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# A systematic review of instruments for the assessment of eating disorders among adults

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## Abstract

**Purpose of review—**The availability of psychometrically sound assessment instruments for assessing eating disorder symptomatology is crucial for both clinical practice and research. The purpose of the current review is to provide the reader with a list of psychometrically validated assessments for adults that are available within the field of eating disorders. Eating disorder interviews and self-report questionnaires were identified using online literature searches, reviewing previous review articles, and via research and/or clinical experience of the authors. The focus of the review was on (1) standard assessments that were frequently used in eating disorder research (such as the Eating Disorder Examination and Eating Attitudes Test), and (2) newer assessments that were developed over the past 5 years. Information compiled on each instrument included the purpose of the assessment, scores that can be derived, psychometric information, translations in other languages, and availability for use in research and clinical settings.

**Recent findings—**Several recent trends in assessment instruments were identified including updates based upon Diagnostic and Statistical Manual criteria, briefer assessments, assessments for specific populations, and assessment of specific clinical features observed in people with eating disorders.

**Summary—**The current review provides eating disorder clinicians and researchers a guide for making informed decisions about the selection of eating disorder assessments.

### Keywords

anorexia nervosa; assessment; binge-eating disorder; bulimia nervosa; eating disorders; interview; self-report questionnaire

## INTRODUCTION

The importance of psychometrically sound assessments to the field of eating disorders cannot be overstated. Eating disorder prevention programs are reliant on valid methods for

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identifying those at risk for an eating disorder and evaluating outcomes of those programs. The accurate diagnosis of eating disorders is essential for tailoring treatment to the individual, and monitoring patient progress during treatment requires sensitive assessments that can detect changes in therapeutic targets. Finally, rigorous reproducible eating disorder research would not be possible without the availability of sound assessments.

## OVERVIEW OF THE CURRENT REVIEW

The objective of the current review is to provide the reader with a list of psychometrically validated assessments for adults that are available to the field of eating disorders. Notably, the scope of this review is not limited to instruments specifically designed to assess the diagnostic features of eating disorders (e.g., binge eating, dietary restriction). Rather, we seek to provide a somewhat more expansive list of measures tapping not only these cognitive/behavioral signatures of eating disorders, but also a wider range of features commonly associated with eating pathology (e.g., perfectionism, emotion dysregulation). Our intention with this approach is to provide researchers and clinicians with an assessment toolbox capable of capturing an array of relevant etiological/maintenance mechanisms and intervention targets. The reviewed assessments include both structured interviews and self-reported questionnaires. The focus of this review is on two areas: (1) established or older assessments that have been frequently used in eating disorder research; and (2) newer assessments that have been developed over the past 5 years. This review will provide information on the purpose of the assessment, current and alternative versions, details about the instrument (e.g., number of items, associated subscales), scores that can be derived from the assessment, psychometric information (i.e., reliability and validity) provided in the original publication, translations in other languages, and information about availability for use in research and clinical settings.

This review is intended to be informative rather than evaluative. The reader is encouraged to consider their own needs, as well as the properties of these assessments in selecting instruments for use. This review is also intended to be selective in the two areas noted above; the assessments that are included in this review should not be considered a comprehensive list.

## METHOD

Several methods were used to identify relevant assessment instruments for inclusion in this review. First, searches of electronic databases were conducted using PubMed and PsycINFO. The following combination of search terms were used: (‘eating disorder*’ OR ‘anore*’ OR ‘bulim*’ OR ‘binge-eating disorder’ OR ‘night eating syndrome’ OR ‘purging disorder’ OR ‘orthorexia’ OR ‘OSFED’ OR ‘EDNOS’ OR ‘disordered eating’) AND (‘assessment’ OR ‘self-report’ OR ‘interview’ OR ‘questionnaire’ OR ‘measure’ OR ‘inventory’). Second, previous reviews of eating disorder assessments were examined and relevant articles from those reviews were included. Finally, additional lists of eating disorder assessments were generated by the authors based upon their prior research and/or clinical experience. For measures published within the past 5 years, we aimed to be inclusive. When

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reviewing older measures, assessment instruments with a larger number of citations from the past 10 years were given preference.

## RESULTS

All retained assessments were grouped into four tables for organizational purposes. Table 1 presents structured interviews developed to assess eating disorder symptoms and diagnoses. Table 2 presents self-report questionnaires used to assess eating disorder symptoms. Table 3 presents self-report questionnaires used to assess features commonly associated with eating disorders. Finally, Table 4 presents eating disorder assessments designed for use with specific populations (e.g., athletes). More specific foci for each assessment instrument are indicated within the tables.

### Trends in recently published assessments

As much has been written about many of the older assessments [1–4], our results section is focused only on the trends observed among instruments published within the last 5 years (indicated by a dagger [†] within the tables). Across those scales, four key trends were observed.

### Focus on criteria from the Diagnostic and Statistical Manual, 5th edition

First, several scales were developed to assess diagnostic criteria forwarded in the 5th edition of the Diagnostic and Statistical Manual (DSM-5) [5]. For example, the Eating Pathology Symptoms Inventory - Clinician Rated Version (EPSI-CRV) [6■■], which is based on the self-report version of the EPSI, was designed to generate DSM-5 eating disorder diagnoses, in addition to providing an assessment of eight different dimensions of eating pathology (e.g., body dissatisfaction, cognitive restraint). Similarly, the Yale Food Addiction Scale 2.0 (YFAS 2.0) [7] is a revision to the original YFAS [8], which utilizes DSM-5 substance use disorder criteria to conceptualize and measure the construct of food addiction.

### Focus on brief assessment of eating disorder symptoms

Second, as many existing eating disorder assessments can be long and time-consuming to administer, several measures were developed or revised to provide a brief assessment of the construct of interest. For instance, the Eating Disorder Examination Questionnaire (EDE-Q) [9] is one of the best-established and most widely used measures of eating psychopathology and is available in several languages. However, the full questionnaire is a relatively long, with 28 items. Investigations of alternative or briefer forms of EDE-Q have emerged, including: a 7-item EDE-Q version [10], which has since received psychometric support in a variety of samples [11–15], an 8-item EDE-Q version [16], and an 18-item EDE-Q version [17]. Similarly, a new 15-item self-report questionnaire – the Eating Disorder-15 [18] – was recently developed to provide a brief assessment of therapeutic progress and outcomes in eating disorder treatment on a weekly basis. In part due to the brevity of ED-15, this measure has proved to be of clinical utility as a complementary and psychometrically robust measure able to track changes during therapy. Finally, the Frost Multidimensional Perfectionism Scale (FMPS) [19,20] was recently revised to trim the original 35-item measure into a briefer 8-item questionnaire.

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### Focus on assessment of eating disorder symptoms in specific populations

Third, given increasing recognition that eating disorders may manifest differently across unique populations, several newer measures were developed to assess eating pathology within specific groups. For example, the Eating Disorders Screen for Athletes (EDSA) [21■■] and Disordered Eating Screen for Athletes (DESA-6) [22■■] were both developed to screen for eating pathology among male and female athletes, a group in which careful attention to dietary intake and high levels of physical activity may be normative [23,24]. The Repetitive Eating Questionnaire (RepEAT-Q) [25] was developed to assess grazing behavior, which may be particularly problematic among individuals with obesity, those who have undergone bariatric surgery, and those with eating pathology [26,27]. Similarly, researchers in France developed the ESSCA [28] interview to help clinicians identify problematic eating behaviors that may contribute to obesity (e.g., food craving, emotional eating). And finally, the Muscularity-oriented Eating Test (MOET) [29■■] and Eating for Muscularity Scale (EMS) [30■■] were each developed to assess disordered eating attitudes and behaviors organized around the pursuit of muscularity, rather than the pursuit of thinness. Although these measures may have relevance across the gender spectrum, muscularity-oriented disordered eating has been posited as a particularly pertinent experience among males [31], who have been underrecognized, underresearched, and underserved in the eating disorders field.

