

Assessment Evaluation of The Eating Disorder Inventory-3

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This paper evaluates the Eating Disorder Inventory-3 (EDI-3) for its use as an assessment tool. It includes information about the development, publishing, content, and administration of the assessment. The scoring of the assessment, the reliability, and the validity information will be discussed. Finally, the paper concludes with a personal evaluation of the EDI-3.

Development and Publishing

The EDI-3, written by David M Garner, was developed based on years of research of individuals struggling with eating disorders. It is published by Psychological Assessment Resources Incorporated, and the original version (EDI) was first published in 1984 (Atlas, 2007). The initial revision of the EDI-2 was in 1991, and the third and most recent revision for the EDI-3 was in 2004 (Clausen, Rosenvinge, Friborg, & Rokkedal, 2011). Researchers and clinicians joined together to create this assessment with common goals of improving clinical care and increasing knowledge of the etiology of eating disorders (Kagee, 2007).

According to the developers manual the purpose of the EDI-3 is to provide a standardized clinical level of the symptoms associated with eating disorders (Atlas, 2007). It measures the psychological traits present in individuals with eating disorders and assesses associated risk factors and outcomes of treatment. It can be used to assess the DSM-IV-TR diagnoses of Anorexia Nervosa, Bulimia Nervosa and Eating Disorders Not Otherwise Specified (Cumella, 2006). It does not assess Binge Eating Disorder and the results of the assessment alone are not sufficient for diagnosis (Atlas, 2007).

The EDI-3 is appropriate for use with English speaking females between the ages of thirteen and fifty-three years (Atlas, 2007). The item booklet is written at the fourth grade reading level. One part of the assessment, the symptom checker, is written at the sixth grade reading

level (Atlas, 2007). It is a three-part test with only one available current version. The current cost of the EDI-3 is \$302 dollars per introductory kit which includes: the professional manual, referral form manual, 25 item booklets, 25 answer sheets, 25 percentile/T-score profiles, 25 symptom checklists and 25 referral forms. There is additional cost of \$290 dollars for the CD-ROM based scoring program (G. Hughes, personal communication, April 27, 2011).

Content

The EDI-3 is a pencil and paper test consisting of 91 items and 12 subscales (Kagee, 2007). The main scales are the drive for thinness and the bulimia scales, the remaining subscales are: low self-esteem, body dissatisfaction, maturity fears, personal alienation, interpersonal alienation, interpersonal insecurity, perfectionism, interoceptive deficits, emotional dysregulation, and asceticism (Atlas, 2007). The response options based on a 6-point Likert-type scale are: always, usually, often, sometimes, rarely, and never (Kagee, 2007). There are six composite scores, 12 primary scores, and three response style validity indicators. The composite scores are eating disorder risk composite, ineffectiveness composite, interpersonal problems composite, and general psychological maladjustment composite. The primary scores are: bulimia, body dissatisfaction, drive for thinness, low self-esteem, personal alienation, interpersonal insecurity, interpersonal alienation, interoceptive deficits, emotional dysregulation, perfectionism, maturity fears, asceticism. The three response style indicators are inconsistency, infrequency and negative impression (Cumella, 2006).

The three part nature of the instrument increases its usefulness. The Referral Form (RF) consists of 25 questions from the full assessment. It assesses Body Mass Index (BMI), providing a clinical level of thinness, and behavioral weight control measures. The RF can be used for brief assessments of non-clinical individuals or groups who are at high risk for developing an eating

disorder. The results may indicate the need for a professional evaluation (Cumella, 2006). The Symptom Checklist (SC) is a structured self-report part of the EDI-3 that assesses the frequency and history of symptoms that are consistent with a DSM-IV-TR diagnosis of an eating disorder (Cumella, 2006). It can be administered as part of the complete EDI-3 assessment, alone, or in conjunction with the RF. When used alone the SC is a screening tool to determine if the full assessment needs to be administered (Atlas, 2007).

Administration

The administration procedures are simple and clearly outlined by an extensive manual accompanying the assessment. It takes about 20 minutes to complete the full assessment. The SC and RF each take about 10 minutes to complete (Atlas, 2007). The qualification level for the EDI-3 is B-level. This indicates that a minimum of a four-year degree in a counseling or psychology related field is necessary to administer and interpret the full assessment (G. Hughes, personal communication, April 27, 2011). A non-counseling professional can score the RF, but the Symptom Checklist must be administered under the guidance of a healthcare professional (Atlas, 2007). The full EDI-3 always needs to be interpreted by a qualified B-level professional.

