

Alcoholics seeking treatment: Does co-occurring social anxiety disorder interfere with AA affiliation?

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Introduction & Study Goals

Social anxiety disorder (SA) is characterized by marked and persistent fear of situations that expose one to unfamiliar people or the scrutiny of others.¹ SA is often accompanied by problem drinking. Approximately 25% of individuals with SA meet diagnostic criteria for AUD; 15% of individuals with AUD meet diagnostic criteria for SA.²

Those with alcohol problems most commonly seek help from Alcoholics Anonymous.³ Yet the social nature of 12-step organizations may pose a significant barrier to recovery for those with comorbid SA and AUD. While co-occurring SA among alcoholics has been posited to adversely impact 12-step facilitated treatment (TSF) outcomes, formal investigation in this area has been lacking. The purpose of this study is to examine the link between SA and participation in TSF treatment using data from project MATCH.

Methods

Study Population and Procedures

Study participants were selected from Project Match, a multi-center longitudinal investigation of the efficacies of three behavioral interventions for AUD.⁴ Participants were recruited from two treatment settings: outpatient or aftercare. A total of 133 pairs of patients (N=266) assigned to TSF were matched by age, gender, and study arm; for each matched pair, one patient had comorbid SA and one patient did not. The data collection schedule included a baseline assessment, and follow-up assessments at 3 month intervals for 15 months.

Measures

Background Characteristics. At baseline, the following background characteristics were assessed: demographic variables, study arm, alcohol use prior to treatment, Antisocial Personality Disorder (ASPD), and SA.

AA Affiliation (AAA). Two subscales of the AA Involvement Scale were used to assess AAA: Attendance (number of meetings attended in the past 90 days), and Involvement (behavioral engagement in the AA program and fellowship).⁵ Attendance was scored from the item "How many meetings have you attended in the past 90 days?" This item was converted to 4 deciles that were then separately divided by 10, resulting in a value ranging between 0-1. Involvement was scored from 8 items: had spiritual awakening in AA, been a sponsor, had a sponsor, number of steps "worked", considered self member of AA, gone to "90 meetings in 90 days", celebrated AA birthday, ever attended an AA meeting. Involvement scores range from 0 (low) to 11 (high).

Alcohol use. Alcohol use was determined by the number of drinks per drinking day in the past 90 days, using the Form 90 the assessment.⁶ Time to first drink following the end of treatment (Month 3), a primary time-to-event outcome measure used in Project MATCH, was considered a relapse.⁴

Data Analysis

Cox regressions were conducted to determine the impact of SA on relapse. Random effect regressions were conducted to determine the SA impact on AAA. Models included the following covariates: background variables and AAA levels in the year prior to treatment. Due to the exploratory nature of this investigation, we report all two-tailed tests with alpha level of p<.05.

Results

Baseline Characteristic	Total	No SA ^a	SA
Gender			
Male	196 (74%)	98 (74%)	98 (74%)
Female	70 (26%)	35 (26%)	35 (26%)
Race			
Caucasian	208 (78%)	102 (77%)	106 (80%)
African-American	27 (10%)	16 (12%)	11 (8%)
Marital Status			
Married	180 (67%)	92 (34%)	88 (66%)
Single	86 (32%)	41 (31%)	45 (69%)
Employed			
No	117 (44%)	54 (41%)	63 (47%)
Full-time	149 (56%)	79 (59%)	70 (53%)
Study Arm			
Outpatient	370 (31%)	61 (46%)	61 (54%)
Aftercare	823 (69%)	72 (46%)	72 (54%)
ASPD			
No	226 (85%)	116 (87%)	110 (83%)
Yes	40 (15%)	17 (13%)	23 (17%)
Age (M, SD)	39.12 (10.27)	116 (87%)	17 (13%)
Education (M, SD)	13.22 (2.11)	13.18 (2.12)	12.86 (2.06)
Drinks per drinking day (M, SD)	16.88 (10.23)	18.30 (11.22)	17.76 (10.74)
Prior AA Attendance (M, SD)	0.04 (0.12)	0.04 (0.14)	0.05 (0.14)
Prior AA Involvement (M, SD)	1.07 (0.64)	1.15 (0.58)	1.07 (0.65)

^aSA = Social Anxiety Disorder

No significant differences were found between the study sample of 133 pairs (N=266) and those not included from the full Project MATCH sample (N=1460) with regards to any of the baseline variables. Participants with and without SA were similar in terms of background characteristics and AA affiliation prior to treatment (Table 1).

