

Center for Learning & Behavioral Solutions, Inc.
AACAP Abstracts

2005:

Reading Disability and Phonemic Awareness

Shirin Ansari, Ph.D., Center for Learning & Behavioral Solutions, 33 Creek Road, Suite #C320, Irvine, CA 92604; Gregory Koch, Ph.D.; Ken Steinhoff, M.D.; Casey Dorman, Ph.D.

Objective: Two studies were conducted to determine if Down's Syndrome (DS) children with adequate reading ability had phonemic awareness and to determine if learning disabled children could be found who had adequate reading but poor phonemic awareness or poor reading and adequate phonemic awareness.

Methods: Study1- 3 groups of five children, ages 8-15. Groups 1 and 2 were DS children with and without adequate reading skills. Group 3 was composed of normal controls, whose reading level was matched with the DS adequate readers. Subjects received 5 measures of phonemic awareness and 2 of reading decoding skills. Study2- Case records were examined of children of average IQ referred for school problems to find children whose reading level was average but whose phonemic awareness was below average and children whose phonemic awareness was average but whose reading level was below average.

Results: Study1- Adequate reading DS children were able to decode phonetic nonsense words as well as the normal children despite lack of phonemic awareness. Study2- 4 children met were reading disabled with intact phonemic awareness and four were average readers with deficient phonemic awareness.

Conclusion: Children with Down's Syndrome may read adequately without evidence of phonemic awareness. Some normal children read adequately without fully developed phonological awareness and some poor readers have adequate phonemic awareness.

ADHD EDUC LD

2006:

EVALUATION OF FLUENCY IN DIFFERENTIAL DIAGNOSIS

Shirin Ansari, Ph.D.; James Swanson, Ph.D.; Gregory Koch, Ph.D.; Casey Dorman, Ph.D.; S. Brown, Ph.D.

Objective: To compare the ability of cognitive measures versus behavioral ratings to predict two measures of fluency: processing speed (from the WISC-IV) and academic fluency (average of reading and math fluency). ADHD is associated with deficits in academic fluency.

Methods: A group of 85 undiagnosed children referred for academic difficulties were administered a

psychoeducational battery, which included both cognitive measures and behavioral rating scales.

Results: Multiple regression analyses showed that cognitive measures accounted for approximately 24% of the variance in the Processing Speed Index (sig. at $p < .001$) and 37% of the variance in Average Fluency (sig. at $p < .001$); on the other hand, the Behavioral Rating Measures accounted for approximately 6% of the variance in the Processing Speed Index (not statistically sig.) and 17% of the variance in Average Fluency (sig. at $p < .05$).

Conclusion: These findings point to a statistically significant correlation between the cognitive measures and measures of processing speed and fluency. The absence of explicit fluency items on rating scales is not compensated for by a strong correlation between fluency and other items in these rating scales. Since academic fluency is an important part of functioning in the classroom, rating scales should include items that measure this skill.

Key Words: ADHD, Assessment, Fluency

2008:

SUBSTANTIATING THE NEED FOR FLUENCY ITEMS IN RATING SCALES

Shirin Ansari, Ph.D., Center for Learning & Behavioral Solutions, Inc., 33 Creek Road, Suite #C320, Irvine, CA 92604; Gregory Koch, Ph.D.; James Swanson, Ph.D.; David Brown, Ed.D.

Objective: Discuss and demonstrate the absence of fluency items on typically-used children's rating scales; and demonstrate the association between the rating on a new fluency item and the child's performance on psychoeducational measures of fluency.

Methods: The parents of a group of 36 children were administered a Likert scale item asking about excessive time needed to finish homework and assignments, regardless of the subject area involved. The rating of the new fluency item was compared to the contents of the Conners' Rating Scales and correlations were determined. The rating on the new fluency item was also compared to multiple measures of fluency from a comprehensive psychoeducational test battery.

Results: The new fluency item did not significantly correlate with any items or subscales on the Conners' Rating Scales, confirming that none of the items or subscales of the Conners' scales directly or indirectly measure the fluency construct reflected by this new item. The new fluency item correlated significantly with a composite of two academic fluency measures: the composite measure of the Reading Fluency subtest and the Math Fluency subtest of the Woodcock Johnson-III Achievement.

Conclusions: The implications of these findings are important in suggesting that a single rating scale item, perhaps added to an existing scale, can aid clinicians in determining if further neuropsychological assessment is warranted of deficits in academic fluency, which if present may qualify a child for school services, extended time for standardized testing, and other academic adaptations aimed at assisting the struggling student.

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2010:

THE ROLE OF ADHD IN ACADEMIC FLUENCY: A FOLLOW-UP STUDY

Shirin Ansari, Ph.D., Center for Learning & Behavioral Solutions, Inc., 33 Creek Road, Suite #C320, Irvine, CA 92604; James M. Swanson, Ph.D.; Gregory L. Koch, Ph.D.; Sabrina Schuck, Ph.D.; Timothy Wigal, Ph.D.; Annamarie Stehli, M.P.H.

Objective: To examine the relationship between academic fluency and the symptoms of ADHD as measured by rating scales and a new instrument, the Center for Learning rating scale (C4L), in an ADHD and community control sample.

Methods: The school-age sample (aged six to 12 years) included 116 children with ADHD and 186 community controls. Group differences were evaluated for Woodcock Johnson-III Reading Fluency (RF), Woodcock Johnson-III Math Fluency (MF) and each of the C4L items. Within the groups, the C4L items were correlated with RF and MF. Correlations of SNAP-IV subscales with RF, MF and each of the C4L items also were performed.

Results: Significant group differences (effect sizes ranging from .88 to 1.45) were found for both RF, MF, and for each of the C4L items. Among the ADHD group SNAP subscales failed to predict RF or MF scores. The key C4L rating item of interest (item 1: "Takes an inordinately long time to finish homework, regardless of the subject or level of difficulty") was correlated with poor math fluency [$r=-.398$, $p=.0009$] and the same C4L item also was correlated with the Inattention subscale of the SNAP [$r=-.409$, $p=.0001$].

Conclusions: The key C4L rating item was found to be elevated in individuals with ADHD and also was correlated with academic fluency problems, while a typically used ADHD rating scale was not. These findings point to the utility of the C4L fluency-rating item in a study that included a community comparison group and support its inclusion in rating scales commonly used to screen for symptoms of ADHD.

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