



Motor sequence test (MST) learning across 12 training trials in the evening, 12 test trials in the morning and 12 new training trials in the morning, for healthy control participants (n = 18, blue squares), patients with obstructive sleep apnea during NREM and REM sleep (NREM/REM OSA, n = 18, red triangles) and patients with REM-exclusive obstructive sleep apnea (REM-OSA, n=17, green diamonds). Similar learning patterns are present in the evening and in the morning when training on a new MST sequence.

## Table S1

POMS SUBSCALES	Controls (n=18)	NREM/REM OSA (N=18)	REM-OSA (n=17)	P-value
Tension	3.3±0.6	6.8±0.8	9.3±2.8	0.052 <i>,</i> <sup>‡</sup>
Depression	0.5±0.2	4.0±1.1	11.5±5.6	0.034, <sup>‡</sup>
Anger	0.4±0.4	2.4±0.8	6.2±4.1	0.182
Vigor	13.8±2.9	8.8±1.2	6.5±2.0	0.065
Fatigue	5.0±1.9	8.9±1.0	15.0±2.5	0.005 <i>,</i> <sup>‡</sup>
Confusion	3.6±0.6	4.8±0.6	7±2.1	0.151
Total Mood Disturbance	-1.8±3.5	18.1±3.5	42.5±13.7	0.002, <sup>‡</sup>

Values are presented as mean  $\pm$  sem. P-value represents results of ANOVA across the three groups for each measure. POMS = Profile of Mood State questionnaire.

Asterisks represent significant pairwise comparisons:

\* (Control/NREM-REM-OSA); ‡ (Control/REM-OSA); § (NREM-REM-OSA /REM-OSA)