



Neuropsychological Assessment Battery™

Administration, Scoring, and Interpretation Manual

Robert A. Stern, PhD

Travis White, PhD

PAR Psychological Assessment Resources, Inc. • 16204 N. Florida Avenue • Lutz, FL 33549 • 1.800.331.8378 • www.parinc.com

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NAB Materials

The NAB materials consist of four manuals, record forms (for the examiner), response booklets (for the examinee), stimulus books, test manipulatives, scoring templates, a score summary and profile form, and computer software for automated scoring. This chapter describes each of these materials, as well as additional required examination materials not provided with the NAB.

NAB MANUALS

The NAB includes four test manuals: (a) this *NAB Administration, Scoring, and Interpretation Manual*, (b) the *NAB Psychometric and Technical Manual* (White & Stern, 2003b), (c) the *NAB Demographically Corrected Norms Manual* (White & Stern, 2003a), and (d) the *NAB U.S. Census-Matched Norms Manual* (White & Stern, 2003c). This set of four manuals is used for both NAB Form 1 and Form 2.

NAB Administration, Scoring, and Interpretation Manual

This *NAB Administration, Scoring, and Interpretation Manual* includes detailed instructions for administering and scoring the NAB, as well as the interpretation guidelines for the NAB scores. One unique feature of the NAB is that the record forms were designed so that the examiner does not need to have this manual in hand during the administration of the NAB. Although it is strongly recommended that the examiner carefully read chapters 3 and 4 of this manual prior to administering the NAB for the first time, all of the specific administration instructions are included in the record forms of each module (i.e., recording instructions, discontinuation rules, scoring rules, and all spoken instructions to the examinee). Moreover, in most circumstances, raw scores can be calculated without using this manual. There may be infrequent occasions (especially as one is learning the NAB scoring criteria) when reference to scoring examples in chapter 4 of this manual may be helpful for specific tests (e.g., Figure Drawing, Writing).

Chapter 5 provides general guidelines for NAB interpretation, whereas chapter 6 provides specific guidelines for the interpretation of all NAB scores. These two chapters are meant to provide adjunctive interpretation assistance to the trained and experienced clinician using the NAB. That is, they are not meant to facilitate clinical interpretations of the NAB by an individual who does not have the appropriate background, training, and experience in interpreting neuropsychological test performance (see chapter 3 for additional discussion of examiner and professional clinician qualifications).

NAB Psychometric and Technical Manual

The *NAB Psychometric and Technical Manual* (White & Stern, 2003b) provides in-depth information about the background and rationale for the NAB, the development of each of the NAB tests, a description of the standardization sample, a summary of the normative data collection procedures, details regarding the development of the norms, and reports on the numerous reliability and validity studies conducted with both healthy and clinical populations. As such, the manual provides the user with necessary reference information about the psychometric and technical qualities of the NAB but it is not required to score and interpret a specific examinee's performance.

NAB Demographically Corrected Norms Manual

The *NAB Demographically Corrected Norms Manual* (White & Stern, 2003a) provides the reference tables for converting NAB raw scores to various standardized scores based on the demographically corrected standardization sample ($N = 1,448$). The demographically corrected norms are recommended for most situations encountered in clinical practice and are used for interpreting an individual examinee's NAB performance relative to neurologically healthy individuals of the same age, sex, and educational level. Use of the demographically corrected norms is automated by the NAB Software Portfolio.

NAB U.S. Census-Matched Norms Manual

The *NAB U.S. Census-Matched Norms Manual* (White & Stern, 2003c) provides the reference tables for converting NAB raw scores to various standardized scores based on the U.S. Census-matched standardization sample ($N = 950$). The age-based, U.S. Census-matched sample was developed to closely match the proportions of the current population of the U.S. with respect to the demographic characteristics of education, sex, ethnicity, and geographic region in each age group, and these norms are used to interpret an individual's NAB performance relative to the U.S. population as a whole. Use of the census-matched norms is automated by the NAB Software Portfolio.

NAB Software Portfolio

The NAB Software Portfolio (NAB-SP) automates many of the steps involved in calculating raw scores and in obtaining normative scores and profiles. The NAB-SP allows a NAB protocol to be scored in a fraction of the time required by hand scoring. The NAB-SP produces two different score reports: (a) the NAB Screening Module Score Report and (b) the NAB Main Modules Score Report. The NAB-SP allows the user to choose which normative sample (i.e., the demographically corrected normative sample or the age-based, U.S. Census-matched normative sample) to use for report and profile generation. It includes built-in, easy-to-use report editing features. It generates profile graphs with the ability to overlay profiles from prior NAB administrations for a specific client. Reports can be exported to common word processing programs, and client data can be exported to many spreadsheet and database programs. The NAB-SP is very flexible, and may be used to score and to generate normative scores even when only one NAB test is administered. In summary, the NAB-SP offers significant reductions in scoring time as well as reductions in the possibility of committing clerical errors during the scoring process.

