

**Supplemental Material S2.** Multiple regression models predicting mean RT and RT difference scores for persons with aphasia only.

**Mean RT: Sentences in Multispeakers**

Overall model:  $F(4, 9) = 1.17, p = .39, R^2 = .34$

Predictors	$\beta$	$t$	$p$
Age	0.38	1.25	.24
Hearing Status	0.07	0.19	.86
Working Memory	-0.42	-1.50	.17
Attentional Control	0.22	0.73	.49

**Mean RT: Sentences in Broadband Noise**

Overall model:  $F(4, 9) = 1.43, p = .30, R^2 = .39$

Predictors	$\beta$	$t$	$p$
Age	0.44	1.48	.17
Hearing Status	-0.06	-0.19	.86
Working Memory	-0.34	-1.26	.24
Attentional Control	-0.39	-1.33	.22

**Mean RT: Sentences in Silence**

Overall model:  $F(4, 9) = 0.59, p = .68, R^2 = .21$

Predictors	$\beta$	$t$	$p$
Age	0.34	1.00	.34
Hearing Status	0.18	0.47	.65
Working Memory	-0.23	-0.74	.48
Attentional Control	0.07	0.21	.84

**RT Difference: Effect of Informational Masking**

Overall model:  $F(4, 9) = 4.08, p = .04, R^2 = .64$

Predictors	$\beta$	$t$	$p$
Age	-0.03	-0.14	.89
Hearing Status	0.20	0.78	.46
Working Memory	-0.14	-0.67	.52
Attentional Control	0.84	3.77	.004

**RT Difference: Effect of Energetic Masking†**

Overall model:  $F(4, 8) = 3.67, p = .62, R^2 = .049$

Predictors	$\beta$	$t$	$p$
Age	-0.10	-0.45	.67
Hearing Status	-0.14	-0.52	.62
Working Memory	-0.13	-0.61	.56
Attentional Control	-0.84	-3.64	.005

†Model is not significant with attentional control outlier removed.