

**Supplemental Material S4.** Mean, standard deviation, median, and statistical test (independent *t* test) results of FFR measures in noise.

FFR Measures	In the presence of noise							<i>p</i> -value
	APD			TD			<i>t</i> -value	
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>t</i> (17)	
P1 Amplitude (in $\mu$ V)	0.068	0.066	0.060	0.108	0.066	0.092	1.320	.204
P2 Amplitude (in $\mu$ V)	−0.071	0.044	−0.062	−0.098	0.047	−0.102	−1.322	.204
P3 Amplitude (in $\mu$ V)	0.082	0.093	0.054	0.119	0.078	0.095	0.947	.357
P4 Amplitude (in $\mu$ V)	−0.068	0.053	−0.064	−0.107	0.079	−0.079	−1.266	.223
P5 Amplitude (in $\mu$ V)	0.063	0.045	0.049	0.118	0.046	0.116	2.622	<b>.018</b>
P6 Amplitude (in $\mu$ V)	−0.076	0.055	−0.055	−0.142	0.055	−0.148	−2.585	<b>.019</b>
P7 Amplitude (in $\mu$ V)	0.075	0.045	0.058	0.106	0.055	0.106	1.366	.190
P8 Amplitude (in $\mu$ V)	−0.056	0.048	−0.035	−0.105	0.069	−0.084	−1.810	.088
P9 Amplitude (in $\mu$ V)	0.057	0.054	0.036	0.109	0.093	0.089	1.513	.149
P10 Amplitude (in $\mu$ V)	−0.076	0.061	−0.048	−0.092	0.058	−0.073	−0.595	.560
P1 Latency (in ms)	58.49	1.45	58.00	58.77	1.73	59.00	0.379	.709
P2 Latency (in ms)	62.66	1.37	62.50	61.67	2.03	61.50	−1.262	.224
P3 Latency (in ms)	66.05	1.59	66.60	65.74	3.86	63.70	−0.230	.821
P4 Latency (in ms)	70.60	2.52	71.50	70.16	4.07	68.50	−0.290	.776
P5 Latency (in ms)	75.15	2.91	75.20	74.66	4.13	72.50	−0.304	.765
P6 Latency (in ms)	76.25	2.46	75.35	77.23	3.91	77.00	−0.296	.771
P7 Latency (in ms)	80.43	2.67	79.20	81.06	3.96	80.00	−0.910	.376
P8 Latency (in ms)	85.95	2.83	85.00	85.42	3.51	85.00	−1.335	.200
P9 Latency (in ms)	90.53	3.57	90.15	90.67	4.56	89.00	−1.017	.324
P10 Latency (in ms)	94.95	3.92	94.95	94.70	4.47	94.00	−1.242	.231
Stim-to-resp correlation	0.125	0.049	0.125	0.273	0.117	0.290	3.599	<b>.002</b>
Stim-to-resp lag (in ms)	11.39	2.26	10.83	11.65	1.54	11.35	1.406	.178
F0 Amplitude (in $\mu$ V)	0.0098	0.0075	0.0065	0.0203	0.0093	0.0182	2.672	<b>.016</b>
F1 Amplitude (in $\mu$ V)	0.0024	0.0014	0.0018	0.0035	0.0012	0.0036	1.686	.110
F2 Amplitude (in $\mu$ V)	0.00071	0.00037	0.00063	0.00138	0.00059	0.00141	2.953	<b>.009</b>
Quiet to noise correlation	0.095	0.066	0.095	0.218	0.116	0.150	2.846	<b>.011</b>

*Note.* Pearson's coefficient = *r* value mentioned for all correlation measures; stim-to-resp = stimulus-to-response; TD = typically developing children; APD = auditory processing disorder; *t*-value = *t*-statistics with degrees of freedom in parenthesis; *p* = level of significance.