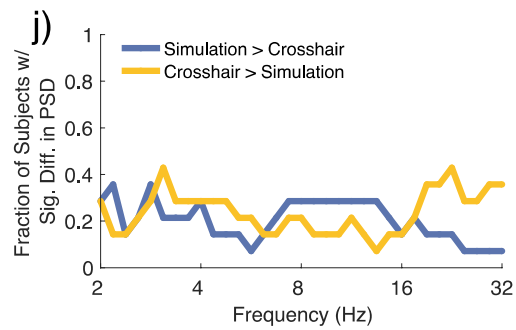
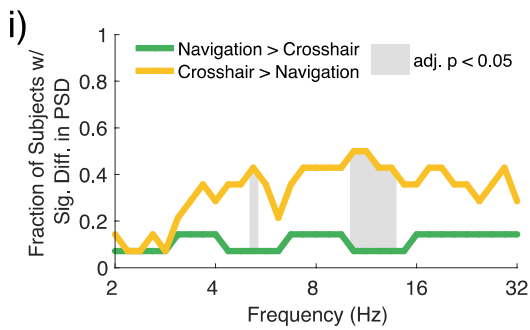
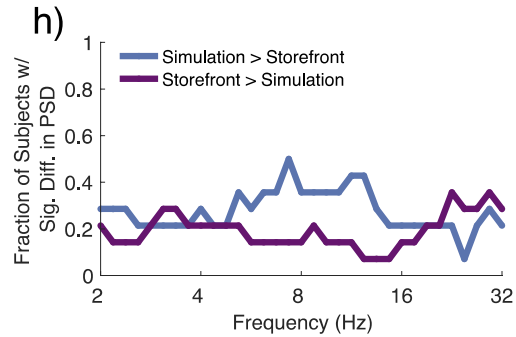
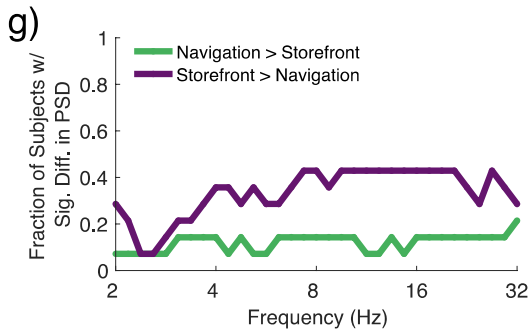
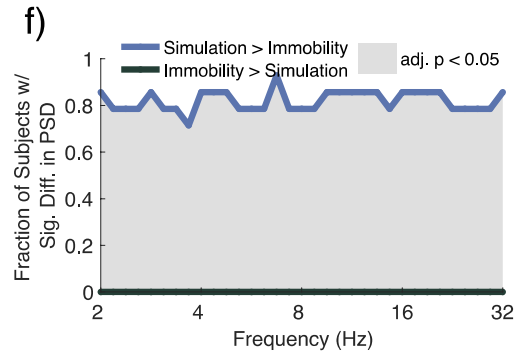
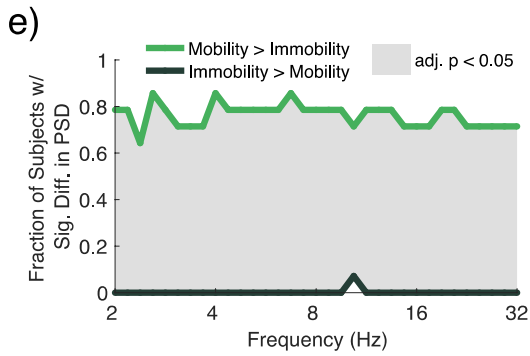
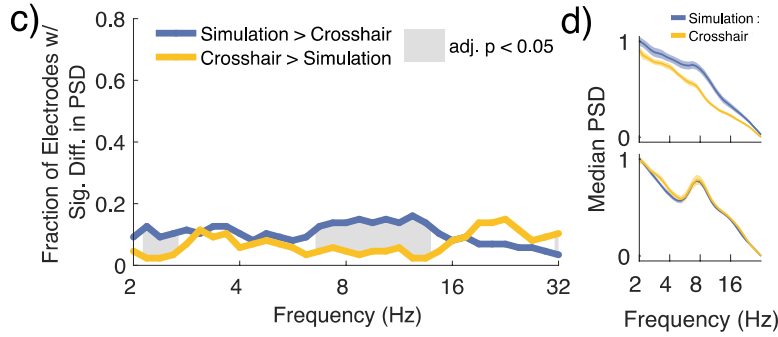
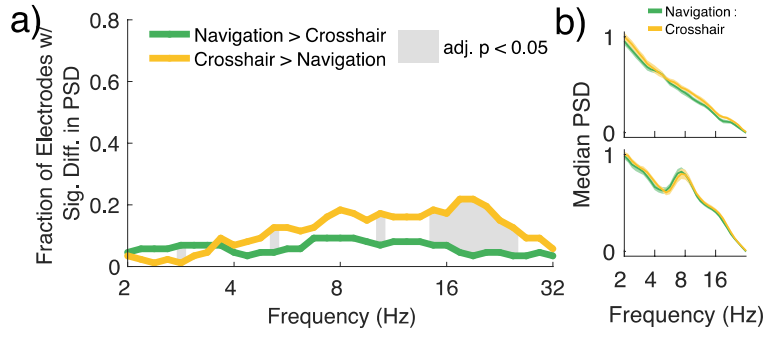


Supplemental Figure 1: Additional behavioral and learning metrics related to Figure 1.

