

---

# Chapter 12

## Beck Depression Inventory and Hopelessness Scale

---

Randy Katz  
Joel Katz  
Brian F. Shaw  
*University of Toronto*

### The Beck Depression Inventory (BDI)

The Beck Depression Inventory (BDI) is a self-administered inventory designed to assess current severity of depression developed from clinical observations of depressed and non-depressed psychiatric patients. Clinical observations of attitudes and symptoms characteristic of depressed patients are represented in a 21-item, multiple-choice style questionnaire. Each item consists of several statements varying in the degree to which they reflect specific depressive symptoms and attitudes. Each BDI item requires a rating response on an ordinal scale from 0 to 3, where 0 represents the total absence of the symptom or attitude and 3 indicates the most severe level. The following 21 symptoms and attitudes were established from clinical observation: (a) mood, (b) pessimism, (c) sense of failure, (d) lack of satisfaction, (e) guilt feelings, (f) sense of punishment, (g) self-dislike, (h) self-accusation, (i) suicidal wishes, (j) crying, (k) irritability, (l) social withdrawal, (m) indecisiveness, (n) distortion of body image, (o) work inhibition, (p) sleep disturbance, (q) fatigability, (r) loss of appetite, (s) weight loss, (t) somatic preoccupation, and (u) loss of libido.

### SUMMARY OF DEVELOPMENT

The BDI was designed for use as a semistructured interview administered by trained interviewers. However, it was developed and refined further to be used as a self-rating instrument taking only 10–15 minutes for administration and scoring. When self-administered, the individual selects one or more of the choices from each item that best reflects how he or she feels. The BDI score is the sum of the rank value associated with the highest ranked statement endorsed from each of the 21 items.

The original BDI was developed by Beck and his colleagues in 1961 (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and revised by Beck for publication in Beck, Rush, Shaw, and Emery (1979). In refining the psychometric characteristics of the instrument,

modifications have been made, including reducing the number of response possibilities and rewording certain items. There currently are two paper-and-pencil forms of the BDI. One is a short 13-item format that mainly measures a cognitive dimension of depression; and the other is a longer 21-item format that measures noncognitive dimensions of depressive disorder, including somatic concerns (Beck, Steer, & Garbin, 1988). Validity coefficients between the two forms are acceptably high and range from 0.89 to 0.97 (Beck & Beck, 1972; Beck, Rial, & Rickels, 1974; Reynolds & Gould, 1981). Despite these minor differences between versions, the two instruments have been found to be comparable in psychiatric patients (Beck & Steer, 1984). A card format (May, Urquart, & Tarran, 1969) and a number of computer-administered forms have been developed, but there are no data on the reliability and validity of these methods of administration (Beck et al., 1988).

## BASIC VALIDITY AND RELIABILITY INFORMATION

**Content Validity.** Over the past 30 years, advances in the classification and diagnostic practices of psychiatric disorders have led to the development of DSM in North America and the ICD system in Europe. Although both systems have progressed along similar paths, in recent years the DSM has received more international attention and is perhaps the more widely used and accepted diagnostic system.

As noted earlier, the BDI originally was developed from an atheoretical model derived from observations by trained clinicians of patients suffering from depressive illness. Although the BDI is a useful tool for assessing many features of clinical depression, it does not provide enough information to establish a *DSM-III-R* diagnosis of major depressive episode, but must be supplemented with additional material. For instance, the BDI focuses on a 1-week period preceding administration, whereas *DSM-III-R* requires the presence of symptoms over a minimum of 2 weeks. The BDI does not assess symptoms relevant to weight gain, hypersomnia, psychomotor agitation, or retardation (Moran & Lambert, 1983; Viedenburg, Krames, & Flett, 1985). Finally, the BDI does not assess for change from a previous level of functioning, which is a critical criteria for the diagnosis of *DSM-III-R* major depressive disorder. Overall, the content validity is good for six of the nine *DSM-III* criteria for depressive episode (Moran & Lambert, 1983), but does not address satisfactorily the remaining three criteria.

**Concurrent Validity.** Beck et al. (1988) cited 35 studies where correlations were reported between the BDI and other well-established instruments that measure depression, including (a) Hamilton Psychiatric Rating Scale for Depression (HRSD; Hamilton, 1960), (b) Zung Self-Reported Depression Scale (Zung SDS; Zung, 1965), (c) Minnesota Multiphasic Personality Inventory Depression Scale (MMPI-D; Hathaway & McKinley, 1943), (d) Multiple Affect Adjective Checklist Depression Scale (MAACL-D; Zukerman & Lubin, 1965), and (e) clinicians' ratings of depth of depression (Beck et al., 1974; Salkind, 1969; Strober, Green, & Carlson, 1981; Wittig, Hanlon, & Kurland, 1963) (see Table 12.1). The correlation coefficients between the BDI and these measures ranged anywhere from a relatively modest .33 with *DSM-III* major depression (Hesselbrock, Hesselbrock, Tenmen, Meyer, & Workman, 1983) to a more substantial .86 with the Zung SDS (Turner & Romano, 1984) and HRSD (Steer, McElroy, & Beck, 1982). However, the most significant relationship was found between clinicians' ratings and the BDI, where the correlation coefficient was reported at .96 (Beck et al., 1974). This is not surprising, because the BDI was developed on the basis of clinical observation of patients suffering with depression. Taken together, the data show that the BDI correlates well with most other self-report measures of depression.

