

*\*This assessment review was compiled by our students and is intended to be used as a guide in assisting clinicians. We encourage you to review the evaluations and assessments for yourself to guarantee the most accurate and updated information.*

## I. General Information

**Title of the test:** Grooved Pegboard Test

**Author:** Ronald Trites, PhD

**Publisher:**

Lafayette Instrument Company  
3700 Sagamore Parkway North  
P.O. Box 5729  
Lafayette, IN 47903  
800-428-7545  
[info@lafayetteinstrument.com](mailto:info@lafayetteinstrument.com)  
[www.lafayetteinstrument.com](http://www.lafayetteinstrument.com)

**Time required to administer:** 10-15 minutes

**Cost of the Test:** \$100

## II. Description of Test

**Type/Purpose of Test:** Manipulative dexterity, including finger speed, is assessed. The test requires more complete visual motor coordination than most pegboard, because the pegs must be rotated before they can be inserted. Assessment is used for prevocational and vocational testing but also been found sensitive to general slowing due to medication or disease progression.

**Population:** Ages 5 and up.

**Focus of measurement:**

Organic systems    Abilities    Participation/life habits    Environmental Factors

## III. Practical Administration

**Ease of Administration:**

Instructions need to be read aloud to the participants to explain the shape of the pegs and how they will be put in to the pegboard. Each hand is tested separately and is timed each trial. The dominant hand is tested first.

**Clarity of Directions:** In the user's manual, the instructions are simple and to the point of how to administer this test. It has scripts for you to say so you do not have to worry about administering it incorrectly. Some directions need to be thoroughly read over to understand scoring and interpretation.

**Scoring Procedures:** The first part of scoring is simply the time it took the participant to complete the task. Start the clock once the participant starts and stop it once the task has been completed. If after five minutes the participant has not completed the pegboard, stop the participant. In your results, document what was difficult for the participant and mark the results with an "A" flag, which symbolizes an incomplete test.

Another score of how many drops the participant had during the test is also noted. A drop is if the peg is picked up and then it falls to the table again unintentionally. If the participant sets it back down do not mark this as a drop. If the participant also picks up a bunch of pegs and lets go of some, it is not considered a drop as long as there is still one peg in the hand. If

the hand that is not being tested turns one of the pegs over it is noted but if it happens again the participant receives a "D" flag for a non standard assessment.

The third score is to count how many pegs were put in correctly.

To find the final score you add up all three scores (time for completion in seconds, number of drops, and how many were correctly put in). When you have this number, locate the table of page seven of the Grooved Pegboard Manual to compare the score of the participant to the scores listed on the table. This table will help you compare you participant's results in the same age group.

### **Examiner Qualification & Training**

No specific training is required for administering this test. The tester needs to become familiar with procedures and scoring before administering.

## **IV. Technical Considerations**

**Standardization:**  **X** **Norms**  **Criterion Referenced**  **Other** \_\_\_\_\_

**Reliability:** Reliability has been established in different studies since this test first came out. It has been found as a reliable source for testing manual dexterity. Retest reliability of this assessment is  $p < 0.01$ , and  $r = .74$  for dominant hand with  $r = .72$  for non-dominant hand.

**Validity:** This test has shown to have established criterion, construct, discriminate, face, and content validity.

**Manual:**  **X** **Excellent**  **Adequate**  **Poor**

### **What is (are) the setting/s that you would anticipate using this assessment?**

Hospital

Outpatient Clinic

Any time you want to assess your client's manual dexterity.

### **Summary of strengths and weaknesses**

#### **Weakness:**

- Scoring and interpretation is a little confusing.
- Test was designed to test employees of companies to see if they can match up to job requirements

#### **Strength:**

- Good way to assess manual dexterity.
- This pegboard has more visual-motor coordination than other pegboard assessments.
- Can be done in short time.

#### **References:**

Grooved Pegboard Manual retrieved from

<http://www.si-instruments.com/product/show/146/grooved-pegboard-test/47.html>

Nine-Hole Peg Test (2007). Nine-Hole Peg Test. In I. E. Asher (Eds.), *Occupational therapy assessment tools: An annotative index* (p. 308). Bethesda, MD: AOTA Press.

Yancosek, K., & Howell, D. (2009). A narrative review of dexterity assessments. *Journal of Hand Therapy*, 22(3), 258. doi: <http://dx.doi.org/10.1016/j.jht.2008.11.004>