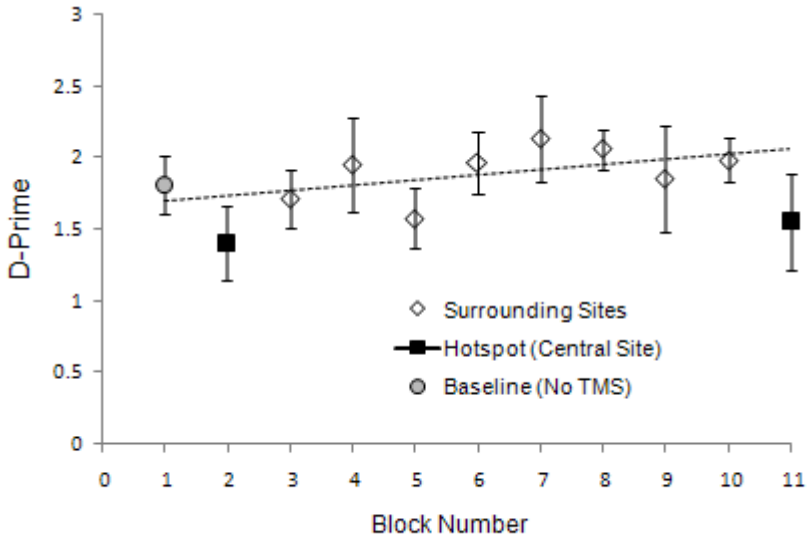
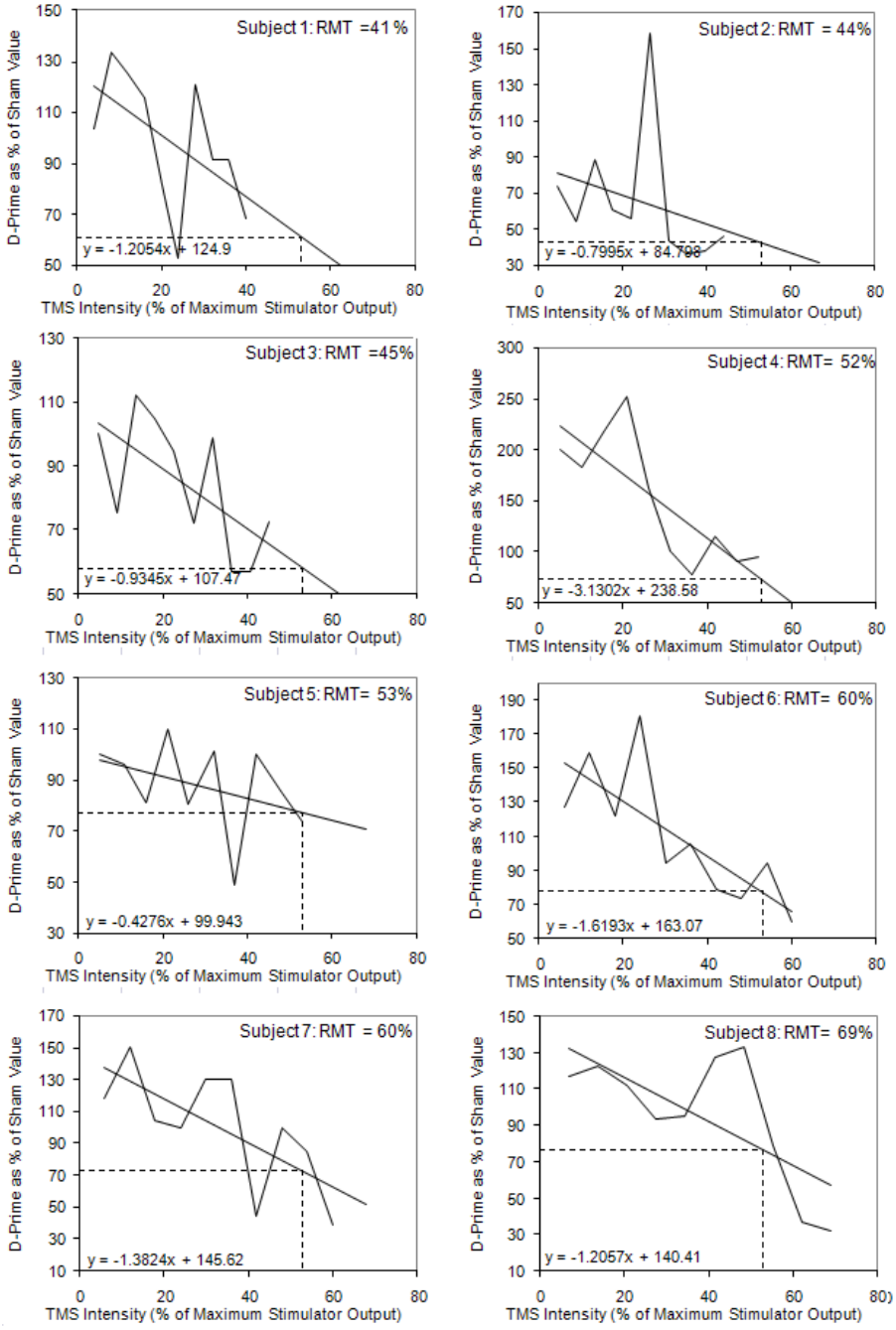


Supplementary Figure S1. D-prime values from Experiment 2 are shown for the baseline condition (no TMS, grey symbol at far left); for 10 HzTMS over the right parietal hotspot (black symbols, second from left and rightmost) and for 10Hz TMS over the eight surrounding sites in the scalp grid (open symbols), plotted against sequential block order along the x-axis. Error bars show SEM. Performance over blocks 3-10 (those which did not involve TMS over the hotspot), was examined for evidence of any ongoing learning effect. There was a modest overall increase in performance; as a linear function, d' increases by 0.030 per block (dashed

line), but across all blocks, d' values were not correlated significantly with block order ($r_s(6)$ = 0.488, p = 0.22). In any case, as a precaution against any increase in d' over successive blocks,,TMS was delivered over the right-parietal hotspot for both the first and last TMS blocks (see black symbols), and their values averaged before comparison with the surround sites. Note that comparable performance for both of the hotspot blocks (black symbols) despite their very different sequential position.


Subject 1: RMT =41 %
y = -1.2054x + 124.9
Subject 2: RMT = 44%
y = -0.7995x + 84.798
Subject 3: RMT =45%
y = -0.9345x + 107.47
Subject 4: RMT= 52%
y = -3.1302x + 238.58
Subject 5: RMT= 53%
y = -0.4276x + 99.943
Subject 6: RMT= 60%
y = -1.6193x + 163.07
Subject 7: RMT = 60%
y = -1.3824x + 145.62
Subject 8: RMT= 69%
y = -1.2057x + 140.41
D-Prime as % of Sham Value
TMS Intensity (% of Maximum Stimulator Output)

Supplementary Figure S2. The individual subject plots for data from Experiment 4, displayed in order of increasing RMT (as shown in the top right corner of each plot) showing the fall in d' for left gaps with increased intensity of TMS over the right-parietal hotspot. D-prime is shown (along the y-axes) as a % of the corresponding Sham value and TMS intensity as % of maximum stimulator output along the x-axes. A linear trend line is fitted to each plot, with the function equation displayed in the bottom left hand corner of each plot . The d' value at a constant reference TMS intensity (i.e. at a stimulator output of 53% corresponding to the grand mean of all subjects' RMT- see main text) is calculated for each subject (represented by the dashed lines). These values were then used in the correlation with individual subject RMT's (cf. Fig. 5 in main paper).