

Introduction

- Developmental impairments in language (LI) and working memory (WMI) have been found to be dissociable (Archibald & Joanisse, 2009).

Specific Learning Impairment (SLI)

- Developmental delay in language learning, despite otherwise typical abilities (Leonard, 1998).
- One hallmark: Difficulties with grammatical structure of language, including tense marking and finite verb morphology (Leonard, 1998)

Working memory

- The ability to store and process information being held in the current focus of attention (Baddeley, 2003).
- Children impaired in this domain may have difficulties storing verbal information in sentence processing when task demands are high (Casasanto et al., 2010)

Grammaticality Judgment

- Participants are required to judge the grammatical well-formedness of stimuli sentences (Miller et al., 2008)
- Not picture-based so allows for distinctions between structures found to be impaired in SLI. For example,
 - He felled* vs. He falls
 - She is jumping vs. She is jump*

Purpose of the Study

- To explore the influence existing language knowledge and working memory in sentence processing by systematically examining the performance of children with deficits in the language only, or both language and working memory
 - Predictions:
 - LI will impair sentence processing overall
 - WMI will impair sentence processing under high memory load

Data Analysis

- The performance of each impairment group (SLI and LI/WMI groups) and corresponding matched control groups on early and late marker sentences was compared in separate ANOVAs.

Conclusions