

### Reading acceleration program:

**Pre-test mode:** Participant is presented with 12 sentences and they have to press a key when they have finished reading the sentence. Afterwards, they are presented with multiple choice questions on the sentences they just read. The mean reading rate (milliseconds per letter) for the sentence correctly answered by the participant determines the initial presentation rate of sentences in the training mode for that participant.

Output from pre-test mode: reaction time (ms) in the form of text file

For example, if a sentence with 144 letters takes 30 seconds to read, the reading rate would be  $30000/144$  would be 208.33 ms/letter.

**Training mode:** Participant is presented with 50 sentences on the screen and, for each sentence, the letters disappear one at a time, according to the participant's mean reading rate (ms/letter) determined from the pre-test mode. Specifically, the per-letter 'presentation rate' decreases from one sentence to the next in steps of 2%, one letter at a time, in order from the beginning of the sentence to the end. Following the disappearance of each sentence from the computer screen, the participant was asked to answer a question at a self-paced rate. The 'disappearance rate' increased only when the participant's answers to the probe questions were correct on 10 consecutive sentences. Each question will have 4 possible answers.

Commented [KC1]: KC will ask about this

Commented [KC2]: KC will ask about this

Output from training mode: accuracy of probe questions

Each training session will last 15 minutes and completed each week for 5 weeks. Ideally, the program should be a freely available internet program that can be accessed at home on their computer, and the investigator should be able to remotely access the training record (e.g. when was the training done each week, and if the training was completed, accuracy of questions).

PsychoPy software

Tutorials: <https://www.psychopy.org/coder/coder.html>