



## ENGLISH ABSTRACTS

### EARLY SCHOOLING AND GROWTH OF LITERACY IN THE TRANSITION TO SCHOOL



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The chapter describes an ongoing project aimed at understanding the impact of instruction on children's early literacy growth. Derived from direct observations of classroom instruction, findings revealed that the most effective instruction depends on the initial skill levels of the child. These child x instruction interactions imply that efforts to improve children's literacy skills will be greatly enhanced by a focus on tailoring instruction to each child's profile of strengths and weaknesses. An intervention is described that attempts to provide such individualized instruction combining a small-group focus with computer support that specifies the amounts and types of instruction each child needs to advance. Findings from the intervention demonstrated greater reading growth for the individualized instruction group over a control group. Further, the more the instruction matched recommended amounts and types for each child, the more children grew. Theoretical and practical implications are discussed.

### THEORY OF MIND AND UNDERSTANDING OF TEACHING IN EARLY CHILDHOOD

*Margalit Ziv, and Ayelet Solomon*

Theory of mind is central in the development of social cognition in preschool years. During this period, children are commonly exposed to teaching which contributes to their development and learning. The study explored 3, 4- and 5-year olds' understanding of teaching and its relation to theory of mind. Six tasks examined whether children judge teaching interactions by the intention of the teacher (to teach or not), or by the outcome (whether learning was accomplished or not). Two additional tasks tested whether children could identify embedded



instructional intent in two common teaching strategies – asking questions and play. Three standard theory-of-mind tasks tested children’s understanding of intention and false belief. There was an age-related change in the understanding of teaching. Five-year-olds distinguished intentional teaching from learning without teaching and recognized the teaching intention of teachers’ questions and play. Understanding teaching and false belief were related. The findings indicate that theory of mind is relevant to preschoolers’ understanding of teaching. Teachers should consider these aspects of children’s social cognition when planning developmentally appropriate educational activities and when preparing children for the transition to elementary school.

YOUNG CHILDREN’S ABILITY TO READ AND SPELL THEIR OWN  
AND CLASSMATES’ NAMES:  
THE ROLE OF LETTER KNOWLEDGE

*Iris Levin, Linnea Ehri, Orit Hamuj and Liat Peled-Haim*

Children’s ability to read and spell their own and classmates’ personal names in and out of context in Hebrew was studied. Pre-literate children, aged 4-6 years (N = 60), showed high knowledge of their own names but varied greatly in knowledge of others’ names and emergent literacy skills. Reading and spelling of names was primarily related to letter knowledge rather than to phonemic awareness. Superior performance with initial over medial/final letters occurred despite no capitalization in Hebrew names. Names of two letters were read better than longer names that were read equally well, indicating use of partial cues. These results bear on Ehri’s (2005) phase theory. We speculate that informal learning of names is founded on letter knowledge plus exposure to names, and is fueled by children’s interest in names.

E-BOOKS AS A TOOL FOR SUPPORTING EARLY LITERACY:  
EVIDENCE FROM HEBREW-SPEAKING CHILDREN

*Ofra Korat and Adina Shamir*

In this paper we present two studies which examined the quality of electronic books (e-books) and their contribution to the literacy development of young children. In the first research we evaluated 43 Hebrew e-books and their potential contribution to children's language and literacy. The results support previous evidence and show that available e-books provide mainly amusement for young children, but hardly support their literacy. In the second research we examined the early literacy progress of kindergarten children after using an educational e-book which we developed following our first study. We asked: (a) Whether the progress in literacy skills that these children exhibit after using our educational e-book is different from the progress they exhibit when adults read the printed version of the same book to the children; (b) Whether the socioeconomic level of the children's family effects this improvement. We tested 128 kindergarten children from 8 different classes, half of whom were from low and half from middle SES families. The children's word meaning progress and story comprehension level were similar across both SES groups in both contexts, i.e. independent book reading and adult reading. No evidence was found regarding children's progress in emergent word reading and phonological awareness. Explanations for the findings, suggestions for future studies and for software designers are discussed.