TABLE 12.1  
Correlations Between the Beck Depression Inventory and Other Measures of Depression

References	Clinical	Hamilton	Zung	MMPI-D	MAACL-D
<i>Psychiatric</i>					
Bailey and Coopen (1976)		.68			
Beck et al. (1961)	.66				
Blatt et al. (1982)			.81 M .77 F	.44	
Bloom and Brady (1968)					.66
Davies et al. (1975)		.73	.73		
Hesselbrock et al. (1983)				.59	
May et al. (1969)	.65				
Mendels, Secunda, and Dyson (1972)			.79	.70	.59
Metcalfe and Goldman (1965)	.62				
Reynolds and Gould (1981)		.57			
Rounseville et al. (1979)	.60	.71			
Schnurr et al. (1976)		.61	.70	.55	
Seitz (1970)			.83	.41	
Steer et al. (1982)		.86			
Strober et al. (1981)	.67				
<i>Nonpsychiatric</i>					
Atkeson et al. (1982)		.73			
Campbell et al. (1984)				.56	
Clarke and Williams (1979)			.67		
Coleman and Miller (1975)	.55				
Giambra (1977)			.66		
Hammen (1980)		.80			
Hatzenbuchler et al. (1983)			.78		
Marsella et al. (1975)			.62		
Salkind (1969)	.73				
Schwab et al. (1967)		.75			
Scogin and Merbaum (1983)				.63	
Scott et al. (1982)				.63	
Tanaka-Matsumi, and Kameoka (1986)			.68		
Turner and Romano (1984)			.86	.75	
<i>Combined</i>					
Beck et al. (1974)	.55 .89 .56 .96 .67				
Carroll et al. (1973)		.41			
Schaeffer et al. (1985)	.65 .67		.81 .76	.59 .57	

Reprinted from *Clinical Psychology Review*, 8, by A. T. Beck, R. A. Steer, and M. A. Garbin, "Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation," pp. 77-100, Copyright (1988), with kind permission from Pergamon Press Ltd, Headington Hill Hall, Oxford OX3 0BW, UK.

**Discriminant Validity.** Although the BDI was developed to assess the severity or depth of depression in psychiatric patients (Beck et al., 1961), a number of authors have investigated the discriminant validity of the BDI in relation to psychiatric and nonpsychiatric populations (Akiskal, Lemmi, Yeteveanian, King, & Belluomini, 1982; Byerly & Carlson, 1982; Clark, Cavanaugh, & Gibbons, 1983; Gallagher, Nies, & Thompson, 1982). These studies demonstrated significantly lower scores on the BDI among nondepressed normals than depressed psychiatric patients and patients with other nonpsychiatric clinical disorders.

Evidence of the ability of the BDI to discriminate between subtypes of depression is limited. Studies looking at the ability of the BDI to discriminate between subtypes of depression generally have failed to show any significant effect (Delay, Pachot, Lemperiere, & Mirouze, 1963; Schnurr, Hoaken, & Jarrett, 1976). However, Beck et al. (1988) reported that outpatients with a recurrent episode of major depression showed higher mean BDI scores than patients suffering with a dysthymic disorder.

*Reliability.* Beck et al. (1988) examined the reliability of the BDI by conducting a meta-analysis of 25 published papers using the BDI. The subject samples for these populations consisted of schizophrenics, substance abusers, college students, and depressed patients. Regardless of the population sampled, internal consistency estimates were high (ranging from .73 to .95). In addition, Beck et al. (1988) presented information on the stability of the BDI from 10 studies that administered the inventory to the same patients on two occasions. As expected, stability estimates were higher for nonpsychiatric patients (.60 to .83) than for psychiatric patients (.48 to .86), reflecting the sensitivity of the BDI to changes in psychiatric symptomatology.

## RESEARCH APPLICATIONS AND FINDINGS

One of the most important applications of the BDI has to do with its sensitivity in measuring change in depressive symptoms and severity. The BDI has been used extensively in research studies designed to assess the efficacy of pharmacological interventions (Bellack & Rosenberg, 1966; Broadhurst, 1970; Burrows, Foenander, Davies, & Scoggins, 1976; Coppen, Whybrow, Noguera, Maggs, & Prange, 1972; Lipsedge & Rees, 1971; Mendels, Secunda, & Dyson, 1972), electroconvulsive therapy (ECT; Green & Statduhat, 1966), psychotherapy (Blackburn, Bishop, Glen, Whalley, & Cristie, 1981; Kovacs, Rush, Beck, & Hollon, 1981; Rush, Beck, Kovacs, & Hollon, 1977), and group therapy (Antonuccio, Lewinsohn, & Steinmetz, 1982). Overall, these studies have shown the BDI to be a sensitive and valuable instrument in detecting statistically significant changes in symptoms and their severity as a result of these various treatment approaches. The value of using symptom-based research tools such as the BDI recently was advocated by Costello (1992).

