

The Multidimensional Pain Inventory (MPI) – SCI version

Assessment Overview

Assessment Area

ICF Domain:

Body Functions

Subcategory:

Sensory Functions

Sections:

Pain Impact (5 subscales)

Responses by Significant Others
(3 subscales)

General Activities (4 subscales)

You Will Need

Length:

20+ minutes, 50 items

Scoring:

Each item scored 0-6, total and mean subscale scores are calculated.

Total score is not used.

Summary

The Multidimensional Pain Inventory (MPI)-SCI is theoretically linked to the cognitive-behavioral conceptualization of chronic pain, where emphasis is placed on the assessment of subjective distress and the impact of pain on patient's lives. A slightly revised version of the MPI was devised for the SCI population.

The MPI-SCI consists of 3 sections (12 subscales total): Pain Impact (Life interference, support, life control, pain severity, affective distress), Responses by Significant Others (Distracting responses, negative responses, solicitous responses) and General Activities (Household activities, activities away from home, social activities, outdoor work)

Availability

Please contact Dr. Eva Widerström-Noga to obtain the MPI-SCI.

Languages: English (The non-SCI MPI is available in Swedish, Dutch, German, Italian, Spanish, Portuguese, French and Japanese).

Assessment Interpretability

Minimal Clinically Important Difference

Not established in SCI

Statistical Error

Not established in SCI

Typical Values

Mean (SD) Scores:

For general activities section:
"Persons with tetraplegia scored lower (34.3 ± 16.4) than those with paraplegia (45.0 ± 19.4)"

(Widerstrom-Noga et al. 2006, p.520; n=161, 138 men, mixed injury types, mean (SD) time since injury = 10.9 (7.8) years)

Measurement Properties

Validity – **Moderate** to **High**

High correlation between MPI-SCI life interference subscale and Brief Pain Inventory (BPI):

Correlation = 0.75

Moderate correlation between MPI-SCI affective distress subscale and Beck Depression Inventory (BDI):

Correlation = 0.48

Moderate correlation between MPI-SCI general activity subscale and Functional Independence Measure (FIM):

Correlation = 0.35

Moderate correlation between MPI-SCI pain interference with activities subscale and BPI:

Correlation = 0.50

(Soler et al. 2013; n=126, 78 males, mixed injury types, mean (SD) = 11.8 (10.8) years)

Number of studies reporting validity data: 4

Reliability – **Low** to **High**

Low to High Test-retest reliability for MPI-SCI

Subscales:

ICC = 0.26-0.86

Low to High Internal Consistency for MPI-SCI

Subscales:

Cronbach's α = 0.61-0.94

(Widerstrom-Noga et al. 2006; n=161, 138 men, mixed injury types, mean (SD) time since injury = 10.9 (7.8) years)

Number of studies reporting reliability data: 2

Responsiveness

Floor/Ceiling Effect:

Not established in SCI

Effect Size:

Moderate effect size (0.6) comparing tetraplegia and paraplegia regarding general activities section

(Widerstrom-Noga et al. 2006; n=161, 138 men, mixed injury types, mean (SD) time since injury = 10.9 (7.8) years)

Number of studies reporting

responsiveness data: 1