Computerized assessment of lexical comprehension in toddlers

Pascal Zesiger
Faculty of psychology and educational science, University of Geneva, Switzerland
pascal.zesiger@pse.unige.ch

Marie Brun
Faculty of psychology and educational science, University of Geneva, Switzerland

Elise Dupuis Lozeron
Faculty of psychology and educational science, University of Geneva, Switzerland

Arik Lévy
Faculty of psychology and educational science, University of Geneva, Switzerland

Muriel Taccoz
Faculty of psychology and educational science, University of Geneva, Switzerland

Gaëlle Zanier
Faculty of psychology and educational science, University of Geneva, Switzerland

Keywords
Lexicon, toddlers, assessment

Abstract:
The assessment of language comprehension in infants and toddlers constitutes a challenge in many respects given young children’s obvious limitations in motivational and attentional resources as well as in compliance. Parental reports (i.e. the McArthur Communicative Development Inventory, Fenson et al., 1993), provide a convenient method for estimating lexical comprehension, although data resulting from such reports are often weakened by the situational context, the overt intention of the caregiver and the presence of a familiar visual referent (Tincoff & Jusczyk, 1999). These potential bias advocate in favour of the elaboration of more direct, performance-based measures of lexical comprehension. Recently, Friend and Keplinger (2003) developed the Computerized Comprehension Test (CCT) in which the child is presented with a prompt containing a target word (i.e. where is the CAT? Touch the CAT) and two pictures on each vertical half-screen, and is asked to touch the picture matching the word. This procedure is based on a classical picture pointing task (comprehension book), and in addition, provides a direct recording of the toddler’s response through a touch screen and a reinforcement procedure using amusing sounds. The original test was designed in English and showed good reliability compared to the MCDI and to the standard picture pointing task. The aim of this paper is twofold. On the one hand, we will present the adaptation of the standard CCT to French, based on the French version of the MCDI (Kern, 2003). A validation of the method is being performed through correlation analyses between the results obtained in the MCDI and in the CCT, and with a test-retest reliability measure. On the other hand, we will describe a modified, fully computerized version of the CCT in which the prompt sentence is not given by an examiner, but is supplied through a loudspeaker so as to avoid a potential bias related to the examiner. A comparison between the 2 methods will be performed.

References