Recent studies have highlighted the importance of defining a significant change in BDI scores from a clinical as opposed to a statistical perspective. One approach, advocated by Jacobson, Follette, and Revenstorf (1984), aims to determine whether the observed changes exceed measurement error of the particular psychometric instrument taking into account correctional factors. Alternatively, Steer, Beck, and Garrison (1986) suggested that at least a 10-point drop in BDI scores from pre- to posttreatment would indicate a clinically significant change, but there are no specific studies on this important decision.

## LIMITATIONS/POTENTIAL PROBLEMS IN USE

The BDI was developed as a symptom inventory, not as a diagnostic instrument. Therefore, inappropriate use of the BDI as a diagnostic instrument can lead to misleading information, which may overestimate the prevalence of depressive illness. For instance, Ennis, Barnes, Kennedy, and Trachtenberg (1989) examined a series of 71 consecutive admissions to an inpatient psychiatric crisis service following the patients' deliberate attempts at self-harm. Although 80% of those admitted to hospital scored within the moderate to severe ranges of

depression as measured by the BDI, only 31% met *DSM-III* criteria for major depressive episode. Ennis and his colleagues reported a dramatic reduction in BDI scores within a few days following admission, even though these patients did not receive any significant treatment for depression. Similar findings were reported by Newson-Smith and Hirsch (1979), using the General Health Questionnaire (GHQ) and the Present State Examination (PSE), and by van Pragg and Plutchik (1985), using subjective recollection of distress. These findings suggest that for patients in a current state of acute emotional distress, high BDI scores may not necessarily reflect clinical depression, but may be interpreted as general psychological distress.

## Beck Hopelessness Scale (BHS)

Two opposing views tended to dominate the literature on depression in the early 1960s. One view held that hopelessness represents an amorphous emotional experience that does not lend itself to measurement or systematic quantification. A second opposing view proposed that, although the emotional component is prominent in the experience of hopelessness, the construct nevertheless can be defined, measured, and objectified in terms of a system of negative statements and attitudes concerning an individual's current view of self and future expectations (Stotland, 1969). Although difficult to define, hopelessness may be seen as the degree to which an individual has a general negative expectancy about events in his or her future, and is one component of Beck's (1967) cognitive triad of negative cognition (i.e., the depressed person's experiences regarding the self, the world, and the future). The relationship between an individual's specific goals and his or her expectations about the likelihood of achieving them plays a major role in determining the degree of hopelessness experienced (Melges & Bowlby, 1969). The Beck Hopelessness Scale (BHS) was designed operationally to define and quantify the concept of hopelessness and to facilitate the study of negative expectations and their relationship to psychopathology.

The BHS is a 20-item self-administered inventory constructed in a forced choice (true/false) format to assess the respondent's negative expectations and pessimistic outlook. Each of the 20 items is scored either 1 or 0. A score of 1 is assigned to 11 items for a true response and to the remaining 9 items when a false response is endorsed. The total score is obtained by calculating the sum of the scores on all 20 items (range of possible scores is from 0 to 20).

## SUMMARY OF DEVELOPMENT

The BHS (Beck, Weissman, Lester & Trexler, 1974) was developed to advance the study of those psychopathological states in which a pervasive sense of personal hopelessness dominated the clinical picture. For instance, hopelessness is a core characteristic of depressive disorder (Beck, 1963, 1967; Melges & Bowlby, 1969), a defining feature of suicidal intent (Beck, 1963; Beck, Brown, Berchick, Stewart, & Steer, 1990; Beck, Steer, Kovacs, & Garrison, 1985; Hill, Gallagher, Thompson, & Ishida, 1988), and is associated strongly with certain physical illnesses (Schmale, 1958). In its development, items were selected from two main sources. Nine items were selected from Heimberg's (1961) test regarding attitudes about the future, and 11 items were drawn from a series of statements made by psychiatric

patients, reflecting the clinical characteristics of hopelessness or negative expectations about the future (Beck et al., 1974).

## BASIC VALIDITY AND RELIABILITY INFORMATION

*Content Validity.* Content validity initially was assessed by several clinicians who reviewed the BHS for depressive content and comprehensibility (Beck et al., 1974). It subsequently was administered concurrently with the BDI. The BHS has a moderately high correlation with the BDI (e.g.,  $r = .68$ ; Minkoff, Bergman, Beck, & Beck, 1973) and with clinical ratings of hopelessness (Ammerman, 1988).

*Concurrent Validity.* Concurrent validity was assessed by comparing BHS scores with general clinical ratings of hopelessness, which included the negative expectancies and observable behaviors of (a) outpatients in a general medical practice and (b) patients who had been hospitalized for attempting suicide. Correlations between BHS scores and clinical ratings of hopelessness for general practice patients and the attempted suicide sample were .74 and .62, respectively (Beck et al., 1974) as well as with the Stuart Future test (.60). In addition, BHS ratings have been shown to be related significantly to expressed suicidal intent (Beck, Kovacs, & Weissman, 1975).

*Predictive Validity.* Beck et al. (1985) carried out a prospective study, in which 165 patients initially hospitalized for significant suicidal ideation were followed-up over a 10-year period. The data were analyzed to determine the relevant cutoff score to maximize the predictive power of the BHS. Ninety-one percent of the sample obtained a BHS score of 10 or more, whereas only 9% (one patient) of completed suicide attempts had a score under 10.

