

Supplemental Material S4. Results of exploratory analyses.

VHI score	Effect	Estimate \pm SE	p-value
Total	Intercept	40.0 \pm 11.7	.0014**
	Timepoint		
	Preop	Reference	
	Postop 1	13.8 \pm 13.8	.3225
	Postop 2	-21.1 \pm 14.4	.1465
	Age \times Timepoint		
	Preop	0.3 \pm 0.2	.2745
	Postop 1	-0.9 \pm 0.3	.0035**
	Postop 2	-0.3 \pm 0.3	.4147
	Sex		
	Female	10.8 \pm 4.4	.0170*
	Male	Reference	
Functional	Intercept	20.7 \pm 5.5	.0006***
	Timepoint		
	Preop	Reference	
	Postop 1	0.7 \pm 6.6	.9163
	Postop 2	-4.4 \pm 7.0	.5286
	Age \times Timepoint		
	Preop	0.2 \pm 0.1	.0399*
	Postop 1	-0.5 \pm 0.1	.0001***
	Postop 2	-0.2 \pm 0.1	.0654
	Yelling: Yes vs. No	-4.0 \pm 1.7	.0237*
	Voice rest \times Timepoint		
	Preop	-1.2 \pm 0.4	.0105*
	Postop 1	1.6 \pm 0.6	.0056**
	Postop 2	0.5 \pm 0.6	.3600
Physical	Intercept	22.4 \pm 1.5	<.0001***
	Timepoint		
	Preop	Reference	
	Postop 1	-14.3 \pm 1.8	<.0001***
	Postop 2	-15.1 \pm 1.9	<.0001***
	Sex		
	Female	5.2 \pm 1.5	.0010**
	Male	Reference	
	Preop voice therapy \times Timepoint		
	Preop	-1.1 \pm 0.4	.0078**
	Postop 1	1.4 \pm 0.5	.0116*
	Postop 2	1.1 \pm 0.5	.0423*

Supplemental Material S4, continued.

VHI score	Effect	Estimate \pm SE	p-value
Emotional	Intercept	14.4 \pm 4.3	.0018**
	Timepoint		
	Preop	Reference	
	Postop 1	2.7 \pm 5.1	.5963
	Postop 2	−5.5 \pm 5.4	.3094
	Age (years) \times Timepoint		
	Preop	0.1 \pm 0.1	.2497
	Postop 1	−0.3 \pm 0.1	.0146*
	Postop 2	−0.1 \pm 0.1	.2730
	Yelling: Yes vs. No	−4.6 \pm 1.6	.0055**

Effects of significant demographic and clinical variables on VHI scores in multiple regression. Solutions for fixed effects in linear mixed models for VHI total score and subscale scores with timepoint (preop, postop 1, postop 2) and significant clinical and demographic variables as fixed effects and intercepts for each patient as repeated measures: * $p < .05$, ** $p < .01$, *** $p < .001$.