- a. Across participant distribution of Fisher z-transformed r-values from the trial level correlation between the duration of navigation and mental simulation trials. The distribution of r-values was marginally significantly different from zero (Wilcoxon signrank $p = 0.057$).
- b. Boxplot showing median excess path across participants at three experimental time points. There is a significant decrease in the excess path between the Navigation Only Block and the early trials (first 12) of the Navigation with Mental Simulation block (Wilcoxon signrank $p < 0.05$, median navigation only = 19.92 virtual units, median early navigation with mental simulation = 9.77 virtual units). The difference in excess path between the Navigation Only Block and the late trials of the Navigation with Mental Simulation block was significant (Wilcoxon signrank $p < 0.05$, median navigation only = 19.92 virtual units, median late navigation with mental simulation = 7.29 virtual units). Within the Navigation with Mental Simulation block, the difference in the excess path between the early and late trials is not significant block (Wilcoxon signrank $p < 0.05$, median early navigation with mental simulation = 9.77 virtual units, median late navigation with mental simulation = 7.29 virtual units).
- c. Scatter plot showing duration of navigation and duration of mental navigation for all trials for each patient. Distinct colors indicate individual patients, with the corresponding-colored lines representing the robust linear fit between navigation vs mental simulation durations for each patient. The thick black line shows the robust linear fit between navigation and mental navigation across data points for all patients.

- d. Across participants, the median rate of compression for mental simulation non-catch trials was significantly greater than the compression for mental simulation catch trials (Wilcoxon signrank $p < 0.001$, median non-catch = 2.31, median catch = 1.57).
- e. Scatter plot showing the path tortuosity during navigation and mental simulation for all catch trials. Distinct colors indicate individual patients, with the corresponding-colored lines representing the robust linear fit between navigation vs mental simulation tortuosity for each patient. The thick black line shows the robust linear fit between navigation and mental navigation tortuosity across data points for all participants.
- f. Across participant distribution of Fisher z-transformed r-values from the trial-level correlation between the path tortuosity during navigation and mental simulation (catch trials). The distribution of r-values was significantly different from zero (Wilcoxon signrank $p < 0.001$).