More recently, Beck et al. (1990) confirmed the predictive power of the BHS in its ability to identify suicide completers from among a large sample ( $n = 1,958$ ) of psychiatric outpatients. A scale cutoff score of nine or higher identified 94% ( $n = 16$ ) of the 17 patients who eventually committed suicide. The high-risk group identified by this cutoff score was 11 times more likely to commit suicide compared with low-risk patients with BHS scores under nine. These findings support the view that the BHS can be an important instrument in correctly identifying psychiatric patients who ultimately commit suicide. However, this sensitivity in detecting suicide risk occurs at the expense of incorrectly classifying a high proportion of patients who will not commit suicide (i.e., low specificity). Nevertheless, given the importance of correctly identifying high-risk patients, a high rate of false positives is acceptable.

*Construct Validity.* Perhaps the most convincing evidence for the construct validity of the BHS comes from its strong association with suicidal intent and actual suicide completion (Beck et al., 1985, 1990). Hopelessness as measured by the BHS has a stronger association with suicidal intent than do measures of clinical depression (Beck et al., 1985, 1990; Weissman, Beck, & Kovacs, 1979). Indeed, Beck et al. (1975) found that the relationship between depression and suicidality is reduced when the effect of hopelessness is partialled out statistically.

Further evidence for the construct validity of the BHS comes from two factor analytic studies, where three similar main factors consistently emerged from both (Beck et al., 1974; Hill et al., 1988). These studies suggested that three factors with the most clinical relevance represented affective, motivational, and cognitive aspects of hopelessness. Factor 1, labeled "feelings about the future" (Beck et al., 1974) or "hope" (Hill et al., 1988), loaded on affect-

laden associations such as hope, enthusiasm, happiness, faith, and good times. Factor 2, labeled "loss of motivation" (Beck et al., 1974) or "giving up" (Hill et al., 1988), loaded heavily on constructs associated with giving up and deliberate self-denial. Factor 3, labeled "future expectations" (Beck et al., 1974) or "plans about the future" (Hill et al., 1988), included items related to a dark future, negative expectations, and a vague and uncertain outlook.

*Reliability.* Overall, the BHS has been shown to be a reliable measure of hopelessness reflecting a negative expectation for positive future outcomes. Beck et al. (1974) examined the reliability of the BHS in a population of 294 hospitalized patients who had attempted suicide. The coefficient alpha for internal consistency of the scale calculated using the Kuder-Richardson formula was 0.93. Intercorrelations for individual scale items and total scale score were within an acceptable range from .39 to .76. Further evidence for the reliability of the BHS was obtained by Hill et al. (1988) in their examination of hopelessness as a measure of suicidal intent in the depressed elderly. An examination of the internal consistency of the BHS indicated a coefficient alpha of .84 and a Spearman-Brown split-half reliability of .82.

## Interpretative Strategies and Treatment Planning

The total score on the BDI can range from 0, suggesting no depression, to a maximum score of 63, indicating a severe state of clinical depression. Although there are no specific cutoff scores designed to reflect clinical caseness, the following ranges, suggested by Beck et al. (1988) typically have been used to guide decision making in clinical and research settings; 0–9 absence of, or minimal, depression; 10–18 mild to moderate depression; 19–29 moderate to severe depression; 30–63 severe depression.

In addition to using the total BDI score as a general index of severity in assessing depressive symptoms, an examination of individual items endorsed with a rank score of 2 or 3 on the questionnaire may point the clinician to further investigation. For example, when patients endorse Item 9 (concerned with suicide) with a response of 2 or 3, it is imperative that the clinician carry out a thorough assessment of the risk of suicide. There also is evidence that the pessimism item on the BDI differentiates suicide completers from noncompleters (Beck et al., 1985), and therefore should alert the clinician to the possible danger of suicide ideation or behavior, and hence to further investigation. Likewise, an affirmative response to the item related to concerns about health or somatic preoccupation might lead one to consider further medical investigation and on the cognitive-affective items, to further psychological investigation.

The BDI can be used to develop treatment planning from early on in the initial stages of therapy. High scores on items related to motivational deficits, such as social withdrawal and work inhibition, would suggest a treatment plan emphasizing behaviorally oriented strategies focused on helping the patient to increase his or her activities. In contrast, high scores on items related to cognitive deficits, such as pessimism, self-dislike, and self-blame/criticism, would suggest a treatment plan with greater emphasis on identifying and addressing hopelessness, negative thinking, and cognitive distortions.

The BDI is sensitive to changes in depressive symptoms, and therefore can be used to track variations in these symptoms on a session-by-session basis. A number of studies using the BDI as a pre- and posttreatment measure have demonstrated significant reductions in mean BDI scores as a consequence of various types of pharmacological treatments. For

instance, mean BDI scores were found to be reduced in depressed patients treated with tricyclic medications (Bellack & Rosenberg, 1966; Lipsege & Rees, 1971), lithium carbonate (Mendels et al., 1972), and ECT (West, 1981). The BDI also has been found to be sensitive to psychologically oriented therapeutic interventions. The mean BDI score was lower following cognitive behavior therapy (CBT) in several studies (Blackburn et al., 1981; Kovacs et al., 1981; Rush et al., 1977) and comparable results have been found with interpersonal therapy.

