I. General Information

Title of the test: Nine-Hole Peg Test (NHPT) - 1985

Author: Not Specified

Publisher: Sammons Preston Rolyan, Inc.

Time required to administer: 10 minutes for both hands

Cost of the Test: $64.82-129.99 (Amazon)

II. Description of Test

Type/Purpose of Test: To measure unilateral finger dexterity to determine the extent of fine motor impairment in people experiencing difficulties with functional performance. (Nine-Hole Peg Test, 2007)

Population: Children and adolescents age 5 to 19; adults age 20 to 94

Focus of measurement:
X Organic systems    X Abilities    X Participation/life habits    ___ Environmental Factors

III. Practical Administration

Ease of Administration: This test is incredibly easy to administer. The only materials that are required are a test kit (small pegboard and 9 pegs), a stopwatch, instructions, and norm tables. The test itself requires little set-up and is quick to administer.

Clarity of Directions: The directions/instructions given by Mathiowetz et al. (1985) are very straightforward and easy to follow. They include information regarding the order of testing, number of practice trials, when to start/stop stopwatch, specifics on materials, and step-by-step instructions to be given to client when testing.

Scoring Procedures:
- Subject is seated at a table; tool is placed in front of subject at midline.
- Pegs are placed off to the side being assessed, in close proximity to the board.
- Subject is read standardized instructions to put pegs into the board as quickly as possible and then remove them, placing them into a small container. Time is recorded in seconds.
- Two consecutive trials with the dominant hand are immediately followed by two consecutive trials with the non-dominant hand.
- Times reported for each hand are compared with normative tables, according to subject age. Faster time generally indicates better function. (Rehabilitations Measures Database, 2010)

Examiner Qualification & Training:
“Can be administered by a wide variety of trained examiners.” (Hitech Therapy, 2013)
## IV. Technical Considerations

**Standardization:**

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<tr>
<th>Norms</th>
<th>Criterion Referenced</th>
<th>Other</th>
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**Reliability:**

High interrater reliability using Pearson correlation coefficient (right = 0.97, left r = 0.99). Test–retest reliability was high for the right hand (r = 0.69) and moderate (r = 0.43) for the left. Several versions of this test are available, including homemade. To improve reliability, choose one style and use it consistently. (Mathiowetz, 1985)

**Validity:**

Concurrent validity was assessed between the Nine-Hole Peg Test and the Purdue Pegboard using Pearson correlation coefficient (right r = -0.61, left r = -0.53), with the results indicating strong concurrent validity. (Mathiowetz, 1985)

**Manual:**

- Excellent
- Adequate
- Poor

*Cannot be reported since the OT program kits do not have manuals with them.

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

Outpatient clinic, home therapy, hand clinic, or hospital rehabilitation clinic. Any setting where clients present with impairments in UE or finger dexterity.

### Summary of strengths and weaknesses

#### Weakness:
- Only tests a small area of function; therefore, should not be used in isolation.
- Performance may be sensitive to practice effects (improved performance after practice trials).
- Patients often display poorer performance when first tested due to lack of familiarity with the task.
- Should not be used to test normal subjects (i.e. for job placement). Other tests are more suitable or appropriate (i.e. Purdue Pegboard).
- While it was said that “faster time generally indicates better function” (Rehabilitation Measures Database, 2010), there is no other mention of whether or not this test gives a good idea of how someone might function in daily tasks that require fine motor skills.

#### Strength:
- Written and verbal standardized instructions.
- Can be administered by wide variety of trained examiners.
- Norms are available.
- Relatively inexpensive construction cost and brief administration time.
- Used with wide range of populations.
- Easily portable.

### References:


