

# Assessment of Binge Eating in Overweight Youth Using a Questionnaire Version of the Child Eating Disorder Examination with Instructions

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## ABSTRACT

**Objective:** Existing self-report methods for assessing eating disorder (ED) symptoms in youth do not adequately measure binge eating and lack sufficient psychometric support. The Youth Eating Disorder Examination-Questionnaire (YEDE-Q), a self-report version of the Child Eating Disorder Examination (ChEDE), was designed to assess the spectrum of ED psychopathology in youth.

**Method:** The YEDE-Q was compared to the ChEDE and the Questionnaire for Eating and Weight Patterns-Adolescent version (QEWPA) in a sample of 35 overweight adolescents aged 12–17.

**Results:** The YEDE-Q showed significant agreement ( $p < .001$ ) with the ChEDE on

all four subscale scores, the global score, and measurement of objective bulimic episodes. The YEDE-Q and the QEWPA showed significant agreement ( $p < .001$ ) on the measurement of shape and weight concerns.

**Conclusion:** The YEDE-Q appears promising in the assessment of eating-related pathology in overweight adolescents, but remains in need of validation in children and ED populations. © 2007 by Wiley Periodicals, Inc.

**Keywords:** assessment; eating disorder pathology; binge eating; interview; questionnaire; adolescent; overweight

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## Introduction

Early recognition of eating disordered behaviors and attitudes is crucial during childhood and adolescence, when prevention or early intervention has the potential to reduce the likelihood of eating disorder (ED) onset or chronicity.<sup>1–4</sup> Considering the disadvantages of a semistructured interview (e.g., time constraints, assessor training), a psychometrically-sound self-report questionnaire assessing ED psychopathology in youth could prove useful for the identification of high risk status or as a clinically practical screening instrument.

Disordered eating behaviors and attitudes appear to be quite common in childhood and adolescence,<sup>5–9</sup> and are associated with a host of negative health consequences<sup>10–16</sup> as well as an increased risk for the development of a full-syndrome ED.<sup>17–21</sup> In particular, overweight youth are significantly more likely than their non-overweight peers to report body dissatisfaction,<sup>22,23</sup> binge eating,<sup>7,24</sup> and the use of unhealthy weight control methods,<sup>23,25,26</sup> and overweight in childhood has been identified as a specific risk factor for bulimia nervosa (BN) and binge eating disorder (BED).<sup>27–29</sup> Overweight youth with high shape and weight concerns appear to exhibit reduced quality of life and greater impairments in psychosocial functioning relative to their lower-risk peers,<sup>30</sup> and those with binge eating problems demonstrate increased ED and general psychopathology compared to weight-matched controls.<sup>31–35</sup> Furthermore, binge eating in youth has been associated both cross-sectionally and prospectively with increases in body weight and/or adiposity,<sup>34,36,37</sup> potentially exposing youth with binge eating problems to the elevated medical and psychosocial comorbidities associated with obesity.<sup>38</sup> Taken together, these findings suggest the need for a rapid and cost-effective method for early identification of ED symptoms, particularly in overweight youth, to

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provide appropriate prevention or early intervention strategies.

Assessment of self-reported binge eating in youth is especially problematic, given the ambiguity of terms such as “large amount of food” and “loss of control.”<sup>39,40</sup> Indeed, existing instruments have generally failed to adequately assess this behavior, especially in younger children. For example, a comparison of a questionnaire-adapted Dutch version of the Child Eating Disorder Examination (ChEDE) to the full ChEDE in overweight, treatment-seeking youth<sup>41</sup> failed to produce a significant correlation in the measurement of objective bulimic episodes (OBEs; consumption of an unambiguously large amount of food, accompanied by loss of control). Similarly, Tanofsky-Kraff et al.<sup>42</sup> found the Questionnaire for Eating and Weight Patterns-Adolescent version (QEWPA) to lack adequate sensitivity for the presence of overeating episodes compared to the ChEDE; specifically, the two measures were in agreement on the classification of OBEs for only 1.1% of participants. These results suggest that additional instructions may be needed for children to reliably report on such symptomatology. In adult samples, several studies have shown that including an instruction sheet on the Eating Disorder Examination-Questionnaire (EDE-Q) containing explicit definitions of binge eating led to good agreement between the EDE-Q and the Eating Disorder Examination (EDE) in the measurement of binge eating.<sup>43,44</sup> Such detailed explanations of ambiguous terms may assist children and adolescents in correctly classifying episodes of binge eating as well.

