

# Neuropsychological Assessment in the Schools: A Nationwide Survey



**Amanda R. Slonaker**, PhD, Department of Psychology, University of Iowa Children's Hospital  
**Lisa A. Pass**, Ed.S., Ball State University, Indiana



## Introduction

Historically, emphasis of school psychological evaluations has been placed on assessment of cognitive ability, academic achievement, and perceptual-motor ability (Goh, Teslow, & Fuller, 1981). Likewise, such measures have been typically utilized in the school setting to determine if a student has a learning disability based on a discrepancy between cognitive ability and academic achievement (Semrud-Clikeman, 2005). This method of assessment, however, often does not provide a comprehensive picture of the neuropsychological functions that underlie a child's abilities to perform in the classroom, and thus neuropsychological measures might provide that missing piece of the evaluation.

Since school psychologists are trained in both psychology and education, they have the fundamental skills needed to integrate a neuropsychological approach in the school environment (Walker et al., 1999). However, according to previous research, school psychologists have reported limited use with neuropsychological measures (Leavell & Lewandowski, 1988).

The purpose of the study was to examine the extent to which various psychological assessment measures are used in the schools, including neuropsychological assessment. The reasons why school psychologists choose to use or not use neuropsychological assessment also was examined.

## Results

### Cognitive Measures:

The two most often used measures were the Wechsler Cognitive Scales (e.g., WPPSI, WISC, WAIS) ( $M = 3.97$ ,  $SD = 1.01$ ) and the Woodcock-Johnson Tests of Cognitive Ability (WJ-III-Cog) ( $M = 2.46$ ,  $SD = 1.29$ ). See Table 1.

### Achievement Measures:

The two most often used measures were the Woodcock-Johnson Tests of Achievement (WJ-III-Ach) ( $M = 2.68$ ,  $SD = 1.35$ ) and the Wechsler Individual Achievement Test ( $M = 2.59$ ,  $SD = 1.37$ ). See Table 2.

### Neuropsychological Measures:

The most frequently used measure was the NEPSY/NEPSY-II ( $M = 1.59$ ,  $SD = .92$ ). Most respondents indicated they "rarely" or "never" administer neuropsychological measures as part of a psychoeducational evaluation. See Table 3.

### Neuropsychological Assessment: Why or Why Not?

Respondents were asked to indicate whether or not they choose to utilize neuropsychological assessment in the school setting. Of the 189 who responded, 145 (77%) reported they do not utilize neuropsychological assessment in the schools, and 44 (23%) reported doing so. The majority of respondents ( $N=33$ ) who answered the question indicated that neuropsychological assessment allows for a better understanding of cognitive processes and gives the examiner more information regarding a student's strengths and weaknesses. The overwhelming majority of respondents (78.1%) reported a lack of training, knowledge, or expertise to be one of the reasons they do not use neuropsychological assessment. More than half of respondents (58.7%) indicated a lack of availability of neuropsychological measures, 27% indicated such assessment was time consuming, 14% indicated expense, 27% indicated lack of support from supervisors, and 19% indicated other reasons.

Table 1: Frequency Ratings of Tests of Cognitive Ability					
Instruments Specified on Questionnaire	Frequency Percentages				
	Never	Rarely	Sometimes	Often	Always
Kaufman Assessment Battery for Children (KABC-II)	66	17	7	10	0
Letter or Letter-R	64	22	10	3	1
Stanford-Binet (SB-V)	42	31	22	5	0
Universal Nonverbal Intelligence Test (UNIT)	37	33	20	10	1
Wechsler Cognitive Scales (e.g., WPPSI, WISC, WAIS)	4	5	10	50	31
Woodcock-Johnson Tests of Cognitive Ability (WJ-III-Cog)	34	18	22	22	5
Note. Percentages are based upon a total of 205 respondents. Total percentages may not equal 100 due to rounding.					

Table 2: Frequency Ratings of Tests of Achievement					
Instruments Specified on Questionnaire	Frequency Percentages				
	Never	Rarely	Sometimes	Often	Always
Bracken Basic Concept Scale (BBCS)	66	13	16	5	0
Kaufman Tests of Educational Achievement (KTEA-II)	61	15	14	7	2
Peabody Individual Achievement Test (PIAT)	82	15	3	1	0
Wechsler Individual Achievement Test (WIAT-II)	32	16	22	20	10
Wide Range Achievement Test (WRAT)	77	11	7	3	2
Woodcock-Johnson Tests of Achievement (WJ-III-Ach)	31	12	23	27	7
Note. Percentages are based upon a total of 205 respondents. Total percentages may not equal 100 due to rounding.					

Table 3: Frequency Ratings of Neuropsychological Assessments					
Instruments Specified on Questionnaire	Frequency Percentages				
	Never	Rarely	Sometimes	Often	Always
Dells-Kaplan Executive Function System (D-KEFS)	86	5	7	2	0
Halstead-Reitan Neuropsychological Test Battery (HRNB)	95	4	2	0	0
Luria-Nebraska Neuropsychological Battery (LNNB)	98	2	0	0	0
NEPSY: A Developmental Neuropsychological Assessment	66	14	14	6	0
Note. Percentages are based upon a total of 205 respondents. Total percentages may not equal 100 due to rounding.					

## Methodology

A questionnaire developed by the researcher was randomly distributed to members of the National Association of School Psychologists (NASP) who were listed as practicing in a public school setting within the United States. A total of 205 participants responded to the questionnaire.

Respondents were asked to indicate the frequency with which they administered specific assessments, including neuropsychological measures, for psychoeducational evaluations. Responses were reported according to a five point Likert-type scale from "never" (1) to "always" (5). The measures were categorized into the following categories: Cognitive Ability, Achievement, and Neuropsychological. These assessments included all editions of the specified instruments.

Descriptive analysis was used to analyze the data. Frequency distributions were calculated to determine the types of measures used by participants as well as the reasons for using or not using neuropsychological assessment.

## Summary and Conclusions

Results indicate school psychologists primarily use measures of cognitive ability and achievement; however, neuropsychological measures are rarely used, if at all. As schools continue to implement the RTI model, a neuropsychological approach would help school psychologists to further understand patterns of deficit as well as students' strengths to plan individualized interventions accordingly. Therefore, this research suggests the likely need for additional neuropsychology training for school psychologists due to the limited use of such assessment in the schools. Yet, because of aforementioned barriers (e.g., inadequate training, expense, lack of support), such an approach may not be readily implemented in the schools. Therefore, it also is recommended school and clinical settings establish greater connections so proper referrals to neuropsychologists also may be made if warranted.

### References

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### Contact Information

**Amanda R. Slonaker, Ph.D.**  
University of Iowa Children's Hospital  
Center for Disabilities and Development  
100 Hawkins Drive  
Iowa City, IA 52242-1011  
E-mail: amanda-slonaker@uiowa.edu