

The interplay of L1 and L2 reading proficiency and executive functions on metacognition in reading

Authors: Diane, IFRS Rolante
Abstract ID: 219
Event: Linguistics 2026 Athens
Subject: 16. Psycholinguistics
Presenter Name: Diane Blank Bencke

Abstract

This study has adopted the underlying theoretical concepts of metacognition (monitoring of any cognitive initiative), executive functions (set of skills and abilities aimed at the execution of a goal) and reading proficiency, competence in reading comprehension (the process by which cognitive and metacognitive strategies and skills required to construct meanings are put into action), in accordance to researchers as Flavell (1981), Kato (1985) and Kleiman (1998). One of the cognitive activities in that metacognition may be evident is in reading, through metacognitive awareness of reading strategies and the use of metacognitive Reading strategies, which involve conscience, control and intentionality in purpose of reading.

Metacognition may relate to reading proficiency, there are studies that show relation between reading proficiency and performance in some components of executive functions (EFs), such as working memory, inhibition, attention and mental flexibility (DIAMOND, 2013).

Components of Executive Functions (EFs) are enhanced in bilinguals according to some studies about bilingual advantage, a non consensual construct dealing with the best performance of bilinguals in relation to monolinguals. Considering these theoretical aspects, which factor can better explain metacognition in reading in first language (Portuguese): reading proficiency in L1 (Portuguese) and L2 (English) - monolingual or bilingual status – or habilities in EFs? To answer that research question, it was carried out an empirical study whose general objective was to verify the factor of greater influence. The study was conducted with 54 university students, average age of 25.8 years, divided into four mutually exclusive groups of high and low proficiency reading levels in Portuguese and English, which carried out the following tests: a) the self-report likert scale of Mokthari and Reichard (2002) – MARSİ - Metacognitive Awareness of Reading Strategies Inventory, b) the comprehension test and evaluation of the use of strategies designed by the author, from a verbal written retrospective protocol; c) EFs tasks: Digit Span (WECHSLER, 1997), Wordspan (FONSECA; SALES; PARENTE, 2009; WESCHLER, 1997) and Trail Making Test (RABELO et al., 2010).

Correlation was observed between MARSİ and strategies in L1 and L2 reading proficiency, as well as between strategies and EFs, but not between MARSİ and EFs. Reading proficiency in L1 and L2 showed more impact than EFs on metacognition in reading in L1. Results were discussed in the light of assumptions based on conceptual framework and literature review. It is expected that the data of this research may contribute to highlight the importance of the role of metacognitive awareness of reading processes and of the development of reading proficiency in mother tongue.