Supplementary Material

Mice haploinsufficient for *Map2k7*, a gene involved in neurodevelopment and risk for schizophrenia, show impaired attention, a vigilance decrement deficit and unstable cognitive processing in an attentional task: impact of minocycline

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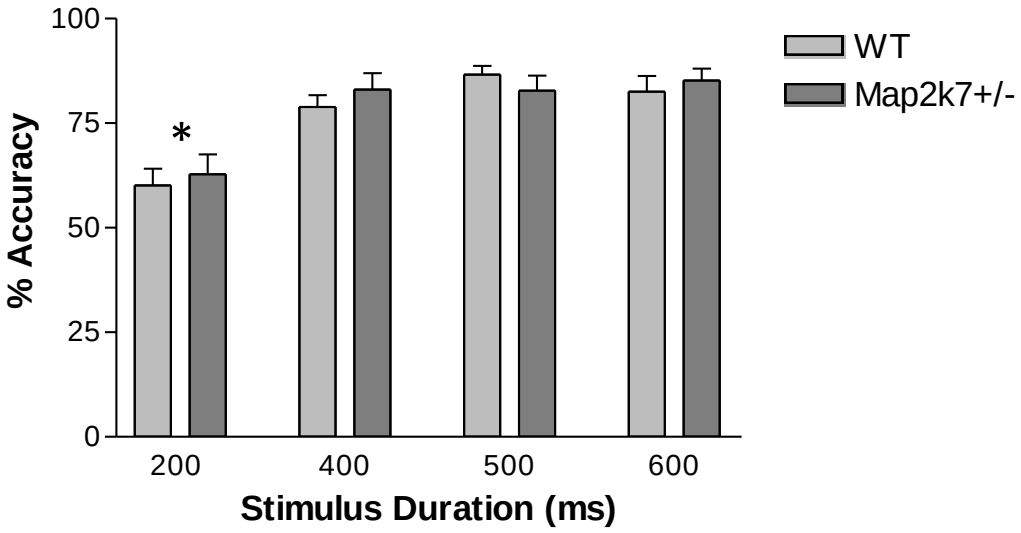
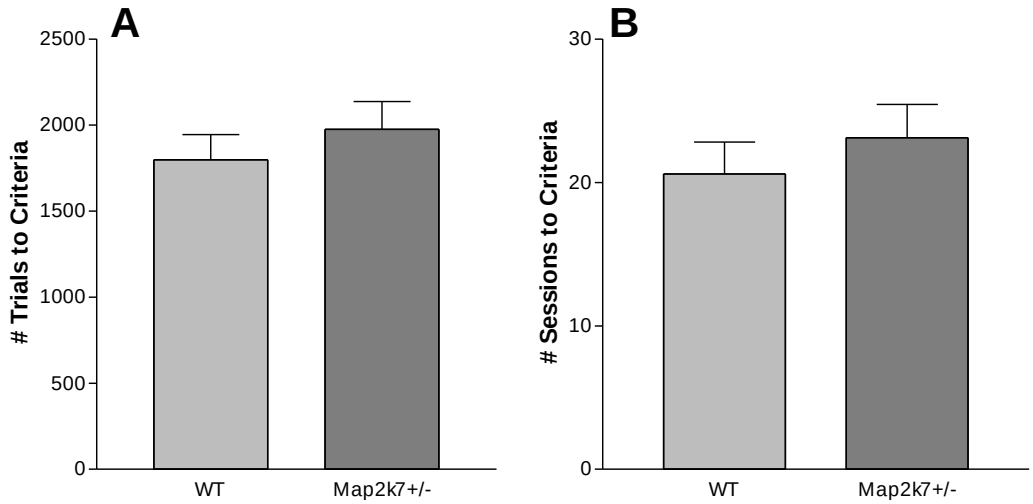
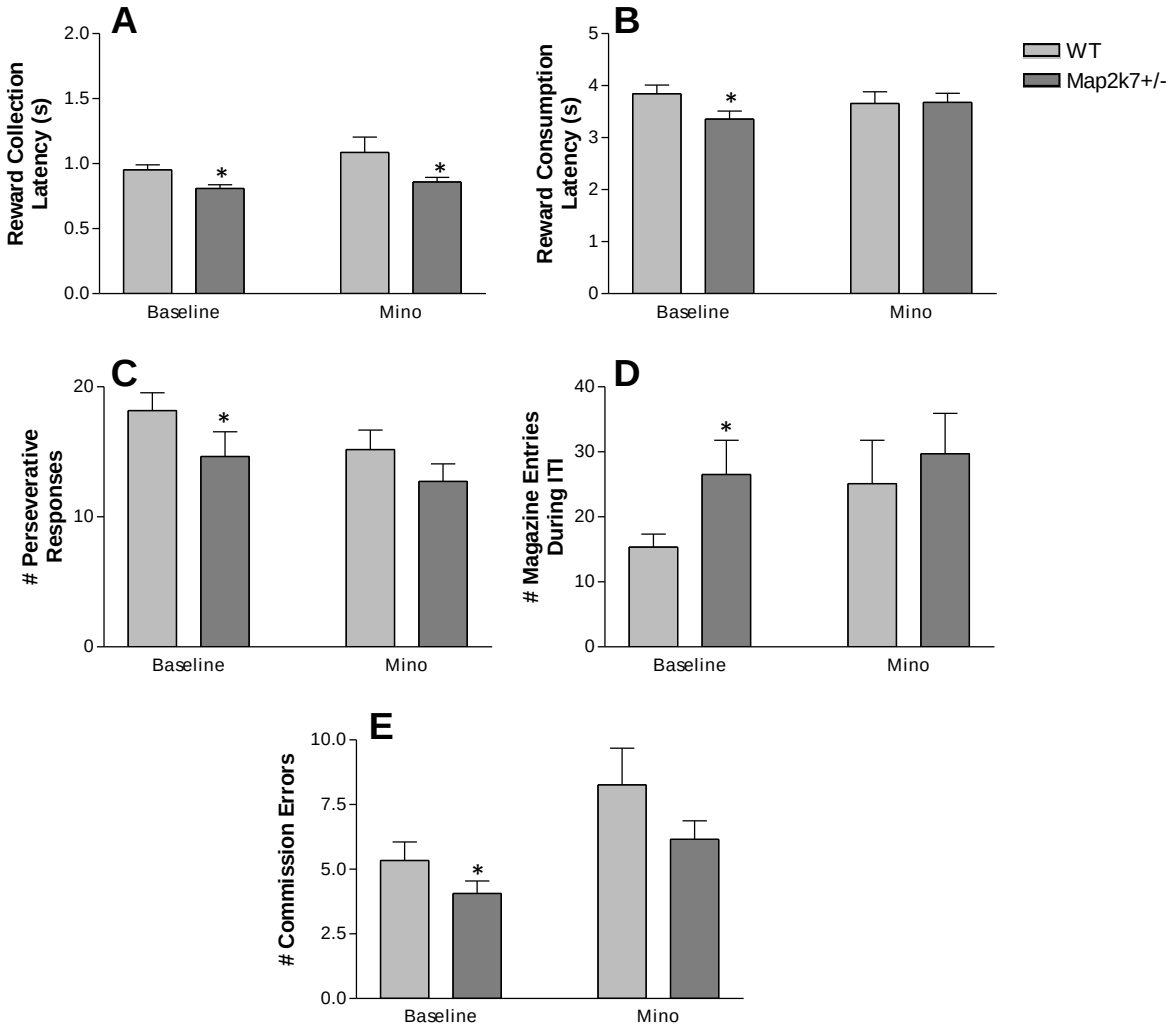
Additional Data



