

Supplemental Material S13. Multivariable-adjusted associations of global and domain-specific cognitive performance with speech-in-noise performance, ACHIEVE baseline (2018–20) and ARIC-NCS Visit 6/7 (2016–17/2018–19).

Worse Cognitive Performance, per SD^a	Model 1: Covariates (N=600)^b		Model 2: Covariates + Other Predictors (N=584)^c	
	PR (95% CI)	P-value	PR (95% CI)	P-value
Global	1.28 (1.06, 1.54)	0.01	1.25 (1.04, 1.49)	0.02
Language	1.15 (0.95, 1.40)	0.16	1.20 (0.99, 1.46)	0.06
Executive function	1.22 (1.03, 1.44)	0.02	1.20 (1.01, 1.43)	0.04
Memory	1.14 (0.96, 1.34)	0.13	1.14 (0.98, 1.33)	0.09

Abbreviations: ACHIEVE: Aging and Cognitive Health Evaluation in Elders; ARIC-NCS: Atherosclerosis Risk in Communities Neurocognitive Study; PR: prevalence ratio; CI: confidence interval; SD: standard deviation.

^a Multivariable-adjusted Poisson regression with robust standard errors to estimate prevalence ratio of being in the lowest quartile of quick speech-in-noise score associated with every SD worse in cognitive performance.

^b Model 1 adjusted for age, sex, race, field center, education, body mass index, smoking, hypertension, diabetes, and stroke.

^c Model 2 adjusted for age, sex, race, field center, education, body mass index, smoking, hypertension, diabetes, stroke, intracranial volume, pure-tone average, total brain volume, fractional anisotropy, mean diffusivity, and white matter hyperintensities volume.