SA status and time to relapse

Overall, there was no association between SA and likelihood of relapse. As shown in Table 2, a significant gender by SA interaction emerged (HR=2.0, p<.05). Table 2 shows results of Cox models run separately for men and women to interpret this significant interaction. Men with SA were no more likely to relapse than men without SA (HR=0.8, p=.28). However, women with SA were significantly more likely to relapse in the 12 months following treatment than women without SA (HR=1.8, p<.05). Figure 1 graphically compares the duration of maintained sobriety post treatment between women with and without SA.

Sample ^a	(n) Eligible	(n) Censored	(n) Event	Time to relapse (days) SA	Time to relapse (days) No SA	HR	95% CI (p)
SA impact on women	59	39	20	28.52	68.04	1.76	0.9-3.4 (0.04)
SA impact on men	177	118	59	60.34	38.42	0.81	0.6-1.2 (0.28)

^a133 subjects with SA and 133 subjects without SA were matched on age, gender, study-arm, and TSF treatment assignment.

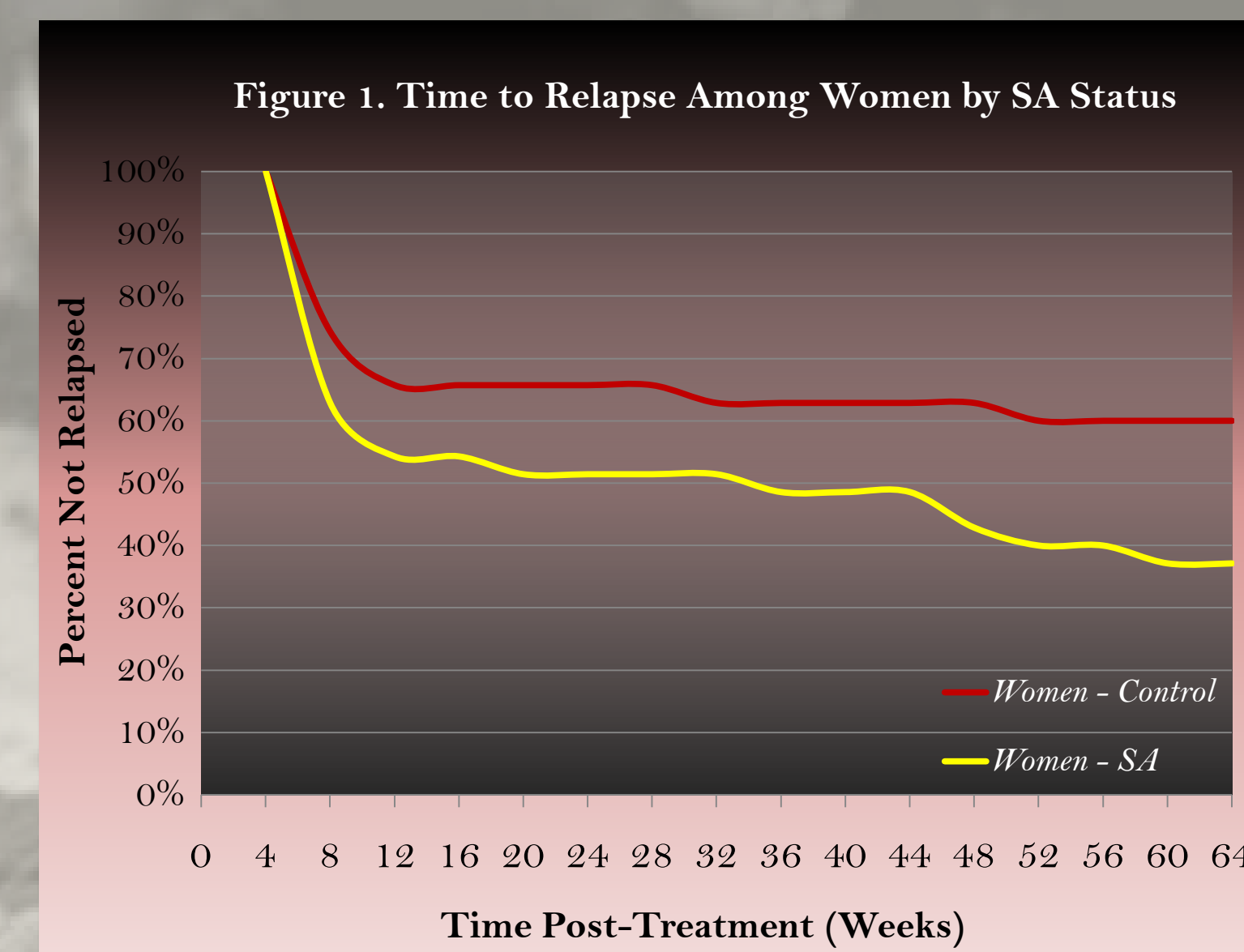
SA status and course of AA participation

