

Protocol for Practicing Manual RFF Calculation

Last updated on January 11th, 2018 by Jennifer M. Vojtech

After reading the tutorial for manually estimating RFF (*Tutorial_Manual-RFF-Estimation.docx*), there are a series of sound samples upon which you can practice calculating RFF. These samples can be found in the *SOUND FILES* folder in the main directory. A template for calculating RFF from the pulse listing provided in Praat has also been added to the main directory (*Training_Template.xlsx*) and can be adapted for future RFF calculations.

There are three types of samples to practice calculating RFF on: the nonsense words /afa/, /ifi/, and /ufu/; the nonsense word /ifi/ produced at different levels of vocal effort; and sentences containing vowel-voiceless consonant-vowel (VCV) productions. These samples have been split up into five different folders (labeled “1–5” in the *SOUND FILES* directory). A description of what each folder contains is as follows:

- 1: Five individuals (A–E) producing three utterances of each /afa/, /ifi/, and /ufu/
- 2 & 3: Each sample set contains 6–8 /ifi/ utterances at four different levels of vocal effort
 - A. Regular effort (“Reg”)
 - B. Mild effort (“Mil”)
 - C. Moderate effort (“Mod”)
 - D. Maximum effort (“Max”)
- 4: Four sentences containing VCV productions
 - A. Only we feel you do fail in new fallen dew
 - B. We all found a wee fly on my food on Monday
 - C. The dew shimmered over my shiny blue shell again
 - D. We showed Nell my shiny new shoe bin
- 5: Four CAPE-V sentences containing VCV productions
 - A. The blue spot is on the key again
 - B. We eat eggs every Easter
 - C. My mama makes lemon muffins
 - D. Peter will keep at the peak.

Open the training template and notice that there are five sheets labeled 1–5, and a final sheet labeled “Inter-rater Correlation.” Each of the numbered sheets corresponds to a folder in the *SOUND FILES* directory. Proceed through each set of samples (there is no necessary order to practice the samples), following the instructions in the tutorial document. Using the training template, you can copy the pulse listings from Praat into the offset (purple) or onset (yellow) boxes under the “t (s)” column for each sample.

After completing each practice set, navigate to the “Inter-rater Correlation” tab; here, you can find your reliability when compared to a trained RFF technician. There are two main sections to this sheet: (i) average inter-rater reliability for each sample set (i.e., nonsense words, /ifi/ at different levels of effort, and sentences containing VCV productions), and (ii) inter-rater reliability for each instance in each sample set. Rejected samples are shown as cells filled with black diagonal stripes. In the upper right-hand corner of each rejected RFF sample is a red arrow; highlight over the sample to read why it was rejected by the trained RFF technician.

For internal lab use, the STEPP Lab requires each individual training on this set of RFF stimuli to have an **average** inter-rater reliability of ≥ 0.93 for **each** of the five sets when compared to the trained RFF technician.