



TEXT COMPREHENSION: EYE-TRACKING ANALYSES

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SUMMARY

This aspect of the Reading Brain project will investigate the relationship between eye movements, cognitive measurements, and text-learning difficulty.

Reading is a learning process, during which information gets built up and knowledge gets structurally organized in one's mind. The reader's eye movements can be considered a representation of this process. Where readers fixate, which words they skip or regress to, where they land in words, and how long they fixate on words provide useful information about moment-to-moment comprehensive processing.

The reading comprehending process can be affected by both the reader and the reading material. Factors of the eye-tracking data (fixation duration, regression rate, etc.) can thus be linked to the reader's cognitive abilities and the difficulty of the text.

Completed

Data collection
(monolingual
adults)

Literature prep

Eye-tracking data
reformatting

Fixation alignment
w/ reading
timeline

In Progress

DNN model
development [end
Sept]

Analysis with
cognitive
measurements [mid-
Sept]

Not yet started

Linking fixation
sequence +
ALARReader
outputs [end Sept]