

The North American Adult Reading Test (NAART) is also known as the NART-R.

NORTH AMERICAN ADULT READING TEST (NAART)

Other Test Name

15 X Peter

Purpose

The purpose of the NAART is to provide an estimate of premorbid intellectual ability.

Source

There is no commercial source. Users may refer to the following text in order to design their own material.

Description

There are a number of clinical, medicolegal, or research situations where knowledge of premorbid IQ is essential. Since premorbid test data are rarely available, methods of estimation are needed. The National Adult Reading Test, or NART (Nelson, 1982; Nelson & O'Connell, 1978), a reading test for irregularly spelled words, has promise as an assessment tool for the determination of premorbid intellectual function. Blair and Spreen (1989) have modified the test for use with North American populations and validated it against the WAIS-R. The test consists of a list of 61 words printed in two columns on both sides of an 8½" × 11" card which is given to the subject to read. The examiner records errors on a scoring sheet. A sample scoring sheet along with the correct pronunciations is given in Figure 3-5.

Administration

The following instructions are given: "I want you to read slowly down this list of words starting here [indicate 'debt'], and continuing down this column and on to the next. When you have finished reading the words on the page, turn the page over and begin here [indicate top of second page]. After each word, please wait until I say 'next' before you read the next word. I must warn you that there are many words that you probably won't recognize. In fact, *most* people don't know them, so just guess at these. O.K.? Go ahead."

The subject should be encouraged to guess, and all responses should be reinforced ("good," "that's fine," etc.). The subject may change a response if he or she wishes to do so, but if more than one version is given, the subject must decide on a final choice. No time limit is imposed.

Approximate Time for Administration

The approximate time required is 10 minutes.

NAART Sample Scoring Sheet	
Page 1	
DEBT det	SUBPOENA sə·pē'·nə
DEBRIS də·brē, dā·brē', dā'·brē	PLACEBO plə·sē'·bō
AISLE ɪl	PROCREATE prō'·krē·āt
REIGN rān	PSALM sām, sālm*
DEPOT də·pō, de'·pō	BANAL bə·nāl', bā·nal', bān'·əl
SIMILE sim'·ə·lē	RAREFY rār'·ə·fī
LINGERIE lan'·zhə·rē', lon'·zhə·rā'	GIST jist
RECIPE res'·ə·pē	CORPS kor, korz
GOUGE gauj	HORS D'OEUVRE ɔr' dəv(r)'
HEIR ār	SIEV siv
SUBTLE sət'·əl	HIATUS hī·ā·təs
CATACOMB kat'·ə·kōm	GAUCHE gōsh
BOUQUET bō·kā', bū·kā'	ZEALOT zel'·ət
GAUGE gāj	PARADIGM par'·ə·dīm, par'·ə·dim
COLONEL kərn'·əl	FACADE fə·sād'
Page 2	
CELLIST chel'·əst	LEVIATHAN li·vī'·ə·thən
INDICT in·dīt'	PRELATE prel'·ət, prēl'·āt*
DETENTE də·tā(n)t <i>də-tā(n)t</i>	QUADRUPED kwād'·rə·ped
IMPUGN im·pyūn'	SIDEREAL sī·dir'·ē·əl, sə·dir'·ē·əl
CAPON kā'·pən, kā'·pon	ABSTEMIOUS ab·stē'·mē·əs
RADIX rād'·iks	BEATIFY bē·at'·ə·fī
AEON ē'·ən, e'·an	GOALED jāld
EPITOME i·pit'·ə·mē	DEMESNE di·mān', di·mēn'
EQUIVOCAL i·kwiv'·ə·kəl	SYNCOPE sing'·kə·pē, sin'·k'rrn·pē
REIFY rā'·ə·fī, rē'·ə·fī	ENNUI an·wē'
INDICES in'·də·sēz	DRACHM dram
ASSIGNATE as'·ig·nāt'	CIDEVANT sēd·ə·vā(n)'
TOPIARY tō·pē·er'·ē	EPERGNE i·pərn', ā·pərn'
CAVEAT kav'·ē·at, kāv'·ē·at,	VIVACE vē·väch'·ā, vē·väch'·ē
kā·vē·at'*	TALIPES tal'·ə·pēz
SUPERFLUOUS sū·pēr'·flū·əs	SYNECDOCHE sə·nek'·də·kē

Figure 3-5. North American Reading Test sample scoring sheet. Pronunciation symbols follow Webster's. Single asterisk indicates correct U.S. pronunciation only. Double asterisks indicate correct Canadian pronunciation only.

Scoring

Each incorrectly pronounced word counts as one error. Slight variations in pronunciation are acceptable when these are due to regional accents. The total number of errors is tabulated. Estimated Verbal, Performance, and Full Scale IQs (VIQ, PIQ, and FSIQs) are calculated through the utilization of the following equations:

$$\text{Estimated VIQ} = 128.7 - .89 (\text{NAART errors})$$

$$\text{Estimated PIQ} = 119.4 - .42 (\text{NAART errors})$$

$$\text{Estimated FSIQ} = 127.8 - .78 (\text{NAART errors})$$

The standard errors of estimate for VIQ, PIQ, and FSIQ are 6.56, 10.67, and 7.63, respectively. For VIQ and FSIQ, a positive discrepancy of 15 or more points between estimated and actual IQ scores indicates the possibility of intellectual deterioration or impairment (based on the calculation of 95% confidence levels). For PIQ, a positive discrepancy of at least 21 points between estimated and actual IQs indicates the possibility of deterioration.

Comment

Blair and Spreen (1989) report that a measure of interscorer reliability for the NAART was .99 ($p < .001$). Coefficient alpha, a measure of internal consistency, was .94. Information regarding test-retest reliability is not yet available.

In a normal sample, correlations between actual WAIS-R VIQ, PIQ, and FSIQ, and predicted IQs on the basis of NAART scores were .83, .40, and .75, respectively (Blair & Spreen, 1989). In short, the NAART is a good predictor of VIQ and FSIQ, but is relatively poor at predicting PIQ. Further, at least in normal people, prediction of IQs was more accurate with equations based on NAART scores than with demographic prediction equations developed by Barona et al. (1984). However, as indicated earlier (see Introduction), the test is not insensitive to cerebral damage, and deterioration in reading test performance does occur in patients with cerebral dysfunction; for example, in cases with moderate to severe levels of dementia (Stebbins et al., 1988, 1990a) and in patients with mild dementia who have accompanying linguistic deficits (Stebbins et al., 1990b). In short, the test is probably best regarded as providing a lower limit of the estimate of premorbid IQ (Stebbins et al., 1990a,b). Combining the NAART with demographic information should increase predictive accuracy (see Introduction). Finally, the test should not be used with aphasic or dyslexic patients, or with patients who have significant articulatory or visual acuity problems.

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