Scoring and Data

There are two types of scoring options available, pencil and paper or a computerized software program. The software adds an additional cost the assessment, however is faster than pencil-paper scoring (G. Hughes, personal communication, April 27, 2011). The RF is a carbonized questionnaire, that provides easy scoring (Cumella, 2006). The full assessment comes with an easy to use scoring sheet and score summary sheet, which the assessment administrator uses to calculate the raw scores, composite scores, validity scale scores and the T-scores (Atlas, 2007). The EDI-3 uses T-scores and composite scores for all scales and subscales, which is an

improvement from the EDI-2's use of percentile scores (Cumella, 2006).

The EDI-3 norm group samples were recruited from Canada, the United States, Italy, the Netherlands and Australia and support prevalence information that is consistent with eating disorder prevalence in Western Societies (Kagee, 2007). Due to the cultural composition of the norm group there is limited use of this assessment in developing countries including areas in Asia, South America and Africa (Kagee, 2007).

The reliability was assessed using the norm group of an adult clinical population from the United States ($n = 983$), an international adult clinical population ($n = 662$), and an adolescent clinical population from the United States ($n = 335$) (Atlas, 2007). Of the total ($n=1980$) female patients, $n=310$ met DSM-IV-TR criteria for Anorexia Nervosa, restricting type; $n = 202$ met criteria for Anorexia Nervosa, binge-purge type; $n = 729$ met criteria for Bulimia Nervosa; and $n = 404$ met criteria for Eating Disorder Not Otherwise Specified. A non-clinical sample ($n= 3802$) was used for comparison (Cumella, 2006). There was good internal consistency of the item scales, as the composite T-scores for the drive for thinness, body image dissatisfaction, and bulimia scales all had alpha coefficients that fell between .90 and .97 for all norm groups and diagnoses. The rest of the subscales had alpha coefficients above .80, except for the international clinical sample, which had an alpha of .74 (Atlas, 2007). The EDI-3 does not provide internal consistency estimates for the non-clinical group (Cumella, 2006). The test-retest reliability produced coefficients falling between .86 and .98. The test-retest data was based on a study of 34 women who had short term (interval range of 1-7 days) previous eating disorder treatment. The correlation coefficients indicate excellent stability for composite scores and subscale scores (Atlas, 2007). There was no test retest data using a non-clinical sample (Cumella, 2006).

The EDI-3 has acceptable convergent validity based on correlations with six other

measures of eating disorder behaviors (Cumella, 2006). Construct validity ranged from -.13 to .83 and was based on correlations with subscales of the Eating Attitudes Tests, The Bulimia Test Revised, and the Rosenberg Self-Esteem Scale (Kagee, 2007). Discriminate validity for most of EDI-3 subscales and composites was determined using two different measures of general psychopathology (the Symptom Checklist-90 and Millon Clinical Multiaxial Inventory-II) (Cumella, 2006). Factor analysis of the EDI-3 using clinical samples showed appropriate scale groups of Interpersonal Problems, Affective Problems, Overcontrol Composites and Ineffectiveness (Atlas, 2007). Additionally, the EDI-3 uses response style indicators, which improves profile validity due to the commonality of cognitive impairment, and approval seeking behavior and denial in the eating disorder clinical population (Cumella, 2006).

Personal Evaluation

The EDI-3 is highly effective assessment for use in community and clinical settings. The ease of administration and the three-part nature of the test make it an ideal tool for the assessment of high-risk groups. It demonstrates good reliability and can be used to assess risk, current level of symptomology, and treatment effectiveness. The validity could be improved, as it is only adequate in most categories. The EDI-3 is limited in current clinic use and will need to be updated to meet diagnostic criteria of the DSM-V, which will include binge eating disorder. Alone, the assessment is not appropriate for diagnosis and needs to be accompanied by an in-depth personal interview and possibly additional assessments for other co-morbid psychopathologies (e.g. depression, anxiety, OCD). The assessment is also limited due to the norm group, which ideally needs to include men and a wider international and cross-cultural representation. Eating disorders affect all cultures, races, genders, and socioeconomic classes, and with more research the EDI-3 can become a better instrument to fully represent that.

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