## **Resource Summary Report**

Generated by NIF on Apr 21, 2025

# NIH Toolbox - Assessment of Neurological and Behavioral Function

RRID:SCR\_002423 Type: Tool

## **Proper Citation**

NIH Toolbox - Assessment of Neurological and Behavioral Function (RRID:SCR\_002423)

## **Resource Information**

URL: http://www.nihtoolbox.org/

**Proper Citation:** NIH Toolbox - Assessment of Neurological and Behavioral Function (RRID:SCR\_002423)

**Description:** An integrated set of tools for measuring cognitive, emotional, motor and sensory function. These tools are being validated for use in diverse cultures, ethnic and geographic groups, ages (3-85 years) and study types. The toolbox is expected to provide a more complete picture of neurological and behavioral health in large-scale longitudinal studies, epidemiological studies, and clinical trials; and to facilitate cross-study comparisons. Moreover, the toolbox will: \* be minimally burdensome to subjects and investigators, \* utilize state-of-the art psychometric approaches and technology, including computer-assisted evaluation, and \* be dynamic and adaptable to changes in measurement and technology. \* be available in English and Spanish Many clinical studies collect data on aspects of neurological and behavioral function. However, the neurological and behavioral tests currently available to researchers lack uniformity and often require specialized training to administer. These limitations make it difficult to compile data across the full range of normal neurological function, and to compare data across studies. The toolbox is royalty-free and is expected to be available online by summer 2012.

#### Abbreviations: NIH Toolbox

**Synonyms:** NIH Toolbox - Assessment of Neurological Behavioral Function, NIH Toolbox for Assessment of Neurological and Behavioral Function, NIH Toolbox for the Assessment of Neurological and Behavioral Function

Resource Type: assessment test provider, material resource

**Keywords:** cognitive, motor, emotional, sensory, epidemiology, prevention, computerized adaptive testing, disease, cognition, executive function, episodic memory, working memory, speed, language, attention, emotion, negative affect, positive affect, stress, coping, social, relationship, motor, locomotion, strength, non-vestibular, dexterity, endurance, sensation, vision, audition, vestibular, somatosensation, nneurological assessment, behavioral assessment, taste, olfaction, learning, memory, lexical retrieval, visuospatial ability, speed of processing, mood, adaptability, interpersonal relations, self-regulation, motor function, non-vestibular balance, hearing, vestibular balance, smell, touch, adult human, late adult human, child, psychometric test, measurement tool

Funding: WO HHS-N-260-2006-00007-C

Resource Name: NIH Toolbox - Assessment of Neurological and Behavioral Function

Resource ID: SCR\_002423

Alternate IDs: nif-0000-00393

Record Creation Time: 20220129T080213+0000

Record Last Update: 20250420T015712+0000

#### **Ratings and Alerts**

No rating or validation information has been found for NIH Toolbox - Assessment of Neurological and Behavioral Function.

No alerts have been found for NIH Toolbox - Assessment of Neurological and Behavioral Function.

#### Data and Source Information

Source: <u>SciCrunch Registry</u>

### **Usage and Citation Metrics**

We found 80 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>NIF</u>.

Di Giorgio E, et al. (2025) Neurobehavioral Outcomes Relate to Activation Ratio in Female Carriers of Fragile X Syndrome Full Mutation: Two Pediatric Case Studies. International journal of molecular sciences, 26(2). Newson JJ, et al. (2024) Leveraging big data for causal understanding in mental health: a research framework. Frontiers in psychiatry, 15, 1337740.

Jensen DEA, et al. (2024) Nuclei-specific hypothalamus networks predict a dimensional marker of stress in humans. Nature communications, 15(1), 2426.

Donohue B, et al. (2024) Accelerating Heritability, Genetic Correlation, and Genome-Wide Association Imaging Genetic Analyses in Complex Pedigrees. Human brain mapping, 45(17), e70044.

Ramduny J, et al. (2024) Increasing the representation of minoritized youth for inclusive and reproducible brain-behavior associations. bioRxiv : the preprint server for biology.

Wang Z, et al. (2024) Resting state fMRI-based brain information flow mapping. ArXiv.

Hartman SJ, et al. (2024) Relationship of physical activity and cognitive functioning among breast cancer survivors: a cross-sectional analysis. Frontiers in Cognition, 3.

Abbas M, et al. (2024) Interconnected declines in audition vision and cognition in healthy aging. Scientific reports, 14(1), 30805.

Santacroce F, et al. (2024) Human intraparietal sulcal morphology relates to individual differences in language and memory performance. Communications biology, 7(1), 520.

Feraco T, et al. (2024) Happy children! A network of psychological and environmental factors associated with the development of positive affect in 9-13 children. PloS one, 19(9), e0307560.

Sharp TH, et al. (2023) The subcortical correlates of autistic traits in school-age children: a population-based neuroimaging study. Molecular autism, 14(1), 6.

Park KS, et al. (2023) Music-based multicomponent exercise training for community-dwelling older adults with mild-to-moderate cognitive decline: a feasibility study. Frontiers in medicine, 10, 1224728.

Litwi?czuk MC, et al. (2023) Using graph theory as a common language to combine neural structure and function in models of healthy cognitive performance. Human brain mapping, 44(8), 3007.

Nashiro K, et al. (2023) Effects of a Randomised Trial of 5-Week Heart Rate Variability Biofeedback Intervention on Cognitive Function: Possible Benefits for Inhibitory Control. Applied psychophysiology and biofeedback, 48(1), 35.

Yoo HJ, et al. (2023) Multimodal neuroimaging data from a 5-week heart rate variability biofeedback randomized clinical trial. Scientific data, 10(1), 503.

Wallace J, et al. (2023) Psychometric Properties of the NIH Toolbox Cognition and Emotion Batteries Among Children and Adolescents with Congenital Heart Defects. medRxiv : the

preprint server for health sciences.

Khodaei M, et al. (2023) Brain working memory network indices as landmarks of intelligence. Neuroimage. Reports, 3(2).

Kotikalapudi R, et al. (2023) Brain morphology predicts individual sensitivity to pain: a multicenter machine learning approach. Pain, 164(11), 2516.

Loughnan RJ, et al. (2023) Intelligence Polygenic Score Is More Predictive of Crystallized Measures: Evidence From the Adolescent Brain Cognitive Development (ABCD) Study. Psychological science, 34(6), 714.

Shields RH, et al. (2023) Sensitivity of the NIH Toolbox to Detect Cognitive Change in Individuals With Intellectual and Developmental Disability. Neurology, 100(8), e778.