The separate tasks used in the online experiment are available at https://app.gorilla.sc/openmaterials/446865

The following supplementary materials are available in an online repository and can be found at https://osf.io/kaczu/

1. Data and codes

File name	Description	Туре	Size
S1a_d_descriptive	Data with descriptive information of the participants (age, language background, musical experience and working memory scores)	.xlsx	126 KB
S1b_d_tt	Data with the scores from the tone categorization task	.xlsx	371 KB
S1c_d_wt	Data with the scores from the word identification task	.xlsx	1.1 MB
S1d_code_tt	Code to analyze the tone categorization task	.Rmd	17 KB
S1d_code_wt	Code to analyse the word identification task	.Rmd	31 KB
S1f_code_equivalence	Code to run equivalence tests between groups	.Rmd	6 KB

2. Detailed participant demographics

File name	Description	Туре	Size
S2. Detailed	Additional information on	.pdf	127 KB
participant	participant		
demographics	demographics.		

3. Stimuli

Audio Stimuli (Tones) and Audio Stimuli (Words)

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File name	Description	Туре	Size
S3_[Stimulus name]	Sound files for each of the audio stimuli used in the tone categorization task (vowels) and word identification tasks (words), in the male and female voices, and for each of the three tones.	.mp3	Each < 100 KB

Visual Stimuli

File name	Description	Туре	Size
S3a_Pictures	Pictures used to represent word meaning, from Rossion & Pourtois (2004).	.jpg	62 KB
S3b_Tonecurves	Smoothed F0 and Chao numeral traces for the three tones in the tone categorization task.	.jpg	150 KB

	Shading ribbons, where present, indicate a 95% Confidence Interval.		
S3c_Wordcurves	Smoothed F0 and Chao numeral traces for the three pseudolanguage word tones in the word identification task. Shading ribbons, where present, indicate a 95% Confidence Interval.	.jpg	180 KB

4. Model output

File name	Description	Туре	Size
S4. Model output	The posterior distribution and relevant multiple comparisons of the Bayesian models run on the accuracy results of the tone categorization and word identification task.	.html	1.1 MB

5. Summary of debriefing

File name	Description	Туре	Size
S5a_Debriefing_summary	A summary of the results of the debriefing, which participants filled in at the end of the experiment.	.pdf	364 KB
S5b_d_debrief	The raw data from the debriefing.	.xlsx	85 KB
S5c_code_debrief	The code to visualize some of the debriefing results.	.Rmd	10 KB