



Maintaining Success in Failure: Psychosocial Improvements among High-Functioning Heavy Drinkers Three Years Following Treatment



CENTER ON ALCOHOLISM,
SUBSTANCE ABUSE,
& ADDICTIONS

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INTRODUCTION

- For decades, researchers have proposed conceptualizations of alcohol use disorder (AUD) treatment response and recovery less focused on abstinence from alcohol, including the assessment of wider areas of psychosocial functioning (Maisto & McCollam, 1980; Pattison, 1976)
- However, abstinence or absence of any heavy drinking remains the model endpoint for evaluating clinical trials of AUD treatment
- There is considerable heterogeneity in functioning among individuals who exceed low risk drinking limits (exceed 3/4 standard drinks for women/men i.e., treatment non-responders)
- Recent research has found over 1/2 of treatment non-responders (or 1/4 of full sample) demonstrate good psychosocial functioning commensurate with individuals reporting abstinence or low risk drinking (i.e., treatment responders) up to one year following treatment, but it is unclear if functioning is maintained beyond one year (Wilson et al. 2016)
- We examined differences between four groups of treatment non-responders/responders at 12-month follow-up on psychosocial functioning and drinking outcomes at 3-year follow-ups in COMBINE and Project MATCH

METHOD

PARTICIPANTS AND PROCEDURE

- Data for the present study came from two multisite randomized clinical trials, the COMBINE study (Anton et al., 2006) and Project MATCH (Project MATCH Research Group, 1996), including those characterized in terms of drinking/functioning at one-year follow-up (n=962 and n=1528) who were retained at three-year (n=641 and n=790) post-treatment follow-ups

MEASURES

- The Form 90 was used to assess alcohol use in both studies (Miller, 1996)
- In COMBINE, psychosocial measures included the SF-12 (Ware et al., 1996) WHOQUOL-BREF (WHO, 1998). In MATCH, psychosocial outcomes included the DrInC (Miller et al., 1995), items from the PFI (Feragne et al., 1983), and the ASI (McLellan et al., 1992)

RESULTS

- Treatment non-responders were identified as individuals who report >0% heavy drinking days at the 12/15-month follow-up periods in COMBINE/MATCH
- Three profiles of non-responders were identified using latent profile analysis in both samples: relatively low functioning (10% and 6%), average functioning (20% and 18%), and high functioning (23% and 28%) (see Wilson et al., 2016)
- Responders included abstainers/low-risk drinkers (~48% in both samples)
- We conducted ANOVAs with Tukey post-hoc comparisons (for continuous outcomes) or chi-square analyses with column proportion tests with Bonferroni alpha correction (for binary outcomes)
- Mean comparisons on psychosocial functioning outcomes are shown in Figure 1 for MATCH and COMBINE, and all results shown in Table 1
- Overall, high-functioning non-responders at one-year post-treatment maintained a similarly high level of functioning two years later that did not differ significantly ($ps>.05$) from the abstainer/low risk drinker group (i.e., traditional responders)

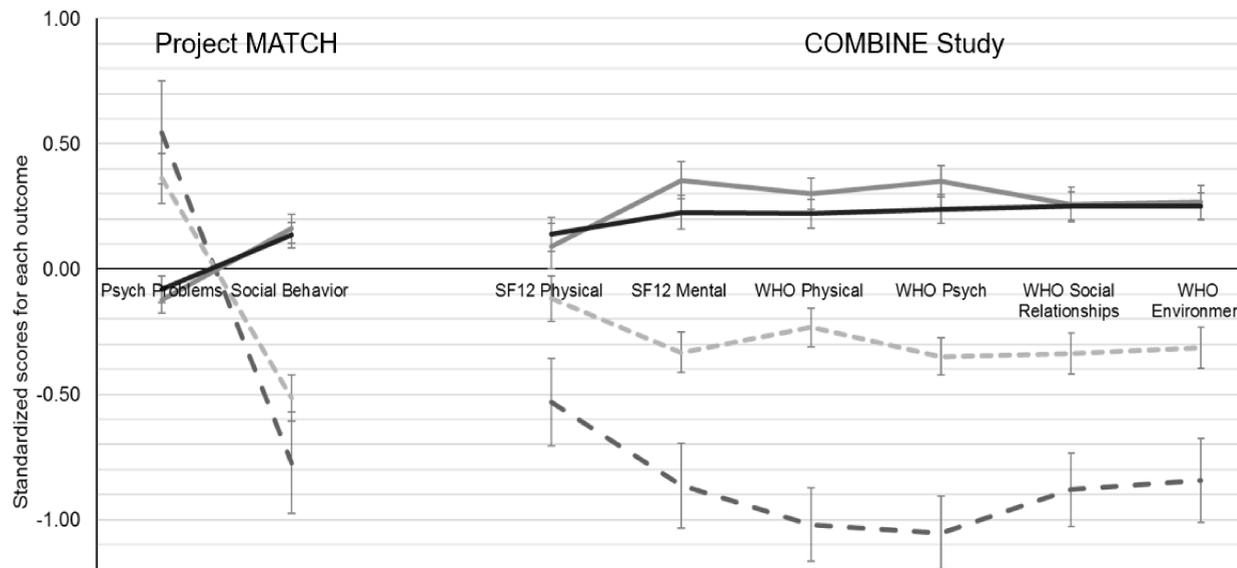


Figure 1. Mean comparisons on psychosocial outcomes between classes identified up to 12/15-months following treatment on outcomes at 3-years in Project MATCH/COMBINE based on most-likely class membership