### Focus on features commonly associated with eating disorders

Fourth, a number of measures were developed to assess specific features commonly observed among individuals with eating disorders. For example, the Dietary Rules Inventory (DRI) [32■■] was developed to assess an individual's adherence to specific dietary rules, which is conceptualized as being one cognitive/behavioral manifestation of dietary restraint. Given evidence of deficits in set-shifting or cognitive flexibility in the eating disorders, researchers developed the Eating Disorder Flexibility Index (EDFLIX) [33■■] to assess both general and eating disorder-specific inflexibility in cognition (e.g., rigid approaches to rules) and behaviors (e.g., use of stereotyped or perseverative behaviors). Consistent with evidence highlighting the roles of sociocultural pressures, weight stigma, and fear of fatness as likely contributors to eating pathology, the Influences on Fear of Fat Scale (SI-FAt) [34■■] was designed to assess environmental influences that may contribute to fearful attitudes toward weight gain and higher weight. As appearance comparisons have been identified as a common behavior among individuals with disordered eating, the Physical Appearance Comparison Scale-3 (PACS-3) [35] was revised to provide an assessment of comparisons that may be particularly relevant to male and female appearance ideals (i.e., thinness and muscularity), to clarify the role of comparisons made to those deemed more versus less attractive than oneself, and to provide an index of the emotional impact of the comparison. Finally, the Short Inventory of Grazing (SIG) [36] was developed to briefly assess the frequency that an individual engages in grazing (i.e., repeatedly picking at or nibbling on small amounts of food outside of planned meals and snacks) both with and without and accompanying sense of having lost control.

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## DISCUSSION

The current review provides an overview of self-report and interview-based instruments available for assessing eating disorder symptoms and related features among adults, with a particular emphasis on measures published within the past 5 years. As is evident in this review, the number of available tools continues to grow, as researchers and clinicians identify important areas for expansion or improvement. In selecting an assessment instrument for use, a variety of issues should be considered. First, the primary construct(s) of interest should be identified and compared to the available instruments. Readers are encouraged not to rely solely on the names of scales, but rather should looked at detailed descriptions of the scale as well as the content of individual items. Often times scale names do not adequately capture the full scope of the scale. Second, readers should verify that the age of the individuals that will be completing the assessment matches the age range recommended for the scale. Third, readers should verify that the instruments being considered are available in the language appropriate for their needs. Fourth, the psychometric properties of the instruments should be examined. In terms of reliability, the most common metrics are internal consistency (e.g., Cronbach's alpha) and test-retest reliability (e.g., intraclass correlation coefficient). A minimum reliability coefficient of 0.70 is recommended, and coefficients of 0.80–0.95 are strongly preferred [37]. In terms of the validity of the instrument, readers should look for empirical evidence of convergent validity (i.e., correlations with similar measures), known-groups validity (i.e., the ability of the instrument to differentiate those known to differ on the construct of interest), and predictive validity (i.e., ability to predict later events) [37]. Also relevant to validity would be the empirical verification of the scale factor structure [38,39]. Fifth, readers should consider the features of the instrument, including such things as the number of items and the time to complete, to ensure that those features are consistent with the intended application. For example, if the assessment instrument is being used to track patient progress during each clinical visit, a brief assessment will likely be more practical than a lengthier assessment. When assessment interviews are being considered, readers should evaluate what training is needed for assessors prior to administering.

## CONCLUSION

In summary, the field has produced numerous tools for the assessment of eating disorders and their associated features. This review identified several new measures published within the past 5 years, which broadly related to four key themes: adherence to DSM-5 criteria, the pursuit of brief assessment tools, assessment of eating pathology in specific groups, and assessment of specific features commonly related to eating disorders. Clinicians and researchers are encouraged to consider a number of factors when deciding upon the right measure for their purposes.

## Conflicts of interest

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**KEY POINTS**

- The availability of psychometrically sound assessment instruments for assessing eating disorder symptomatology is crucial for both clinical practice and research.
- The current review provides readers with a list of psychometrically validated assessments for adults that are available within the field of eating disorders, with an emphasis on assessments published within the past 5 years.
- Recently published assessment instruments broadly addressed four key themes: (1) adherence to DSM-5 criteria, (2) pursuit of brief assessment tools, (3) assessment of eating pathology in specific groups, and (4) assessment of specific features commonly related to eating disorders.
- Clinicians and researchers are encouraged to carefully consider a variety of issues (e.g., assessment length, language, reliability and validity data for the population of interest) when choosing the best instrument for their needs.

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**Table 1.**

Structured interviews to assess eating disorder symptoms and diagnoses

| Scale name | Description | Focus | Psychometrics | Translations[a] | Availability |
|---|---|---|---|---|---|
| Eating Disorder Examination (EDE) [40] | The EDE is a semi-structured interview designed to measure the thoughts and behaviors commonly associated with eating disorders over the past 28 days. The EDE contains 4 subscales assessing: (1) Dietary Restraint, (2) Eating Concern, (3) Weight Concern, and (4) Shape Concern. In addition, the 17th version of EDE can be used to derive DSM-5 eating disorder diagnoses (i.e., AN, BN, BED, OSFED, UFED). | ED Structured Interview | Psychometric data for the EDE, 17th edition is not available with the primary publication [40]. However, a review of the EDE and its versions supports the reliability and validity of EDE scores, and indicates that the instrument can distinguish between cases and noncases [3]. | *English*, Chinese, Croatian, Dutch, Finnish, German, Hebrew, Italian, Malay, Norwegian, Persian, Portuguese, Spanish, Swedish | EDE, 17th Edition is freely available online at: https://www.credo-oxford.com/pdfs/EDE_17.0D.pdf. |
| The Eating Disorder Assessment for DSM-5 (EDA-5) [41] | Semi-structured interview focused on the diagnosis of DSM-5 feeding and eating disorders (i.e., AN-R, AN-B/P, BN, BED, ARFID, OSFED, UFED, pica, rumination disorder). The EDA-5 was designed to be an efficient diagnostic tool for research and clinical settings, and utilizes a skip-logic that results in different numbers of items being delivered across individual respondents. | ED Structured Interview | EDA-5 derived eating disorder diagnoses demonstrated fair/substantial agreement with diagnoses derived from the longer EDE interview (kappa=0.74). The test-retest reliability of diagnoses was excellent/almost perfect (kappa=0.87) [41]. | *English*, Norwegian | EDA-5 is freely available to researchers and clinicians at: https://eda5.org/. |
| Structured Interview for Anorexic and Bulimic Syndromes (SIAB-EX) [42] | 87-item semi-structured interview to assess current and lifetime DSM-IV eating disorder symptoms and diagnoses (i.e., AN, BN, BED, EDNOS), as well as symptoms of depression, phobias, and obsessive-compulsive symptoms. The SIAB-EX produces a total score as well as 6 subscale scores addressing: (1) Body Image, (2) General Psychopathology, (3) Sexual Problems, (4) Bulimic Symptoms, (5) Compensatory Behaviors, and (6) Atypical Binges. | ED Structured Interview | Interrater reliability (kappa) for SIAB-EX scores ranged from 0.63 to 0.85. The SIAB-EX subscales and total score were generally positively correlated with EDE subscale scores, with smaller associations observed between EDE scores and the SIAB-EX subscales indexing Sexual Problems and Atypical Binges [42]. | *German*, English | SIAB-EX may be available upon request from the study's primary author. |
| Eating Pathology Symptoms Inventory - Clinician Rated Version (EPSI-CRV) [6■■] [†] | Clinician-administered interview that assesses eating disorder behaviors and cognitions over the past three months, and is able to generate both DSM-5 eating disorder diagnoses (i.e., AN-R, AN-B/P, BED, OSFED) and scores across 8 subscales: (1) Body Dissatisfaction, (2) Binge Eating, (3) Cognitive Restraint, (4) Purging, (5) Excessive Exercise, (6) Restricting, (7) Muscle Building, and 8) Negative Attitudes Toward Obesity. | ED Structured Interview | Interrater reliability for EPSI-CRV diagnoses was substantial/excellent (ICC 0.87), and internal consistency was good for most subscales with Cronbach's alpha ranging from 0.65 to 0.81. EPSI-CRV diagnoses were positively correlated with diagnoses obtained via the Structured Clinical Interview for DSM-IV-TR Disorders, and EPSI-CRV subscale scores were positively associated with scores from self-report version of the EPSI [6■■]. | *English* | EPSI-CRV is freely available to researchers and clinicians at: https://kuscholarworks.ku.edu/handle/1808/29616. |
| Structured Clinical Interview for DSM-5 (SCID-5) [43] | Semi-structured interview for making the major DSM-5 diagnoses (e.g., mood disorders, substance use disorders). The SCID-5 Research Version contains a module for assessing diagnostic criteria for the feeding and eating disorders (i.e., AN-R, AN-B/P, BN, BED, OSFED, ARFID). | ED Structured Interview | There are currently no reliability and validity data available for the SCID-5 eating and feeding disorder diagnoses. | *English*, Chinese, Greek, Italian, Danish, Dutch, German, Hungarian, Korean, Norwegian, Polish, | SCID-5 is available for purchase at: https://www.appi.org/products/structured-clinical-interview-for-dsm-5-scid-5 |

| Scale name | Description | Focus | Psychometrics | Translations[a] | Availability |
| --- | --- | --- | --- | --- | --- |
| | | | | Portuguese, Romanian, Spanish Turkish | |
| Evaluation Semi-Structurée des Comportements Alimentaires [Semi-structured Interview for Eating Disorders] (ESSCA) [28] † | Semi-structured interview to address the determinants of food intake including hunger, food craving, problematic eating behaviors, snacking, emotional eating, and eating disorders particularly related to overweight. | ED Structured Interview particularly related to overweight | There are currently no reliability and validity data available for the ESSCA | *French* | ESSCA is available in French at: https://www.hesge.ch/heds/heds/heds/heds-et-cite/professionnels/essca |