The importance of the BHS lies in its clinical utility. It has been successful in identifying patients experiencing such intense hopelessness that they are of high risk for suicide. As mentioned earlier, the total score on the BHS can range from 0, suggesting no hopelessness, to a maximum score of 20, indicating the absence of all hope. Although there are no specific cutoff scores designed to reflect caseness with respect to hopelessness, a score of 9 or more has been associated with a significant risk of suicide (Beck et al., 1985, 1990). High-risk psychiatric outpatients with a score of 9 or more were 11 times more likely to commit suicide than low-risk patients with scores below 9 (Beck et al., 1990). When interpreting scores on the BHS, clinicians should be mindful that scores above 10 may signal immediate or long-term suicide potential. It must be emphasized that a comprehensive assessment of suicide should include other clinical indices, including a history of suicide attempts, family history of suicide, alcohol and drug abuse, and the presence of an affective disorder (Beck et al., 1990).

## Case Report

Mr. A is a 43-year-old married man (second marriage) with three children (from his current marriage). He presented to the clinic with severe anxiety and sleep difficulty that he attributed to concerns about his job. He also reported increasing his alcohol consumption from being a "business drinker" (he was in sales/marketing) to drinking for stress relief (average of four drinks per day for 7 weeks). He denied feeling depressed and denied having suicidal ideation.

Mr. A had concerns about how the clinician would respond to him, and on several occasions commented that he must seem like a real "baby" for being so "stressed out."

He had no family history for depression or alcohol abuse. He described his father as an "Iron John" type and his mother as "loving, but a worrier." The major precipitants for his recent symptoms involved both financial and work stresses. His company was going through a major restructuring, and it appeared that he would be under extreme pressure to produce or be fired. Two years ago, he moved into a new house with a large mortgage—a decision that had worried him.

He was very concerned that his friends who were "fun loving jocks" would see through him and ridicule him. In fact, his best friend had commented that Mr. A seemed "off in space" at their last lunch.

Mr. A reported that his wife was understanding and supportive. She had been in the health-care field and encouraged him to get a psychological consultation. Mr. A felt considerable responsibility toward his family and was moved to tears in the interview when he thought about "letting them down."

As part of our standard intake assessment, Mr. A completed the BDI and the BHS. His BDI score was 18, with notable items (scored 2 or 3) being sleep disturbance, guilt, failure, and decreased interest. This score was notable given Mr. A's general comments that he



wasn't depressed (he endorsed the BDI statement No. 1—sadness as 0). Mr. A's BHS score was 14, a score that was concerning, given his clinical presentation. Mr. A had considerable pessimism about his situation. In the second interview, he minimized his report stating that work might "turn around."

The clinician took careful note of his hopelessness and, consistent with cognitive therapy, related it to his degree of helplessness and his self-criticism (worthlessness). The risk of suicidal behavior was considered. Mr. A denied any intent to attempt suicide, any previous attempts, and had only fleeting thoughts about suicide and escape.

He began a treatment regimen including antidepressant medication and cognitive behavior therapy. Three weeks later, Mr. A, during his therapy session, acknowledged that he had, in fact, bought ammunition for his rifle just 1 week before his initial evaluation. He reported feeling positive about his therapy. By disclosing this information, the therapist arranged to dispose of the gun and ammunition. Mr. A maintained that he did not intend to harm himself, but acknowledged that his feelings of despondency were greater than he had expressed initially.

It was clear that his concerns about his job were going to be ongoing. The company was not doing well and the marketing efforts in the recession were having limited effects. Therapy focused on his perceived helplessness and his attributional style (significant self-blame and tendency to take excessive responsibility for failure).

Interestingly, his BDI score remained relatively stable at 18 to 20 for 11 weeks. Mr. A's sleep improved, but other symptoms (guilt, sense of failure) were very resilient. By 16 weeks of therapy, his score was 11; and by 20 weeks, it was 9. His BHS score dropped from 14 to 7 by week 11 and was 3 at the end of 20 weeks.

In sum, this case illustrates how a psychological assessment utilizing the BDI and BHS may help to alert the clinician to issues as a function of their discrepancy with self-report in the clinical interview. The BDI and BHS are both sensitive to change over the course of therapy and may be used to determine the severity of depression and hopelessness, respectively. In addition, it may be useful to consider higher (or lower) than expected scores to pursue in the interview and/or over time. The self-report scales are both prone to social desirability, and unfortunately it may be that significant clinical symptoms are not reported. On the other hand, as in the case of Mr. A, important symptoms or a state of mind like hopelessness may be detected when clinically the patient minimizes his or her distress. Self-report instruments are not infallible, but they do provide information that is clinically useful.

