

Sentence-reading task instructions

Experimenter Instructions

- Run `sentence_reading_task.py` on PsychoPy
 - Tested on:
Python 3.11 + Psychopy 2023.1.3
Python 3.8 + Psychopy 2024.2.4
 - Psychopy package dependencies used: `numpy`, `pyserial`
- When a dialogue appears, enter a session number. This could be any text, and will only affect the filename under which the experiment log is saved.
- The task will be displayed on the first monitor detected by PsychoPy
 - If this needs to be adapted, change the `monitor_id` variable in line 52 to the index corresponding to the correct monitor (i.e., some integer value > 0)
- The script will display the instruction screen for minimally 5 seconds, and maximally until it receives the first scanner pulse
 - The script is set up to listen to scanner input in serial mode from port "COM8", with baud rate 57600, and it will proceed to the task once it receives ascii characters 's' and 'S' (or, in decimal, '115' and '83').
- The script has 20 blocks of 4 sentences each, and 20 s rest blocks between the sentence blocks. The total script run time is ~13 minutes.
- To escape the script, press Esc ('escape')
 - The script might take a few seconds
- A logfile `session_*session number*_logfile.csv` and a trigger file `session_*session number*_triggers.csv` will be saved in the same directory of the task script.

Participant Instructions

In this task, you will read a series of sentences presented on the screen, either aloud or silently in your head.

Each sentence will appear in the center of the screen for 4 seconds before automatically advancing to the next one. Begin reading each sentence as soon as it appears.

The sentences are grouped into blocks, and the reading mode alternates between blocks. At the start of each block, you will see a cue indicating the mode for that block: “out loud” or “silently”.

When reading out loud:

- Articulate the sentences as naturally as you would in everyday conversation.
- If you make an error, you may either correct yourself (e.g., “the mountains ~~stall~~ stood tall against the clear blue sky”) or continue without correction (e.g., “the mountains ~~stall~~ tall against the clear blue sky”).

When reading silently:

- Focus on mentally “hearing” the sentence in your inner voice.
- Avoid moving your lips, tongue, or jaw while reading silently.

After each block of sentences, a rest screen will appear for 25 seconds. Use this time to relax, but keep your gaze fixed on the screen. A countdown timer will indicate when the next block is about to begin.

The task consists of 20 blocks, each containing 4 sentences, and will take approximately 13 minutes to complete.