The beck depression inventory

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The Beck Depression Inventory (BDI)

Overview

Depression is one of the most common psychological problems and it can take over the person's emotions, bodily functions, behaviors, and thoughts. In fact, it is so prominent that 16 percent of Americans at some point in their lives experience an episode of major depression (Kessler et al. 2003 as cited in Nolen-Hoeksema, 2007). There are various theories of depression; one of the first cognitive theories was developed by psychiatrist Aaron Beck.

Beck proposed that individuals who suffer from depression see the world through a negative cognitive triad. The cognitive triad consists of constant negative thoughts that individuals possess about the world, themselves, and the feature. Beck, interested in the disease as a result of negative thoughts, created the Beck Depression Inventory (BDI, BDI-II). The BDI is a self-report inventory that consists of 21-multiple choice items used to assess the severity of depression in diagnosed adults and adolescents mostly by healthcare professionals and researchers (Allen, 2003).

Background

Aaron Beck created the BDI by first collecting descriptions of patient's symptoms. Consequently, he used those symptoms to build a scale that would measure how severe the symptoms were present in the affected individuals. During the development of the test, Beck kept in mind the importance of affecting " negative cognitions." He proposed that negative, sustained, inaccurate, and intrusive thoughts are the cause of the disease (Nolen-Hoeksema, 2007) and that depressed individuals automatically jump to negative conclusions on the basis of little evidence.

In addition, these individuals are more likely to ignore good events, focus only on negative circumstances, and exaggerate them (Nolen-Hoeksema, 2007). Beck's description of depression built the foundation of the BDI and provided the structure of the test. The structure consisted of items such as: " I have lost all of my interest in other people" (negative thoughts about the world), " I feel discouraged about the future" (negative thoughts about the future), and " I blame myself for everything bad that happens" (negative thoughts about the self) (Allen, 2003).

General Information

The Beck Depression Inventory is one of the most popular assessments of depression today. There are different versions of the BDI: the original BDI which was published in 1961 and then revised in 1971 (BDI-1A), and the BDI-II which was published in 1961 (Wikipedia, 2007).

- Construction of the Inventory

The content of the inventory is clinically derived. First of all, observations and records of the characteristic, attitudes, and symptoms of depressed patients were made (Beck et. al, 1961). Second of all, Beck specifically selected a group of these attitudes and symptoms that consistently appeared to occur in the depressed patient population. Observation and selection were the two key components in the construction of the inventory. After these two were made, Beck condensed the records and selection into 21 categories of symptoms and attitudes.

Each category in the test describes a specific behavior tending to occur in the depressed population. The behaviors are scaled in 4 to 5 self-placement

statements that reflect the range of severity. It is important to keep in mind that the items that Beck created were selected on the basis of observable behaviors and not the origin of the processes of depression (Beck et al., 1961).

The main purpose of the test is to monitor and assess how the person was feeling the previous week. The items looks like the respective scale; (0) I do not feel sad. (1) I feel sad. (2) I am sad all the time and I can't snap out of it. (3) I am so sad or unhappy that I can't stand it. In each scale, a value of 0 to 3 is assigned to each answer. The overall score, meaning the sum of the different values assigned to each scale, is then compared to the test key to diagnose the patient’s severity.

The evaluative scales are: 0–9 indicating that a person is not depressed, 10–18 indicating that a person has a mild-moderate depression, 19–29 indicating moderate-severe depression and 30–63 indicating severe depression. If a person has a value of more than 63 it means that the person suffers from extreme severe depressive symptoms. There a special cases in the BDI, where one statement can have two responses: For example: (2a) I am blue or sad all the time and I can't snap out of it and the second one (2b) I am so sad or unhappy that it is very painful.(Beck et al., 1961).

- Administration of the Inventory

The test is usually administered by a clinical psychologist who reads each item in the category and asks the respondent to choose the statement that fits his mood best at the present time. For the test to work, the administrator must read the test carefully, clearly, and slow enough so that the person

listening can understand. The respondent should also have a copy of the test so that he/she can read along with the administrator. Depending on the response, the interviewer circles the number assigned to each item statement (Beck et. al, 1961).

- Sample

A total of 409 patients were selected from the psychiatric outpatient hospital at the University ofPennsylvania and from the psychiatric inpatient service of the Philadelphia General Hospital.