## Summary and Conclusions

The Beck Depression Inventory (BDI) and the Beck Hopelessness Scale (BHS) are 20-item, self-report inventories designed to measure depression and hopelessness, respectively, in a variety of clinical and research settings. Both questionnaires are easily understood and administered, and require approximately 5–10 minutes to complete and score. The BDI has been the subject of extensive psychometric evaluation and has been demonstrated to have high content, concurrent, predictive, and construct validity, and also to be highly internally consistent. It is especially useful in treatment planning with high and low scores suggesting different psychotherapeutic strategies. The BHS was designed to define and measure operationally the concept of hopelessness and its relationship to psychopathology. Although the BHS has not been studied as extensively as the BDI, the available literature indicates that it, too, has high validity and internal consistency. In particular, the BHS is useful in identifying

patients at high risk for attempted or completed suicide, but it also has low specificity. The resulting high rate of false positives can be overlooked in view of the importance of correctly identifying patients at high risk for suicide.

## References

- Akiskal, H. S., Lemmi, H., Yeterian, B., King, D., & Belluomini, J. (1982). The utility of the REM latency in psychiatric diagnosis: A study of 81 depressed outpatients. *Psychiatry Research*, 7, 101-110.
- Ammerman, R. T. (1988). Hopelessness scale. In M. Mersen (Ed.), *Dictionary of behavioural assessment techniques* (pp. 251-252). University of Pittsburgh: Pergamon.
- Antonuccio, D. O., Lewinsohn, P. M., & Steinmetz, J. L. (1982). Identification of therapist differences in a group treatment for depression. *Journal of Consulting and Clinical Psychology*, 50, 433-435.
- Atkeson, B. M., Calhoun, K. S., Resnick, P. A., & Ellis, E. M. (1982). Victims of rape: Repeated assessment of depressive symptoms. *Journal of Consulting and Clinical Psychology*, 50, 96-102.
- Bailey, J., & Coopen, A. (1976). A comparison between the Hamilton Rating Scale and the Beck Inventory in the measurement of depression. *British Journal of Psychiatry*, 128, 486-489.
- Beck, A. T. (1963). Thinking and depression. 1: Idiosyncratic content and cognitive distortions. *Archives of General Psychiatry*, 9, 324-335.
- Beck, A. T. (1967). *Depression: Clinical, experimental, and theoretical aspects*. New York: Harper & Row.
- Beck, A. T., & Beck, R. W. (1972). Screening depressed patients in family practice: A rapid technique. *Postgraduate Medicine*, 52, 81-85.
- Beck, A. T., Brown, G., Berchick, R. J., Stewart, B. L., & Steer, R. A. (1990). Relationship between hopelessness and ultimate suicide: A replication with psychiatric outpatients. *American Journal of Psychiatry*, 147, 190-195.
- Beck, A. T., Kovacs, M., & Weissman, A. (1975). Hopelessness and suicidal behavior: An overview. *Journal of the American Medical Association*, 234, 1146-1149.
- Beck, A. T., Rial, W. Y., & Rickels, K. (1974). Short form of depression inventory: Cross-validation. *Psychological Reports*, 34, 1184-1186.
- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford.
- Beck, A. T., & Steer, R. A. (1984). Internal consistencies of the original and revised Beck depression inventories. *Journal of Clinical Psychology*, 40, 1365-1367.
- Beck, A. T., Steer, R. A., Kovacs, M., & Garrison, B. (1985). Hopelessness and eventual suicide: A 10-year prospective study of patients hospitalized with suicidal ideation. *American Journal of Psychiatry*, 142(5), 556-563.
- Beck, A. T., Steer, R. A., & Garbin, M. A. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8, 77-100.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, 4, 561-571.
- Bellack, L., & Rosenberg, S. (1966). Effects of antidepressant drugs on psychodynamics. *Psychosomatic Medicine*, 7, 106-114.
- Berndt, S. M., Berndt, D. J., & Byars, W. D. (1983). A multi-institutional study of depression in family practice. *Journal of Family Practice*, 16, 83-87.
- Blackburn, I. M., Bishop, S., Glen, A. I. M., Whalley, I. J., & Christie, W. (1981). The efficacy of cognitive therapy in depression: A treatment trial using cognitive therapy and pharmacotherapy each alone and in combination. *British Journal of Psychiatry*, 139, 181-189.
- Blatt, S. J., Quinlan, D. M., Chevron, E. S., McDonald, C., & Zuroff, D. (1982). Dependency and self-criticism: Psychological dimensions of depression. *Journal of Consulting and Clinical Psychology*, 50, 113-115.