ED, eating disorder; AN-R, anorexia nervosa – restricting type; AN-B/P, anorexia nervosa – binge-eating/purge type; BN bulimia nervosa; BED, binge-eating disorder; ARFID, avoidant/restrictive food intake disorder; OSFED, other specified feeding or eating disorder; UFED, unspecified feeding or eating disorder; EDNOS, eating disorder not otherwise specified. Italics used to indicate the language in which a scale was originally validated.

[a]List of available translations includes those that may be accessible through the scale's original authorship team, but for which psychometric data may not yet be published.

†Indicates that the instrument was published in last 5 years.



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**Table 2.**

Self-report questionnaires to assess eating disorder symptoms and diagnoses

| Scale name | Description | Focus | Psychometrics | Translations [a] | Availability |
|---|---|---|---|---|---|
| Eating Disorder Examination – Questionnaire (EDE-Q) [9] † | The 6th edition of the EDE-Q is a 28-item self-report questionnaire, which was adapted from the EDE interview and assesses eating disorder thoughts and behaviors over the past 28 days. The EDE-Q comprises 4 subscales assessing: (1) Dietary Restraint, (2) Eating Concern, (3) Weight Concern, and (4) Shape Concern, which can be averaged to calculate a global scale score. In addition, the EDE-Q can be used to assess the frequency of specific eating disorder behaviors (e.g., binge eating). More recently, briefer (e.g., 7-item, 18-item) versions of the EDE-Q have been published [44■■]. | ED Symptom Questionnaire (General) | Psychometric data for the EDE-Q, 6th edition is not available with the primary publication. However, a review of the EDE-Q and its versions supports the reliability and validity of EDE-Q scores, and indicates that the instrument can distinguish between cases and noncases. Some work suggests that the EDE-Q may generate higher scores than the EDE interview for features such as binge eating and Shape Concerns [3]. | *English*, Chinese, Croatian, Dutch, French, Finnish, German, Hebrew, Italian, Malay, Norwegian, Persian, Portuguese, Spanish, Swedish | EDE-Q is freely available at: https://www.credo-oxford.com/pdfs/EDE-Q_6.0.pdf. |
| Eating Disorder Inventory (EDI) [45] | Originally, published in 1983, the EDI was developed as a multidimensional self-report measure of the psychological and behavioral symptoms commonly associated with anorexia nervosa and bulimia nervosa. The latest version, the EDI-3, contains 91 items and 12 primary subscales assessing: (1) Drive for Thinness, (2) Bulimia, (3) Body Dissatisfaction, (4) Low Self-Esteem, (5) Personal Alienation, (6) Interpersonal Insecurity, (7) Interpersonal Alienation, (8) Interoceptive Deficits, (9) Emotional Dysregulation, (10) Perfectionism, (11) Asceticism, and (12) Maturity Fears. | ED Symptom Questionnaire (General) | Psychometric data for the EDI-3 are not available with the primary publication. However, EDI-3 subscales have been shown to discriminate between clinical and control groups, with most subscales demonstrating good internal consistency in clinical and nonclinical samples [46]. | *English*, Arabic, Chinese, Danish, Dutch, French, German, Italian, Japanese, Korean, Mandarin, Polish Portuguese, Spanish, Swedish | EDI-3 available for purchase at: https://www.parinc.com/Products/Pkey/103. |
| Eating Attitudes Test (EAT) [47] | 40-item (EAT-40) and 26-item (EAT-26) self-report questionnaires originally designed to assess symptoms of anorexia nervosa. The original factor analysis suggested 3 factors capturing: (1) Dieting, (2) Bulimia and Food Preoccupation, and (3) Oral Control. However, the measure is commonly used as a unidimensional scale. | ED Symptom Questionnaire (General) | For both versions, Cronbach's alpha for the total score was good at 0.83 or higher. EAT-26 and EAT-40 total scores were strongly positively correlated, and demonstrated positive correlations with body dissatisfaction and symptoms of related disorders (e.g., depression, anxiety). Clinical cutoff scores of 30 for the EAT-40 and 20 for the EAT-26 were identified [47]. | *English*, Arabic, Chinese, French, German, Greek, Hebrew, Iranian, Italian, Japanese, Korean, Malay, Persian, Polish, Portuguese, Spanish, Zulu | Permission to use the EAT-26 and EAT-40 can be obtained at: https://www.eat-26.com. |
| Eating Pathology Symptoms Inventory (EPSI) [48] | 45-item self-report measure, which contains 8 subscales that assess: (1) Body Dissatisfaction, (2) Binge Eating, (3) Cognitive Restraint, (4) Purging, (5) Excessive Exercise, (6) Restricting, (7) Muscle Building, and (8) Negative Attitudes Toward Obesity | ED Symptom Questionnaire (General) | Internal consistency for the EPSI subscale scores were generally good, and ranged from 0.66 to 0.95. Test-retest (r) reliability was also generally good, and ranged from 0.61 to 0.85. Subscale scores evidenced good convergent and discriminant validity, and largely demonstrated invariance across sex and weight categories [48]. | *English*, Chinese | EPSI items and scoring key available at: https://psych.ku.edu/sites/psych.ku.edu/files/docs/cv/EPSI.pdf. |

| Scale name | Description | Focus | Psychometrics | Translations [a] | Availability |
|---|---|---|---|---|---|
| Eating Disorder Diagnostic Scale (EDDS) [49] | The original EDDS is a 22-item self-report questionnaire able to generate DSM-IV eating disorder diagnoses and an overall eating disorder symptom composite score. A newer 23-item version of the EDDS for DSM-5 is also available. | ED Symptom Questionnaire (General) | Although psychometric data for the DSM-5 version of the EDDS are not available, Cronbach's alpha for the DSM-IV EDDS symptom composite was 0.91, and the test-retest reliability (*r*) was 0.87. Test-retest reliability (kappa) for the EDDS diagnoses ranged from 0.71 to 0.95. Agreement (kappa) between diagnoses obtained via the EDDS and the Structured Clinical Interview for DSM Disorders ranged from 0.74 to 0.93 [49]. | *English*, Cantonese, Chinese, French, German, Icelandic, Korean, Portuguese, Spanish | EDDS scales and scoring keys are available at: http://www.ori.org/sticemeasures. |
| Munich ED-Quest [50] | 60-item self-report questionnaire suitable for producing severity ratings and deriving diagnoses of DSM-5 feeding and eating disorders for use in in research and clinical practice. In addition to the total score, 3 subscales assess: 1) Preoccupation with Figure and Weight, 2) Bingeing and Vomiting, and 3) Inappropriate Compensatory Behavior. | ED Symptom Questionnaire (General) | Cronbach's alpha for the Munich ED-Quest total score and subscales was 0.89 or higher. Test-retest reliability (r) for the total score and subscale scores was 0.89 or higher. Munich ED-Quest scores among individuals with eating disorders declined from treatment to discharge. Clinical (noneating disorder) and community controls demonstrated lower Munich ED-Quest scores compared to eating disorder patients. The Munich ED-Quest total score was positively correlated with results from eating disorder diagnostic interviews [50]. | *German*, English | Munich ED-Quest items and scoring information are freely available to researchers and clinicians within the online supporting documents from the primary publication. |
| Multifactorial Assessment of Eating Disorders Symptoms (MAEDS) [51] | 56-item self-report measure for the assessment of symptoms central to eating disorders. The MAEDS contains 6 subscales assessing: 1) Depression, 2) Binge Eating, 3) Purgative Behavior, 4) Fear of Fatness, 5) Restrictive Eating, and 6) Avoidance of Forbidden Foods. | ED Symptom Questionnaire (General) | Cronbach's alpha for the MAEDS subscales ranged from 0.80 to 0.92. Test-retest reliability (r) for subscale scores ranged from 0.89 to 0.99. MAEDS subscale scores were positively associated with established measures of depression and eating pathology [51]. | *English* | MAEDS items are provided in the primary publication, and MAEDS copies/scoring information can be obtained from the primary author. |
| Disordered Eating Attitude Scale (DEAS) [52] | 25-item self-report questionnaire that assesses the individual's eating attitudes (i.e., beliefs, thoughts, feelings, behaviors, and relationship with food). In addition to a total score, the DEAS also produces 5 subscale scores: (1) Relationship with Food, (2) Concern with Food and Weight Gain, (3) Restrictive and Compensatory Behaviors, (4) Feelings Toward Eating, and (5) Idea of Normal Eating. | ED Symptom Questionnaire (General) | Cronbach's alpha for the DEAS subscales ranged from 0.43 to 0.88. Subscale scores were positively correlated with established measures of eating pathology. DEAS total scores were significantly higher among individuals with anorexia nervosa and bulimia nervosa, compared to those without an eating disorder [52]. | *Portuguese*, English, Japanese, Spanish | DEAS items and scoring information are provided in the primary publication. |
| Clinical and Research Inventory for Eating Disorders (CR-EAT) [53] | 63-item self-report measure specifically designed for the online or computerized assessment of eating disorders. The CR-EAT produces a total score, as well as 11 subscale scores: (1) Weight Preoccupation, (2) Mood Dysregulation, (3) Affect-regulatory Eating, (4) Self-Esteem, (5) Concerns about Negative Evaluation, (6) Body Embarrassment, (7) Restrained Eating Behavior, (8) Societal Expectations of Weight and Shape, (9) | ED Symptom Questionnaire (General) | Cronbach's alpha was 0.95 for the CR-EAT total score, and ranged from 0.62 to 0.93 for the subscales. Test-retest reliability (ICC) was 0.97 for the total score, and ranged from 0.83 to 0.96 for the subscales. CR-EAT scores were positively correlated with traditional measures of eating pathology, and discriminated between clinical and nonclinical samples [53]. | *German*, Czech English, French, Hungarian, Portuguese, Romanian, Spanish, | CR-EAT is freely available for research purposes from the primary author. |