--- Low Functioning Non-Responders
 ... Average Functioning Non-Responders
 — High Functioning Non-Responders
 — Abstainers/Low-Risk Drinkers

Table 1. Mean comparisons between classes identified up to 12-months following treatment on outcomes at 3-years in Project MATCH based on most-likely class membership

	Non-responder Class 1: Low Functioning (≈6%)	Non-responder Class 2: Average Functioning (≈18%)	Non-responder Class 3: High Functioning (≈28%)	Responders: Abstainers/ Low-risk Drinkers (48%)
Sample size range by group*	23 - 35	92 - 123	246 - 280	185 - 352
DrInC: Total Consequences (n = 546, abstainers omitted) M (95% Confidence Interval)	61.04 _a (48.58, 73.51)	47.58 _b (42.12, 53.04)	30.48 _c (27.89, 33.08)	25.54 _c (22.12, 28.94)
Percent Drinking Days (n = 790) M (95% Confidence Interval)	29.33 _a (17.03, 41.64)	38.98 _b (32.37, 45.59)	43.56 _c (39.24, 47.87)	17.95 _a (14.87, 21.02)
Drinks per Drinking Day (n = 790) M (95% Confidence Interval)	7.04 _a (4.17, 9.91)	6.12 _a (5.09, 7.16)	6.17 _a (5.56, 6.78)	2.43 _b (2.07, 2.79)
Percent Heavy Drinking Days (n = 790) M (95% Confidence Interval)	24.10 _a (12.92, 35.27)	30.25 _a (24.23, 36.28)	28.66 _a (24.88, 32.44)	8.41 _b (6.24, 10.58)
Social Behavior Score (n = 766) M (95% Confidence Interval)	3.06 _a (2.87, 3.26)	3.19 _a (3.10, 3.27)	3.50 _b (3.45, 3.56)	3.49 _b (3.45, 3.54)
Troubled by Psych Problems (n = 787) M (95% Confidence Interval)	1.57 _a (1.02, 2.12)	1.33 _a (1.07, 1.59)	0.70 _b (0.56, 0.84)	0.75 _b (0.62, 0.88)
Unhappy – Life (n = 748) Proportion	.50 _a	.40 _a	.18 _b	.16 _b
Unhappy – Living Situation (n = 752) Proportion	.40 _a	.29 _a	.20 _{ab}	.17 _b
Unhappy – Personal Relationship (n = 750) Proportion	.54 _a	.34 _{ab}	.22 _{bc}	.15 _c
Dissatisfied – Leisure (n = 759) Proportion	.49 _a	.46 _a	.19 _b	.18 _b
Unemployed (n = 789) Proportion	.31 _a	.24 _a	.11 _b	.12 _b
Experienced serious depression (n = 789) Proportion	.34 _a	.26 _{ab}	.12 _c	.16 _{bc}
Experienced anxiety/tension (n = 789) Proportion	.43 _{ab}	.38 _b	.22 _c	.23 _{ac}

Note. DrInC=Drinker Inventory of Consequences, ASI=Addiction Severity Index, BDI=Beck Depression Inventory, PFI=Psychosocial Functioning Inventory. Means/proportions sharing a subscript in a row indicate means that are not significantly different from each other based on Tukey post-hoc comparisons/cross-tabulation tests of significance.

*Sample sizes ranged based on missingness on the various outcome variables.

SUMMARY/CONCLUSION

- Defining success versus failure for alcohol clinical trials has been a contentious issue
- Reductions in drinking have been shown to be associated with stable improvements in functioning and health over time, and some individuals can achieve meaningful improvements in health by reductions in drinking, even if they still occasionally exceed low risk drinking limits
- The results from the current study suggest over 1/2 of individuals who engage in occasional heavy drinking can achieve and maintain high levels of functioning that is comparable to abstainers and low risk drinkers

- The current results further question the utility of alcohol consumption alone in defining successful outcomes in alcohol clinical trials

LIMITATIONS

- Limitations include the exclusive use of self-report, no perspective of significant others (who may define success differently), having only one subjective measure of physical health, and saving out most likely class membership (rather than using individual class probabilities for analyses)