Health Utilities Index-Mark III (HUI-Mark III)

Assessment Overview

Assessment Area

ICF Domain:

Body Functions

Subcategory:

Sensory and Pain

You Will Need

Length:

8 items – less than 5 minutes

Scoring:

Each item is scored from either 1 (no problems with domain) to 5 or 6 (severe problems with domain). Scores assigned to each attribute level are then combined using the multiplicative $u = 1.371$ ($u*_1 u*_2 u*_3 u*_4 u*_5 u*_6 u*_7 u*_8$) - 0.371 to arrive at an overall index for each respondent. The scores are then scaled to be between 0 and 1.

Summary

The Health Utilities Index-Mark III (HUI-Mark III) scale measures quality of life in 8 domains: vision, hearing, speech, ambulation, dexterity, emotion, cognition and pain.

After scaling each item from 1 to 5 or 6 and combining these scores using a multiplicative utility function, the Index is scaled from 0 (completely unhealthy) to 1 (completely healthy).

Availability

Worksheet: Can be found here.

Assessment Interpretability

Minimal Clinically Important Difference

Not established in SCI

Statistical Error

Not established in SCI

Typical Values

Mean HUI-Mark III score for SCI patients (±SD):

0.27 (±0.27)

(Craven et al. 2012; n=357; mean age (range): 53.7 (24-89) years, traumatic SCI: n=279, non-traumatic SCI: n=78)

Measurement Properties

Validity – **Low** to **Moderate**

Low Hierarchal regression model of HUI-Mark III with personal factors:

$R^2 = 0.008$

Low Hierarchal regression model of HUI-Mark III with body functions and structure:

$R^2 = 0.142$

Moderate Hierarchal regression model of HUI-Mark III with activity and participation:

$R^2 = 0.565$

Moderate Hierarchal regression model of HUI-Mark III with environmental factors:

$R^2 = 0.565$

(Mittmann et al. 2014; n=357; 257 males, 100 females; mean age (range): 53.7 (24-89) years: traumatic SCI: n=279, non-traumatic SCI: n=78)

Moderate Hierarchal regression model of HUI-Mark III and SCI Secondary Conditions Scale-Modified for health and health preference:

r = 0.37

Moderate Hierarchal regression model of HUI-Mark III and SCI Secondary Conditions Scale-Modified for self-rated health:

r = -0.41

Moderate Hierarchal regression model of HUI-Mark III and SCI Secondary Conditions Scale-Modified for secondary health conditions and severity:

r = -0.47

(Craven et al. 2012; n=357; mean age (range): 53.7 (24-89) years, traumatic SCI: n=279, non-traumatic SCI: n=78)

Number of studies reporting validity data: 2

Reliability – **Not Established in SCI**

Not established in SCI

Number of studies reporting reliability data: 0

Responsiveness

Floor/Ceiling Effect:

Not established in SCI

Effect Size:

Not established in SCI

Number of studies reporting responsiveness data: 0