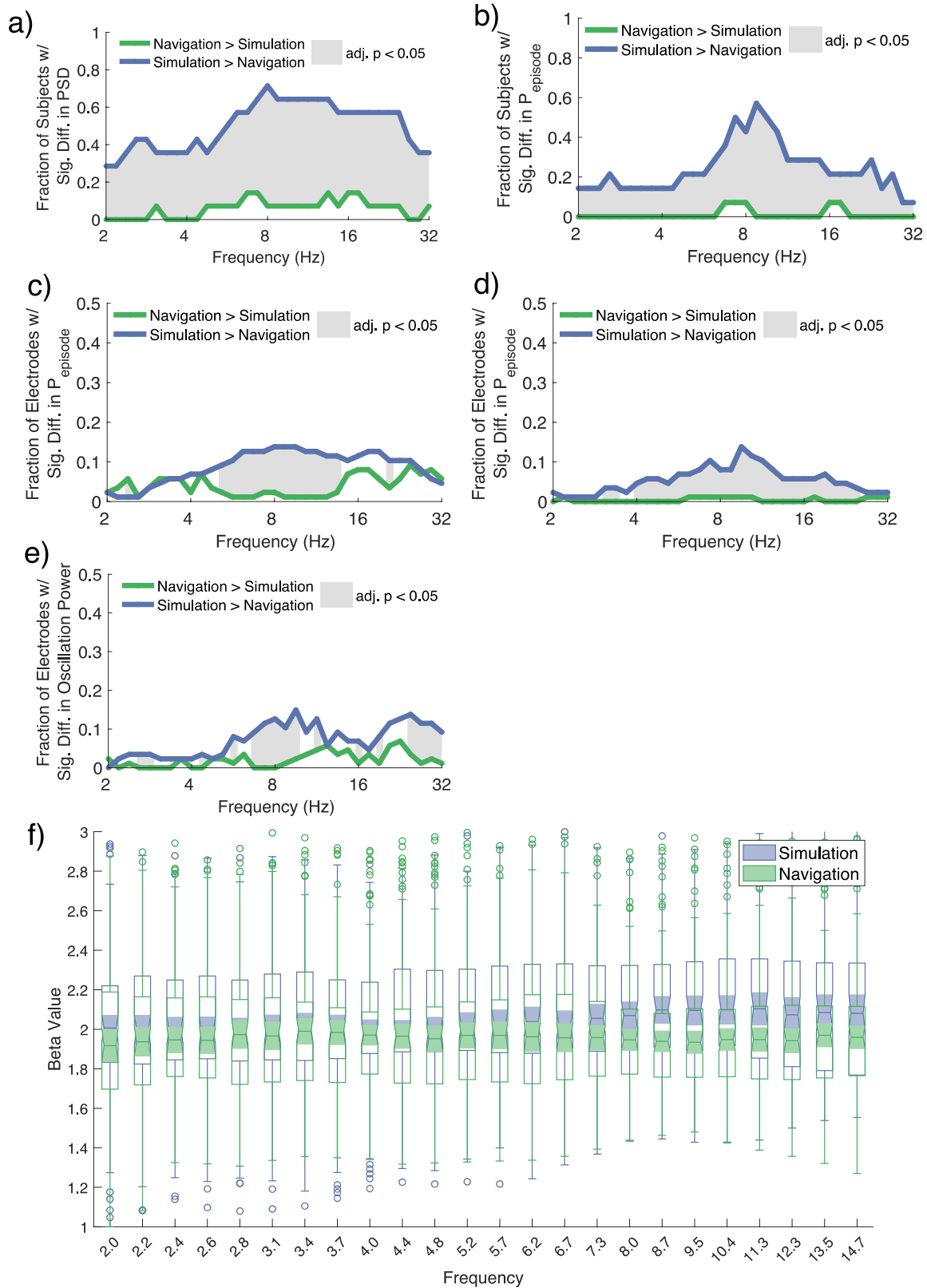


Supplemental Figure 2: Power Spectral Density plots for Additional Control Comparisons and Subject Level Analyses related to Figure 2.

- a. Fraction of electrodes showing significantly different power during mobility in the navigation condition versus cross-hair presentation (ranksum FDR adjusted $p < 0.05$). At 3.1 Hz, the proportion of electrodes with significantly greater power during navigation relative to cross-hair presentation was significantly greater than the amount expected by chance (FDR adjusted $p < 0.05$; gray shaded areas). While for frequencies 14.6 – 20.8 Hz, the proportion of electrodes with significantly greater power during cross-hair presentation relative to mobility was significantly greater than the amount expected by chance (FDR adjusted $p < 0.05$; gray shaded areas).
- b. Two representative electrodes showing the median and median absolute difference of power during mobility in the navigation condition (blue) and crosshair presentation (yellow).
- c. Fraction of electrodes showing significantly different power during mental simulation versus cross-hair presentation (ranksum FDR adjusted $p < 0.05$). For frequencies 2.2 - 2.6 Hz and 6.7 - 13.5 Hz, the proportion of electrodes with significantly greater power during mental simulation was significantly greater than the amount expected by chance. At 32 Hz, the proportion of electrodes with significantly greater power during crosshair presentation was significantly greater than the amount expected by chance (FDR adjusted $p < 0.05$; gray shaded areas).
- d. Two representative electrodes showing the median and median absolute difference of power during mental simulation (blue) and crosshair presentation (yellow).
- e. Fraction of subjects with at least one significant electrode (ranksum FDR adjusted $p < 0.05$) contributing to the overall proportion of electrodes showing a significant difference in the PSD between mobile versus immobile periods of navigation. Across the 2 – 32 Hz range, the proportion of subjects that had at least one electrode showing significantly greater power during mobile compared to immobile periods of navigation (ranksum FDR adjusted $p < 0.05$) was significantly greater than expected by chance (FDR adjusted $p < 0.05$; gray shaded areas).
- f. Fraction of subjects with at least one significant electrode (ranksum FDR adjusted $p < 0.05$) contributing to the overall proportion of electrodes showing a significant difference in the PSD between mental simulation versus immobile periods of navigation. Across the 2 – 32 Hz range, the proportion of subjects that had at least one electrode showing significantly greater power during mental simulation compared to immobile periods of navigation (ranksum FDR adjusted $p < 0.05$) was significantly greater than expected by chance (FDR adjusted $p < 0.05$; gray shaded areas).
- g. Fraction of subjects with at least one significant electrode (ranksum FDR adjusted $p < 0.05$) contributing to the overall proportion of electrodes showing a significant difference in the PSD between navigation and storefront presentation. The proportion of subjects contributing to each condition did not significantly differ (FDR adjusted $p > 0.05$) from the amount expected for any frequencies between 2 – 32 Hz.
- h. Fraction of subjects with at least one significant electrode (ranksum FDR adjusted $p < 0.05$) contributing to the overall proportion of electrodes showing a significant difference in the PSD between mental simulation and storefront presentation. The proportion of subjects contributing to each condition did not significantly differ (FDR adjusted $p > 0.05$) from the amount expected for any frequencies between 2 – 32 Hz.
- i. Fraction of subjects with at least one significant electrode (ranksum FDR adjusted $p < 0.05$) contributing to the overall proportion of electrodes showing a significant difference in the