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| Scale name | Description | Focus | Psychometrics | Translations [a] | Availability |
|---|---|---|---|---|---|
| | Perfectionism: Familial Expectations, (10) Harmful Weight Regulation, (11) Personal Expectations. | | | | |
| Eating Disorder Questionnaire-Online (EDQ-O) [54] | 26-item computer-based self-report measure that was designed to assign DSM-IV-TR eating disorder diagnoses using a computerized algorithm. | ED Symptom Questionnaire (General) | Agreement between EDQ-O derived diagnoses and diagnoses derived from a traditional eating disorder interview ranged from 79% for eating disorder not otherwise specified to 93% for anorexia nervosa [54]. | *English* | EDQ-O items are provided in the primary publication. |
| Interactive, Graphical Assessment Tool (IGAT) [55] † | Computer-based, self-report measure that assesses the frequency of disordered-eating behaviors (e.g., binge eating, purging), body weight, and stress at the weekly level for the past 12 weeks. The IGAT provides interviewers and respondents with a calendar to help identify key reference dates, and graphically displays symptom levels across the previous 3 months. | ED Symptom Questionnaire (General) | Data supported the test-retest reliability of IGAT scores. IGAT frequency data were correlated with traditional eating disorder measures assessing a shorter timeframe [55]. | *English* | A demo version of the IGAT is available at: https://undeatingbehaviors.wixsite.com/uwyoeatingbehaviors/interactive-graphical-assessment-tool. |
| Questionnaire of Eating and Weight Patterns-5 (QEWP-5) [56] | Brief self-report screening questionnaire designed to assess diagnostic criteria for DSM-5 binge-eating disorder. Earlier versions of the measure (i.e., QEWP, QEWP-Revised) assessed both diagnostic criteria for binge-eating disorder using prior DSM criteria, as well as related phenomena (e.g., temporality of binge eating and dieting). | ED Symptom Questionnaire (Binge-Eating Disorder) | Reliability and validity data were not available in the original QEWP-5 publication [56]. | *English*, French, Italian, Portuguese, Spanish | QEWP-5 is available as supplementary material with the primary publication, and available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4374019/. |
| Bulimic Investigatory Test, Edinburgh (BITE) [57] | 33-item self-report questionnaire that assesses symptoms of DSM-III bulimia nervosa (e.g., binge eating, purging). Two subscales assess: (1) Symptoms and (2) Severity. | ED Symptom Questionnaire (Bulimic Behaviors) | Cronbach's alpha for the subscales ranged from 0.62 to 0.96. BITE scores significantly declined across treatment, and distinguished individuals with binge eating from those without binge eating [57]. | *English*, Arabic, French, German, Italian Portuguese, Spanish, Thai | BITE is provided as an appendix in the primary publication. |
| Bulimia Test-Revised (BULIT-R) [58] | 28-item self-report questionnaire designed to assess the behavioral, cognitive, and physiological aspects of DSM-III-TR bulimia nervosa. | ED Symptom Questionnaire (Bulimic Symptoms) | Test-retest reliability (r) for BULIT-R total scores was 0.95. BULIT-R scores were related to bulimia nervosa diagnostic status [58]. | *English*, French, German, Icelandic, Korean, Portuguese, Spanish | BULIT-R is available from the primary study's first author. |
| Binge Eating Scale (BES) [59] | 16-item unidimensional self-report questionnaire assessing binge-eating severity as indexed by the behavioral manifestations (e.g., overeating) and the emotional/cognitive manifestations (e.g., guilt, fear of being unable to stop eating) of binge eating. | ED Symptom Questionnaire (Binge Eating) | BES scores differentiated individuals with no, moderate, and severe levels of binge eating. BES scores were positively associated with a tendency to pursue unrealistically strict diets and feelings of low self-efficacy in maintaining those diets [59]. | *English,* Arabic, French, Indonesian, Malay, Portuguese, Spanish | BES is provided as an appendix in the primary publication. |
| Eating Loss of Control Scale (ELOCS) [60] | 18-item single-factor measure that assesses self-reported frequency and severity of eating episodes characterized by loss of control | ED Symptom Questionnaire (Loss of Control Eating) | Cronbach's alpha for the ELOCS was 0.90. Higher ELOCS scores were associated with greater eating pathology, | *English* | ELOCS is provided as an appendix in the primary publication. |

