

# 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 SCI patients, 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

Available for purchase here:

<http://www.pearsonclinical.com/psychology/products/100000159/beck-depression-inventoryii-bdi-ii.html?Pid=015-8018-370&Mode=summary>

**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; mixed injury types; 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; mixed injury types; 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:

$\alpha = 0.85$

(Soler et al. 2013; Spanish version,  $n=126$ , 78 males; mixed injury types; 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