CogniFit

Naming Test

Version No: 2023.1 Issue Date: 2023-04-17

Purpose of this document

This file contains all the information to understand and analyze the Naming Test. You will be able to find relevant information about how this assessment task works, what it measures, and all relevant data about the variables recorded during the performance of the activity.



Task Info

In this section information about the task, its structure, and stimuli will be given.

Task Description

The *Naming Test* measures the ability to accurately and rapidly name objects. A series of images will be displayed that the user must identify and associate them with their corresponding name. To this end, the test-taker is required to determine which is the first letter that spells the name of the object depicted on the screen, and to select it among a set of four possible options. For example, for the picture of an apple, the test-taker should click on the letter "A" but not on the three incorrect responses ("C", "P", "M") also present on the screen.

The concept of this task is based on the Boston Naming Test (Kaplan et al., 1983), and it is also used as the Vocabulary subtest in the Wechsler assessment battery (WAIS-III; Wechsler, 1997).

You can try the *Naming Test* for free on <u>this page</u>. If you want more information about its technical details, you can contact us at <u>support@cognifit.com</u>.

Cognitive skills measured

The primary cognitive ability measured by this task is *naming*.

This task contributes to the measurement of <u>Visual perception</u>, <u>Naming</u>, <u>Processing speed</u>, and <u>Response time</u>.



Task Structure

The task is divided into 2 phases:

Phase	Amount of trials	Time allowed to answer
0 (Learning)	1	8 seconds
1 (Testing)	18	8 seconds

Task Stimuli

An image will be shown in the center of the screen, then it will disappear and four squares with letters inside will appear instead. The image will have a schematic-conceptual aspect of an object, animal, or food they represent. They will be flat white drawings, highlighting the silhouettes. The squares will appear distributed in two rows and two columns and will be black. All of them will contain a white letter centered inside. One of the letters will coincide with the first letter of the name of the image shown before, but the rest will be mere distractors. When answered correctly or when not answered within the first 8 seconds from when the image was shown, the square containing the correct letter will change its color from black to green. If answered incorrectly within the first 8 seconds since the letters were displayed, the color of the selected square will change from black to red.



Variables Info

In this section details about the variables, their definition, range, and other pieces of relevant information will be given.

Basic Variables

Basic variables refer to variables and indices that are commonly used in experimental research and clinical settings.

Accuracy

This variable measures the percentage of accuracy in all trials of the testing phase. It ranges from 0 to 100, and higher values indicate better performance.

Response time

This variable measures the average response time to correct trials in the testing phase. It ranges from 0 to 8000 milliseconds, and lower values indicate better performance.

Omission errors

This variable measures the number of trials where no response is given by the user, that is, the number of timeouts. It ranges from 0 to 18. High scores on this variable indicate that the user is distracted (not paying attention) or has a slow response.

Omission errors (percentage)

This variable measures the number of trials where no response is given by the user, that is, the number of timeouts. It ranges from 0 to 100. High scores on this variable indicate that the user is distracted (not paying attention) or has a slow response.



Validity Index

If the user's performance falls outside these ranges, it will be considered deviating from the expected and may invalidate the assessment results.

Task Validity

This variable represents the validity of the whole task, and it is 'true' only when all the individual variables of the Validity Index of the task are 'true'. Otherwise, it is 'false'.

Accuracy validity

This variable measures the validity of the variable "Accuracy", and it is 'true' when its value is between 0 and 100 (both included). Otherwise, it is 'false'.

Response time validity

This variable measures the validity of the variable "Response time", and it is 'true' when its value is between 250 and 5000 milliseconds (both included). Otherwise, it is 'false'.

Omission errors validity

This variable measures the validity of the variable "Omission errors", and it is 'true' when its value is below 9, included. Otherwise, it is 'false'.



References

Kaplan, E., Goodglass, H., Weintraub, S. (1983). Boston Naming Test. Philadelphia: Lea & Febiger.

Wechsler, D. (1997). WAIS-III: Wechsler Adult Intelligence Scale - Third edition administration and scoring manual. San Antonio, TX: Psychological Corporation.