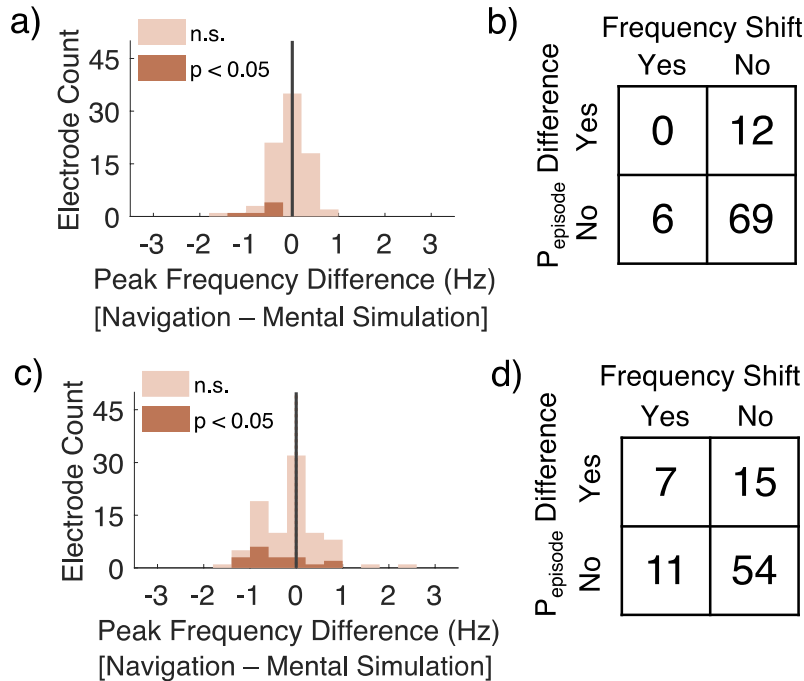
PSD between navigation and crosshair. At 5.2 and from 10.4 – 13.5 Hz, the proportion of subjects that had at least one electrode showing significantly greater power during cross-hair compared to navigation (ranksum FDR adjusted $p < 0.05$) was significantly greater than expected by chance (FDR adjusted $p < 0.05$: gray shaded areas).

j. Fraction of subjects with at least one significant electrode (ranksum FDR adjusted $p < 0.05$) contributing to the overall proportion of electrodes showing a significant difference in the PSD between mental simulation and cross-hair. The proportion of subjects contributing to each condition did not significantly differ (FDR adjusted $p > 0.05$) from the amount expected for any frequencies between 2 – 32 Hz.



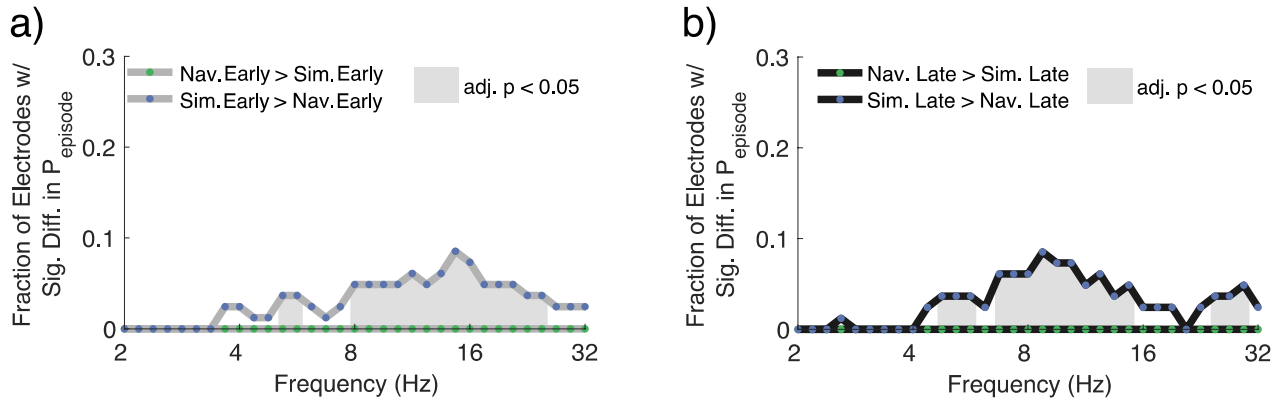
Supplemental Figure 3: Additional navigation vs. simulation comparisons related to Figure 3.