- Broadhurst, A. D. (1970). I tryptophan vs. ECT (letter). *Lancet*, 1, 1392.
- Burrows, G. D., Foenander, G., Davies, H., & Scoggins, B. A. (1976). Rating scales as predictors of response to tricyclic antidepressants. *Australian and New Zealand Journal of Psychiatry*, 10, 53-56.
- Byerly, F. C., & Carlson, W. A. (1982). Comparison among inpatients, outpatients, and normals on three self-report depression inventories. *Journal of Clinical Psychology*, 38, 797-804.
- Campbell, M. M., Burgess, P. M., & Finch, S. J. (1984). A factorial analysis of BDI scores. *Journal of Clinical Psychology*, 40, 992-996.
- Carroll, B. J., Fielding, J. M., & Blashki, T. G. (1973). Depression rating scales: A critical review. *Archives of General Psychiatry*, 28, 361-366.
- Christenfeld, R., Lubin, B., & Satin, M. (1978). Concurrent validity of the Depression Adjective Check List in a normal population. *American Journal of Psychiatry*, 135, 582-584.
- Clarke, D. C., Cavanaugh, S. V., & Gibbons, R. D. (1983). The core symptoms of depression in medical and psychiatric patients. *Journal of Nervous and Mental Diseases*, 171, 705-713.
- Clarke, M., & Williams, A. J. (1979). Depression in women after perinatal death. *Lancet*, 1, 916-917.
- Coleman, R. E., & Miller, A. G. (1975). The relationship between depression and marital maladjustment in a clinic population: A multitrait-multimethod study. *Journal of Consulting and Clinical Psychology*, 43, 647-651.
- Coppen, A., Whybrow, P. C., Noguera, R., Maggs, R., & Prange, A. J. (1972). The comparative antidepressant value of 1 tryptophan and imipramine with and without attempted potentiation by leithrenine. *Archives of General Psychiatry*, 26, 474-478.
- Costello, C. G. (1992). Research on symptoms versus research on syndromes—Arguments in favor of allocating more research time to the study of symptoms. *British Journal of Psychiatry*, 160, 304-308.
- Davies, B., Burrows, G., & Poyton, C. (1975). A comparative study of four depression rating scales. *Australian and New Zealand Journal of Psychiatry*, 9, 21-24.
- Delay, J., Pachot, P., Lemperiere, T., & Mirouze, R. (1963). La nosologie des etats depressifs: Rapports entre l'etologie et la semiologie: 2 Resultats du Questionnaire de Beck/Classification of depressive states. [Agreement between etiology and symptomatology: 2 Results of Beck's Questionnaire.] *Encephale*, 52, 497-505.
- Ennis, J., Barnes, R. A., Kennedy, S., & Trachtenberg, D. D. (1989). Depression in self-harm patients. *British Journal of Psychiatry*, 154, 41-47.
- Gallagher, D., Nies, G., & Thompson, L. W. (1982). Reliability of the Beck Depression Inventory with older adults. *Journal of Consulting and Clinical Psychology*, 50, 152-153.
- Giambra, L. M. (1977). Independent dimension of depression: A factor analysis of three self-report depression measures. *Journal of Clinical Psychology*, 33, 928-935.
- Green, W. J., & Statduhat, P. P. (1966). The effects of the ECT on the sleep dream cycle in a psychotic depression. *Journal of Nervous Mental Disorders*, 143, 123-134.
- Hamilton, M. (1960). A rating scale for depression. *Journal of Neurology, Neurosurgery, and Psychiatry*, 23, 56-62.
- Hammen, C. I. (1980). Depression in college students: Beyond the Beck Depression Inventory. *Journal of Consulting and Clinical Psychology*, 48, 126-128.
- Hatzenbuchler, L. C., Parpal, M., & Mathews, L. (1983). Classifying college students as depressed or nondepressed using the Beck Depression Inventory: An empirical analysis. *Journal of Consulting and Clinical Psychology*, 51, 360-366.
- Heimberg, L. (1961). *Development and construct validation of an inventory for the measurement of future time perspective*. Unpublished master's thesis, Vanderbilt University, Nashville, TN.
- Hesselbrock, M. M., Hesselbrock, V. M., Tenmen, H., Meyer, R. E., & Workman, K. L. (1983). Methodological considerations in the assessment of depression in alcoholics. *Journal of Consulting and Clinical Psychology*, 51, 399-405.
- Hill, R. D., Gallagher, D., Thompson, L. W., & Ishida, T. (1988). Hopelessness as a measure of suicidal intent in the depressed elderly. *Psychology and Aging*, 3, 230-232.
- Jacobson, N. S., Follette, W. C., & Revenstorf, D. (1984). Psychotherapy outcome research: Methods of reporting variability and evaluation.

