

Supplemental Material S1. Supplemental analysis.

This supplemental analysis assesses the timing of novel adjective match-mismatch condition effects for the PMN and frontal N400 ERP components using sequential 25ms time windows. Analyses were completed for the RS and RRCR learning conditions separately. ERPs elicited by matches and mismatches were compared using repeated measures ANOVA including within factors of condition (match, mismatch) and electrode site. Regions of interest for the PMN and frontal N400 were the same as the primary analysis reported in the main text. Time windows began 100ms prior to the original time windows and extended 100ms beyond the original offset. The effect of condition for each 25ms time window is reported for the PMN in Table S1 and for the frontal N400 in Table S2. A dark box outlines the original time window for the PMN between 200-300ms and for the frontal N400 between 600-800ms. The results support that a condition effect was not present for the PMN in the RS condition and that the match-mismatch effect began in RRCR condition within our chosen 200-300ms time window which was selected based on prior literature. As can be seen in the waveforms, the conditions remain separated in the RRCR condition; however, this condition effect extends beyond where the PMN is typically measured and may instead be a blending of the PMN and frontal N400 components. For the frontal N400, the analysis highlights that the condition effect began in both conditions around the same time (~550ms) and that our 600-800ms time window captures the majority of that effect in both conditions. Overall, the supplemental analysis supports the time windows chosen for the PMN and frontal N400 based on the prior literature.

Table S1. Analysis of the PMN match-mismatch effect using sequential 25ms time windows.

Time Window	RS Learning Condition				RRCR Learning Condition			
	<i>F</i>	<i>df</i>	<i>p</i>	η_p^2	<i>F</i>	<i>df</i>	<i>p</i>	η_p^2
<i>100-125ms</i>	2.012	1, 19	.172	.096	1.897	1, 19	.184	.091
<i>125-150ms</i>	1.072	1, 19	.314	.053	1.225	1, 19	.282	.061
<i>150-175ms</i>	1.127	1, 19	.302	.056	2.678	1, 19	.118	.124
<i>175-200ms</i>	0.907	1, 19	.353	.046	1.710	1, 19	.207	.083
<i>200-225ms</i>	1.287	1, 19	.271	.063	2.931	1, 19	.103	.134
<i>225-250ms</i>	0.679	1, 19	.420	.034	6.621	1, 19	.019*	.258
<i>250-275ms</i>	1.297	1, 19	.269	.064	10.632	1, 19	.004*	.359
<i>275-300ms</i>	1.004	1, 19	.329	.050	10.874	1, 19	.004*	.364
<i>300-325ms</i>	0.933	1, 19	.346	.047	11.967	1, 19	.003*	.386
<i>325-350ms</i>	1.004	1, 19	.329	.050	11.396	1, 19	.003*	.375
<i>350-375ms</i>	2.540	1, 19	.127	.118	16.693	1, 19	.001*	.468
<i>375-400ms</i>	3.290	1, 19	.086	.148	18.352	1, 19	>.001*	.491

Note. * = *p*-values less than .05

Table S2. Analysis of the frontal N400 match-mismatch effect using sequential 25ms time windows.

Time Window	RS Learning Condition				RRCR Learning Condition			
	<i>F</i>	<i>df</i>	<i>p</i>	η_p^2	<i>F</i>	<i>df</i>	<i>p</i>	η_p^2
500-525ms	2.148	1, 19	.159	.102	4.206	1, 19	.054	.181
525-550ms	2.095	1, 19	.164	.099	4.191	1, 19	.055	.181
550-575ms	4.915	1, 19	.039*	.206	5.965	1, 19	.025*	.239
575-600ms	5.285	1, 19	.033*	.218	7.076	1, 19	.015*	.271
600-625ms	4.110	1, 19	.057	.178	7.618	1, 19	.012*	.286
625-650ms	4.590	1, 19	.045*	.195	7.696	1, 19	.012*	.288
650-675ms	13.109	1, 19	.002*	.408	5.207	1, 19	.034*	.215
675-700ms	12.260	1, 19	.002*	.392	2.608	1, 19	.123	.121
700-725ms	9.248	1, 19	.007*	.327	2.314	1, 19	.145	.109
725-750ms	5.556	1, 19	.029*	.226	4.387	1, 19	.050	.188
750-775ms	7.674	1, 19	.012*	.288	5.576	1, 19	.029*	.227
775-800ms	5.430	1, 19	.031*	.222	4.582	1, 19	.045*	.194
800-825ms	3.201	1, 19	.090	.144	2.043	1, 19	.169	.097
825-850ms	1.721	1, 19	.205	.083	2.705	1, 19	.116	.125
850-875ms	1.908	1, 19	.183	.091	5.391	1, 19	.032*	.221
875-900ms	1.330	1, 19	.263	.065	10.167	1, 19	.005*	.349

Note. * = *p*-values less than .05