The outpatients were seen on their first appointment in the hospital, and if not possible, the administrators scheduled a specific appointment days later. Those who were already hospitalized patients were seen the day after their admission to the Hospital. The sample was selected in a first study over a 7-month period starting in June, 1959 (N = 226). A second study selected another sample over a 5-month period (N = 183).

The demographics of Study 1 and Study were as such respectively: 40 and 37 males, 59 and 62 women, 67 and 61 white, 32 and 38 African American, 25 and 21 were between the ages of 15-24, 33 and 31 were between the ages of 35-44, 11 and 16 were between the ages of 45-54, and 5 and 7 were above 55 years old. Patients with brain damage and mental deficiency were thrown out of the study. From the total sample these were the diagnoses: 41% psychotic, 43% had a psychoneurotic disorder, and 43% had a personality disorder (Beck et al., 1961).

- Reliability and Validity

Test-retest reliability has been evaluated in 38 patients who were given the BDI on two occasions. The reliability coefficient for the BDI is above the . 90's. Two methods for assessing the internal consistency of the instrument were utilized. In the first one 200 consecutive cases were studied. The score for each of the 21 categories was compared with the overall score on the Depression Inventory for each individual. It was found that all categories showed a significant relationship of the total score for the inventory.

The second evaluation assessed split half-reliability. Ninety-seven cases in the first sample were selected to perform the analysis. A Pearson Correlation was used to evaluate the odd and even categories; a coefficient of 0. 86 was found. Furthermore, the Spearman-Brown correlation for the reliability of the BDI yielded a coefficient of . 93. As far as the face validity of the BDI is concerned, it does look like the BDI is assessing depression. Interrater reliability was evaluated among psychiatrists who assessed the diagnostic categories of psychoneurotic disorder, psychotic disorder and personality disorder. The agreement between psychiatrists was of 73% in the 100 cases that were seen by two psychiatrists.

Problems regarding validity: It might be easy for a subject to detect the purpose of the test due to the fact that all items assess emotions regarding depression. The participant may catch on to the purpose and manipulate or fake the responses. Content validity however, is high because the BDI assesses a wide variety of symptoms and attitudes associated with depression. When assessing the accuracy of the test, a correlation of . 77 between the inventory and psychiatric ratings using university students as subjects suggest high concurrent validity. Beck himself tested the concurrent

validity of the BDI with psychiatric ratings of patients and the evaluation yielded coefficients of . 65 and . 67.

- Different forms of BDI’s
- BDI-IA

The BDI-IA is a revision of the original test and it was published by Beck in 1971. As opposed to the original BDI, the BDI removed the special cases when the responses had more than 2 answers. Participants in this test are encouraged to explain how depressed they had been feeling the past two weeks.

- BDI-PC

The BDI depends heavily on physical symptoms that may unfortunately inflate scores. The inflation of scores may not be necessarily attributed to depression. To fix for this weakness, Beck developed a measure called the " Beck Depression Inventory for Primary Care" (BDI-PC). The BDI-PC consists of seven items from the BDI-II which have the advantage of being completely independent of the physical components included in the general BDI. The BDI is designed for use by trained professionals (Wikipedia, 2007).

- BDI-II

The American Psychiatric Association published the Fourth Edition of the Diagnostic and Statistical Manual of Mental Disorders, a handbook that mental health professionals use to diagnose mental disorders (DSM-IV). The DSM-IV changed many of the diagnostic criteria for Major Depressive Disorder; therefore, the BDI-II developed in response to the changes (Beck et al., 1961). This current version of the questionnaire has been designed for

individuals 13 years old and over and it contains depression items such as hopelessness and irritability, thoughts such as guilt or emotions of being punished, as well as physical symptoms such as weight loss, fatigue, and lack of interest in sex.

Depression has two components: the psychological component (e. g. mood) and the physical component (e. g. loss of appetite); therefore, the BDI-II was developed using two subscales. The psychological component contains eight items: pessimism, past failures, guilty feelings, punishment feelings, self-dislike, self-criticalness, suicidal thoughts or wishes, and worthlessness.

The physical component consists of the other thirteen items: sadness, loss of pleasure, crying, agitation, loss of interest, indecisiveness, loss of energy, change in sleep patterns, irritability, change in appetite, concentration difficulties, fatigue, and loss of interest in sex. The two subscales were moderately correlated at 0. 57, suggesting that the physical and psychological aspects of depression are closely related rather than totally distinct.