- a. Fraction of subjects with at least one significant electrode (ranksum FDR adjusted $p < 0.05$) contributing to the overall proportion of electrodes showing a significant difference in the PSD between navigation and mental simulation. Across the 2 – 32 Hz range, the proportion of subjects that had at least one electrode showing significantly greater power during mental simulation compared to navigation (ranksum FDR adjusted $p < 0.05$) was significantly greater than expected by chance (FDR adjusted $p < 0.05$: gray shaded areas).
- b. Fraction of subjects with at least one significant electrode (ranksum FDR adjusted $p < 0.05$) contributing to the overall proportion of electrodes showing a significant difference in the P_{episode} between mental simulation versus immobile periods of navigation. Across the 2 – 32 Hz range, the proportion of subjects that had at least one electrode showing significantly greater oscillatory activity during mental simulation compared to navigation (ranksum FDR adjusted $p < 0.05$) was significantly greater than expected by chance (FDR adjusted $p < 0.05$: gray shaded areas).
- c. Similar comparison as in (Figure 3c) except the P_{episode} was computed using the full trial length for navigation and mental simulation, (e.g., without matching duration on a trial-by-trial basis). At 2.4 Hz, there was a greater proportion of electrodes with significantly more oscillatory activity (signrank FDR adjusted $p < 0.05$) during navigation compared to mental simulation; while from 5.2 - 13.5 Hz and at 20.8 Hz, there was a greater proportion of electrodes with significantly more oscillatory activity (signrank FDR adjusted $p < 0.05$) during mental simulation compared to navigation (gray shaded areas).
- d. Fraction of electrodes showing significantly different P_{episode} during navigation versus mental simulation when the P_{episode} power threshold is determined separately for each condition (meaning the average power during each condition is used to determine the threshold). For frequencies 3.1-3.4 Hz and 4.0 – 24.7 Hz, the oscillatory prevalence for mental simulation was significantly increased relative to navigation (signrank FDR adjusted $p < 0.05$).
- e. Fraction of electrodes showing a significant difference in the power of detected oscillations (i.e., time points when P_{episode} threshold is passed) during navigation versus mental simulation (signrank FDR adjusted $p < 0.05$). We found that for frequencies 2.6 – 2.8 Hz, 6.2 – 8.7 Hz, and 24.7- 32.0 Hz, the oscillatory power for mental simulation was significantly increased relative to navigation (FDR adjusted $p < 0.05$).
- f. General linear model (GLM) beta values for navigation (green) and mental simulation (blue); P_{episode} threshold computed using periods of immobility in the navigation condition.



Supplemental Figure 4: Additional peak frequency differences related to Figure 4 shown separately for low (2 – 4 Hz) and high (5 – 12 Hz) theta.

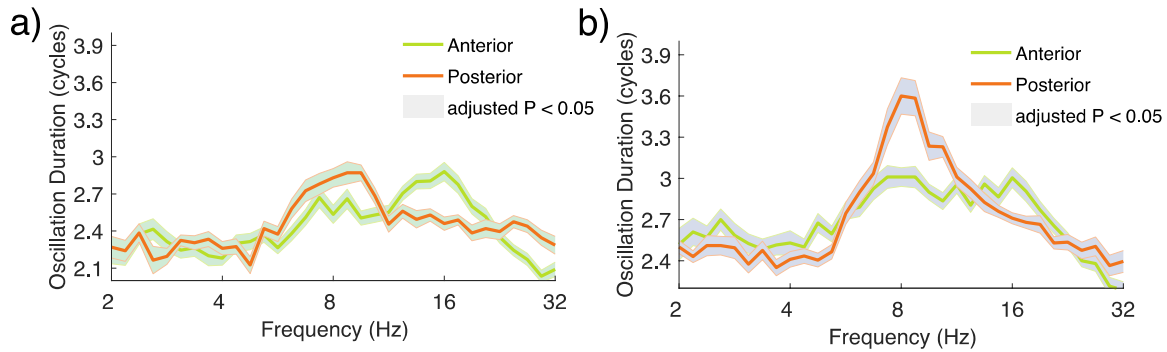
- Histogram showing the average trial level difference in peak frequency for 2 – 4 Hz between navigation and mental simulation. The dark orange color represents the subset of electrodes whose frequency difference was significantly different from zero when tested across trials (Wilcoxon signrank $p < 0.05$); light orange indicates all electrodes. Across all electrodes, the median trial level frequency difference was significantly different than zero (Wilcoxon signrank $p < 0.0001$). Across electrodes, the median trial level frequency difference was not significantly different than zero (Wilcoxon signrank $p = 0.094$).
- Contingency table showing the number of electrodes that showed significant differences in the peak frequency navigation vs mental simulation versus the number of electrodes that showed a significant difference in P_{episode} for navigation vs mental simulation only for frequencies 2 - 4 Hz. There was no association between the presence of P_{episode} differences and shifts in the peak frequency between conditions (Fisher exact test $p = 0.590$).
- Histogram of the average trial level difference in peak frequency for 5 – 12 Hz between navigation and mental simulation. The dark orange color represents the subset of electrodes whose frequency difference was significantly different from zero when tested across trials (Wilcoxon signrank $p < 0.05$); light orange indicates all electrodes. Across all electrodes, the median trial level frequency difference was significantly different than zero (Wilcoxon signrank $p < 0.0001$). Across electrodes, the median trial level frequency difference was not significantly different than zero (Wilcoxon signrank $p > 0.05$).
- Contingency table showing the number of electrodes that showed significant differences in the peak frequency navigation vs mental simulation versus the number of electrodes that showed a significant difference in P_{episode} for navigation vs mental simulation for frequencies 5 - 12 Hz. There was no association between the presence of P_{episode} differences and shifts in the peak frequency between conditions (Fisher exact test $p = 0.221$).



