Beck Depression Inventory (BDI)

Assessment Overview

Assessment Area

ICF Domain:
Body Function
Subcategory:
Mental Functions

You Will Need

Length:
< 10 minutes, 21 items

Scoring:
Items scored 0-3, total score (0-63) as sum of items.
Higher scores reflect more depressive symptoms.

Summary

The Beck Depression Inventory (BDI) is one of the most widely used screening instruments for measuring the severity of depression in adults and adolescents. It is a self-report inventory composed of items relating to depressive symptoms (hopelessness and irritability), cognitions (guilt or feelings of being punished), and physical symptoms (fatigue, weight loss, and lack of interest in sex). The BDI can be used with, but is not limited to, persons with SCI.

Several somatic symptoms included in the BDI are common in SCI and may be confused with symptoms of depression. Therefore, BDI score may be artificially inflated among patients with SCI, representing higher levels of depression than is actually the case.

The BDI is quick and easy to administer but you should be aware of any physical limitations that may affect scores.

Availability

Worksheet: Can be purchased here.

Languages: English, Spanish, Arabic, Chinese, Farsi, and many European languages

Assessment Interpretability

Minimal Clinically Important Difference

Not established in SCI

Statistical Error

Not established in SCI

Typical Values

Threshold values:
Not established in SCI. But for the general population:
  0-9 = Minimal depression
  10-18 = Mild depression
  19-29 = Moderate depression
  30-63 = Severe depression

(Kendal et al 1987, review)

Measurement Properties

Validity – **Low** to **Moderate**

Low to **Moderate** correlation with SF-36 Domains:

General Health – r = -0.229
Vitality – r = -0.329
Social functioning – r = -0.283
Mental health – r = -0.247

(Ataoglu et al. 2015; n=140; 104 males, 36 females; mean (SD) age: 36.2 (13.5) years; ASIA A-D; inpatient; mean (SD) time since injury: 25.2 (43.9) months)

Low correlation with Wheelchair Outcome Measure (WhOM):

WhOM mean Sat – r = -0.220
WhOM mean Sat x Imp – r = -0.262

(Alimohammad et al. 2016; n=75 with SCI; no info on injury type; Farsi speakers, wheelchair as primary mobility device; mean (SD) time post-SCI: 60 (61) months)

Moderate correlation with Functional Independence Measure (FIM):

r = -0.486

(Koca et al. 2014; n=44; 29 males; ASIA A-D; outpatient; mean (SD) time since injury: 31.2(4.7) months)

Moderate correlation with Spinal Cord Injury Lifestyle Scale (SCILS):

r = -0.45

Moderate correlation with Health Behaviour Questionnaire (HBQ):

r = -0.33

(Shabany et al. 2018, n=97 traumatic SCI; 77 males; age range: 26+; 79.4% paraplegia, 20.6% tetraplegia; 61.9% complete injury, 38.1% incomplete injury)

Number of studies reporting validity data: 4

Reliability – **Moderate**

Moderate Internal Consistency:

α = 0.85

(Soler et al. 2013; n=126; 78 males; ASIA A-C; traumatic and non-traumatic; mean (SD) time since injury: 11.8(10.8) years)

Number of studies reporting reliability data: 1

Responsiveness

Floor/Ceiling Effect:
Not established in SCI

Effect Size:
Not established in SCI

Number of studies reporting responsiveness data: 0