Vision Sciences Society Annual Meeting Abstract | October 2020

## Individual Differences in Font Preference & Effectiveness as Applied to Interlude Reading in the Digital Age

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Journal of Vision October 2020, Vol.20, 412. doi:https://doi.org/10.1167/jov.20.11.412

## Abstract

In the age of pervasive reading on digital devices, incredible opportunities for customized interfaces abound. We consider how personalizing body text font can improve reading outcomes for adult readers. We present results of large-scale Interlude Reading experiments run on 386 crowdsourced participants, whereby we tested 16 body text fonts and measured impacts on font preference and reading speed. We define "Interlude Reading," nestled between glanceable and long-form reading, as the form of reading that occurs in short interludes and is common in the mobile context. Our studies controlled for participants' interest and familiarity with reading passages, familiarity with font families, and font size - via a perceptually-based font size normalization technique. While past work has considered how these factors affect reading in isolation, we present the first study that combines these factors under a single experimental methodology. First, our results show that normalizing a font's size affects reading speed and font preferences. Second, familiarity with a font predicts neither preference nor effectiveness of a font. Third, people do not know what is good for them: despite 80% of people believing their most preferred font would be their most effective for reading, this was only true 18% of the time. Fourth, and most surprisingly, a simple change in font yielded a reading speed gain of 38 words per minute on average, and 93 WPM for our top quartile of participants (equivalent to eight pages an hour) while comprehension remained similarly high. With these results, we put forward (1) a methodology for running large-scale controlled reading studies, (2) a computational toolkit of crowdsourcing experiments, and (3) a list of concrete recommendations about favorable and effective fonts, and font normalization strategies. Moreover, the potential impacts on individual reading efficacy highlighted here demonstrate a need to further exploit the personalization of text formats.

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