Supplemental Figure 5: Additional comparisons related to Figure 5 for early and late navigation and mental simulation.

a. Fraction of electrodes showing significantly different $P_{episode}$ during navigation and mental simulation during the first 12 trials of the Navigation with Mental Simulation block. For frequencies 5.2 – 5.7 Hz and 8.0 – 24.7 Hz, the proportion of electrodes with significantly more oscillatory activity during mental simulation compared to navigation was significantly greater than the amount expected by chance (FDR adjusted $p < 0.05$; gray shaded areas).

b. Fraction of electrodes showing significantly different $P_{episode}$ during navigation and mental simulation during the final 12 trials of the Navigation with Mental Simulation block. For frequencies 4.8 – 5.7 Hz, 6.7 – 14.7 Hz, and 24.7 – 29.3 Hz, the proportion of electrodes with significantly more oscillatory activity during mental simulation compared to navigation was significantly greater than the amount expected by chance (FDR adjusted $p < 0.05$; gray shaded areas).



Supplemental Figure 6: Additional anterior versus posterior hippocampus comparisons related to Figure 6.

a. Plot showing the median oscillation duration during navigation plotted separately for anterior and posterior hippocampus. Across electrodes, the cycle duration did not significantly differ between the anterior and posterior hippocampus for any frequencies between 2 - 32 Hz (Wilcoxon signrank adjusted $p > 0.05$).

b. Plot showing the median oscillation duration during mental simulation plotted separately for anterior and posterior hippocampus. Across electrodes, the cycle duration did not significantly differ between the anterior and posterior hippocampus for any frequencies between 2 - 32 Hz (Wilcoxon signrank adjusted $p > 0.05$).

Comparison	Freq.	2.00	2.18	2.38	2.59	2.83	3.08	3.36	3.67	4.00	4.36	4.76	5.19	5.66	6.17	6.73	7.34
Navigation Mobile vs. Immobile	N	39	39	41	44	43	41	41	40	43	42	43	41	42	42	43	37
	χ^2	78.00	78.00	82.00	88.00	86.00	82.00	82.00	80.00	86.00	84.00	86.00	82.00	84.00	84.00	86.00	74.00
	adj.P	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Simulation vs. Navigation Immobile	N	48	48	47	49	50	49	48	47	48	49	48	47	48	47	49	45
	χ^2	96.00	96.00	94.00	98.00	100.00	98.00	96.00	94.00	96.00	98.00	96.00	94.00	96.00	94.00	98.00	90.00
	adj.P	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Navigation vs. Storefront	N	7	7	8	7	10	9	13	13	9	9	10	11	12	14	15	18
	χ^2	0.29	0.29	4.00	2.57	0.80	2.00	0.15	1.38	0.22	0.22	0.80	0.18	0.67	0.57	1.20	0.44
	adj.P	0.79	0.79	0.17	0.30	0.64	0.37	0.79	0.51	0.79	0.79	0.64	0.79	0.68	0.71	0.53	0.76
Simulation vs. Storefront	N	14	14	12	11	13	17	16	17	17	15	18	17	18	17	16	18
	χ^2	5.14	9.14	10.67	4.55	1.38	0.12	0.50	0.12	0.12	0.13	4.00	9.53	7.11	9.53	12.50	21.78
	adj.P	0.048	0.006	0.004	0.064	0.359	0.754	0.609	0.754	0.754	0.754	0.083	0.006	0.017	0.006	0.001	*
Navigation vs. Crosshair	N	5	8	7	8	10	8	12	10	10	11	10	11	13	14	14	15
	χ^2	3.60	1.00	2.57	1.00	0.00	1.00	0.00	0.00	0.00	0.18	0.00	0.18	1.38	0.57	0.57	1.20
	adj.P	0.191	0.499	0.276	0.499	1.000	0.499	1.000	1.000	1.000	0.850	1.000	0.850	0.465	0.618	0.618	0.499
Simulation vs. Crosshair	N	12	13	10	12	16	19	19	20	14	13	16	14	12	11	15	17
	χ^2	2.67	12.46	7.20	6.00	2.00	0.11	0.95	0.40	2.29	0.15	0.50	0.57	0.67	4.55	6.53	5.76
	adj.P	0.161	0.003	0.030	0.042	0.226	0.794	0.454	0.600	0.196	0.764	0.565	0.550	0.526	0.073	0.039	0.042