TEST ADMINISTRATION MATERIALS

The modular design of the NAB results in an organized and easy-to-use set of test administration materials. Each of the six NAB modules has an associated record form and stimulus book. The Screening, Attention, Language, and Executive Functions Modules also have response booklets. All of these materials are color-coded by module, such that each module record form, response booklet, and stimulus book are printed in the same color scheme, which differs from the other modules (see Table 2.1). A major goal of NAB development was to minimize the amount of manipulatives necessary for test administration. Therefore, there are only two sets of manipulatives: the plastic “tans” used for Design Construction (Screening and Spatial Modules) and the map used for Map Reading (Spatial Module).

Record Forms

Each NAB module has two record forms: one for Form 1 and one for Form 2. The record forms provide all of the necessary instructions for test administration and scoring, as well as adequate space for recording examinee responses for each test. In addition, each record form has a score summary table that allows for both a numerical and a graphical display of the raw and various standardized scores for the module. General instructions for using the record forms are provided in chapter 3, but more comprehensive instructions are given for each module in chapter 4.

Response Booklets

Excluding the Memory and Spatial Modules, each NAB module has two response booklets: one for Form 1 and one for Form 2. The response booklets are used for tests that require the examinee to write, draw, or provide other similar responses (e.g., maze completion).

Table 2.1
NAB Administration Materials by Module

Module	Record form colors	Stimulus book colors	Response booklet colors	Manipulatives
Screening	Burgundy and black	Burgundy and black	Burgundy and black	Tans
Attention	Green and black	Green and black	Green and black	
Language	Orange and black	Orange and black	Orange and black	
Memory	Teal and black	Teal and black		
Spatial	Blue and black	Blue and black		Tans and Map
Executive Functions	Purple and black	Purple and black	Purple and black	

Note. In addition to the module-specific materials, the NAB Score Summary and Profile Form is used to integrate test data from multiple NAB modules. Separate scoring templates are provided for the Numbers & Letters tests in the Screening and Attention Modules (printed in burgundy and green, respectively).

Stimulus Books

Each NAB module has two color-coded, spiral bound stimulus books: one for Form 1 and one for Form 2. The stimulus books contain all of the visual stimuli presented to the examinee for all tests other than Map Reading (Spatial Module).

Manipulatives

Tans

The Design Construction tests in both the Screening and Spatial Modules are assembly tasks that use a set of five flat, blue plastic geometric shapes: two large triangles, one small triangle, one square, and one rhomboid. These materials are adapted from the ancient Chinese puzzle game in which a person uses a set of seven pieces (“tans”) to copy designs (“tangrams”). In the NAB, the same five tans are used for both forms of the Screening Module and the Spatial Module Design Construction tests.

Map

The Spatial Module Map Reading test involves an 11 in. x 17 in. color map that the examinee uses to follow directions and answer questions. The map is pre-creased to fold into a more manageable 8½ in. x 11 in. size. There are different maps for Form 1 and Form 2.

Scoring Templates

The Numbers & Letters tests in both the Screening Module and the Attention Module require the use of scoring templates in order to score the number of omissions and commissions in specific subtests. Each clear acetate template is placed over the Numbers & Letters Response Booklet to identify the location of the target stimuli. Specific instructions for using the templates are provided in chapter 4. There are four Numbers & Letters scoring templates (printed in burgundy) for the Screening Module: Form 1–Part A, Form 1–Part B, Form 2–Part A, and Form 2–Part B. There are six Numbers & Letters scoring templates (printed in green) for the Attention Module: Form 1–Part A1, Form 1–Part A2,

Form 1–Part D, Form 2–Part A1, Form 2–Part A2, and Form 2–Part D.

NAB SCORE SUMMARY AND PROFILE FORM

The NAB Score Summary and Profile Form facilitates calculation of the NAB Module Index and Total NAB Index scores. Additional general profile areas are provided to plot the scores of other tests that might have been administered concurrently with the NAB. The back page may be used to record notes and behavioral observations from the NAB administration.

ADDITIONAL MATERIALS

In addition to the materials included with the NAB, the examiner will need a stopwatch to accurately time the examinee’s responses, a pen or pencil for recording the examinee’s responses in the record forms, an additional black pen or marker (not extra-fine point) for the examinee to use when completing items in the response booklets, and a set of at least five colored markers for the examinee to use during the Figure Drawing test. Additionally, a clipboard is recommended to hold the record forms and shield them from the examinee’s view. Table 2.2 lists the additional materials needed to administer the NAB.

Table 2.2
Additional Administration Materials
Not Included With the NAB

Additional Materials
Stopwatch
Pen or pencil for examiner
Black pen or marker for examinee
Set of at least five colored markers for Figure Drawing test
Clipboard