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| Scale name | Description | Focus | Psychometrics | Translations [a] | Availability |
|---|---|---|---|---|---|
| | feelings, cognitions, and behaviors over a period of 4 weeks. | | emotion dysregulation, and depression, as well as lower self-control [60]. | | |
| Loss of Control Over Eating Scale (LOCES) [61] | 24-item self-report questionnaire that assesses aspects of loss of control eating with clinical relevance. In addition to the overall scale score, the LOCES contains 3 empirically derived subscales assessing: (1) Behavioral Aspects, (2) Cognitive/Dissociative Aspects, and (3) Positive/Euphoric Aspects. | ED Symptom Questionnaire (Loss of Control Eating) | Cronbach's alpha for the overall LOCES was 0.96, and test-retest reliability was r = 0.86. LOCES scores were positively correlated with measures of overall eating pathology, clinical impairment and psychological distress [61]. | *English*, Chinese, Farsi, German, Portuguese, Spanish | LOCES is provided as an appendix in the primary publication. |
| Night Eating Questionnaire (NEQ) [62] | 14-item self-report questionnaire used to assess the behavioral and psychological symptoms of night eating syndrome. The NEQ comprises 4 subscales capturing: (1) Nocturnal Ingestions, (2) Evening Hyperphagia, (3) Morning Anorexia, and (4) Mood/Sleep. | ED Symptom Questionnaire (Night Eating Syndrome) | Cronbach's alpha for the NEQ total score was 0.70, and ranged from 0.30 to 0.94 across the subscales. The NEQ total score was positively correlated with the percentage of daily calories consumed after dinner, and measures of eating pathology, sleep quality, depression, and perceived stress [62]. | *English*, Arabic, Chinese, German, Hebrew, Italian, Korean, Portuguese, Spanish | NEQ is provided as an appendix in the primary publication. |
| Eating Disorder Belief Questionnaire (EDBQ) [63] | 32-item self-report questionnaire, which assesses the core beliefs and underlying assumptions associated with eating disorders. The EDBQ comprises 4 subscales capturing: (1) Negative Self-Beliefs, (2) Weight and Shape as a Means to Acceptance by Others, (3) Weight and Shape as a Means to Self-Acceptance, and (4) Control Over Eating. | ED Symptom Questionnaire (Cognitions) | Cronbach's alpha for the EDBQ subscales was 0.86 or higher. Higher EDBQ subscale scores were associated with increased eating pathology, body dissatisfaction, and depression, but negatively associated with self-esteem. Individuals with bulimia nervosa or anorexia nervosa demonstrated higher EDBQ scores compared with healthy controls [63]. | *English*, Persian | EDBQ items are available within the primary publication. |
| SCOFF [64] | 5-item self-report screening tool for DSM-IV anorexia nervosa or bulimia nervosa. | ED Symptom Questionnaire (Screening) | Positive endorsement of two or more items provided 100% sensitivity for identifying individuals with a diagnosis of bulimia nervosa or anorexia nervosa.[64] | *English*, Arabic, Chinese, Danish, Finnish, French, German, Italian, Malay, Portuguese Spanish, Swedish | SCOFF items and scoring are freely available within the primary publication and at: https://www.psychtools.info/scoff/ |
| ED-15 [18] | 15-item self-report questionnaire designed to capture session-by-session treatment progress by assessing eating psychopathology levels over the preceding week. In addition to a total scale score, 2 subscales (10 items) assess (1) Weight and Shape Concerns, and (2) Eating Concerns. An additional 5 items assess the frequency of specific eating disordered behaviors. | ED Symptom Questionnaire (Monitoring) | Split-half reliability for the ED-15 total and subscale scores (Spearman-Brown coefficients) ranged from 0.70 to 0.93, and test-retest reliability (Pearson correlation coefficients) ranged from 0.85 to 0.93. ED-15 scores were positively correlated with established measures of eating pathology, depression, and anxiety. Among individuals receiving treatment for an eating disorder, ED-15 scores declined over time.[18] | *English*, Portuguese | ED-15 items and scoring key are available within the primary publication. |
| Change in Eating Disorder Symptoms (CHEDS) [65] | 35-item self-report measure designed to assess session-by-session change in eating disorder symptoms across treatment. In addition to a total score, the CHEDS produces 7 subscale scores assessing: (1) Body Preoccupation, (2) | ED Symptom Questionnaire (Monitoring) | Cronbach's alpha for the overall CHEDS scale was 0.96, and ranged from 0.73 to 0.93 for the subscales. CHEDS scores were significantly correlated with traditional measures of body image, | *English* | CHEDS items are provided in the primary publication. |

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| Scale name | Description | Focus | Psychometrics | Translations [a] | Availability |
|---|---|---|---|---|---|
| | Body Dissatisfaction, (3) Body Checking, (4) Binge Eating, (5) Restrictive Eating, (6) Food Preoccupation, and (7) Vomiting. | | eating pathology, and body checking. CHEDS scores were able to discriminate between individuals with and without eating disorders, with a CHEDS total score of 60 providing the best cutoff.[65] | | |
| Short Evaluation of Eating Disorders (SEED) [66] | 6-item self-report measure developed to facilitate monitoring of key eating disorder symptoms. The SEED allows for the calculation of 2 severity indices: (1) Anorexia Nervosa Total Severity Index, (2) Bulimia Nervosa Total Severity Index. | ED Symptom Questionnaire (Monitoring) | SEED scores were positively associated with established measures of eating pathology, and demonstrated change across treatment.[66] | *German*, Czech, English, French, Hungarian, Portuguese | SEED is provided as a figure in the primary publication. |
| Anorexia Nervosa Stages of Change Questionnaire (ANSOCQ) [67] | 20-item unidimensional self-report measure developed to assess patients' readiness to recover from anorexia nervosa based on the stages of change model. Total scores can be used to categorize respondents into 5 possible stages of change: Precontemplation, Contemplation, Preparation, Action, and Maintenance. | ED Symptom Questionnaire (Readiness for Recovery) | ANSOCQ total scores reflecting greater readiness to recover from anorexia were associated with less favorable beliefs about anorexia and greater self-efficacy regarding recovery.[67] | *English*, German, Spanish | ANSOCQ provided as an appendix in the primary publication. |
| Eating Disorders Recovery Endorsement Questionnaire (EDREQ) [68] † | 28-item self-report questionnaire containing 4 factors that assess: (1) Lack of Symptomatic Behavior, (2) Acceptancy of Self and Body, (3) Social and Emotional Connection, and (4) Physical Health. | ED Symptom Questionnaire (Recovery) | Participants (individuals reporting a lifetime eating disorder diagnosis, family members, and clinicians) rated the importance of individual components of recovery, and these ratings were used to derive the factor structure of the EDREQ. Reliability data for the EDREQ scores were not provided in the primary publication, however, EDREQ subscale importance ratings were not related to levels of eating pathology.[68] | *English* | EDREQ items are provided in the primary publication. |
| Clinical Impairment Scale (CIA) [69] | 16-item unidimensional self-report scale designed to assess the impact of eating disorder symptoms on one's personal, cognitive, and social functioning. | ED Symptom Questionnaire (Impairment) | Cronbach's alpha for the CIA was 0.97 and test-retest reliability (ICC) was 0.86. CIA scores were positively correlated with scores on an established measure of eating pathology and clinician impairment ratings. A CIA cutoff score of 16 discriminated between individuals with and without an eating disorder.[69] | *English*, Farsi, Italian, Japanese, Norwegian, Persian, Portuguese, Spanish, Swedish | CIA items are provided in the primary publication, with the formatted scale and scoring information freely available at: https://www.credo-oxford.com/7.2.html. |
| Eating Disorder Quality of Life Scale (EDQLS) [70] | 40-item self-report questionnaire designed to measure 12 domains of disordered eating-related quality of life: (1) Cognitive, (2) Educational/Vocational, (3) Family and Close Relationships, (4) Relationships with Others, (5) Future Outlook, (6) Appearance, (7) Leisure, (8) Psychological, (9) Emotional, (10) Values and Beliefs, (11) Physical, and (12) Eating. The EDQLS also produces a total scale score. | ED Symptom Questionnaire (Quality of Life) | Cronbach's alpha for the total EDQLS score was 0.96, and ranged from 0.36 to 0.79 across the subscales. The EDQLS total score was positively associated with established measures of quality of life.[70] | *English*, Danish,French, German, Japanese, Spanish | EDQLS items are provided in the primary publication. |

| Scale name | Description | Focus | Psychometrics | Translations [a] | Availability |
|---|---|---|---|---|---|
| Health Related Quality of Life in Eating Disorder (HeRQoLED) [71] | 55-item self-report questionnaire developed to measure health-related quality of life for individuals with an eating disorder. Eight subscales capture: (1) Symptoms, (2) Restrictive Behaviors, (3) Body Image, (4) Mental Health, (5) Emotional Role, (6) Physical Role, (7) Personality Traits, and (8) Social Relations. | ED Symptom Questionnaire (Quality of Life) | Cronbach's alpha for each of the subscales was 0.78 or higher, with test-retest reliability (ICC) values exceeding 0.86. HeRQoLED scores were positively associated with established measures of general quality of life and eating pathology.[71] | *English*, Spanish | HERQoLED is available upon request from the primary author. |
| Eating Disorder Quality of Life (EDQOL) [72] | 25-item self-report questionnaire designed to measure quality of life among individuals with eating disorders. In addition to an overall score, the EDQOL contains 4 subscales capturing: (1) Psychological, (2) Physical/Cognitive, (3), Financial, and (4) Work/School. | ED Symptom Questionnaire (Quality of Life) | Cronbach's alpha for the EDQOL overall score was 0.94, and subscale alphas ranged from 0.84 to 0.95. Test-retest correlations ranged from 0.14 to 0.97. EDQOL subscales were correlated with general measures of quality of life and negative emotionality. The EDQOL also differentiated individuals with an eating disorder from those without an eating disorder.[72,73] | *English*, Chinese, French, German, Hebrew, Japanese, Portuguese, Spanish, Swedish | EDQOL is available upon request from the primary author. |
| Quality of Life for Eating Disorders (QOL-ED) [73] | 20-item self-report questionnaire developed to assess quality of life in the context of an eating disorder. The QOL-ED produces a global score, as well as 6 subscales related to: (1) Body Weight, (2) Eating Behavior, (3) Eating Disorder, (4) Psychological, (5) Daily Living, (6) Acute Medical Status. | ED Symptom Questionnaire (Quality of Life) | Cronbach's alpha was 0.93 for the QOL-ED global score and ranged from 0.58 and 0.89 for the subscales. Scores on the QOL-ED Psychological subscale and Eating Behavior subscale were most strongly correlated with measures of eating pathology. QOL-ED scores among hospitalized patients with eating disorders significantly decreased from admission to discharge.[73] | *English*, Hindi, Spanish | QOL-ED may be available upon request from the study's primary author. |

ED, eating disorder. Italics used to indicate the language in which a scale was originally validated.

