

Supplemental Material S3. Complete results of multivariate logistic regression models used to test for differences between clusters.

Model 1, no interaction. Variables: `pcaCluster2` = cluster assignment in model-based clustering on PCA scores (2-cluster solution); `age_mos` = age in months; `aud_acuity_pre` = width of fitted boundary region on *rake-wake* identification task; `stereognosis_pre` = mean letter size on oral stereognosis task.

Call:

```
glm(formula = pcaCluster2 ~ age_mos + aud_acuity_pre + stereognosis_pre,
family = binomial, data = modeldatacomplete)
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-1.4314	-1.0130	-0.6875	1.1763	1.6348

Coefficients:

	Estimate	Std. Error	z value	p.value
(Intercept)	-0.25	4.60	-0.05	0.96
<code>age_mos</code>	0.01	0.03	0.49	0.63
<code>aud_acuity_pre</code>	-0.17	0.25	-0.67	0.50
<code>stereognosis_pre</code>	-0.21	0.34	-0.62	0.54

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 34.296 on 24 degrees of freedom

Residual deviance: 32.381 on 21 degrees of freedom

AIC: 40.381

Model 2, with interaction between sex and auditory acuity based on previous literature. Variables:
pcaCluster2 = cluster assignment in model-based clustering on PCA scores (2-cluster solution);
age_mos = age in months; **sexM** = participant sex, reference level: male; **aud_acuity_pre** = width of fitted boundary region on *rake-wake* identification task; **stereognosis_pre** = mean letter size on oral stereognosis task.

Call:

```
glm(formula = pcaCluster2 ~ age_mos + sex * aud_acuity_pre + stereognosis_pre,
family = binomial, data = modeldatacomplete)
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-1.3652	-1.0153	-0.6454	1.1141	1.5656

Coefficients:

term	estimate	std.error	statistic	p.value
(Intercept)	-0.04	5.02	-0.01	0.99
age_mos	0.02	0.03	0.71	0.48
sexM	-0.89	1.87	-0.48	0.63
aud_acuity_pre	-0.21	0.46	-0.46	0.65
stereognosis_pre	-0.30	0.36	-0.82	0.41
sexM:aud_acuity_pre	0.01	0.56	0.01	0.99

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 34.296 on 24 degrees of freedom

Residual deviance: 31.606 on 19 degrees of freedom

AIC: 43.606

Number of Fisher Scoring iterations: 4