

ENGLISH ABSTRACTS

THE EFFECTS OF WRITING AND STORYBOOK READING INTERVENTIONS AT HOME ON CHILDREN'S EARLY LITERACY

Iris Levin, Dorit Aram

This study assesses the effects of different intervention programs on low SES mother-child joint activities and on progress in children's early literacy and language. A total of 119 families participated in the study. Parents divided into three groups were coached on mediating learning, applied respectively to: interactive storybook reading, writing mediation, and visuomotor skills mediation. Different workshops were followed by seven weeks of tri-weekly structured dyadic interactions and weekly tutorial home visits. A fourth group (control) received no intervention. The parents and the children were assessed on interactive reading and on joint writing, and the children were tested on early literacy prior to the intervention (pretest), immediately thereafter (immediate posttest) and three months later (delayed posttest). The results showed implementation success: mothers coached in interactive storybook reading or in writing mediation improved in the activity they were coached in from pretest to the immediate and the delayed posttests. Interactive storybook reading improved less for older than younger children, whereas writing mediation improved more for older than for younger children. No transfer emerged from one activity to the other: Coaching on reading had no effect on writing, and vice versa. Children's alphabetic skills were enhanced in the group coached on writing mediation, whereas linguistic competencies, unexpectedly, were not enhanced in the group guided on interactive storybook reading. The significance of writing mediation as a dyadic activity promoting literacy is emphasized.

THE ROUTE TO LINGUISTIC LITERACY

Ruth A. Berman

The paper considers the route to linguistic competence in Israeli Hebrew. As background, the notion of "linguistic literacy" is reviewed with reference to the pragmatic and linguistic demands involved on speaker-writers in the course of verbal communication. Attention is focused on the medium of expression – written or spoken – to demonstrate the distinct properties of each – in terms of such factors as processing constraints, cultural conventions, and linguistic features – compared with commonalities underlying the use of language for conveying ideas in general. The paper then reports on findings from a large-scale study comparing texts produced in speech and in writing by native Hebrew

speaker-writers from grade school via middle school across adolescence and into adulthood. Findings reveal a complex developmental path, such that children aged 9 to 10 years write very much as they speak, middle school pre-adolescents reflect a transitional pattern, while high-school adolescents are largely similar to educated adults in both modes of expression. It is concluded that the path to literacy is long and complex, involving concurrent reliance on pragmatic skills, cognitive abilities, and linguistic knowledge.

THE E-BOOK AS A FACILITATOR OF LANGUAGE AND LITERACY
AMONG YOUNG CHILDREN: RESEARCH REVIEW ON HEBREW-
SPEAKING CHILDREN

Ofra Korat, Ora Segal-Drori, Adina Shamir

In this paper we present a series of studies performed in Israel that examined the contribution of e-book reading to the language and literacy of kindergarten children and first graders. Children worked with e-books designed by the researchers to achieve this aim. The review focuses on children's enhancement in phonological awareness, word meaning, story comprehension, story production, letter naming, word reading and word writing. We present the effect of reading these e-books on the language and literacy of young children: (a) in general, (b) on children in different age groups (c) and on children from different SES groups. Results showed that independent e-book reading among young children supported most language and literacy skills. The progress of most skills appeared after three reading sessions. Children from all age groups benefitted from reading the e-books, although progress rates differed by skill. Children from middle and low SES groups benefitted from reading the e-books and in some cases, low SES children gained more than those from a middle SES. Further research and pedagogical implications for software developers and educators are discussed.