[a] List of available translations includes those that may be accessible through the scale's original authorship team, but for which psychometric data may not yet be published.

† Indicates that the instrument was published in last 5 years.



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**Table 3.**

Self-report questionnaires to assess features commonly associated with eating disorders

| Scale name | Description | Focus | Psychometrics | Translations[a] | Availability |
|---|---|---|---|---|---|
| Multidimensional Body–Self Relations Questionnaire (MBSRQ) [74] | 69-item self-report inventory for the assessment of attitudinal dispositions toward the physical self. The MBSRQ contains 10 subscales that assess: (1) Appearance Evaluation, (2) Appearance Orientation, (3) Fitness Evaluation, (4) Fitness Orientation, (5) Health Evaluation, (6) Health Orientation, (7) Illness Orientation, (8) Overweight Preoccupation, (9) Self-Classified Weight, and (10) the Body Areas Satisfaction Scale. | Associated Features (Body Image) | Initial analyses indicated a similar factor structure for the MBSRQ across male and female samples. Cronbach's alpha for the subscales ranged from 0.75 to 0.91, and subscales were significantly intercorrelated.[74] | *English*, German, Malay, Persian, Portuguese, Spanish | MBSRQ is available for purchase at: http://www.body-images.com/assessments/. |
| Body Shape Questionnaire (BSQ) [75] | 34-item unidimensional self-report scale developed to assess the role of body shape concerns among individuals with anorexia nervosa and bulimia nervosa. | Associated Features (Body Image) | BSQ scores were higher among eating disorder patients compared to individuals from a community sample. BSQ scores were positively associated with measures of eating pathology.[75] | *English*, French, German, Persian, Portuguese, Spanish | BSQ3 is provided as an appendix in the primary publication. |
| Dietary Rules Inventory (DRI) [32■■] † | 28-item self-report questionnaire designed to assess how frequently the respondent has engaged in rule-based eating behavior during the past 28 days. In addition to a global score, 4 subscales assess rules related to: (1) What to Eat, (2) Social Eating, (3) When and How Much to Eat, and (4) Caloric Level. | Associated Features (Dietary Rules) | Cronbach's alpha for the global score was 0.96; alphas for the four subscales ranged from 0.86 to 0.92. Test-retest reliability (*r*) for the global score was 0.88, and ranged from 0.72 to 0.90 for the subscales. DRI global and subscale scores were strongly correlated with measures of eating pathology.[32■■] | *Italian*, English | DRI is available as supplemental file with the primary publication. |
| Emotional Eating Scale (EES) [76] | 25-item self-report questionnaire assessing the degree to which affective states precipitate a desire to eat. In addition to the total score, the EES contains 3 subscales that capture the relationship between eating urges and (1) Anger/Frustration, (2) Anxiety, and (3) Depression. | Associated Features (Emotional Eating) | Internal consistency for the EES total and subscale scores was 0.72 or higher. EES subscale scores were positively correlated with measures of binge eating, and changes in EES subscale scores were related to changes in binge eating across treatment.[76] | *English*, Arabic, Portuguese, Turkish | EES is provided as an appendix in the primary publication. |
| Emotional Appetite Questionnaire (EMAQ) [77] | 22-item self-report questionnaire designed to assess an individual's tendency to eat in response to both positive and negative emotions and situations. The EMAQ contains 4 subscales capturing eating in response to: (1) Positive Emotion, (2) Positive Situation, (3) Negative Emotion, (4) Negative Situation. | Associated Features (Emotional Eating) | Cronbach's alpha for the EMAQ subscales ranged from 0.66 to 0.87. Eating in response to negative emotions and situations was positively associated with body mass index and measures of emotional eating.[77] | *English*, French, Portuguese | EMAQ is provided as an appendix in the primary publication. |
| Exercise and Eating Disorders (EED) [78] | 22-item self-report questionnaire designed to assess cognitions related to physical activity among individuals with eating disorders. The EED comprises a sum score and 3 thematically derived subscales indexing: (1) Intentions to Exercise, (2) Consequences of Not Exercising, and (3) Bodily Sensations. | Associated Features (Exercise) | Cronbach's alpha for the sum score was 0.92, with alphas ranging from 0.66 to 0.93 for the subscales. EED sum and subscale scores were positively correlated with measures of body image disturbance. Mean EED scores were higher among eating disorder patients than controls.[78] | *Norwegian*, Czech English, French, German, Spanish, Swedish | EED is provided as a figure in the primary publication. |

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| Scale name | Description | Focus | Psychometrics | Translations[a] | Availability |
|---|---|---|---|---|---|
| The Compulsive Exercise Test (CET) [79] | 24-item self-report questionnaire designed to assess exercise within an eating disorder context. In addition to a total score, the CET is composed to 5 empirically derived factors capturing: (1) Avoidance and Rule-Driven Behavior, (2) Weight Control Exercise, (3) Mood Improvement, (4) Lack of Exercise Enjoyment, and (5) Exercise Rigidity. | Associated Features (Exercise) | Cronbach's alpha for the CET sum score was 0.85, and subscale alphas ranged from 0.73 to 0.88. CET scores were significantly correlated with established measures of pathological exercise. The CET total and Weight Control Exercise subscale were positively correlated with measures of eating pathology, and demonstrated incremental validity in predicting eating pathology over and above existing measures of pathological exercise.[79] | *English*, French, German, Spanish | CET items are provided in the primary publication. |
| Drive for Muscularity Scale (DMS) [80] | 15-item self-report questionnaire developed to assess the desire for and engagement in behaviors intended to achieve a muscular physique. In addition to a full-scale score, the DMS contains 2 subscales: (1) Muscularity Attitudes and (2) Muscularity Behaviors. | Associated Features (Drive for Muscularity) | Assessment of the DMS factor structure in men and women indicated that the DMS full scale and subscales can be used among male samples, whereas only the DMS full scale score should be used among females. Cronbach's alphas were 0.81 or higher in male and female samples.[80] | *English*, French, German, Japanese, Portuguese, Romanian, Spanish, Turkish | DMS items are provided in the primary publication, with the full scale and scoring information provided at the following website: http://spartan.ac.brocku.ca/~dmccreary/muscularity.html |
| Muscle Dysmorphic Disorder Inventory (MDDI) [81] | 13-item self-report questionnaire that assesses symptoms associated with muscle dysmorphia. In addition to an overall sum score, the MDDI contains 3 subscales: (1) Drive for Size, (2) Appearance Intolerance, and (3) Functional Impairment. | Associated Features (Drive for Muscularity) | Cronbach's alpha for the MDDI sum and subscale scores ranged from 0.77 to 0.85, and test-retest reliability (r) was 0.81 or higher. MDDI scores were positively associated with measures of eating pathology, body image, supplement use, time spent exercising, and obsessive-compulsive symptoms.[81] | *English*, German, Italian, Portuguese, Spanish, Turkish | MDDI items are provided in the primary publication. |
| Eating Disorder Flexibility Index (EDFLIX) [33■■] † | 36-item self-report questionnaire assessing general and eating disorder-specific cognitive flexibility. In addition to the total score, 3 subscales index: (1) General Flexibility, (2) Food and Exercise Flexibility, and (3) Body Shape and Weight Flexibility. | Associated Features (Cognitive Flexibility) | Cronbach's alpha for the total score was 0.91, and ranged from 0.76 to 0.91 for the three subscales. EDFLIX total and subscale scores were positively correlated with measures of eating pathology and executive function. A cutoff score of 136 differentiated individuals with eating disorders from healthy controls.[33■■] | *Norwegian*, English | EDFLIX items and scoring information available as a supplemental file at: https://www.frontiersin.org/articles/10.3389/fpsyg.2019.00663/full. |
| Food Acceptance and Awareness Questionnaire (FAAQ) [82] | 10-item self-report instrument that captures an individual's acceptance of urges and cravings to eat, or the extent to which they might try to control or change those thoughts. The FAAQ produces a total score, as well as 2 subscale scores: (1) Acceptance, and (2) Willingness. | Associated Features (Food Acceptance) | Cronbach's alpha for the FAAQ total score in a community sample was 0.68, and was 0.84 for both subscales. Test-retest reliability (ICC) for the total score was 0.72, and ranged from 0.74 to.79 for the subscales. FAAQ scores among overweight individuals increased after participation in an acceptance-based behavioral weight loss program.[82] | *English*, Portuguese, Spanish | FAAQ items are provided in the primary publication. |
| Three Factor Eating Questionnaire (TFEQ) [83] | 51-item self-report multidimensional measure of human eating behavior, which is made up of 3 subscales assessing: (1) Cognitive Restraint of Eating, (2) Hunger, and (3) Disinhibition. | Associated Features (Eating Behavior) | Cronbach's alpha for the subscales were good at 0.85 or higher. All subscales were positively correlated with body weight.[83] | *English*, German, Hungarian, Malay, Mandarin Chinese, Persian, Portuguese, Romanian, | TFEQ items and scoring key are available within the primary publication. |

