ICF Measure of Participation and Activities Screener (IMPACT-S)

Assessment Overview

Assessment Area

ICF Domain:
Activities and Participation
Subcategory:
All 9 chapters

You Will Need

Length:
32 items
Scoring:
Items scored 0-3. Subscale and total scores are sums of item scores transformed to a 0-100 scale. Higher scores indicate greater participation.

Summary

The ICF Measure of Participation and Activities Screener (IMPACT-S) is a self-report measure which assesses participation and activity limitations under to the ICF model.

It contains 9 domains, representing all 9 chapters under the Activities and Participation domain. Two subscale scores (Activity, Participation) and a total score can be obtained.

Availability

Worksheet: Currently unavailable.

Assessment Interpretability

Minimal Clinically Important Difference

Not established in SCI

Statistical Error

Not established in SCI.

In patients with various other neuromuscular conditions:

Standard Error of Measurement:
4.4
Minimal Detectable Change:
12.1

(van der Zee et al. 2010; n=47; 15 males; various diagnoses; mean (SD) age 50.6 (11.8))

Typical Values

Mean (SD) Scores:
Total: 69.6 (13.0)
Activities: 66.1 (12.7)
Participation: 73.9 (15.1)

(van der Zee et al. 2014; n=157, 104 males; 59.2% paraplegia, 69.4% motor complete; mean (SD) time post-SCI = 25.3 (26.8) years)

Measurement Properties

Validity – Low to High

High correlation with World Health Organization Disability Assessment Schedule II (WHODAS II):

IMPACT-S Total: r = -0.78
IMPACT-S Activities: r = -0.70
IMPACT-S Participation: r = -0.77

Low to High correlation with Utrecht Scale for Evaluation of Rehabilitation (USER) participation subscale:

IMPACT-S Total:
- USER-Participation Frequency: r = 0.32
- USER-Participation Restriction: r = 0.73
- USER-Participation Satisfaction: r = 0.38

IMPACT-S Activities:
- USER-Participation Frequency: r = 0.30
- USER-Participation Restriction: r = 0.67
- USER-Participation Satisfaction: r = 0.28

IMPACT-S Participation:
- USER-Participation Frequency: r = 0.34
- USER-Participation Restriction: r = 0.74
- USER-Participation Satisfaction: r = 0.47

(van der Zee et al. 2014; n=157, 104 males; 59.2% paraplegia, 69.4% motor complete; mean (SD) time post-SCI = 25.3 (26.8) years)

High correlation with World Health Organization Disability Assessment Schedule II (WHODAS II):

IMPACT-S Total: r = -0.88

(Post et al. 2008; n=275 (13% SCI); mean (SD) age: 40.4 (15.8) years; 65.9% males; 58.8% employed or in full-time education; mean (SD) duration: 2.2 (0.9) years)

Number of studies reporting validity data: 3

Reliability – Moderate to High

Moderate to High Test-retest Reliability:

Total: ICC = 0.88
Activities: ICC = 0.92
Participation: ICC = 0.74
Domains: ICC = 0.54-0.90

(van der Zee et al. 2010; n=47; 15 males; various diagnoses; mean (SD) age 50.6 (11.8))

High Internal Consistency:

Total: α = 0.92
Activities: α = 0.84
Participation: α = 0.88

(van der Zee et al. 2014; n=157, 104 males; 59.2% paraplegia, 69.4% motor complete; mean (SD) time post-SCI = 25.3 (26.8) years)

High Internal Consistency:

Total: α = 0.96

High Test-retest Reliability:

ICC = 0.94

(Post et al. 2008; n=275 (13% SCI); mean (SD) age: 40.4 (15.8) years; 65.9% males; 58.8% employed or in full-time education; mean (SD) duration: 2.2 (0.9) years)

Number of studies reporting reliability data: 3

Responsiveness

Floor/Ceiling Effect:
Not established in SCI

Effect Size:
Admission to discharge: 0.32 [0.29*]
Discharge to follow-up: -0.14

Standard Response Mean:
Admission to discharge: 0.40 [0.37*]
Discharge to follow-up: -0.21
*N=87 subgroup containing SCI participants

(van der Zee et al. 2011; n=395; 211 males; various neuromuscular conditions, < 22% with SCI; mean (SD) age 52.1 (13.6))

Number of studies reporting responsiveness data: 1