

McNaughton, S. (1998). *Reading acquisition of adults with severe congenital speech and physical impairments: theoretical infrastructure, empirical investigation, educational application*. Unpublished doctoral dissertation, University of Toronto, Ontario Institute for Studies in Education, Toronto, Ontario, Canada. Peter Lindsay (Advisor): 324 pages of text, 286 references, 10 appendices, 38 tables, and 85 figures.

Theoretical issues pertaining to both ecological and reading acquisition factors were addressed. Two empirical descriptive studies were conducted. In Study 1, a battery of reading acquisition skill tests was given to 107 Kindergarten students in order to obtain performance measurements of nondisabled children at the onset of reading. In Study 2, communication competencies were evaluated, ecological information was obtained and an expanded battery of tests was given to 32 adults with SCSPI, of whom 31 had used Blissymbolics as their initial primary communication system. A multi-tiered model of analysis was used for examining the data.

The results showed (1) an overall lower reading performance of adult subjects with SCSPI in comparisons on standardized tests with the norms of nondisabled adults, (2) a similar pattern of performance on informal reading related tasks in comparisons between adults with SCSPI and children at comparable phonological recoding levels, (3) statistically significant performance differences between SCSPI subjects with phonological recoding skills and those without, and (4) a pattern of higher reading achievement associated with stronger environmental support *irregardless of articulatory ability*.

An argument is presented that the failure to find a different pattern of reading acquisition skills between the SCSPI and nondisabled groups at similar phonological recoding levels precludes a primarily endogenous explanation for the generally lower reading level of persons with SCSPI. Rather, the higher ecological ratings associated with higher reading achievement and higher performance in language and cognitive measures provide support for an exogenous etiology. Limitations relating to print access, literacy instruction and literacy expectations are proposed as primary causal factors of lower reading performance of learners with SCSPI rather than their severe speech limitations to which reading difficulties are typically attributed. Lower performance in tasks measuring nonverbal intelligence, receptive language and working memory are attributed to a reciprocal relationship between reading ability and the efficiency of these cognitive processes.

A profile for Reading Acquisition and an Ecological Checklist are proposed for use within *Writing and Reading with the Internet and Bliss (WRIB)* – a new Educational Application emphasizing explicit, analytic teaching of spelling-sound correspondences and using the learner's experience with Blissymbolics as a language resource.