Given the limitations of questionnaire methods as outlined earlier, there is a need for a self-report instrument that can reliably assess the range of ED psychopathology, particularly binge eating, in diverse populations of children and adolescents. The Youth Eating Disorder Examination-Questionnaire (YEDE-Q; measure available upon request from the corresponding author) was designed to: (1) assess the full spectrum of ED psychopathology; (2) improve measurement of binge eating by explaining ambiguous terms such as “large” and “loss of control”; and (3) apply to a broad audience by using language appropriate for respondents within the full range of ages and reading abilities. The YEDE-Q was adapted from the EDE-Q for adults, and includes a child-adapted version of the binge rating instructions developed by Goldfein et al.<sup>43</sup> Furthermore, the YEDE-Q has a literacy level consistent with a third-grade reading ability, potentially expanding its applicability not only to younger children, but also to adolescents with reading or comprehension difficulties.

The primary aim of the current study is to examine the concurrent validity of the YEDE-Q in comparison to the ChEDE, the semistructured interview upon which it is based, in overweight treatment-seeking adolescents. Secondary aims include comparing the YEDE-Q to another validated questionnaire for ED assessment in adolescents, the QEWPA, as well as examining any potential predictors of agreement between the YEDE-Q and the ChEDE. This is the first study to examine the psychometric properties of a questionnaire version of the ChEDE including child-adapted binge rating instructions<sup>43</sup> in overweight treatment-seeking adolescents. This study represents an initial attempt at validating this instrument for use in children, and youth with clinically significant eating disturbances.

## Method

### Participants

The present sample was comprised of 35 individuals (71.4% female) participating in a randomized, controlled trial of an Internet-based weight-loss and body image intervention for overweight adolescents (Celio Doyle A, Goldschmidt A, Huang C, Taylor CB, Wilfley DE. Early intervention of overweight and eating disorder attitudes and behaviors via the Internet in adolescents: A randomized controlled trial, submitted). One of the two intervention sites (St. Louis, Missouri) participated in the present sub-study. The sample was recruited in two cohorts (cohort 1,  $n = 15$ ; cohort 2,  $n = 20$ ), which did not differ significantly in age, body mass index (BMI;  $\text{kg}/\text{m}^2$ ), sex, or race/ethnicity (all  $ps > .28$ ). Participants ranged from 12 to 17 years of age, with a mean age of 13.8 at baseline ( $SD = 1.6$ ). The sample was 51.4% Caucasian, 40.0% African-American, 2.9% Hispanic, and 5.7% other. The BMI of the sample ranged from  $24.3 \text{ kg}/\text{m}^2$  to  $58.2 \text{ kg}/\text{m}^2$  ( $M = 35.3$ ;  $SD = 7.1$ ). The mean percent overweight for the sample, calculated using centers for disease control and prevention growth charts for age and sex,<sup>45</sup> was 98.1 ( $SD = 2.3$ ), while the mean standardized BMI was 2.26 ( $SD = 0.42$ ).

### Procedure

Participants were recruited to the larger treatment study through pediatrician referrals, newspaper ads, and flyers inviting overweight teens ( $\text{BMI} \geq 85\text{th}$  percentile) with Internet access to take part in a 16-week study focused on healthy eating, exercise, and improving body image. The study was approved by the Washington University School of Medicine IRB. Initial phone screens excluded individuals with a current or past diagnosis of an ED; medical conditions resulting in significant weight

changes or precluding moderate physical activity; use of medication significantly affecting weight; or reading level below the sixth grade.

Upon meeting initial entry criteria, potential participants were invited to complete an in-person assessment to determine suitability for the larger intervention study. Informed consent was obtained from adolescents and a parent prior to completion of the assessment battery, which included self-report questionnaires, the ChEDE, and height and weight measurement. The YEDE-Q and ChEDE both focused on the last 28 days and were administered on the same day to ensure coinciding time periods. The YEDE-Q was administered first to ensure that comprehension of items on the self-report questionnaire could not be attributed to detailed explanation of concepts by the interviewer during the ChEDE. Assessors were thoroughly trained in administration of both the child and adult forms of the EDE prior to initiation of the study. ChEDE assessors were blind to responses on the self-administered questionnaire.

### Measures

**Child Eating Disorder Examination 12.0.** The Child Eating Disorder Examination (ChEDE)<sup>46</sup> is a semistructured, interviewer-based instrument aimed at assessing the key behavioral and attitudinal correlates of EDs in children aged 8–14 years. Like the adult form of the interview,<sup>47</sup> the ChEDE generates four subscale scores (Restraint, Eating Concern, Weight Concern, and Shape Concern) and a global score measuring the overall severity of ED psychopathology. The ChEDE also contains diagnostic items that can be used to arrive at a clinical diagnosis of an ED. Further, three forms of overeating are distinguished: OBEs, in which an unambiguously large amount of food is consumed, accompanied by a sense of loss of control over eating; subjective bulimic episodes (SBEs), in which the amount of food consumed is viewed as excessive by the examinee but is not unambiguously large, and loss of control is present; and objective overeating episodes (OOs), in which an unambiguously large amount of food is consumed in the absence of loss of control over eating. Modifications of the adult EDE found in the ChEDE include adapting its language to address comprehension concerns in younger children, and the addition of a card-sort task to supplement items addressing over-valuation of shape and weight.

The EDE is considered the “gold standard” for ED assessment, as supported by demonstrations of its construct validity, internal consistency,<sup>48</sup> concurrent validity,<sup>49</sup> inter-rater reliability, and test-retest reliability.<sup>50,51</sup> Initial studies of the ChEDE in eating disordered youth<sup>46</sup> have produced global and subscale scores comparable to those observed in adult patients with EDs. More recent studies<sup>41</sup> have found good internal consistency for most

ChEDE subscales, and adequate inter-rater and test-retest generalizability.<sup>41,52</sup> The ChEDE was also found to discriminate well between eating disordered and non-eating disordered individuals, as well as between individuals with AN and those with other eating disturbances.<sup>52</sup>

**Youth Eating Disorder Examination-Questionnaire.** The Youth Eating Disorder Examination-Questionnaire (YEDE-Q) was adapted from the EDE-Q 5.2<sup>40</sup> for use with children. Major changes to the EDE-Q were based on those originally made in the development of the ChEDE, and also included simplification of descriptive terms from the EDE-Q’s severity scale (e.g., use of “not at all,” “a little bit,” “a lot,” “very, very much”), and use of words consistent with a third-grade reading level. In addition, instructions developed by Goldfein et al.<sup>43</sup> to assist adults with binge ratings were modified for use in the YEDE-Q by including examples and pictures of large episodes, as well as vignettes exemplifying a child experiencing loss of control.

The EDE-Q subscales on which the YEDE-Q is based appear to have adequate internal consistency and test-retest reliability.<sup>53,54</sup> In addition, the EDE-Q has shown good agreement with the EDE in its measurement of attitudes and some behaviors (e.g., compensatory behaviors) associated with EDs, across both eating disordered and non-eating disordered samples.<sup>40,55–57</sup> Of note, the EDE-Q tends to overestimate the severity of psychopathology relative to the EDE, and may be problematic in the measurement of behaviors for which no clear definition is provided, such as overeating and loss of control.<sup>58,59</sup>

**Questionnaire for Eating and Weight Patterns-Adolescent Version.** The Questionnaire for Eating and Weight Patterns-Adolescent version (QEWPA)<sup>60</sup> is a 12-item self-report questionnaire designed to assess binge eating and related pathology in adolescents. The QEWPA has demonstrated sufficient test-retest reliability,<sup>61</sup> and appears to converge with the Child Eating Attitudes Test (ChEAT)<sup>62</sup> in terms of classification of pathology level (e.g., depressive and ED symptomatology) according to BED diagnostic status.<sup>60</sup> However, as mentioned earlier, it has shown limited convergent validity when compared with the ChEDE in terms of presence and type of eating episode.<sup>42</sup>

### Data Analysis

Pearson chi-square and independent samples *t*-tests were used to evaluate cohort differences. The Kolmogorov–Smirnov test was utilized to determine normality of the distributions in the sample. To compare the ChEDE and the YEDE-Q, Pearson correlations were used for normally distributed scores on the Weight Concern subscale, and Spearman’s rho correlations were used to account for the nonnormal distributions of the Restraint, Eating Concern, and Shape Concern subscales; the global

**TABLE 1. Eating disorder psychopathology and behaviors in the past month**

|   | ChEDE       | YEDE-Q                 | Correlation | Compare Means Test Statistic <sup>a</sup> |
|---|-------------|------------------------|-------------|---|
| Restraint subscale ( <i>n</i> = 35)           | .90 ± 1.12  | 1.15 ± 1.09            | .58*        | <i>z</i> = -1.90, <i>p</i> = .058         |
| Eating Concern subscale ( <i>n</i> = 35)      | .21 ± .38   | .94 ± .97              | .58*        | <i>z</i> = -4.48, <i>p</i> < .001         |
| Weight Concern subscale ( <i>n</i> = 35)      | 1.20 ± 1.08 | 1.92 ± 1.35            | .70*        | <i>t</i> (34) = 4.33, <i>p</i> < .001     |
| Shape Concern subscale ( <i>n</i> = 35)       | 1.23 ± 1.29 | 2.19 ± 1.65            | .84*        | <i>z</i> = -4.75, <i>p</i> < .001         |
| Global score ( <i>n</i> = 35)                 | .89 ± .74   | 1.55 ± 1.03            | .75*        | <i>z</i> = -4.46, <i>p</i> < .001         |
| OBE days ( <i>n</i> = 33) <sup>b</sup>        | .17 ± .51   | .57 ± .74 <sup>c</sup> | .53*        | <i>z</i> = -3.28, <i>p</i> = .001         |
| OBE episodes ( <i>n</i> = 35)                 | .17 ± .51   | 1.36 ± 3.33            | .73*        | <i>z</i> = -2.21, <i>p</i> = .027         |
| SBE episodes ( <i>n</i> = 35)                 | .34 ± .87   | 1.7 ± 3.67             | .25         | <i>z</i> = -2.63, <i>p</i> = .009         |
| OO episodes ( <i>n</i> = 33) <sup>b</sup>     | .69 ± 1.81  | .56 ± 4.19             | .20         | <i>z</i> = -.401, <i>p</i> = .688         |
| Driven exercise ( <i>n</i> = 34) <sup>b</sup> | .23 ± 1.35  | 3.35 ± 7.02            | .16         | <i>z</i> = -2.59, <i>p</i> = .01          |

Notes: ChEDE, Child Eating Disorder Examination; YEDE-Q, Youth Eating Disorder Examination-Questionnaire; OBE, objective bulimic episode; SBE, subjective bulimic episode; OO, Objective overeating.

<sup>a</sup> Paired sample *t*-tests were used for normally distributed subscale and frequency scores. Wilcoxon signed-rank tests were used for nonnormally distributed subscale and frequency scores.

