TABLE S1. Relevant alcohol cue reactivity (alcohol > soft drink) contrasts, before training, pre – post training, and after training

Brain region	Hemis-phere	Cluster Size	Coordinates of Peak Activation (MNI, x y z)			T_{max}
Pre training, both groups						
Orbitofrontal cortex	L	230	-45	29	-14	5.14 *
Amygdala/hippocampus	L	62	-21	-7	-14	4.98 ***
Orbitofrontal cortex	R	41	33	35	-14	4.83 *
Superior parietal lobule	L	22	-24	-58	46	4.30 *
Inferior occipital gyrus	R	107	45	-79	-8	4.25 *
Inferior temporal lobe	L	25	-45	-46	-17	3.98 *
Middle frontal gyrus/ insula	L	139	-36	14	40	3.92 *
Superior parietal lobe	R	55	27	-58	49	3.81 *
Insula	R	34	27	17	-20	3.81 *
Suppl. motor area	L/R	69	0	26	61	3.63*
Middle temporal gyrus	L	15	-66	-16	-14	3.32 *
Inferior frontal gyrus	R	20	45	5	34	3.32 *
Hippocampus/amygdala/ putamen	R	16	21	-13	-20	3.27 *
Inferior frontal gyrus	R	11	45	26	10	3.26 *
Superior temporal gyrus	L	10	-33	14	-38	3.05 *
Middle occipital gyrus	L	10	-45	-76	-8	2.97 *
Pre training, Bias modification > Sham						
Superior frontal gyrus	R	34	18	59	16	3.12 *
Pre training, Sham > Bias modification						
No suprathreshold voxels						
Pre – post training, Bias modification > Sham						
Cerebellum	R	34	15	-28	-26	3.78 *
Amygdala	L	11	-15	-4	-20	3.47 ***
Superior temporal gyrus	R	16	42	11	-26	3.35 *
Caudate	R	24	3	14	1	3.12 *
Cerebellum	L	10	-12	-31	-20	3.10 *
Post training, Sham > Bias modification						
Amygdala/para-hippocampus	L	14	-15	-1	-26	3.86 ***

*** $p < .05$, family-wise error corrected, small-volume corrected

* $p < .005$ uncorrected, $k \geq 10$

TABLE S2. Exploratory analyses of alcohol relapse

Alcohol relapse rates of all participating alcohol-dependent inpatients were acquired 1 year after abstinence through postal and telephone interviews (using the same procedure as Wiers et al, 2011 (19); Eberl et al, 2013 (23). Relapse was defined as drinking >1 alcoholic beverage within 12 months. Please note that analyses remained exploratory because a power analysis based on Eberl et al, 2013 (N=475, 8.5% relapse reduction, χ^2=3.42, p=.039, ϕ=.085, small effect) and Wiers et al, 2011 (N=214, 13% relapse reduction, χ^2=3.71, p=.057, ϕ=.13, small effect) indicated that in order to replicate their effects of cognitive bias modification training decreasing relapse, our neuroimaging study would have had to consist of at least 200 patients to find even a trend.

In the bias modification training group, 7 out of 15 patients (46.7%) remained abstinent, whereas this percentage was 41.2% in the sham training group (7 out of 17). Though these percentages were comparable with previous reports of cognitive bias modification training on relapse (19, 23), the difference was not significant (χ^2=.098, p=.76).

There was no association between relapse and alcohol cue reactivity in our regions of interest (amygdala and nucleus accumbens): neither over all patients nor between the two training groups (p>.005 uncorrected). See below for whole-brain analyses of alcohol cue reactivity of relapsers versus abstainers and the interaction of relapse status x training status, all at $p < .005$ uncorrected, $k \geq 5$.

Brain region	Hemis-phere	Cluster Size	Coordinates of Peak Activation (MNI, x y z)			T_{max}
Pre-post training, Abstainers > Relapsers, Bias modification > Sham						
Cerebellum	L	80	-18	-61	-50	4.55 *
Cerebellum	R	93	24	-55	-50	4.42 *
Precuneus	L	38	-18	-58	49	4.09 *
Middle temporal gyrus	L	15	-36	-70	16	3.80 *
Putamen	R	6	18	-4	-5	3.67 *
Precentral gyrus	R	67	30	-22	64	3.64 *
Subgyral	L	14	-30	-13	34	3.55 *
Fusiform gyrus	L	18	-30	-55	1	3.48 *
Medial frontal gyrus	R	26	18	11	52	3.47 *
Postcentral gyrus	R	15	48	-19	31	3.43 *
Inferior parietal lobe	L	44	-54	-25	34	3.39 *
Precuneus	R	46	21	-73	46	3.35 *
Fusiform gyrus	L	13	-27	-43	-17	3.34 *
Cuneus	L	24	-18	-55	19	3.32 *
Precentral gyrus	R	9	36	-7	28	3.30 *
Precuneus	R	13	27	-55	19	3.28 *
Pre-post training, Abstainers > Relapsers						
No suprathreshold voxels						
Post training, Relapsers > Abstainers, Bias modification > Sham						
No suprathreshold voxels						
Post training, Relapsers > Abstainers						
Cerebellum	L	12	-36	-79	-38	3.14 *