Results

Exclusion criteria

Prior to analysing the data, we have excluded participants based on a priori set criteria. Participants who have spent less than or equal to 90 seconds on the practice text were excluded (1 exclusion). Further, we wanted to exclude participants who have had no correct answers on the final test (0 exclusions). Finally, we have excluded participants who have stated that they have reading deficits (3 exclusions). This left us with a total sample of 203 participants. There is another set of exclusion criteria based on the number of times the participants have read each of the three texts. These are used in robustness check analyses (see suplementary materials).

Interpolated activity effect

Our first two hypotheses are concerned with the effects of different interpolated activities on the total number of correct answers and total number of intrusive distractors chosen. To test these hypotheses, we have focused only on the groups which have not received feedback, since there was no feedback option for the rereading group (n = 122). We conducted a one-way MANOVA with interpolated activity as the independent variable and the total number of correct and intrusive options chosen as dependent variables. The correlation between our DVs calculated on the whole sample is -0.71 (95% CI: [-0.77, -0.63], $p = 4.79255 \times 10^{-32}$).

Pillai's V for the analysis is 0.12565, p=0.00376 (Wilks' $\Lambda=0.875, p=0.00327$; Hotelling-Lawley's trace = 0.1421, p=0.00285; Roy's largest root = 0.1366, p=0.00049). The effect size, calculated as $\omega_{mult}^2=0.10949$.

The interaction between feedback and interpolated activity type

The remaining hypotheses deal with the effect of feedback on the total number of correct answers and the total number of intrusors. Therefore, these analyses are carried out only on the data from participants in the general and content related test conditions (n = 203).

References