

ModerateDrinking.com & Moderation Management: Outcomes of a Randomized Clinical Trial with 3, 6, & 12 month Follow-ups¹

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ABSTRACT

Objective: To evaluate the effectiveness of a web-based moderate drinking protocol (www.moderatedrinking.com) and use of the online resources of Moderation Management (MM) (www.moderation.org) compared to the use of the online resources of MM alone. **Method:** Eighty heavy drinkers were randomly assigned to either the experimental or control group. Follow-ups were at 3, 6, and 12 months. **Results:** Seventy five participants (94%) had outcome data at one or more follow-up points, and 59 (73%) were assessed at all three follow-ups. Comparing baseline measures to the average outcomes at follow-ups indicated a significant overall reduction in both groups in alcohol-related problems and consumption variables. Compared to the control group, the experimental group had better outcomes on alcohol-related problems, percent days abstinent, and trends favoring them on the other consumption variables. We also found an interaction between intensity of drinking and outcomes. Less heavy drinkers in the experimental group had significantly better outcomes on log Mean BAC per drinking day and a trend towards better outcomes on log Mean Drinks per Drinking Day when compared to the control group. Heavier drinkers did not differentially benefit from the MD program on consumption measures. **Conclusion:** The outcome data provide evidence for the effectiveness of the moderate drinking web application and of the effectiveness of the resources available online at MM.

INTRODUCTION

Problem drinkers: An under-served population. Epidemiological research suggests that there are four times as many individuals with alcohol problems but not dependence relative to those who meet the criteria for dependence (NIAAA, 2000). Another report indicates that this group is increasing in size while the prevalence of alcohol dependence is declining (NIAAA, 2004). While moderation training protocols are effective for this population (Hester, 2003), there are barriers to its widespread implementation in the U.S. On the other hand, a web application could be a practical alternative for meeting the needs of this under-served population.



The Moderate Drinking web application. The protocol is a divided into modules which focus on: building motivation and self-confidence; setting drinking goals/limits; "doing a 30" (an initial month long period of abstinence); self-monitoring drinking (with personalized feedback relative to the goals the drinker has set); rate control; setting personal drinking rules; self-monitoring urges to drink (with personalized feedback); identifying and managing triggers; developing alternatives; general problem solving; dealing with lapses and/or relapses; considering abstinence; and self-monitoring one's own mood using the Positive and Negative Affect Scale (Clark & Tellegen, 1988).

HYPOTHESES

1. Both experimental and control groups will reduce their alcohol-related problems & consumption relative to baseline levels at follow-ups.
2. The experimental group will show a greater reduction in alcohol-related problems & consumption relative to the control group at follow-ups.

METHODS

Inclusion and Exclusion criteria, Consort Flow Chart, Assessment & Randomization: Please See Handout.

Participants	N = 80
Female/Male	56%/44%
Mean Age	50
Ethnicity:	
Caucasian	78.7%
Hispanic	18.7%
Other	2.5%

Fig. 1. Alcohol-related Problems: DrInC Recent Scores

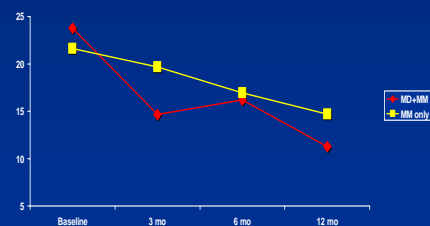
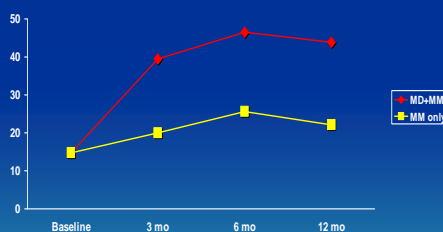


Fig. 2. Percent Days Abstinent (PDA)



RESULTS

Primary analyses. Results are based on the intent to treat sample. The dependent measures of primary importance are: alcohol-related problems (DrInC Recent Score), Percent Days Abstinent (PDA), log Mean Drinks per Drinking Day, and log Mean Peak BAC for Drinking Days.

Hypothesis 1. The reduction in alcohol-related problems was significant $F(3,53) = 14.22, p < .001$. There was also evidence of additional improvement between 6 and 12 months ($p = .008; d = .29$). The multivariate test of the overall reduction in alcohol consumption averaging across both groups was significant $F(9, 47) = 8.14, p < .001$.

Hypothesis 2. For alcohol-related problems the Time x Treatment interaction was significant, $F(3, 53) = 3.23, p = .030$. In terms of the overall two way interaction, the pattern for the drinking measures was for there to be a trend toward greater overall improvement from baseline to the follow-ups in the MD+MM than in the MM-only group. For PDA, this two-way Time x Treatment interaction was significant, $F(3, 53) = 3.26, p = .029$. There also was a significant Time x Treatment x Binge Drinking Status interaction, $F(9, 47) = 2.49, p = .021$.

Outcomes differed as a function of Binge Drinking Status. The multivariate test of the Time x Treatment x Binge Drinking Status three-way interaction was significant. For non-binge drinkers (Figures 3 & 4), the improvement from baseline to the 3 month follow-up was significantly greater for the MD+MM group than for the MM only group.

Fig. 3. Median Peak BAC per Drinking Day

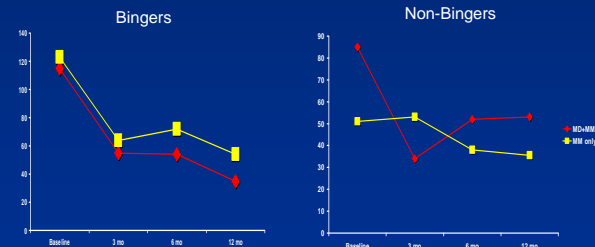
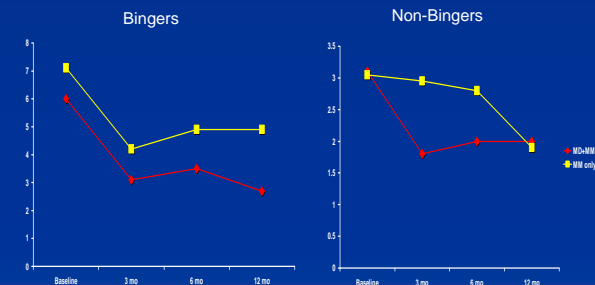


Fig. 4. Median Drinks per Drinking Day



DISCUSSION

These outcome data support both experimental hypotheses: 1. Both groups reduced their alcohol-related problems and drinking relative to baseline levels at follow-up; and 2. The experimental group showed a greater reduction in alcohol-related problems and drinking relative to the control group at follow-up.

These results provide evidence that the web application, Moderate Drinking (www.moderatedrinking.com), when used in conjunction with the resources at MM (www.moderation.org) helps heavy drinkers reduce their alcohol-related problems and drinking more than using the resources of MM alone.

The interaction between level of drinking and outcomes is consistent with other research suggesting that heavier drinkers may benefit less from moderation protocols.

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