The purpose of the subscales is to help determine the primary cause of a patient's depression. All of the items were reworded except for interest in sex items, suicidal thoughts, emotions of being punished. Some of the items replaced were: items of body image, hypochondria, and difficulty working were. Sleep loss and appetite loss items were modified to test whether the person’s appetite and sleep increased or decreased. The other difference mentioned above is that in the BDI-II participants are also supposed to rate how they have been feeling for the past two weeks, as opposed to the past

week as in the original BDI. The BDI-II contains 21 questions and their answers are scored on a scale value of 0 to 3.

The cutoffs are different from the original BDI: for minimal depression it is 0–13, for mild depression it is 14–19, for moderate depression 20–28, and severe depression is 29–63. The higher total the overall score is, the more depression the test taker is experiencing. The BDI can distinguish between different subtypes of depressive disorders, such as major depression and dysthymia (a less severe form of depression).

Validity for the BDI-II: The test is valid because it conforms to the diagnostic criteria for depression. As mentioned above, items were added, eliminated and reworded to satisfy the DSM-IV and to increase content validity. " Construct validity is also good; the convergent validity of the BDI-II was evaluated by administering the BDI-1A and the BDI-II to two sub-samples of outpatients (N= 191) yielding correlation of . 93 (p <. 001). Good factorial Validity has also been found by the inter-correlations of the 21 items calculated from the sample responses." (Beck & Steer, 1984).

Reliability: It is positively correlated (r= 0. 71) with the Hamilton Depression Rating Scale. The test has a good test–retest reliability (Pearson r = 0. 93) meaning that the test is not affected by changes in daily mood. The test has a high internal consistency (α=. 91).

The test is scored differently for the general population and for individuals who have been clinically diagnosed with depression. When the test is assessing the general population, a score of 21 or over represents depression. Those who have been clinically diagnosed, scores from 0 to 9

represent minimal depressive symptoms, scores of 10 to 16 indicate mild depression, scores of 17 to 29 indicate moderate depression, and scores of 30 to 63 indicate severe depression.

My evaluation of the test in relation to what I just learned in my abnormal psychology course

Why is this test so important, relevant, and enduring? The creation of the BDI represents the transformation of the view of depression from Freud’s psychodynamic perspective, to one based on a cognitive perspective established on the patient's own thoughts. Before the development of the BDI, modern psychodynamic theorists were relying on the work that Freud published regarding depression on his paper Mourning and Melancholia (Nolen-Hoeksema, 2007).

In this paper, Freud described how depression was a result of a feeling of abandonment and believed that the symptoms of those who were depressed were very similar to those who were suffering from the death of their loved ones. His description of depression was in ways similar to those of Beck; Freud believed the depressed were unmotivated, lethargic, lonely, and experiencing self-hate and blame. Furthermore, he suggested that the depressed usually blamed and punished those who they thought had abandoned them.

The difference between Freud and Beck lies on Freud’s concept of introjected hostility. According to this theory, when the depressed believe they have been rejected, they turn their rage inward and to themselves. In other words, Freud was more concerned with analyzing the experience of rage in relationships primarily in childhood as a cause for depression.

Beck on the other hand, wanted to help discover the negative, automatic thoughts that patients generally had and was naturally interested in linking these thoughts to their depression. As opposed to Freud, Beck’s theory is current and comprehensive due to the fact that it includes thoughts about the world, the future, and the person. The test is important simply because Beck began the transformation of the study of depression from a psychodynamic perspective to a cognitive perspective.

The test is valid, reliable, and it conforms to the diagnostic criteria for depression. As mentioned above, the test has great face validity. Just be looking at the test, we know that it is assessing sad moods, loss of interest in usual activities, and feelings of hopelessness, suicidal ideation, psychomotor agitation or retardation, and trouble concentrating; all variables that constitute depression.

References

Allen J. P (2003). " An Overview of Beck's Cognitive Theory of Depression in Contemporary

Literature." Retrieved from the World Wide Web November, 10, 2007

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Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961) An inventory for measuring depression [Electronic version]. Archives of General Psychiatry 4, 561-571.

Beck Depression Inventory (2007). Wikipedia. Retrieved from the World Wide Web November, 12, 2007

Beck Depression Inventory - Original scientific paper published in 1961.

Nolen-Hoeksema, S. (2007). Abnormal Psychology. New York, NY: The McGraw-Hill Companies [producer].