This article appeared in the March/April 2005 issue of the Orange County Psychologist, the official publication of the Orange County Psychological Association, a chapter of the California Psychological Association on pages 3 and 5.

Research Focus: A New Way of Looking at Reading Acquisition

The following information derives from a recent seminar coordinated by Shirin Ansari, Ph.D., founder of the Center for Learning & Behavioral Solutions in Irvine, California. Also participating in the seminar were Neuropsychologist Casey Dorman, Ph.D., Neuropsychologist Gregory Koch, Ph.D., Psychiatrist Ihab Soliman, M.D., and Psychiatrist Kenneth W. Steinhoff, M.D. Their conclusions, based in part on doctoral research by Dr. Ansari, question long-held assumptions about reading acquisition. Their findings and clinical observations may be useful to clinicians working with both children and adults with learning and/or attentional difficulties.

Phonemic awareness, the ability to recognize and manipulate the individual sounds in words, has long been considered a fundamental skill in reading acquisition. The existing paradigm, Dr. Ansari notes, asserts that phonemic awareness is not only necessary but also the greatest predictor in learning to read and spell (Liberman, 1971, 1973; Bradley and Bryant, 1983; Cunningham, 1990). Dr. Ansari and her colleagues have recently challenged this paradigm by presenting research findings that some children learn to read without phonemic awareness. Moreover, she believes that other factors, such as attention, may be equally or more critical to reading acquisition.

Dr. Ansari's research, conducted as part of her doctoral dissertation, built upon prior research that revealed some Down's syndrome children read at levels higher than expected despite deficits in phonemic awareness (Marshall and Cossu, 1990; Cossu, Rossini & Marshall, 1993). Dr. Ansari compared the decoding skills of five Down's syndrome good readers, five Down's syndrome poor readers, and five typical children matched for reading level with the good reading Down's group. She found that the Down's good readers and the typical children performed equivalently on reading real words and phonemic nonsense words. Yet the Down's good readers and the Down's poor readers all performed significantly worse than the typical children in tests of phonemic awareness.

What does this all mean? Ansari concludes that Down's children may hear individual phonemes but do not have a conscious representation of words as consisting of individual sounds. Therefore, she notes, phonemic awareness does not appear to be necessary for reading acquisition in Down's syndrome children.

Additional research at the Center for Learning and Behavioral Solutions also defies the connection between phonemic awareness and reading acquisition, Ansari notes. The Center has identified a group of good readers (aged 7-12) who have low phonemic awareness and another group of weak readers (7-12 years) who have solid phonemic awareness skills. Consequently, she concludes that, for typical children, phonemic awareness skills are only inconsistently related to the development of reading skills. Moreover, she states, other cognitive-linguistic abilities appear to be equally critical to reading acquisition. "I cannot stress the importance for clinicians, educators, and parents to understand that children with reading acquisition difficulties may be impaired by much more than just phonemic awareness and conceptualization issues," Ansari asserts.

…phonemic awareness skills are only inconsistently related to the development of reading skills.

If lack of phonemic awareness is not the only culprit in reading acquisition problems, what else is? Dr. Ansari has a few ideas. For example, she points to attention as an under-recognized factor in reading acquisition. In particular, children who have attentional difficulties while they are learning decoding may never develop fluent reading skills. Once phonemic awareness skills are acquired, however, children are no longer vulnerable to attention problems.

Ansari and her colleagues recommend a broad assessment of children with reading disabilities and difficulties, including evaluation of such co-morbidities as ADHD, fluency limitations (processing speed), problems with short-term memory (Stanovich, 1985), impaired ability to discriminate rapid speech (Karus, et al., 1996), ability to recognize words automatically, and comprehension deficits (Stanovich, 1985). She also recommends assessment of visual tracking ability, fine motor functioning, and ability versus achievement patterns.

Dr. Ansari emphasizes that the Center's findings are particularly important because unremediated reading problems appear to become increasingly entrenched, based on results of a 1995 study conducted by John Lyons. The study concluded that "there is an only one in eight chance that a child who is not reading at grade level at the end of the first grade will learn to read adequately without time-intensive, strategic tutoring interventions." Consequently, she highlights the responsibility of clinicians working with reading impaired clients "to search high and wide for the very best answer, which will not come from only one test or a static period in time."

…there is only a one in eight chance that a child who is not reading at grade level at the end of the first grade will learn to read adequately without time-intensive, strategic tutoring interventions.

For further inquiry, please contact the Center for Learning & Behavioral Solutions, (949) 654-2424, Fax: (949) 654-2428 or info@centerforlearning.net. The Center uses research-based programs and multi-disciplinary methods to help children overcome learning issues. Services include comprehensive assessment, educational therapy programs, parent training, advocacy services, psychotherapy, social skills training and tutoring.