Comparison	Freq.	8.00	8.72	9.51	10.37	11.31	12.34	13.45	14.67	16.00	17.45	19.03	20.75	22.63	24.68	26.91	29.34	32.00
Navigation Mobile vs. Immobile	N	36	36	37	38	38	36	36	33	34	35	38	41	40	41	40	36	36
	χ^2	72.00	72.00	74.00	68.21	76.00	72.00	72.00	66.00	68.00	70.00	76.00	82.00	80.00	82.00	80.00	72.00	72.00
	adj.P	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Simulation vs. Navigation Immobile	N	46	45	50	50	47	49	48	46	48	48	49	49	48	46	46	46	45
	χ^2	92.00	90.00	100.00	100.00	94.00	98.00	96.00	92.00	96.00	96.00	98.00	98.00	96.00	92.00	92.00	92.00	90.00
	adj.P	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Navigation vs. Storefront	N	16	15	15	16	17	18	15	18	21	22	21	20	15	14	8	6	4
	χ^2	0.00	0.13	0.13	2.00	2.94	4.00	3.33	11.11	11.52	9.09	11.52	6.40	6.53	9.14	0.00	1.33	0.00
	adj.P	1.00	0.79	0.79	0.37	0.26	0.17	0.22	0.01	0.01	0.02	0.01	0.05	0.05	0.02	1.00	0.51	1.00
Simulation vs. Storefront	N	17	19	17	18	18	17	15	13	14	15	15	17	17	15	12	14	13
	χ^2	19.88	17.79	14.24	16.00	16.00	19.88	16.13	7.54	2.29	1.20	0.13	0.12	1.06	3.33	0.67	0.00	1.38
	adj.P	*	*	*	*	*	*	*	0.014	0.215	0.392	0.754	0.754	0.417	0.118	0.547	1.000	0.359
Navigation vs. Crosshair	N	19	18	15	16	19	19	20	19	20	21	22	19	17	12	11	8	3
	χ^2	2.63	1.78	0.13	2.00	5.16	2.63	3.60	12.74	10.00	16.10	17.82	12.74	5.76	6.00	1.64	0.00	0.67
	adj.P	0.276	0.401	0.874	0.371	0.095	0.276	0.191	0.003	0.010	*	*	0.003	0.077	0.077	0.414	1.000	0.618
Simulation vs. Crosshair	N	16	16	16	17	17	16	14	13	14	16	18	18	19	15	12	12	12
	χ^2	8.00	12.50	8.00	9.53	5.76	18.00	14.29	3.85	0.00	0.00	4.00	4.00	5.16	3.33	0.67	2.67	6.00
	adj.P	0.022	0.003	0.022	0.013	0.042	*	0.003	0.091	1.000	1.000	0.088	0.088	0.055	0.118	0.526	0.161	0.042

Supplemental Table 1. χ^2 statistics for navigation χ^2 and mental simulation PSD comparisons to control conditions related to Figure 2. (*adj.p < 0.001)

Comparison	Conditions	Baseline	Freq.	2.00	2.18	2.38	2.59	2.83	3.08	3.36	3.67	4.00	4.36	4.76	5.19	5.66	6.17	6.73	7.34
Navigation vs. Simulation	PSD	-	N	9	9	8	8	10	8	7	9	9	14	15	17	18	17	23	24
			χ^2	18.00	18.00	16.00	16.00	20.00	16.00	14.00	18.00	18.00	28.00	30.00	34.00	21.78	14.24	25.13	48.00
			adj.P	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Navigation vs. Simulation	Pepisode	Immobile	N	4	4	4	7	4	6	8	8	8	6	7	10	9	12	12	15
			χ^2	8.00	8.00	8.00	14.00	8.00	12.00	16.00	16.00	16.00	12.00	14.00	20.00	18.00	24.00	16.67	22.53
			adj.P	0.005	0.005	0.005	*	0.005	*	*	*	*	*	*	*	*	*	*	*

Comparison	Conditions	Baseline	Freq.	8.00	8.72	9.51	10.37	11.31	12.34	13.45	14.67	16.00	17.45	19.03	20.75	22.63	24.68	26.91	29.34	32.00
Navigation vs. Simulation	PSD	-	N	24	26	30	32	32	33	26	26	26	25	21	19	22	22	18	11	8
			χ^2	48.00	52.00	52.27	56.25	49.00	44.18	52.00	52.00	52.00	42.32	34.38	30.42	29.45	29.45	28.44	22.00	9.00
			adj.P	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Navigation vs. Simulation	Pepisode	Immobile	N	15	20	17	18	13	11	11	10	10	12	11	10	8	6	7	4	4
			χ^2	22.53	40.00	34.00	36.00	26.00	22.00	22.00	20.00	12.80	16.67	22.00	20.00	16.00	12.00	14.00	8.00	8.00
			adj.P	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.005

Supplemental Table 2. χ^2 statistics for comparison between navigation and mental simulation PSD and P_{episode} related to Figure 3 (*adj.p < 0.001)

