

DETERMINANTS OF READING ACHIEVEMENT IN THE 1st GRADE: ONE YEAR FOLLOW-UP STUDY

MIRA ČUDINA - OBRADOVIĆ

received: April '99.

accepted: November '99.

A one-year follow-up study of reading achievement has been conducted among 1st grade children. One hundred and nineteen children were followed up from the final month in kindergarten to the end of the first grade. The sample consisted of 65 girls and 54 boys. The average age of the participants at the beginning of the study was 6 years and 7 months. The aim of the study was to determine the predictors of reading achievement at the end of the 1st grade, reading achievement being defined according to 6 different criteria: reading accuracy, reading rate, text comprehension, reading fluency, midterm Croatian language grade in the 1st grade and final Croatian language grade in the 1st grade. Predictor variables were defined in 3 blocks: (1) parental coaching, which consists of variables preschool sound-letter knowledge and parental involvement; (2) child's cognitive functioning which consists of variables intelligence, spatial orientation, short-term memory (visual and audio); (3) child's phonological sensitivity consisting of variables onset-rhyme blending, word blending, word segmentation, first phoneme elision, pseudoword blending, phoneme elision. Six hierarchical stepwise multiple regression analyses were performed, with each regression equation testing the contribution of 3 blocks of independent variables to one of the 6 criteria of reading achievement. The most robust finding of the study was that all meaningful reading activities measured by reading fluency, comprehension and school language grades were best predicted by the pre-school sound-letter correspondence knowledge, while the contribution of the phonological and cognitive skills was mostly insignificant. The strong contribution of parental involvement was evident only to grade variables. These results are in agreement with those previous data which study reading as the meaning-searching process and not a word-decoding skill.

The results of many studies converge on several determinants of reading achievement. According to these studies, reading achievement may be influenced by cognitive functioning: general cognitive ability (Stanovich, 1988; Morris, Stuebing et al., 1998), short-term memory and spatial orientation (Stanovich, Siegel et al., 1997; Morris, Stuebing et al., 1998; Salonen, Lepola, & Niemi, 1998); simple speech perception (McBride-Chang et al., 1998), letter-sound knowledge (Stevenson & Newman, 1986; Wagner, Torgesen, Rashotte, Hecht et al., 1997) and phonological skills (Goswami & Bryant, 1990). Phonological skills in particular seemed to be predictive of the ability to learn to read, as they are necessary for word decoding, i.e. the awareness of the relationship between

sounds and letters (Whitehurst & Lonigan, 1998 and Snowling, 1996 for review). A growing number of research data pointed to the centrality of phonological awareness in the process of learning to read (Wagner, Torgesen, Rashotte et al., 1997; Wagner, Torgesen, Laughon, Simmons & Rashotte, 1993; Muter, Snowling & Taylor, 1994; Nation & Hulme, 1997; Muter et al., 1997; Goswami & Bryant, 1990). According to these data, phonological sensitivity was the critical factor in learning to read.

While the children who are early readers will show significantly higher sensitivity at all levels of phonological sensitivity (shallow, intermediate and deep) (Stainthorp &

Mira Čudina - Obradović, PhD, is a psychologist, professor at Teacher Education Academy, University of Zagreb, Savska 77, 10000 Zagreb, Croatia