Supplemental material

Figure 1 Supplemental

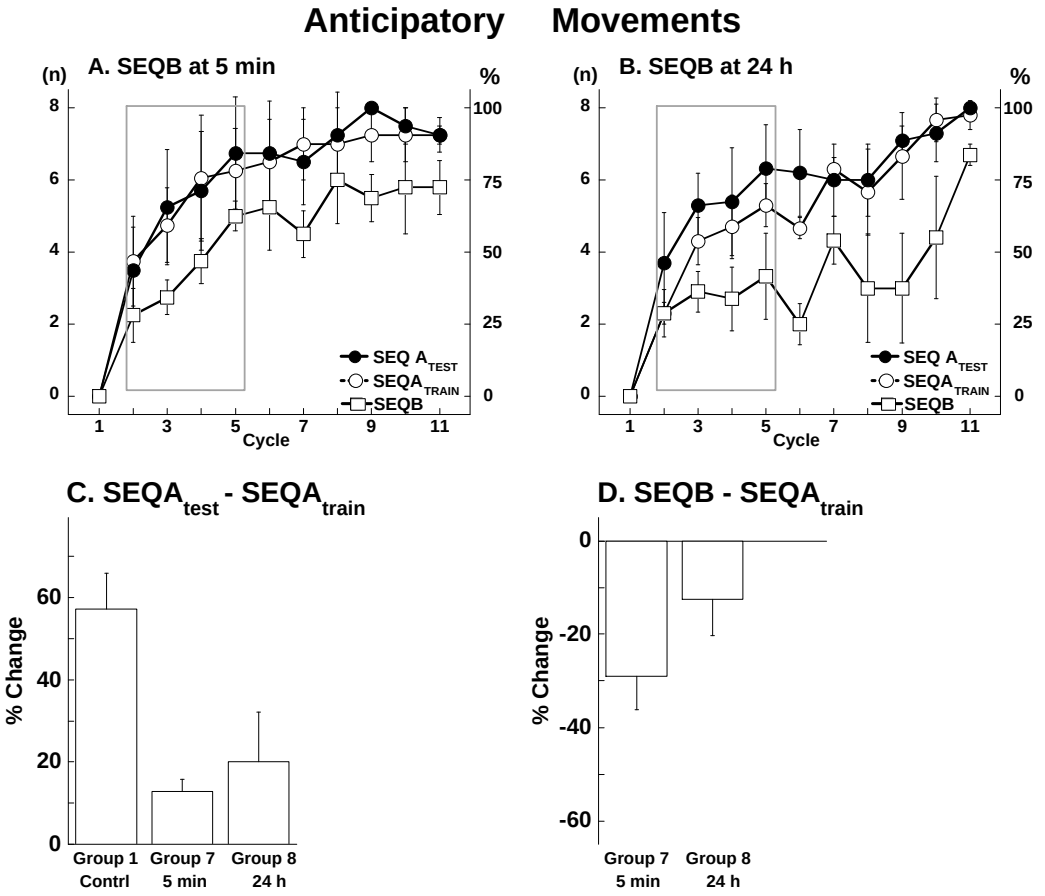

Figure 1. Supplemental.

A and B. Correct anticipatory movements for SEQA and B plotted as a function of movement cycles. Both Group 7 (A) and 8 (B) learned SEQA in 11 cycles and learned SEQB in 11 cycles either 5 minutes (Group 7) or 24 h later (Group 8). A. In group 7, the number of correct anticipatory movements significantly increased in $SEQA_{train}$, $SEQA_{test}$ and SEQB across cycles ($F(10,99) = 12.5$, $p<0.0001$). Repeated measures ANOVA also showed a main effect for session ($F(2,99) = 7.6$, $p=0.0008$), without interaction. *Post-hoc* tests with Bonferroni correction showed significant difference between SEQB and $SEQA_{train}$ ($p< 0.0004$), a borderline difference

($p=0.02$) between SEQB and $SEQA_{test}$, but not between $SEQA_{train}$ and $SEQA_{test}$ ($p=0.72$). B. In group 8, there was a significant increase of correct anticipatory movements across cycles ($F(10,99) = 19.5$, $p<0.0001$) and between sessions ($F(2,99) = 9.8$, $p<0.0001$). *At post-hoc* tests there was significant difference between SEQB and $SEQA_{train}$ ($p< 0.0001$) and $SEQA_{test}$ ($p=0.002$), but not between $SEQA_{train}$ and $SEQA_{test}$ ($p>0.05$).