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| Scale name | Description | Focus | Psychometrics | Translations[a] | Availability |
|---|---|---|---|---|---|
| | | | | Spanish, Swedish, Thai | |
| Yale Food Addiction Scale 2.0 (YFAS 2.0) [7] † | 35-item self-report questionnaire assessing the construct of food addiction using diagnostic criteria adapted from the DSM-5 substance use disorders (e.g., tolerance, withdrawal, loss of control). The YFAS produces both a diagnostic output (i.e., food addiction present or absent) and a symptom count. | Associated Features (Food Addiction) | Kueder-Richardson alpha for the YFAS symptom count was 0.92. YFAS symptom count and diagnostic status were positively associated with binge eating frequency, weight cycling, and body mass index.[7] | *English*, French, Malay, Turkish, Arabic, Hungarian, Korean, Japanese, Portuguese, German, Chinese, Italian | YFAS is available at: https://fastlab.psych.lsa.umich.edu/yale-food-addiction-scale/. |
| Eating Habits Questionnaire (EHQ) [84] | 21-item self-report questionnaire developed to assess the cognitions, behaviors, and feelings related to an extreme focus on health eating, which has sometimes been termed ‘orthorexia.’ The EHQ comprises 3 subscales assessing: (1) Knowledge of Healthy Eating, (2) Problems Associated with Healthy Eating, and (3) Feeling Positively about Healthy Eating. | Associated Features (Orthorexia) | Cronbach’s alpha for the subscales ranged from 0.82 to 0.90, and test-retest reliability (r) ranged from 0.72 to 0.81. EHQ subscales were positively correlated with measures of eating pathology, obsessive-compulsive pathology, and depressed mood.[84] | *English*, German | EHQ items are provided in the primary publication. |
| Düsseldorf Orthorexia Scale (DOS) [85] | 10-item self-report questionnaire assessing the fixation on a health-conscious way of eating, which has been termed ‘orthorexia.’ | Associated Features (Orthorexia) | Cronbach’s alpha for the DOS was 0.84, with test-retest reliability (r) ranging from 0.67 to 0.79 across three timepoints. The DOS total score was positively correlated with measures of healthy food consumption and established measures of orthorexia.[85] | *German,* Arabic, Chinese, English, Polish, Portuguese, Spanish | DOS is available upon request from the primary study authors. |
| Sociocultural Influences on Fear of Fat Scale (SI-FAT) [34■■] † | 16-item self-report scale assessing the degree to which an individual experiences pressure to avoid becoming fat. The SI-FAT includes 4 parallel subscales assessing sociocultural influences from 4 different sources: (1) Family Influences, (2) Peer Influences, (3) Partner Influences, and (4) Media Influences. | Associated Features (Social Influence) | Cronbach’s alpha for the SI-FAT subscales was 0.80 or higher, and test-retest reliability (r) was 0.61 or higher. SI-FAT subscales were positively correlated with antifat attitudes and experiences of teasing.[34■■] | *English,* Portuguese | SI-FAT items are provided in the primary publication. |
| Sociocultural Attitudes Toward Appearance Questionnaire-4 (SATAQ-4) [86] | 22-item self-report questionnaire designed to measure appearance-related pressures and appearance ideal internalization. The SATAQ-4 comprises 5 subscales assessing: (1) Family Appearance Pressures, (2) Peer Appearance Pressures, (3) Media Appearance Pressures, (4) Thin Ideal Internalization, and (5) Muscular Ideal Internalization. | Associated Features (Appearance Pressures, Internalization) | Cronbach’s alpha for the SATAQ-4 subscales was  0.75. Subscale scores were positively correlated with measures of eating pathology, and negatively correlated with measures of appearance satisfaction and self-esteem.[86] | *English,* Farsi, French, German, Italian, Japanese, Lithuanian, Spanish | SATAQ-4 items are provided in the primary publication. |
| Physical Appearance Comparison Scale-3 (PACS-3) [35] † | 27-item scale assessing the frequency, direction (upward versus downward), and emotional impact of appearance comparisons to peers and media figures. The PACS-3 comprises 9 subscales: (1) Proximal: Frequency, (2) Proximal: Direction, (3) Proximal: Effect, (4) Distal: Frequency, (5) Distal: Direction, (6) Distal: Effect, (7) | Associated Features (Appearance Comparison) | Cronbach’s alpha for the PACS-3 subscales was  0.76. PACS-3 subscale scores were positively correlated with measures of eating pathology, and negatively correlated with measures of appearance satisfaction and self-esteem.[35] | *English,* German | PACS-3 items are provided in the primary publication. |

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| Scale name | Description | Focus | Psychometrics | Translations[a] | Availability |
|---|---|---|---|---|---|
| | Muscular: Frequency, (8) Muscular: Direction, (9) Muscular: Effect. | | | | |
| Difficulties in Emotion Regulation (DERS) [87] | 36-item self-report questionnaire designed to assess multiple aspects of emotional dysregulation. The DERS produces an overall score, as well as 6 subscale scores: (1) Nonacceptance, (2) Goals, (3) Impulse, (4) Awareness, (5) Strategies, and (6) Clarity. | Associated Features (Emotion Regulation) | Cronbach's alpha for the overall DERS score was 0.93, and ranged from 0.80 to 0.89 among the subscales. Test-retest reliability (r) of DERS scores was 0.57 or higher. DERS scores were associated with scores on measures of emotion regulation, experiential avoidance, and emotional expressivity.[87] | *English*, Albanian, Chinese, Finish, German, Hindi, Italian, Persian, Portuguese, Spanish | DERS items are provided in the primary publication |
| UPPS-P Impulsive Behavior Scale (UPPS-P) [88,89] | The original UPPS-P is a 59-item self-report questionnaire designed to assess 5 different facets of impulsivity: (1) Negative Urgency, (2) Lack of Premeditation, (3) Lack of Perseverance, (4) Sensation Seeking, and (5) Positive Urgency. The short form (SUPPS-P) is a 24-item questionnaire, which seeks to assess the same 5 subscales in a briefer format. | Associated Features (Impulsivity) | Cronbach's alpha for the 5 subscales of the UPPS short form ranged from 0.74 to 0.85. Corresponding UPPS-P and SUPPS-P subscales were strongly correlated with one another (r  0.63). SUPPS-P subscales were significantly associated with risky or problematic behaviors (e.g., pathological gambling, problematic drinking, self-harm behaviors, risky sexual behaviors, binge eating).[89] | *English*, Arabic, Brazilian, Dutch, Farsi, French, German, Italian, Korean, Polish, Spanish, Portuguese | The UPPS and SUPPS-P are available at: http://www.impulsivity.org/measurement/UPPS_P. |
| Hewitt Multidimensional Perfectionism Scale (HMPS) [90] | 45-item self-report questionnaire assessing the personal and social components of perfectionism. The HMPS contains 3 subscales: (1) Self-Oriented Perfectionism, (2) Other-Oriented Perfectionism, and (3) Socially Prescribed Perfectionism. | Associated Features (Perfectionism) | Cronbach's alpha for the HMPS subscales ranged from 0.82 to 0.87. HMPS scores demonstrated significant associations with measures of psychopathology, personality, and performance standards.[90] | *English*, Italian | HMPS is available for purchase at: https://hewittlab.psych.ubc.ca/measures-3/multidimensional-perfectionism-scale-2/. |
| Frost Multidimensional Perfectionism Scale (FMPS) [19,20][†] | The original FMPS is a 35-item self-report scale, which provides an overall score, as well as subscale scores assessing 6 dimensions of perfectionism: (1) Concern over Mistakes, (2) Personal Standards, (3) Parental Expectations, (4) Parental Criticism, (5) Doubts about Actions, and (6) Organization. The FMPS-Brief version consists of 8 items that assess 2 domains of perfectionism: (1) Striving and (2) Evaluative Concerns. | Associated Features (Perfectionism) | Cronbach's alpha for the FMPS subscales ranged from 0.77 to 0.93. FMPS scores were correlated with scores on established measures of perfectionism and psychopathology.[19] FMPS-Brief subscales demonstrated good internal consistency (alphas  0.81). Evaluative Concerns demonstrated the strongest associations with measures of psychopathology.[20] | *English*, Chinese, Polish, Spanish | FMPS and FMPS-Brief items are provided in the primary publications. |

Italics used to indicate the language in which a scale was originally validated.

