Development of standardized IReST texts in Greek for evaluation of reading performance

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<u>Introduction</u>: Reading is an important aspect of functional vision, since many daily activities rely on it. Reading difficulty is a common complaint among low vision individuals. Therefore there is a need to evaluate reading performance using clinical tools which resemble daily situations of reading continuous text. The IReST (International Reading Speed Texts) study group has developed standardized, equivalent paragraphs, suitable for repeated measurements, across 17 languages so far. This study aims the development of the IReST version in Greek according to the criteria that have been posed by the IReST Study Group.

<u>Methods – Results</u>: The ten standardized IReST texts in English were translated to Greek, and linguistically adapted according to the rules of Gibson's Syntactic Prediction Locality Theory. The new texts are of equal length, content and linguistic complexity, so that they are homogenous and comparable within the Greek language and also between languages. The word frequency has been shown to influence reading performance, so the words used in the texts have high lexical frequency. It was unnatural for the sentences to have the same syntactic make-up, however their complexity was controlled by minimizing the grammatical transformations and limiting the integration cost for every word of the paragraphs. The IReST texts in Greek are suitable for measuring reading speed and for further analysis of reading performance in various ways.

<u>Discussion</u>: The development of standardized reading paragraphs in Greek is expected to be used in the field of reading and low vision research. The texts are designed to constitute a new diagnostic tool in vision and reading disorders, providing a reliable way to measure reading speed or vision acuity, as they simulate everyday reading tasks and can give important information about the correlation between visual and cognitive parameters that affect reading performance.