C. Savings at test (% improvement in cycles 2 to 5) in Groups 1 (Controls), 7 and 8. Each bar represents the mean ± SE for each group. There were significant ($p<0.003$) differences between group 1 and groups 7 and 8. D. Percent performance change between SEQB and $SEQA_{train}$ (Cycles 2 to 5) for groups 7 and 8. Each bar represents mean difference (± SE). There was no significant difference between the two groups.

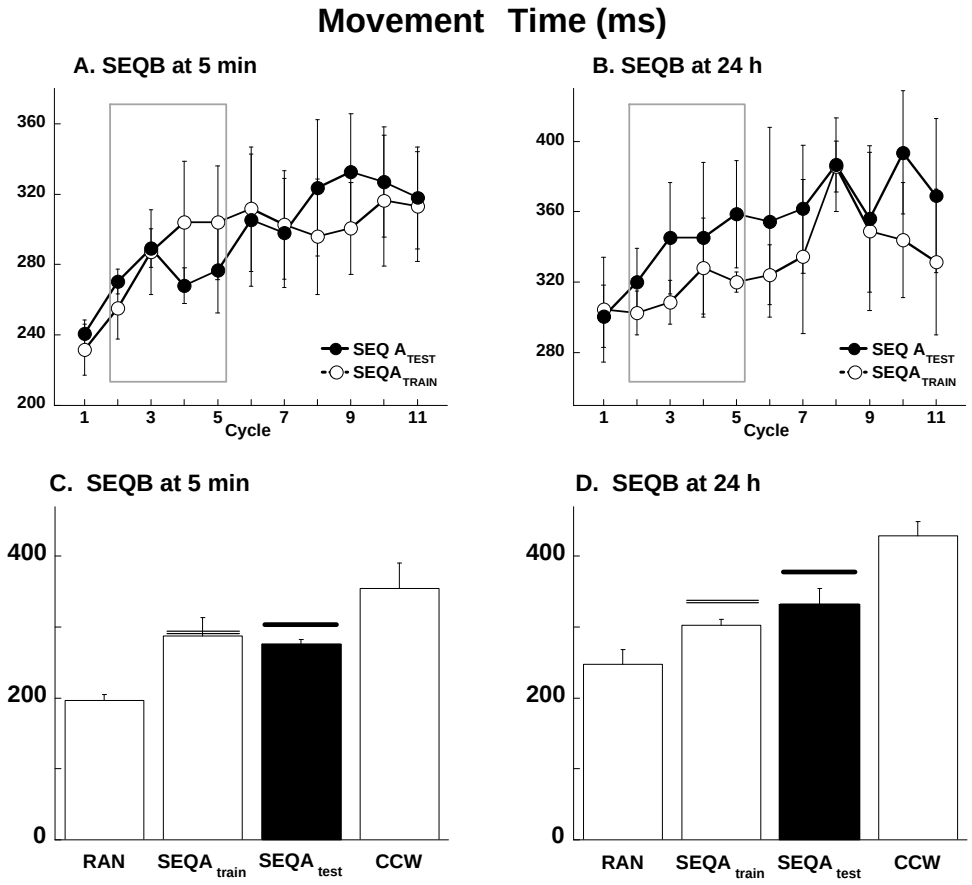

Figure 2. Supplemental.

Implicit learning for Group 7 (A) and Group 8 (B). Mean MTs (± S.E) per cycle plotted for $SEQA_{train}$ (empty black circles) and $SEQA_{test}$ (filled black circles). MT increased across cycles in both Groups during both sessions. A. Repeated measure ANOVA for Group 7 showed a main effect of cycle ($F(10,66) = 1.9$, $p=0.04$), but not between sessions. B. For Group 8, there was an increase of MT across cycles ($F(10,66) = 2.1$, $p=0.02$), with a difference between the two sessions ($F(1,66) = 3.5$, $p=0.04$).

C, D. Mean MT for correct anticipatory movements in cycles 2-5 (± S.E) per group for RAN, CCW, $SEQA_{train}$ (white bars) and $SEQA_{test}$ (black bars). The horizontal bars in $SEQA_{train}$ and $SEQA_{test}$ bars represent the MT mean for the entire block. C. There was no significant

difference between $SEQA_{train}$ and $SEQA_{test}$ in Group 7. D. A bordeline significant increase was found in group 8 between $SEQA_{train}$ and $SEQA_{test}$ ($p=0.06$). The increase is comparable to the one reported for group 3.