<sup>b</sup> Participants were excluded from these analyses due to invalid data.

<sup>c</sup> OBE days are scaled on the YEDE-Q such that no days = 0; 1–5 days = 1; 6–12 days = 2; 13–15 days = 3; 16–22 days = 4; 23–27 days = 5; and every day = 6. Thus, a mean OBE days score of .57 indicates a sample average of less than one OBE day in the last month.

\**p* < .001.

score; OBE days and episodes; SBE episodes; OO episodes; and driven exercise. Self-induced vomiting, laxative misuse, and diuretic misuse were not endorsed by any participants on any measure, and thus were not included in the analyses. Frequencies of ED behaviors were compared for the 28 days preceding the assessment. Paired-sample *t*-tests and Wilcoxon signed-rank tests were used to determine significant differences in subscale score or frequency ratings. Spearman's rho correlations were used to compare the YEDE-Q to the QEWP-A. To determine whether age, weight, or sex predicts higher agreement between the YEDE-Q and the ChEDE in terms of subscale scores, global score or endorsement of OBEs, interaction terms were entered into a regression with ChEDE scores as the dependent variable.

## Results

### Comparisons Between the YEDE-Q and ChEDE

Table 1 reports mean subscale and global scores, as well as correlations between and comparisons of means for the YEDE-Q and ChEDE subscale scores.

All four subscale scores and the global scores generated by the YEDE-Q and ChEDE were significantly correlated, with correlations ranging from .58 to .84. The YEDE-Q yielded significantly higher scores than the ChEDE on all but the Restraint subscale. There was generally close agreement between the YEDE-Q and the ChEDE, with 80% of participants scoring within one scale point on the Restraint subscale; 71.4% doing so on the Eating Concern subscale; 68.6% doing so on the Weight Concern subscale; and 62.9% doing so on the Shape Concern subscale. Regarding the global score, 74.3% of participants showed agreement

**TABLE 2. Subscale internal consistency**

| Subscale       | Cronbach Alpha |                     |                     |
|----------------|----------------|---------------------|---------------------|
|                | YEDE-Q         | ChEDE <sup>53</sup> | EDE-Q <sup>54</sup> |
| Restraint      | .63            | .80                 | .84                 |
| Eating Concern | .69            | .91                 | .93                 |
| Weight Concern | .78            | .90                 | .89                 |
| Shape Concern  | .89            | .88                 | .78                 |

Notes: YEDE-Q, Youth Eating Disorder Examination-Questionnaire; ChEDE, Child Eating Disorder Examination; EDE-Q, Eating Disorder Examination-Questionnaire.

within one scale point, indicating that individuals were overall classified as exhibiting similar degrees of pathology. To examine agreement on classification of risk status, individuals were classified as high risk if their Weight Concern or Shape Concern subscale scores were above the published means for noneating disordered adolescent females,<sup>52,63</sup> or if they endorsed any episodes of loss of control eating (i.e., OBEs or SBEs), which has been shown to be associated with other ED symptoms in overweight youth.<sup>7,34</sup> The difference between YEDE-Q and ChEDE classification of high- and low-risk groups was significant ( $\chi^2(1, n = 35) = 14.29; p < .001$ ), which is not surprising given that the YEDE-Q means for the Shape and Weight Concern subscales and for episodes of loss of control eating (see below) were significantly greater than those generated by the ChEDE.

Cronbach alphas for the YEDE-Q are reported in Table 2. Neither age, BMI *z*-score, nor sex was found to predict better agreement between any of the YEDE-Q and ChEDE subscale scores or global scores.

