

The effect of disfluency on mind wandering during text comprehension

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Abstract: Perceptual disfluency of a text can operate as a desirable difficulty, presumably because it leads to better comprehension. However, little is known about what cognitive mechanisms support this benefit. Here, we investigate whether sustained attention, as measured by reports of mind wandering (i.e., lapses in attention) during reading, mediates the relationship between disfluency and text comprehension. We manipulated the typeface (fluent: Arial; disfluent: Comic Sans) of two texts on research methods. A total of 208 participants recruited online read either one of these texts, either in a fluent or disfluent typeface, followed by a series of text level and inference level comprehension questions. We found that mind wandering was less frequent when participants read disfluent text. Importantly, our results show that the relationship between disfluency and text level comprehension was indirectly mediated by mind wandering, suggesting that sustained attention is one of the cognitive mechanisms by which disfluency influences comprehension.