READING THE HOMOGRAPHIC SATURATED TEXT: THE PROBLEM IS
ALSO THE SOLUTION

Amalia Bar-On

About a quarter of the words in non-vowelized Hebrew texts are homographic, i.e. words that can be read in two or more different ways. For example, the letters string הפרה HPRH represents six words: Abstract noun: *hafara* 'violation'; concrete noun preceded by the article 'the': *hapara* 'the cow'; prefix preceded by the article 'the': *hapre-(history)* 'the pre-(historic)'; two verbs: *heféra* 'she

violated' and *hifra* 'he fertilized' and an imperative: *hafre* 'fertilize'. The broad distribution of homographic words in every Hebrew text dictates relying on context while reading. Context is inherent to the Hebrew word-recognition process, and is responsible for successful and accurate reading. However, in some cases the context does not help solve the homography, and even can impede fluent reading. This can be demonstrated in the (misleading) opening in the following sentence which contains the homographic word הפרה HPRH: למרות שהפרה במשפט אינה נפוצה... ('Although violation in the sentence is not common...'). Some readers might begin reading: "although the cow in the sentence...", then figure out that they made a mistake, and correct it to "although violation in the sentence...". The fact that these examples are possible on the one hand, but are rather exceptional on the other hand, poses the question: what are the unique properties of the context that enable reading in the very opaque Hebrew orthography? The explanation proposed in the present article is that the different options presented by the homographic string letters usually differ in their morpho-syntactic features. Each one is consequently embedded in a different morpho-syntactic context, which leads to one option recognition and does not allow the other. Analysis of the linguistic features of homographic words and description of the different contexts which are derived from them will be presented in order to reinforce this explanation.

DO ADOLESCENTS WITH MATHEMATICS LEARNING DISABILITIES KNOW THE MULTIPLICATION TABLE?

Avital Rotem, Avishai Henik

Children with mathematics learning disabilities (MLD) have an arithmetic fact deficiency. We investigated development of multiplication facts knowledge in typical achievers (TA) in 2nd, 3rd, 4th and 6th grades and adults, and in 6th and 8th graders with MLD. We examined multiplication facts proficiency and multiplication "number sense", i.e., sensitivity to (1) distance of candidate results from true results, (2) operand-relatedness of candidate results, (3) digit-consistency between candidate results and true results, and (4) parity of results. Between 4th and 6th grade, TA children reach multiplication proficiency seen in adults, first with easy problems (i.e., involving multipliers smaller than 5, duplicate multipliers or 5) and then with difficult problems. Moreover, they develop a multiplication number sense and use it for checking plausibility of results in arithmetic tasks. Multiplication performance of 6th graders with MLD is similar to that of TA 2nd graders. In 8th grade they improve only on easy problems, with performance similar to that of TA 4th graders, suggesting they form a late, weak, and most importantly, partial multiplication network. However, they also develop

a multiplication number sense and use it for checking plausibility of arithmetic results. Implications for the number sense accompanying simple multiplication knowledge and instruction are discussed.

READING COMPREHENSION SKILLS: PROFILES OF 7TH GRADE
READERS IN CANADA

Orly Lipka, Linda Siegel

This study examines profiles of reading comprehension skills in English of students in the 7th grade. The study was designed to investigate the cognitive and linguistic factors that have an influence on reading comprehension in native English speakers in Canada. Within this sample, the existence of three groups were examined: (1) children with poor comprehension in the absence of word reading difficulties (“poor comprehenders”); (2) children with poor word reading and poor comprehension skills (poor readers); (3) and children with both good word reading and comprehension abilities (“good comprehenders”). The performance of the groups was compared and the role of some relevant processes, including word reading, word reading fluency, phonological awareness, working memory, and morphological and syntactic awareness were assessed. The findings indicate the existence of three different groups of reading comprehension. About 10% of the students in 7th grade were classified as “poor comprehenders” and presented considerable difficulties in their reading comprehension ability in the absence of word reading difficulties. In addition, the findings indicate that “good comprehenders” performed better than the “poor comprehenders” on cognitive and linguistic tasks, demonstrating that reading comprehension is based on multiple processes. On an experimental task that was designed to examine reading comprehension with reduced vocabulary and prior knowledge, the “poor comprehenders” demonstrated lower performance than the “good comprehenders”. This finding demonstrates that “poor comprehenders” may have difficulties with reading comprehension higher processes rather than just with the linguistic skills. Implications in relations to assessment, screening and intervention are discussed.