

## Beck Depression Inventory (BDI)

**PLEASE READ THIS:** If you want a copy of the BDI or any further information on it please direct them to [The Psychological Corporation](#).

**Devised By:** The original version of the BDI was introduced by Beck, Ward, Mendelson, Mock & Erbaugh in 1961. The BDI was revised in 1971 and made copyright in 1978 (Groth-Marnat, 1990). Both the original and revised versions have been found to be highly correlated (.94; Lightfoot & Oliver, 1985 cited in Groth-Marnat, 1990).

**Type of Instrument:** The BDI is a 21 item self-report rating inventory measuring characteristic attitudes and symptoms of depression (Beck et al., 1961). The BDI has been developed in different forms including several computerized forms, a card form (May, Urquhart, Tarran, 1969, cited in Groth-Marnat, 1990); the 13-item short form and the more recent BDI-11 by Beck, Steer & Brown, 1996 (see Steer, Rissmiller and Beck, 2000 for information on the clinical utility of the BDI-11).

**Description:** The BDI is a self-administered 21 item self-report scale measuring supposed manifestations of depression. The BDI takes approximately 10 minutes to complete, although clients require a fifth – sixth grade reading age to adequately understand the questions (Groth-Marnat, 1990).

### Reliability

Internal consistency for the BDI ranges from .73 to .92 with a mean of .86. (Beck, Steer, & Garbin, 1988). Similar reliabilities have been found for the 13-item short form (Groth-Marnat, 1990). The BDI demonstrates high internal consistency, with alpha coefficients of .86 and .81 for psychiatric and non-psychiatric populations, respectively (Beck et al., 1988).

**Split-half / Cronbach's Alpha:** The BDI has a split-half reliability co-efficient of .93.

**Test-Retest Reliability:** Beck et al., (1961) did not recommend conventional test-retest reliability for his original measures for the BDI (1961). Beck suggested that if the BDI was re-administered within a short interval then scores could be spuriously inflated due to memory factors. If the test was re-administered after a long interval then consistency would be lower due to the intensity of depression. Alternate test-retest reliability methods by Beck et al., (1961) found that regardless of whether the 2 tests were reissued at 2 or 6 weeks intervals the scores on the inventory tended to reflect changes in the clinical depth of depression. However, Groth-Marnat (1990) reported that re-test reliabilities ranged from .48 to .86, depending on the interval between re-testing and type of population.

**Alternate Form Reliability:** Correlation's between the 21 item and 13-item short form have ranged from .89 to .97 indicating that the short form is an acceptable substitute for the long form (Beck, Rial, & Rickels, 1974). However, readers are drawn to the possible "sins" of short form development (Smith, McCarthy & Anderson, 2000).

**Inter-rater Reliability:** Beck, et al., (1961) reported that inter-rater reliability was not appropriate for the BDI. See Beck et al. (1961) for details.

### Validity & Factor Analysis

A meta-analysis of studies on the revised BDI's psychometric properties by Richter, Werner, Heerlim, Kraus, & Sauer (1998) report advantages with the revised BDI's high content validity, and validity in differentiating between depressed and non-depressed people. Beck, Steer and Garbin (1988) reported that the revised BDI has been found to include three to seven factors, depending on the method of factor extraction. These include factors that reflect negative attitudes towards self, performance impairment and somatic disturbances, as well as a general factor of depression (Brown, Schulberg & Madonia 1995).

**Criterion (or Predictive) Validity:** The BDI has been able to discriminate the level of adjustment in seventh-graders (Albert & Beck, 1975 as cited in Groth-Marnat, 1990).

**Content Validity:** The content of the BDI was obtained by consensus from clinicians regarding symptoms of depressed patients (Beck et al., 1961). The revised BDI items are consistent with six of the nine DSM-111 categories for the diagnosis of depression (Groth-Marnat, 1990).

**Concurrent validity:** Correlations with clinician ratings of depression using the revised BDI range from .62 to .66 (Foa, Riggs, Dancu, & Rothbaum, 1993). Clinical ratings for Psychiatric patients are reported as high to moderate ranging from .55 to .96  $r = .72$  (Beck et al., 1988 cited in Groth-Marnat, 1990). Groth-Marnat (1990) reported moderate correlations between the revised BDI and other scales measuring depression such as the Hamilton Psychiatric Rating Scale for Depression (.73) and the Zung Self Reported Depression Scale (.76) and the MMPI Depression Scale (.76).

**Construct Validity:** Groth-Marnat (1990) reported that controversy exists over whether the revised BDI is measuring state or trait variables. Furthermore, it has been suggested that the BDI is not specific to depression, unlike the [DASS](#).

**Convergent and Discriminant Validity:** Discriminant analysis has found that the translated version of the revised BDI highly discriminates depressive symptoms in Spanish (Bonicatto, Dew, Soria (1998) Persian (Hojat, Shapurian, Mehryar (1986) and Chinese speaking people (Skeck (1990). Groth-Marnat (1990) reports that the revised BDI discriminates Psychiatric patients from non-psychiatric patients as well as relatively higher scores for patients with major depressive disorder compared to patients with dysthymic disorders. The revised BDI has also been used to discriminate loneliness, stress and self reported anxiety (Groth-Marnat, 1990).

#### **Interpretation:**

- |                              |                         |
|------------------------------|-------------------------|
| 1. Sadness                   | 12. Social withdrawal   |
| 2. Pessimism                 | 13. Indecisiveness      |
| 3. Sense of failure          | 14 Change in body image |
| 4. Dissatisfaction           | 15. Retardation         |
| 5. Guilt                     | 16. Insomnia            |
| 6. Expectation of punishment | 17. Fatigability        |

- |                        |                           |
|------------------------|---------------------------|
| 7. Dislike of self     | 18. Loss of appetite      |
| 8. Self Accusation     | 19. Loss of Weight        |
| 9. Suicidal ideation   | 20. Somatic preoccupation |
| 10. Episodes of crying | 21. Low level of energy   |
| 11. Irritability       |                           |

Add up the score for each of the twenty-one questions and obtain the total. The highest score on each of the twenty-one questions is three, the highest possible total for the whole test is sixty-three. The lowest possible score for the whole test is zero. Only add one score per question (the highest rated if more than one is circled)

### **Total score Levels of Depression**

05 - 09 These ups and downs are considered normal

10 - 18 Mild to moderate depression

19 - 29 Moderate to severe depression

30 - 63 Severe depression

Below 4 = Possible denial of depression, faking good; this is below usual scores for normals.

Over 40 = This is significantly above even severely depressed persons, suggesting possible exaggeration of depression; possibly characteristic of histrionic or borderline personality disorders. Significant levels of depression are still possible (Groth-Marnat, 1990).

### **Key References:**

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