**Figure S1.** Discrepancies in polysomnographically and actigraphically assessed total sleep time. In this Bland-Altman plot, the horizontal reference line in the middle indicates the average difference in total sleep time (TST) estimated with polysomnography and actigraphy. The dotted lines above and below represent the 95% confidence interval. The two clusters respectively represent TST data from the nights with 5 h (left cluster; open circles) and 9 h (right cluster; filled circles) of time in bed (TIB). Discrepancies between polysomnographically and actigraphically assessed TST decreased as TST approached TIB, i.e. when sleep efficiency was high. *P < 0.05; **P < 0.01 for group contrasts.
**Figure S2.** Effects of partial sleep deprivation on response bias measures. Daily average and standard errors of the sleep restriction (red lines) and the control (blue lines) groups from the days after the last baseline night (B3), after 1-7 nights of sleep manipulation (M1 to M7), and after 2 nights of recovery sleep (R1 and R2) were plotted for the response bias measure ($B''_D$) in (A) the Sustained Attention to Response Task (SART) and (B) the verbal 1- and 3-back tasks.