FNE, $F(1,13) = 3.42, p < .09$, the SADS, $F(1,13) = 20.49, p < .005$, the SPAI social phobia subscale, $F(1,13) = 11.53, p < .06$, and the total SPAI scores, $F(1,13) = 12.39, p < .07$. However, when baseline differences were controlled, analyses of questionnaire data failed to show differential effects of therapy for those with and without APD (Table 1).

**DISCUSSION**

Results of this study showed significant effects of behavior therapy on social phobic subjects with and without APD. Both groups improved on observer-rated anxiety and speech quality, self-reported state anxiety (STAI-state), fear-related cognitions (CT), confidence during a speech (PRCS), and severity of social phobia (FNE, SPAI). Moreover, although this study did not specifically target APD as a treatment focus, positive changes found on the FNE reflect improvement in fear of criticism and rejection, which are recognized as core issues in APD (Renneberg, Goldstein, Phillips, & Chambless, 1990). These findings add to previous studies independently demonstrating the effectiveness of behavioral treatments for APD (Alden & Capreol, 1993;
<table>
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<tr>
<th>Behavioral ratings</th>
<th>Social Phobics Without APD (n = 7)</th>
<th>Social Phobics With APD (n = 8)</th>
<th>Treatment Effect</th>
<th>Group Effect</th>
<th>Treatment × Group</th>
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<td>Talk quality</td>
<td>M 6.00 (1.71)</td>
<td>M 5.69 (2.98)</td>
<td>8.25*</td>
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<td>SD 7.60 (1.58)</td>
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<td>Speaker’s anxiety</td>
<td>M 5.43 (1.51)</td>
<td>M 6.81 (2.59)</td>
<td>57.34***</td>
<td>0.01</td>
<td>1.72</td>
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<td>SD 3.19 (1.77)</td>
<td>SD 4.33 (2.29)</td>
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<td>LSM 3.54</td>
<td>LSM 3.87</td>
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<td>Talk length(min)²</td>
<td>M 7.11 (3.62)</td>
<td>M 8.62 (5.21)</td>
<td>0.38</td>
<td>0.14</td>
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<td>SD 9.37 (2.64)</td>
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<td>LSM 8.3</td>
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<td>During speech</td>
<td>STAI-state M 40.29 (7.50)</td>
<td>STAI-state M 50.25 (14.10)</td>
<td>12.08**</td>
<td>5.62*</td>
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<td>SD 30.86 (7.40)</td>
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<td>LSM 34.47</td>
<td>LSM 40.52</td>
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<td>CT</td>
<td>M 56.86 (23.56)</td>
<td>M 73.56 (32.13)</td>
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<td>SD 27.14 (14.75)</td>
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<td>LSM 28.68</td>
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<td>Severity of social phobia</td>
<td>PRCS</td>
<td>STAI-trait*</td>
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**Notes:** Means with standard deviations in parentheses are based on ANOVAs whereas LSMs (least square means) are based on ANCOVAs with baseline as the covariate.

*This analysis was based on five phobic persons without APD and five with APD. bThis analysis was based on eight phobic persons without APD and six phobics with APD.

* *p < .05, **p < .005, ***p < .0001.
Alden, 1989; Renneberg, Goldstein, Phillips, & Chambless, 1990) and for
social phobia (e.g., Turner, Beidel, & Jacob, 1994).

Interestingly, no differential treatment response was found for subjects with
and without APD. Although these findings should be considered very prelimi-
nary, due to a small sample size, they cannot be attributed to a general lack of
differences between the social phobic subjects with and without APD in our
sample. Consistent with previous research (Herbert, Hope, & Bellack, 1992;
Holt, Heimberg, & Hope, 1992; Turner, Beidel, & Townsley, 1992), those with
APD reported more subjective anxiety (STAI-state), more social phobic anxiety
(SPAI social phobia subscale), and more social avoidance and distress
(SADS). Moreover, though social phobic subjects with and without APD
responded to therapy with the same degree of change, subjects with APD also
had more severe symptomatology before and after therapy than social phobic
subjects without APD. These results lend further credence to findings suggest-
ing that APD and social phobia are the same entities at different points on a
continuum (Herbert, Hope, & Bellack, 1992; Holt, Heimberg, & Hope, 1992;

A pattern of results showing improvement in different domains of anxiety
for subjects with APD compared to subjects without APD would be evidence
for qualitative differences between these two groups. Although we did not find
this result, observation of the data suggests that whereas both groups respond-
ed equally on behavioral and state anxiety measures, social phobic subjects
with APD showed about half as much change as social phobic subjects without
APD on measures of social phobia severity such as the SPAI and FNE. Too
few subjects may have been the reason that this result did not reach statistical
significance. A future study, using a larger sample may suggest the presence of
qualitative differences between social phobic subjects with and without APD.

It should be noted that though public speaking anxiety is considered a spe-
cific social phobia, it is unlikely that our sample comprised a unique group of
specific social phobic subjects with and without APD. We recruited social pho-
bic subjects whose worst fear was public speaking. The finding that 50% of
our social phobic subjects also met criteria for APD is consistent with Turner,
Beidel, Borden, Stanley, and Jacob (1991). Moreover, as with other studies
(Herbert, Hope, & Bellack, 1992; Holt, Heimberg, & Hope, 1992; Turner,
Beidel, & Townsley, 1992), most subjects meeting criteria for APD probably
met criteria for generalized social phobia as well. However, since we did not
prospectively classify our patients in terms of generalized or specific social
phobia, this is only an assumption. This study is unique in that treatment
focused on one social fear. Previous social phobia studies recruited subjects
with a variety of “worst fears,” and each subject focused on a different fear in
treatment (e.g., Emmelkamp, Mersch, Vissia, & Van Der Helm, 1985; Mattick
and Peters, 1988; Mattick, Peters, & Clarke, 1989). It is possible that this sole
treatment focus contributed to the higher residual scores in social phobic per-
sons with APD, since this group tends to have more widespread problems than
socially phobic subjects without APD. Future studies should assess whether a focused behavioral treatment generalizes to other social fears.

Findings that social phobic subjects with APD scored higher on most measures than subjects without APD before and after treatment, as well as similar patterns of improvement suggest that APD is simply a more severe form of social phobia. This supports previous research findings (Herbert, Hope, & Bellack, 1992; Holt, Heimberg, & Hope, 1992; Hofmann et al., 1995; Turner, Beidel, & Townsley, 1992). Before reaching any firm conclusions from these results, however, it would be important to replicate them using a larger sample size, a control group, and follow-up measures. Moreover, recent research suggests that subclassification of individuals with APD based on interpersonal problem profiles may help determine the most efficacious interventions (Alden & Capreol, 1993). Therefore, replication of this study would benefit from inclusion of measures of interpersonal problems.

This study has several limitations. First, there were no follow-up measures, and it is unclear whether treatment gains would have been maintained equally for both groups. Second, the sample size was small, and it is possible that a larger sample size would have led to the detection of qualitative differences. Third, we did not classify our patients with respect to generalized or specific social phobia. Therefore, we cannot draw any conclusions regarding social phobia subtypes. Fourth, there was no control for the halo effect of treatment since we did not include a no-treatment control group. However, in a previous publication, this treatment led to significant improvement when compared to a control group (Newman et al., 1994). In addition, all changes from pretreatment to posttreatment indicated an improvement in subjects’ public speaking anxiety, which was the focus of our treatment.

REFERENCES