- ing clinical significance. *Behaviour Therapy*, 15, 336-352.
- Kovacs, M., Rush, A. J., Beck, A. T., & Hollon, D. S. (1981). Depressed outpatients treated with cognitive therapy or pharmacotherapy: A one-year follow-up. *Archives of General Psychiatry*, 38, 33-39.
- Lipsedge, M. S., & Rees, W. I. (1971). A double-blind comparison of doxepin and amitriptyline for the treatment of depression with anxiety. *Psychopharmacologia*, 19, 153-162.
- Marsella, A. J., Sanborn, K. O., Kameoka, V., Shiguru, L., & Brennan, J. (1975). Cross-validation of self-report measures of depression among normal populations of Japanese, Chinese, and Caucasian ancestry. *Journal of Clinical Psychology*, 31, 281-287.
- May, A. E., Urquart, A., & Tarran, J. (1969). Self-evaluation of depression in various diagnostic and therapeutic groups. *Archives of General Psychiatry*, 21, 191-194.
- Melges, F., & Bowlby, J. (1969). Types of hopelessness in psychopathological process. *Archives of General Psychiatry*, 20, 690-699.
- Mendels, J., Secunda, S. K., & Dyson, W. L. (1972). A controlled study of the antidepressant effects of lithium carbonate. *Archives of General Psychiatry*, 26, 154-157.
- Metcalf, M., & Goldman, E. (1965). Validation of an inventory for measuring depression. *British Journal of Psychiatry*, 111, 240-242.
- McKinley, J. C., & Hathaway, S. R. (1943). Identification and measurement of psychoneuroses in medical practice; Minnesota Multiphasic Personality Inventory. *Journal of the American Medical Association*, 122, 161-167.
- Minkoff, K., Bergman, E., Beck, A. T., & Beck, R. W. (1973). Hopelessness, depression, and attempted suicide. *American Journal of Psychiatry*, 130, 455-459.
- Moran, P. W., & Lambert, M. J. (1983). A review of current assessment tools for monitoring changes in depression. In M. S. Lambert, E. R. Christensen, & S. S. DeJulio (Eds.), *The assessment of psychotherapy outcome*. New York: Wiley.
- Newson-Smith, J.G.B., & Hirsh, S. R. (1979). Psychiatric symptoms in self-poisoning patients. *Psychological Medicine*, 9, 493-500.
- Reynolds, W. M., & Gould, J. W. (1981). A psychometric investigation of the standard and short form of the Beck Depression Inventory. *Journal of Consulting and Clinical Psychology*, 49, 306-307.
- Rounseville, B. J., Weissman, M. M., Rosenberger, P. H., Wilber, C. H., & Kleber, H. D. (1979). Detecting depressive disorders in drug abusers. *Journal of Affective Disorders*, 1, 255-267.
- Rush, A. J., Beck, A. T., Kovacs, M., & Hollon, S. (1977). Comparative efficacy of cognitive therapy and pharmacotherapy in the treatment of depressed outpatients. *Cognitive Therapy and Research*, 1, 17-37.
- Salkind, M. R. (1969). Beck Depression Inventory in general practice. *Journal of the Royal College of General Practitioners*, 18, 267-271.
- Schaefer, A., Brown, J., Watson, C. G., Plemel, D., DeMott, J., Howard, M. T., Petrik, N., Balleweg, B. J., & Anderson, D. (1985). Comparison of the validities of the Beck, Zung, and MMPI depression scales. *Journal of Consulting and Clinical Psychology*, 53, 415-418.
- Schmale, A. H. (1958). Relationship of separation and depression to disease: A report on a hospitalized medical population. *Psychosomatic Medicine*, 20, 259-277.
- Schnurr, R., Hoaken, P.C.S., & Jarrett, F. J. (1976). Comparison of depression inventories in a clinical population. *Canadian Psychiatric Association Journal*, 21, 473-476.
- Schwab, J. J., Bialow, M., Brown, J. M., & Holzer, C. E. (1967). Diagnosing depression in medical inpatients. *Annals of Internal Medicine*, 67, 695-707.
- Scogin, F. R., & Merbaum, M. (1983). Humorous stimuli and depression: An examination of Beck's premise. *Journal of Clinical Psychology*, 39, 165-169.
- Scott, N. A., Hannum, T. E., & Christ, S. L. (1982). Assessment of depression among incarcerated females. *Journal of Personality Assessment*, 46, 372-379.
- Seitz, F. C. (1970). Five psychological measures of neurotic depression: A correlation study. *Journal of Clinical Psychology*, 26, 504-505.
- Steer, R. A., McElroy, M. G., & Beck, A. T. (1982). Structure of depression in alcoholic men: A partial replication. *Psychological Reports*, 50, 723-728.
- Stotland, E. (1969). *The psychology of hope*. San Francisco, CA: Jossey-Bass.

- Strober, M., Green, J., & Carlson, G. (1981). Utility of the Beck Depression Inventory with psychiatrically hospitalized adolescents. *Journal of Consulting and Clinical Psychology, 49*, 482-483.
- Tanaka-Matsumi, J., & Kameoka, V. A. (1986). Reliabilities and concurrent validities of popular self-report measures of depression, anxiety, and social desirability. *Journal of Consulting and Clinical Psychology, 54*, 328-333.
- Turner, J. A., & Romano, J. M. (1984). Self-report screening measures for depression in chronic pain patients. *Journal of Clinical Psychology, 40*, 909-913.
- van Pragg, H., & Plutchik, R. (1985). An empirical study on the "cathartic effect" of attempted suicide. *Psychiatry Research, 16*(2), 123-130.
- van Pragg, H., & Plutchik, R. (1987). Interconvertibility of five self-report measures of depression. *Psychiatry Research, 22*(3), 243-256.
- Viedenburg, K., Krames, I., & Flett, G. L. (1985). Reexamining the Beck Depression Inventory: The long and short of it. *Psychological Reports, 36*, 767-778.
- Weissman, A., Beck, A. T., & Kovacs, M. (1979). Drug abuse, hopelessness, and suicidal behavior. *International Journal of addiction, 14*, 451-464.
- West, E. D. (1981). Electric convulsion therapy in depression: A double-blind controlled trial. *British Medical Journal, 282*, 355-357.
- Zukerman, M., & Lubin, B. (1965). *Manual for the Multiple Affect Adjective Checklist*. San Diego: California Educational and Industrial Testing Service.
- Zung, W.W.K. (1965). A self-rating depression scale. *Archives of General Psychiatry, 12*, 63-70.