Comparison	Conditions	Freq.	2.00	2.18	2.38	2.59	2.83	3.08	3.36	3.67	4.00	4.36	4.76	5.19	5.66	6.17	6.73	7.34
Early vs. Late	Navigation	N	10	12	11	13	16	14	15	12	14	15	17	18	19	20	22	23
		χ^2	20.00	24.00	22.00	26.00	32.00	28.00	30.00	24.00	28.00	30.00	34.00	36.00	38.00	40.00	44.00	46.00
		adj.P	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Early vs. Late	Simulation	N	4	4	5	7	8	6	9	9	8	10	7	8	9	10	8	9
		χ^2	8.00	8.00	10.00	14.00	16.00	12.00	18.00	18.00	16.00	20.00	14.00	16.00	18.00	20.00	16.00	18.00
		adj.P	0.005	0.005	0.002	*	*	*	*	*	*	*	*	*	*	*	*	*

Comparison	Conditions	Freq.	8.00	8.72	9.51	10.37	11.31	12.34	13.45	14.67	16.00	17.45	19.03	20.75	22.63	24.68	26.91	29.34	32.00	
Early vs. Late	Navigation	N	21	19	20	19	18	18	17	16	16	16	16	14	13	12	10	10	8	9
		χ^2	42.00	38.00	40.00	38.00	36.00	28.44	26.47	24.50	12.50	18.00	14.29	12.46	10.67	12.80	20.00	16.00	10.89	
		adj.P	*	*	*	*	*	*	*	*	*	*	*	*	*	0.001	*	*	*	*
Early vs. Late	Simulation	N	8	8	7	9	9	11	9	9	8	5	5	3	3	1	5	3	4	
		χ^2	16.00	16.00	14.00	10.89	10.89	14.73	18.00	18.00	16.00	10.00	10.00	6.00	6.00	2.00	10.00	6.00	8.00	
		adj.P	*	*	*	0.001	0.001	*	*	*	*	0.002	0.002	0.015	0.015	0.157	0.002	0.015	0.005	

Supplemental Table 3. χ^2 statistics for within navigation and mental simulation comparison between early versus late P_{episode} related to Figure 5 (*adj.p < 0.001)

Comparison	Freq.	2.00	2.18	2.38	2.59	2.83	3.08	3.36	3.67	4.00	4.36	4.76	5.19	5.66	6.17	6.73	7.34	
Navigation: Anterior vs. Posterior	N	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	
	χ^2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.41	1.41
	adj.P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.594	2.594
Simulation: Anterior vs. Posterior	N	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	
	χ^2	0.49	0.49	0.11	0.73	0.11	1.63	0.24	0.24	1.54	0.18	0.00	0.31	0.77	1.55	2.46	1.60	
	adj.P	0.694	0.694	0.758	0.617	0.758	0.441	0.758	0.758	0.441	0.758	0.956	0.758	0.617	0.441	0.391	0.441	
ACC: Navigation vs. Simulation	N	1	0	0	0	1	0	0	1	3	2	1	2	1	1	1	0	
	χ^2	2.00	-	-	-	2.00	-	-	2.00	0.67	0.00	2.00	4.00	2.00	2.00	2.00	-	
	adj.P	0.273	-	-	-	0.273	-	-	0.273	0.683	1.571	0.273	0.188	0.273	0.273	0.273	-	

Comparison	Freq.	8.00	8.72	9.51	10.37	11.31	12.34	13.45	14.67	16.00	17.45	19.03	20.75	22.63	24.68	26.91	29.34	32.00
Navigation: Anterior vs. Posterior	N	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86
	χ^2	1.41	-	-	-	-	-	-	-	0.73	0.73	-	-	-	-	-	-	-
	adj.P	2.594	-	-	-	-	-	-	-	2.596	2.596	-	-	-	-	-	-	-
Simulation: Anterior vs. Posterior	N	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86
	χ^2	1.60	5.73	4.54	5.76	2.44	0.83	2.46	3.68	2.54	2.46	0.83	0.31	3.98	1.63	0.73	0.11	0.11
	adj.P	0.441	0.275	0.363	0.275	0.391	0.617	0.391	0.363	0.391	0.391	0.617	0.758	0.363	0.441	0.617	0.758	0.758
ACC: Navigation vs. Simulation	N	0	0	3	2	3	2	3	3	2	0	0	0	1	1	1	1	0
	χ^2	-	-	6.00	4.00	6.00	4.00	6.00	6.00	4.00	-	-	-	2.00	2.00	2.00	2.00	-
	adj.P	-	-	0.118	0.188	0.118	0.188	0.118	0.118	0.188	-	-	-	0.273	0.273	0.273	0.273	-

Supplemental Table 4. χ^2 statistics for anterior versus posterior hippocampus and anterior cingulate cortex (ACC) P_{episode} comparisons related to Figure 6.