[a]List of available translations includes those that may be accessible through the scale's original authorship team, but for which psychometric data may not yet be published.

[†]Indicates that the instrument was published in last 5 years.

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**Table 4.**

Self-report questionnaires to assess eating disorder symptoms in specific populations

| Scale name | Description | Focus | Psychometrics | Translations [a] | Availability |
|---|---|---|---|---|---|
| Eating Disorders Screen for Athletes (EDSA) [21■■] [†] | 6-item, single-factor self-report eating disorder screening tool for male and female athletes. | Populations (Athletes) | Cronbach's alpha was 0.80 in male and 0.86 in female athletes. A cutoff score of 3.33 differentiated individuals with and without clinical levels of eating pathology. Measurement invariance was established for gender, level of competition, and sport type.[21■■] | *English* | EDSA is provided as an appendix in the primary publication. |
| Disordered Eating Screen for Athletes (DESA-6) [22■■] [†] | 6-item, single-factor self-report measure designed to screen for eating pathology among male and female athletes. | Populations (Athletes) | Test-retest reliability (r) was 0.83. DESA-6 scores were positively correlated with measures of eating pathology.[22■■] | *English,* Japanese | DESA-6 is provided as a supplemental file with the primary publication. |
| Eating Disorder Examination - Bariatric Surgery Version (EDE-BSV) [91] | Adaptation of the EDE interview, which is specifically designed for use with bariatric surgery patients. The EDE-BSV allows for a structured analysis of eating behavior, taking into account the altered gastrointestinal tract of postbariatric patients. Similar to the EDE, the EDE-BSV allows for the calculation of 4 subscale scores assessing: (1) Restraint, (2) Eating Concern, (3) Weight Concern, and (4) Shape Concern. | Populations (Bariatric) | According to the EDE-BSV, postsurgical bariatric patients reported no objective binge episodes, but 25% of the sample reported loss of control eating. Postsurgical loss of control eating assessed via the EDE-BSV was associated with more pathological scores on traditional measures of eating pathology and general psychopathology after surgery.[91] | *English,* Japanese | EDE-BSV is available from the primary author, and at: https://www.phenxtoolkit.org/protocols/view/230103. |
| Repetitive Eating Questionnaire (RepEAT-Q) [25] [†] | 12-item self-report questionnaire designed to assess the frequency of grazing behaviors and attitudes within eating disorder, nonclinical, and bariatric populations. In addition to the total score, 2 subscales index: (1) Repetitive Eating and (2) Compulsive Grazing. | Populations (Bariatric) | Cronbach's alpha for the total score and subscales was 0.85 in nonclinical and bariatric samples. Test-retest reliability (*r*) was 0.82. RepEAT-Q scores were (1) positively correlated with eating pathology in both groups, (2) positively correlated with body mass index in the nonclinical sample, and (3) negatively correlated with percentage weight loss in the postsurgical bariatric sample. A cutoff total score of 1.25 differentiated bariatric patients with and without grazing.[25] | *Portuguese,* English, Norwegian | RepEAT-Q items are provided in the primary publication, and available upon request from the primary author. |
| Short Inventory of Grazing (SIG) [36] [†] | 2-item self-report questionnaire assessing the frequency of grazing behavior over the past three months, as well as the frequency of experiencing loss of control during grazing episodes during the past three months. Categories indicating the severity of grazing (mild, moderate, severe) can be applied. | Populations (Bariatric) | Cronbach's alpha for the SIG was 0.72. SIG scores were positively correlated with measures of established measures of eating pathology and grazing behavior, and scores were significantly higher among individuals identified as having an eating disorder.[36] | *English* | SIG is provided as an Additional File in the primary publication. |
| Dutch Eating Behavior Questionnaire (DEBQ) [92] | 33-item self-report questionnaire developed to assess distinct eating behaviors with theorized relevance to obesity. The DEBQ contains 3 subscales assessing: (1) Emotional Eating, (2) | Populations (Obesity) | Cronbach's alpha for the DEBQ subscales ranged from 0.80 to 0.95. Subscales were positively intercorrelated with one another.[92] | *Dutch,* Chinese, English, French, German, Italian, Japanese, | DEBQ items are provided in the primary publication. |

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| Scale name | Description | Focus | Psychometrics | Translations [a] | Availability |
|---|---|---|---|---|---|
| | External Eating, and (3) Restrained Eating. | | | Malay, Maltese, Spanish, Turkish | |
| Eating Disorders in Obesity (EDO) [93] | 11-item self-report measure developed to assess binge eating and DSM-IV criteria for eating disorders (i.e., bulimia nervosa and binge-eating disorder) among individuals seeking weight-loss treatment. | Populations (Obesity) | Test-retest reliability (kappa) for EDO assessments of both eating disorder presence and binge eating was 0.65. Agreement (kappa) between the EDO and an establish measure of eating pathology was 0.67 for assessing the presence of an eating disorder, and 0.63 for assessing binge eating.[93] | *Swedish*, English | EDO is provided as an appendix in the primary publication. |
| Diabetes Eating Problem Survey-Revised (DEPS-R) [94] | 14-item self-report measure of disordered eating among individuals with type I diabetes. | Populations (Diabetes) | Cronbach's alpha for the DEPS-R was 0.86. DEPS-R scores were positively correlated with zBMI, diabetes-specific family conflict, negative affect around blood glucose monitoring, and parental burden. DEPS-R scores were negatively correlated with frequency of blood glucose monitoring and quality of life.[94] | *English*, Chinese, German, Greek, Italian, Turkish | DEPS-R items are provided in the primary publication. |
| Eating Disorder Assessment for Men (EDAM) [95] | 50-item self-report questionnaire designed to assess eating pathology among males. In addition to the total score, the EDAM is comprised of 4 subscales indexing: 1) Binge Eating, 2) Muscle Dysmorphia, 3) Body Dissatisfaction, and 4) Disordered Eating. | Populations (Males) | Cronbach's alpha for the total score was 0.91. The total score correctly predicted eating disorder status (i.e., current eating disorder versus healthy control) for 82.1% of the sample. [95] | *English* | EDAM may be available upon request from the study's primary author. |
| Muscularity-oriented Eating Test (MOET) [29■■] † | 15-item, single-factor measure of muscularity-oriented disordered eating. | Populations (Males) | Internal consistency (omega) ranged from 0.92 to 0.93 in samples of undergraduate men. Test-retest reliability (r) was 0.75. MOET scores were positively correlated with measures of eating pathology, drive for muscularity, and muscle dysmorphia.[29■■] | *English* | MOET is provided as an appendix in the primary publication. |
| Eating for Muscularity Scale (EMS) [30■■] † pas0000804_supp.html. | 27-item, 9-factor self-report questionnaire assessing muscularity-oriented disordered eating attitudes and behaviors related to: (1) Preoccupation, (2) Diet Gain, (3) Diet Loss, (4) Dietary Restraint, (5) Excessive Attention, (6) Functional Impairment, (7) Health Risk, (8) Compensatory Exercise, and (9) Negative Affect. In addition to the subscale scores, the EMS also produces a total score. | Populations (Males) | Cronbach's alpha for the total score was 0.95 in a mixed-gender community sample. Test-retest reliability (*r*) 0.90. The EMS total score and subscale scores were positively correlated with measures of eating pathology and muscularity dissatisfaction.[30■■] | *English* | EMS is provided as supplementary material with the primary publication, and available at: https://supp.apa.org/psycarticles/supplemental/pas0000804/ |

Italics used to indicate the language in which a scale was originally validated.

[a] List of available translations includes those that may be accessible through the scale's original authorship team, but for which psychometric data may not yet be published.

† Indicates that the instrument was published in last 5 years.