This set-up is very similar to the one that you have in the template wordspot with the difference that we do not want participants to say anything, but just to press a button.

The task for the participants will be to listen to recordings of sentences and hit a button if they hear a grammatical violation. Some of the sentences will be followed by a comprehension question.

We have 80 experimental items (40 with a violation and 40 without a violation), 20 fillers and 10 training items. All of these are recorded in .wav format. After the block of the training item, the remaining 100 items should appear in 4 blocks of 25 items each. They should be pseudo randomized for each participant with the restriction that no more than 2 items with a violation (called ‘incorrect’ in our excel file) can immediately follow each other.

If there is a comprehension question for the item, it should follow the audio recording. If there is no comprehension question, the next item should start automatically. The inter-stimulus interval of some 1000 ms. should be enough. The comprehension questions will require a yes-no answer and should be displayed on the screen as text.

In between the blocks participants should be offered to take a break and continue by pressing a button.

As output data from this experiment, we will need the reaction times, whether it was indeed a sentence with a violation, the response to the comprehension question and whether it was correct. We will need to collect reaction times from the start of the trial (=recording). We will calculate the point in the recording where there is a violation later in order to compare the reaction times to different types of violations.

\*\*The items numbers in the file “stimuli violation detection for zep” correspond to the item numbers of the actual audio files, which can be found in our project folder: indivdifflangproc2014/violation detection in auditory stimuli/audio files/

In the excel file, you will find the sentences too, but you don’t need them, because people only hear the audio. We hope the rest of the information in the excel file will be clear.