

### Validity of Craig Handicap Assessment and Reporting Technique Short Form Japanese Version (CHART-SF-J)

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**Purpose:** To examine the criterion-related validity of the Craig Handicap Assessment and Reporting Technique Short-Form Japanese version (CHART-SF-J) in individuals with spinal cord injury (SCI). The CHART-SF is a 19-items questionnaire to evaluate individual's handicap developed at 1999. Origin is the CHART (37-items) developed by Whiteneck et al. (1992). CHART-J had Six sub-scale (Physical Independence (Pi), Cognitive Independence (Co), Occupation (Oc), Mobility (Mo), Social Integration (So) and Economic Self-Sufficiency (Es)).

**Methods:** Mailed questionnaire included several questions about personal characteristics and physical conditions, the Barthel Index (BI), the Frenchy Activity index (FAI) and the CHART-J except Co and Es sub-scale.

**Analysis:** Pearson's coefficients of correlation were performed sub-scale between CHART-J and CHART-SF-J and sub-score between FAI and CHART-SF-J. Furthermore, being dependent variable a total CHART-J score, multiple regression analysis was performed on an independent variable to be all the questions of CHART-SF-J.

**Results:** Two hundred and ninety-three SCI individuals participated in this study (male 246, female 47, mean age 38.7 years, BI score 75.6 (mean value), FAI score 19.2 (mean value)). Sub-scale mean score were as Pi (87.6), Mo (73.5) Oc (45.0) So (77.6). Pearson's coefficients of correlation ranged 0.91–0.95 between CHART-SF-J to CHART-J, ranged 0.23–0.69 between FAI and CHART-SF-J. The regression model presented is 0.89 by R-squared ( $F = 103.12$ ;  $p < 0.001$ ).

**Conclusion:** Sub-scales of CHART-SF-J closely approximate the scores of that gathered by the Original CHART. The criterion-related Validity of CHART-SF-J demonstrated in SCI individuals except Co and Es sub-scale. It is appropriate to utilize in SCI research in the future. CHART-SF-J is a valuable tool for determining handicap for populations in which time is at a minimum.