

[Lalo Salmerón](#)

Understanding Long-Text Comprehension by Triangulating Eye Movements and EEG Data

ERI Lectura, University of Valencia, Spain

The rapid digitalization of reading contexts and practices has raised concerns about students' ability to comprehend long (i.e., multi-page) texts. From a cognitive perspective, our capacity to understand this phenomenon—and to intervene effectively—is limited in part by the lack of models that specifically account for long-text reading. Current theories of text comprehension are largely grounded in models developed to explain the processing of short texts (i.e., a few sentences). For example, the Construction–Integration model (Kintsch, 1998) posits that readers build a mental representation of a text by incorporating individual clauses, which—at least for skilled readers—are integrated through activation mechanisms into a coherent situation model. Importantly, this framework assumes that these fundamental mechanisms operate similarly regardless of a clause's or sentence's position within the text. The aim of this presentation is to summarize a line of research that bridges work on text comprehension and attention. I will discuss a series of laboratory and intervention studies that combine eye-tracking and EEG measures to examine both how comprehension unfolds during long-text reading and how it can be effectively supported.

About

Lalo Salmerón is a professor in the Department of Developmental and Educational Psychology and a researcher at the ERI Lectura at the University of Valencia. He earned his PhD in Experimental Psychology in 2006 from the University of Granada, Spain, and was a Fulbright Scholar at the Institute of Cognitive Science at the University of Colorado, USA. He has been a visiting professor at the Universities of Oslo, Frankfurt, and Toulouse. He is deeply grateful to the many mentors, collaborators, and students who have shaped his academic journey. His research centers on reading comprehension, with a particular focus on how people read and understand texts in digital environments. He has devoted much of his work to examining core digital reading processes—such as navigation, integration, and critical evaluation of information—as well as the impact of screen reading on comprehension. His research combines diverse methodologies, including eye-tracking and EEG laboratory studies, classroom-based interventions, secondary analyses of large-scale datasets, and meta-analyses. He is currently president-elect of the Spanish Society for Experimental Psychology (SEPEX), coordinator of the SIG2 *Comprehension of Texts and Graphics* of the European Association for Learning and Instruction (EARLI), and a member of the PISA (OECD) Reading Expert Group.