Overall, there was no association between SA and AA affiliation levels in the year following treatment (involvement: F=2.46, p=.1348; attendance: F=0.06, p=.92).

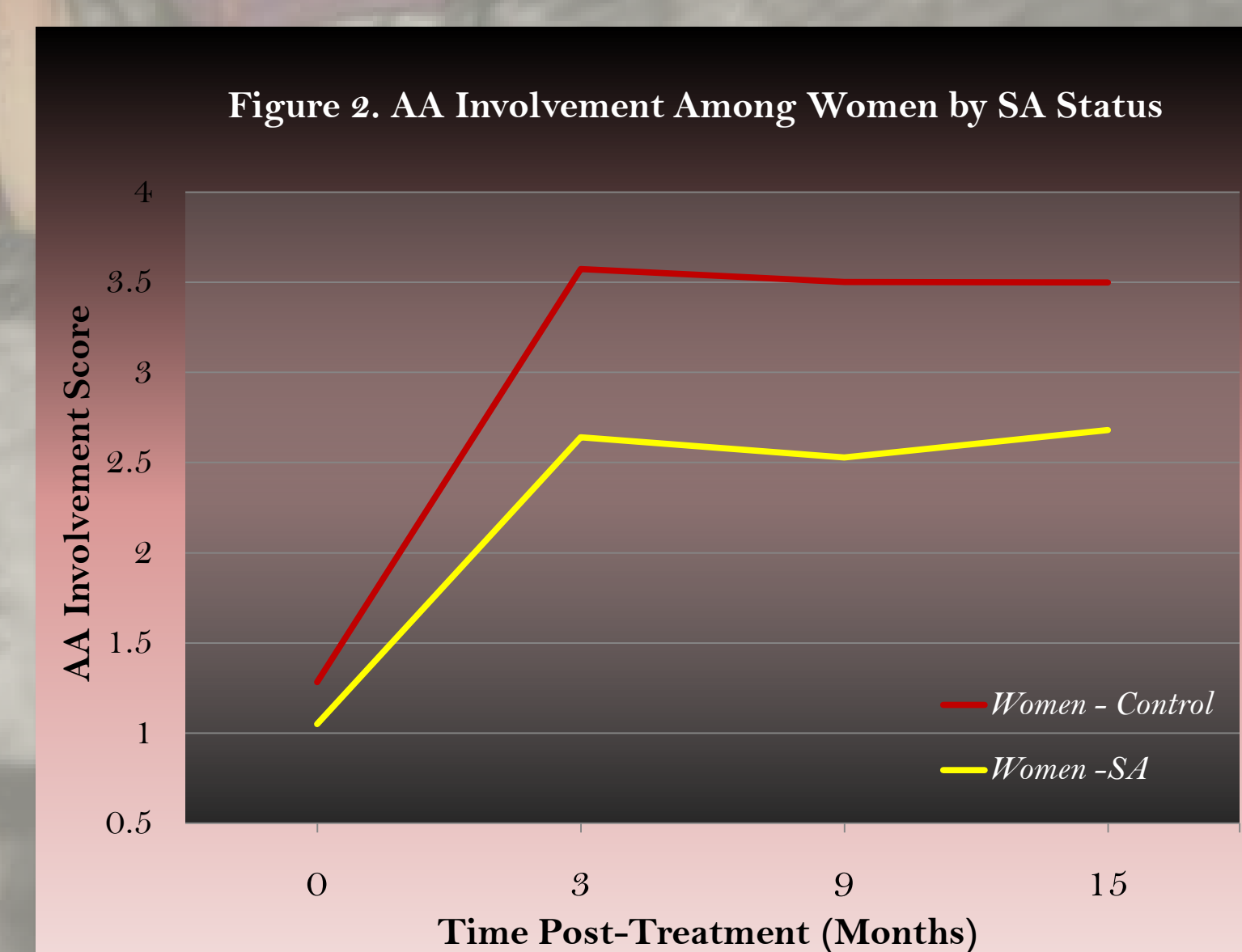
Variable	B	S.E.	F Value	Pr > F
Gender	-0.0146	0.2759	2.24	0.1348
Ethnicity	0.1654	0.1273	1.08	0.2377
Marital status	-0.1458	0.1666	1.82	0.2286
Full-time employment	-0.0854	0.1491	0.33	0.5668
Study arm	0.1882	0.2208	1.51	0.2202
Age	0.0123	0.0100	0.73	0.3943
Education	-0.0267	0.0365	0.53	0.4649
Prior AA involvement	0.1873	0.0348	28.89	<.0001
Prior AA attendance	0.1881	0.5698	0.00	0.9556
ASPD ^a	0.3983	0.2070	3.70	0.0550
Pre-treatment alcohol severity	0.0005	0.0081	0.00	0.9556
Time	0.4124	0.2003	4.46	0.0121
SA ^b	-0.5827	0.4044	2.46	0.1637
SA X time	-0.0521	0.2896	0.02	0.9799
SA X gender	0.7450	0.2855	6.81	0.0094

