Supplemental Table 1. Posthoc Backward Regression Models Predicting SLLT delayed cued recall (hits-false positives) performance from significant connectivity ROIs (from Table 5), sex, and scanner site by group.

## HC

The model was not significant, p = .317

## rMDD

A significant model emerged: F(7,26) = 5.175, p = .001, adjusted  $R^2 = .470$ 

Variable	β	p
19. Left Hippocampus—Left Middle Temporal Gyrus	.280	.111
20. Right Hippocampus—Right Parahippocampal Gyrus	.335	.197
21. Right Hippocampus—Right Claustrum	.717	.052
22. Right Hippocampus—Left Putamen	589	.099
23. Right Hippocampus—Right Declive of Cerebellum	.152	.351
Sex	045	.762
Site	025	.889

Supplemental Table 2. Correlations between Table 5 Regression Analysis (post principal components analysis) and Neuropsychological Test Performance Raw Data.

	HC Negative Recall			rMDD Positive Recall	
	PC 1	PC2	PC3	PC1	
<b>Estimated Verbal IQ</b>	-0.26	0.09	-0.79*	0.002	
Memory					
SLLT					
Delayed Cued Recall	-0.59**	-0.66**	-0.68**	0.69**	
(Hits-False Positives)	-0.39	-0.00	-0.06	0.09	
Recognition (Hits-False	-0.51*	-0.63**	-0.63**	0.68**	
Positives)	-0.51**			0.08	
Delayed Cued Recall d'	-0.34	-0.50*	-0.54**	0.60**	
Delayed Recognition, d'	-0.46*	-0.69**	-0.48*	0.58**	
CVLT-II					
Long Delay Free Recall	-0.19	-0.11	0.004	0.22	
Recognition	-0.47*	-0.20	-0.15	0.08	
Language					
Verbal Fluency					
Letter	-0.17	-0.13	-0.31	0.47**	
Animals	-0.06	-0.06	0.09	0.39*	
Visuospatial					
Benton Visual Form	0.002	-0.30	0.57	-0.14	
Discrim.					
Motor					
Purdue Pegboard					
Bilateral Average	-0.41	-0.05	-0.23	0.07	
Digit Symbol Coding	-0.48*	-0.37	-0.27	0.20	
Trail Making Test- A	0.30	-0.01	0.19	-0.34*	
<b>Executive Functioning</b>					
Trail Making Test- B	0.41	0.23	0.54*	-0.20	
Stroop					
Interference ( <i>T</i> )	-0.11	-0.23	-0.33	0.12	
Wisconsin Card					
<b>Sorting Test</b>					
Total Correct	0.21	-0.35	-0.09	-0.15	
Perseverative Errors	-0.25	-0.44*	-0.07	0.16	

## **Figure Legends**

Figure 1. Whole Group Baseline Connectivity Covaried by Sex, Left Hippocampal Seed.

Combined HC and rMDD connectivity (aqua); HCs demonstrating greater connectivity than rMDD within network (lime green); rMDD demonstrating greater connectivity than HCs extranetwork (red).

Figure 2. Whole Group Baseline Connectivity Covaried by Sex, Right Hippocampal Seed.

Combined HC and rMDD connectivity (aqua); HCs demonstrating greater connectivity than rMDD within network (lime green); rMDD demonstrating greater connectivity than HCs extranetwork (red).

Figure 3. Predicting Connectivity from SLLT Performance by Group using Sex corrected Cued Recall-False Positive scores. Panel A represents HC resting state connectivity pattern for negative cued recall for the i) left hippocampal seed and ii) the right hippocampal seed. Panel B represents resting state connectivity pattern in rMDD for positive cued recall for the i) left hippocampal seed and ii) the right hippocampal seed.

Figure 4. Recall Serial Position Curve of the SLLT by Group and Gender.

Figure 1.

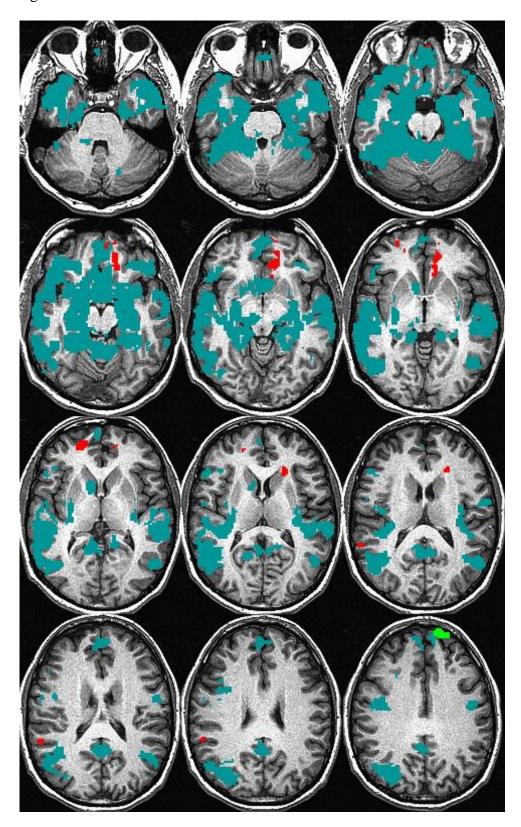


Figure 2.

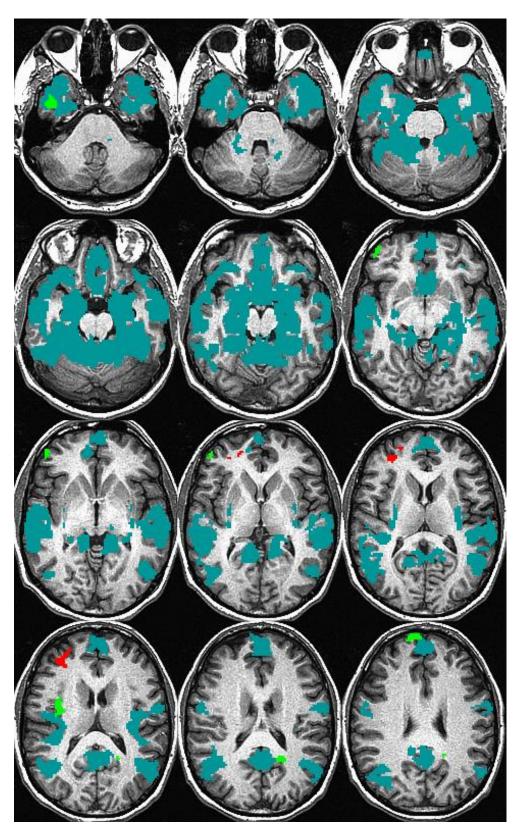


Figure 3.

