

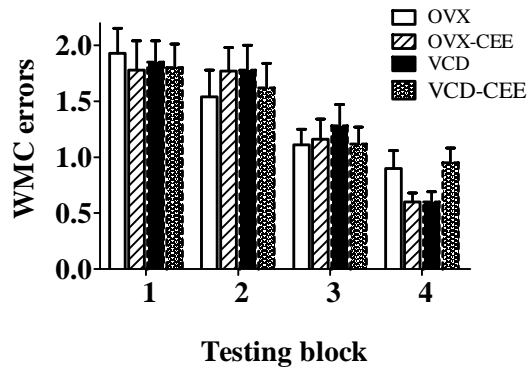
### Supplemental figure legends:

Supplemental Figure 1. Mean $\pm$ SE working memory correct (WMC) errors (a), working memory incorrect (WMI) errors (b) and reference memory (RM) errors (c) for each group (OVX n= 9, OVX-CEE n= 9, VCD n= 12, VCD-CEE n= 13) for the water radial arm maze (wRAM) across 12 days of testing, divided into 4 testing Blocks.

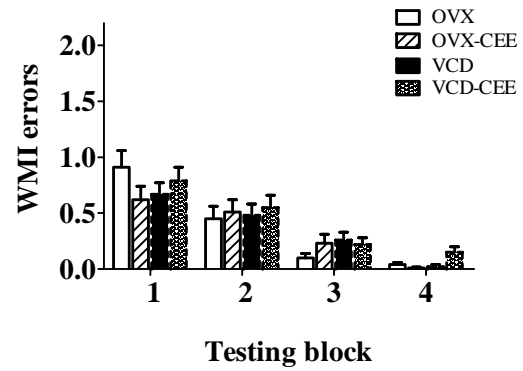
Supplemental Figure 2. Scatterplots of total errors on the delayed-match-to sample (DMS) plus maze for the 6 hr, 4 hr and 8 hr post-delay trial for OVX and OVX-CEE groups (a-c) and VCD and VCD-CEE groups (d-f). There were no group differences for the 6- or 4- hour delay. OVX-CEE animals made fewer errors relative to OVX animals after an 8-hr delay, indicating that CEE enhanced performance in surgically menopausal rats;  $p < .005$ . CEE did not impact post-delay performance if animals had undergone transitional menopause via VCD treatment.

# Supplemental Figure 1

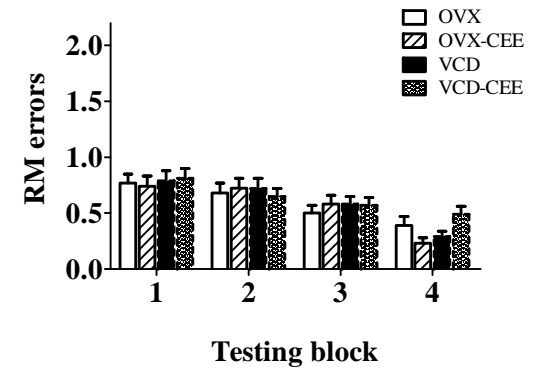
**a** Working memory correct errors



**b** Working memory incorrect errors



**c** Reference memory errors



Supplemental Figure 2

DMS Post-delay Errors