^aASPD = Antisocial Personality Disorder

^bSA = Social Anxiety Disorder



A significant main effect for time was found for both AAI subscales (involvement: F=4.46, p<.05; attendance: F=33.01, p<.0001). This finding reflected the significantly decline in both involvement and attendance when assessed six months after treatment. While no association between SA and AA attendance was found for men and women alike, gender differences emerged in the SA impact on AA Involvement (F=6.81, p<.01). Post hoc analyses revealed no differences in Involvement scores for men with and without SA (F=0.04, p=.85). However, women with SA reported significantly lower AA involvement scores during follow-up in comparison to women without SA (F=11.79, p=.0008). The lower AA involvement scores among women with SA in comparison to women without SA over the 15-month study period are graphed in Figure 2.



Variable	B	S.E.	F Value	Pr > F
Gender	0.0522	0.0336	1.55	0.1213
Ethnicity	-0.0097	0.0139	0.49	0.4843
Marital status	-0.0320	0.0250	1.42	0.2844
Full-time employment	-0.0413	0.0330	1.48	0.2114
Study arm	0.0501	0.0279	3.19	0.0731
Age	0.0007	0.0013	0.26	0.6074
Education	0.0032	0.0040	0.63	0.4290
Prior AA involvement	0.0168	0.0038	19.10	<.0001
Prior AA attendance	0.2491	0.0636	3.91	<.0001
ASPD	0.0318	0.0227	15.32	0.1611
Pre-treatment alcohol severity	0.0004	0.0009	0.24	0.6242
Time	0.1750	0.0271	33.01	<.0001
SA ^b	0.0048	0.0473	0.06	0.9186
SA X time	0.0191	0.0385	0.12	0.6201
SA X gender	0.0046	0.0309	0.02	0.8815

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Discussion

In this study, alcoholic women with SA were more likely to relapse and less likely to participate in certain components of the AA program than alcoholic women without SA and alcoholic men with and without SA. These results indicate that SA does not impair women in terms of meeting attendance, nor does it impair men in terms of either dimension of AA affiliation. The discrepancy between participation levels in attendance versus other involvement was observed only among women with SA. In contrast to merely sitting among many at a meeting, activities that expose the individual to the scrutiny of other members may be especially challenging for women with SA. Women with SA may be more apt to perceive and internalize criticisms by others, leading to less participation in certain activities. For example, the AA activity of giving a "lead" (telling one's story from a podium), which often involves sharing personal struggles with large alcoholic audiences, may be more anxiety-provoking for women with SA. Excessive fear of being perceived as "less than" by others may impair their ability to participate in, and thus benefit from, self-exposing exercises in unfamiliar group settings.

Conclusions

Women with SA seeking help for alcohol problems may benefit more from TSF treatment or 12-step fellowships held in settings that diminish the effects of SA, such as women-only meetings or small, familiar groups.

Future Directions

Chemical dependency care providers should consider the additional challenges that SA poses for the recovery of alcoholic women in formulating treatment plans.

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