Supplementary Figure S1. Performance of *Map2k7*$^{+/-}$ mice in the 5-CSRTT remained similar to WTs prior to being challenged with shorter stimulus durations (SD). Throughout a single session, mice were subjected to variable stimulus durations with a fixed ITI of 5 seconds. Stimulus durations varied pseudorandomly across the session between 0.2, 0.4, 0.5 and 0.6 seconds in order to challenge accuracy. Data analysed by a repeated measures ANOVA, with genotype as a between subjects factor, stimulus duration as a within subjects factor and each individual mouse nested within genotype, with Tukey's post-hoc. Data are presented as mean ± SEM. Accuracy significantly decreased for all mice with stimuli of 0.2 seconds, but was maintained at a high level for 0.4, 0.5 and 0.6 second stimuli (effect of stimulus duration: $F_{(3,84)}$=30.63, *p<0.001 (vs. 0.4, 0.5, 0.6s SD); no effect of genotype: p=0.47; N_{WT}=15, $N_{Map2k7+/-}$=16).



Supplementary Figure S2. WT and *Map2k7*$^{+/-}$ mice took a similar number of trials (**A**) and sessions (**B**) to reach criteria for initial acquisition of the 5-CSRTT. Initial acquisition occurred prior to introduction of the vITI, so the ITI was fixed at 5 seconds and stimulus duration fixed at 1 second. Data was analysed separately by a one-way ANOVA between genotypes. Data are presented as mean ± SEM. No significant effect of genotype: p=0.43 and p=0.39 for **A** and **B**, respectively. N_{WT}=15, $N_{Map2k7+/-}$=16.



Supplementary Figure S3. Additional data on the effect of minocycline on other phenotype-specific changes in performance. Minocycline removed genotype statistical significance for: the latency to consume reward, the number of perseverative responses, magazine entries during the ITI and commission errors, but did not affect reward collection latency. Data analysed by a repeated measures ANOVA, with genotype as a between subjects factor, session as a within subjects factor and each individual mouse nested within genotype, with Tukey's post-hoc. Data are presented as mean ± SEM. *$p<0.05$ (vs. WT). $N_{WT}=15$, $N_{Map2k7+/-}=16$.