PARENTAL WRITING MEDIATION AND EARLY LITERACY OF  
CHILDREN WITH AND WITHOUT ADHD

*Dorit Aram and Idit Bazelet*

The study compared the nature of parental writing mediation to children with and without ADHD, and tested the relationship between parental writing mediation characteristics and their children's early literacy skills. Participants were 62 kindergartners and one of their parents (32 children with ADHD). Parents were videotaped at home while writing words with their child. Video analysis assessed mediation measures of parental guidance specifically in the writing process, and mediation measures that characterize teaching interactions in general. Children's

early literacy (word writing, letter knowledge, and phonological awareness) was assessed at home. Results showed that, already in kindergarten, children with ADHD exhibited lower literacy achievements comparing to their peers without ADHD. Parents of children without ADHD scored higher than parents of children with ADHD on both the writing and the more general mediation measures. In both groups, the specific writing mediation measures correlated significantly with the children's early literacy. Compared to children without ADHD, in the group of the children with ADHD more general mediation measures correlated significantly with the children's early literacy.

#### NEUROCOGNITIVE ASPECTS OF NUMERICAL PROCESSING AND DEVELOPMENTAL DYSCALCULIA

*Avishai Henik, Orly Rubinsten, Sarit Ashkenazi and Nitza Mark-Zigdon*

The last two decades have witnessed an upsurge in interest in the investigation of numerical cognition. Research in this area is characterized by an effort to understand the mental processes involved, on the one hand, and the brain structures that subserve these mental processes, on the other. In this work we present results pertaining to basic processes like enumeration and comparative judgment of quantities and numbers, and to skill and automaticity in numerical processing. Next, we discuss a learning disability in arithmetic: developmental dyscalculia, and the deficient processes and neural tissue involved in this disability.

#### THE EMERGENCE OF THE VERB CATEGORY IN HEBREW-SPEAKING CHILDREN: A NEW PSYCHOLINGUISTIC PERSPECTIVE

*Dorit Ravid*

Learning verbs is a major challenge in language acquisition, since young learners need to identify constantly changing events in the world and encode them linguistically. The current paper describes how Hebrew "packages" verbs lexically and grammatically, and how children aged 2-3 learn about the components of this Semitic packaging. My main claim is that although the non-linear root-and-

pattern structure underlies the verb system, it is not accessible to toddlers in early acquisition. This is because most verbs in child-directed speech, such as *boi* “come (f.),” have defective roots, are modal in function (future, imperative, or infinitive in form), and take the form of binyan *Qal*. This combination renders them opaque in form, with stem-external agreement markers serving to highlight verb structure. Later on, verbs start taking the present-tense form to mark activities and states, followed by past-tense telic verbs, framed by more tense and person-gender-number markers. Tense shifts serve to highlight pattern changes and root forms. At the same time, more and more verbs with more transparent full roots emerge to enhance the root and pattern category. The paper presents an initial analysis of maternal input to a Hebrew-speaking child aged 1;6 and of the first ten verbs of three children to illustrate this developmental route.

IS IT OR IS IT NOT A TRIANGLE?  
INTUITIONS AND TRIANGLES IN THE KINDERGARTEN

*Dina Tirosh, Pessia Tsamir and Esther Levenson*

Children come into contact with triangles and other geometrical shapes from an early age. Learning about triangles is part of the preschool curricula in many countries. This study focuses on the identification of non-examples of triangles among young children, and the accompanying reasons for these identifications. Results indicated that some non-examples are intuitively recognized as such by the children. In addition, some non-examples were accompanied by visual reasoning (low-level geometric reasoning) while others were accompanied by critical attribute reasoning (higher-level geometrical reasoning). It is recommended that children be introduced to a variety of non-examples, which will encourage focusing on the critical attributes of triangles in order to develop a concept image in line with concept definition of a triangle.