

**NINDS CDE Notice of Copyright  
Jebsen Taylor Hand Function Test**

<b>Availability:</b>	<p><b>Copyright:</b> Jebsen, Taylor, Treischmann, Trotter, &amp; Howard, (1969).</p> <p>A test kit is sold commercially through multiple vendors, which usually includes instructions, all items needed to perform seven subtests, a carrying bag, and pad of 50 blank record forms.</p> <p><b>Available for purchase at:</b> <a href="#">Jebsen-Taylor Hand Function Test Instrument Link</a> .</p> <p><b>More information available at Rehab Measures:</b> <a href="#">Rehab Measures: Jebsen Hand Function Test</a>.</p> <p>For more information, please visit: <a href="#">The SCI Research Evidence (SCIRE) website</a>.</p>
<b>Classification:</b>	<p><b>Supplemental:</b> Myotonic Muscular Dystrophy (DM), Spinal Cord Injury (SCI) and SCI-Pediatric (age 6 years and over)</p> <p><b>Exploratory:</b> Cerebral Palsy (CP), Congenital Muscular Dystrophy (CMD), Duchenne Muscular Dystrophy (DMD), Friedreich's Ataxia (FA), Neuromuscular Disease (NMD), and Spinal Muscular Atrophy (SMA).</p>
<b>Short Description of Instrument:</b>	<p>This test was designed to provide a short, objective test of hand functions commonly used in activities of daily living. It was developed for health professionals working in restoration of hand function. The test items include a range of fine motor, weighted and non-weighted hand function activities which are timed.</p> <p><b>Construct measured:</b> Upper extremity function, activities of daily living</p> <p><b>Generic vs. disease specific:</b> Generic</p> <p><b>Intended respondent:</b> Participant</p> <p><b># of items:</b> 7</p> <p><b># of subscales and names of sub-scales:</b> N/A</p> <p><b># of items per sub-scale:</b> N/A</p>

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<p><b>Comments/Special Instructions:</b></p>	<p><b>Scoring:</b> The time taken to complete each of the tasks is recorded in seconds during test administration. Scores are compared to normative data. Normative data are available for children over 6 years of age and for adult males and females in the 20–90 year age range. Studies show that scores high strongly correlated with age (times increase with older age), thus comparisons must be age-matched.</p> <p><b>Background:</b> This is a performance measure. The test is a norm-referenced timed performance measure of unilateral hand function. The items include : (1) writing (copying) a 24-letter sentence, (2) turning over 3 x 5” cards (simulated page turning), (3) picking up small common objects such as a paper clip, bottle cap and coin (4) simulated feeding using a teaspoon and five kidney beans, (5) stacking checkers, (6) picking up large light objects (empty tin can) and (7) picking up large heavy objects (full tin can x 1 lb). The non-dominated hand is tested first, followed by the dominant hand. The instructions for test administration are provided in Jebsen et al. (1969). A Jebsen-Brief has been introduced and contains three items (Bovend’Eerd, et al., 2004), but field testing has been limited.</p>
<p><b>Rationale/Justification:</b></p>	<p><b>Strengths/Weaknesses:</b> Commonly used Hand Function Test for adults with stable hand impairments. Administration without standardized equipment\set-up and without standardized instruction negatively impacts reliability. Testing requires tolerance for sitting upright for at least 45 minutes, thus recommended for subacute and chronic studies. Test-retest reliability ranges from poor-to-excellent (r=0.60–0.99) in non-SCI populations.</p> <p><b>SCI-specific Psychometric Properties:</b> Test-retest reliability lowest for writing and simulated feeding (Stern et al., 1992). There are no published psychometric studies in SCI population. Limitations of Jebsen Test of Hand Function in SCI is that some items require mid-line crossing and trunk control (thus not a pure measure of hand function) (Wuolle et al., 1994) and were not responsiveness to changes following tendon transfers (Mulcahey et al., 1999).</p>

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<b>References:</b>	<p><b>Key Reference:</b></p> <p>Jebsen RH, Taylor N, Trieschmann RB, Trotter MJ, Howard LA. An objective and standardized test of hand function. <i>Arch Phys Med Rehabil.</i> 1969;50(6):311–319.</p> <p><b>Other References:</b></p> <p>Bovend'Eerdt T J, Dawes H, Johansen-Berg H, Wade DT. Evaluation of the Modified Jebsen Test of Hand Function and the University of Maryland Arm Questionnaire for Stroke. <i>Clin Rehabil.</i> 2004;18(2):195–202.</p> <p>Lynch KB, Bridle MJ. Validity of the Jebsen-Taylor hand function test in predicting activities of daily living. <i>Occup Ther J Res.</i> 1989;9(5):316–318.</p> <p>Stern EB. Stability of the Jebsen-Taylor hand function test across three test sessions. <i>Am J Occup Ther.</i> 1992;46(7):647–649.</p> <p>Pfutzner A, Musholt PB, Schipper C, Niemeyer M, et al. Self-assessment and objective determination of dexterity in patients with type 1 or type 2 diabetes mellitus. <i>Curr Med Res Opin.</i> 2012;28:15–21.</p> <p>Rider B &amp; Linden C. Comparisons of standardised and non-standardised administration of the Jebsen Hand Function Test. <i>J Hand Ther.</i> 1988;2:121–123.</p> <p>Mulcahey MJ, Betz RR, Smith BT, Weiss AA. A prospective study of the outcomes of tendon transfers with children with tetraplegia. <i>J Pediatr Orthop.</i> 1999;19:319–328.</p> <p>Wuolle KS, Van Doren CL, Thrope GB, Keith MW, Peckham PH. Development of a quantitative hand grasp and release test for patients with tetraplegia using a hand neuroprosthesis. <i>J Hand Surg [Am].</i> 1994;19(2):209–18.</p>
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