

Supplemental Material S2. A repeated-measures ANOVA, treating compression speed, the number of background talkers, and audiogram as the independent variables, the individual 2-second time windows as the random effects factor, and output/input SNR slope as the dependent variable.

Audiogram (A)	$F(3, 42) = 47.204, p < .001, \eta^2_p = .771$
Compression Speed (CS)	$F(1, 14) = 40.565, p < .001, \eta^2_p = .743$
Number of Talker (NT)	$F(1, 14) = 62.424, p < .001, \eta^2_p = .817$
A × CS	$F(3, 42) = 3.585, p < .05, \eta^2_p = .204$
A × NT	$F(3, 42) = 2.49, p = .073, \eta^2_p = .151$
CS × NT	$F(1, 14) = 33.934, p < .001, \eta^2_p = .708$
A × CS × NT	$F(3, 42) = 11.964, p < .001, \eta^2_p = .461$