In terms of ED behaviors, the YEDE-Q and ChEDE were significantly correlated for OBE days and episodes, but not for SBE episodes, OO episodes, or driven exercise. The YEDE-Q generated

**TABLE 3. Agreement between the YEDE-Q and the ChEDE in identifying presence of OBEs**

| ChEDE           | YEDE-Q                                    |  | $\chi^2$ |
|-----------------|---|--|----------|
|                 | Binge eating<br><i>n</i> (%) <sup>a</sup> | No binge eating<br><i>n</i> (%) <sup>a</sup> |          |
| Binge eating    | 4 (11.4)                                  | 3 (8.6)                                      | 16.91*   |
| No binge eating | 0 (0.0)                                   | 26 (74.3) <sup>b</sup>                       |          |

Notes: YEDE-Q, Youth Eating Disorder Examination-Questionnaire; ChEDE, Child Eating Disorder Examination; OBE, objective bulimic episode.

<sup>a</sup>Indicates % of the full sample (*n* = 35).

<sup>b</sup>Percentages do not add up to 100% because of exclusion of participants with invalid data.

\**p* < .001.

**TABLE 4. Rates of participants endorsing presence of eating episodes**

| Episode Type | ChEDE <i>n</i> (%) <sup>a</sup> | YEDE-Q <i>n</i> (%) <sup>a</sup> |
|--------------|---------------------------------|----------------------------------|
| OBE days     | 4 (11.4)                        | 15 (42.9)                        |
| OBE episodes | 4 (11.4)                        | 7 (20.0)                         |
| SBE episodes | 6 (17.1)                        | 12 (34.3)                        |
| OO episodes  | 10 (28.6)                       | 7 (20.0)                         |

Notes: ChEDE, Child Eating Disorder Examination; YEDE-Q, Youth Eating Disorder Examination-Questionnaire; OBE, objective bulimic episode; SBE, subjective bulimic episode; OO, objective overeating.

<sup>a</sup>Indicates % of the full sample (*n* = 35).

significantly greater frequency ratings than the ChEDE for OBE days and episodes, SBE episodes, and driven exercise. These data are presented in Table 1. Results of examining agreement between the YEDE-Q and the ChEDE in terms of endorsement of any OBEs are reported in **Table 3**; **Table 4** reports the number of participants endorsing different types of eating episodes according to both measures. An analysis of the closeness of agreement between the YEDE-Q and the ChEDE in measurement of frequency of ED behaviors revealed that 100% of participants showed agreement within two OBE days; 82.9% did so within two OBE episodes; 82.9% did so within two SBE episodes; and 77.1% did so within two OO episodes. Neither age nor BMI *z*-score were found to predict greater concordance between the YEDE-Q and ChEDE in terms of OBE days or episodes. However, sex did significantly predict agreement between the YEDE-Q and the ChEDE in measurement of OBE days (*p* = .017), with females exhibiting greater agreement between the two measures. The effects of sex on agreement between the YEDE-Q and the ChEDE in terms of OBE episodes could not be explored due to lack of variability in OBE episodes among males.

**Comparisons Between the YEDE-Q and the QEWP-A**

Comparisons of the QEWP-A item assessing importance of shape or weight and both the YEDE-Q

**TABLE 5. YEDE-Q and ChEDE shape and weight concerns comparisons with the QEWP-A**

|                           | QEWP-A Correlations |       |
|---------------------------|---------------------|-------|
|                           | YEDE-Q              | ChEDE |
| Weight Concern subscale   | .61*                | .55*  |
| Shape Concern subscale    | .58*                | .60*  |
| Importance of weight item | .55*                | .45*  |
| Importance of shape ITEM  | .60*                | .39** |

Notes: YEDE-Q, Youth Eating Disorder Examination-Questionnaire; ChEDE, Child Eating Disorder Examination; QEWP-A, Questionnaire for Eating and Weight Patterns-Adolescent version.

\**p* < .01.

\*\**p* < .05.

and ChEDE Weight and Shape Concern subscales and individual diagnostic items are presented in **Table 5**. The YEDE-Q and the QEWP-A were not significantly correlated in terms of frequency ratings for OBE days or episodes of driven exercise. In comparisons of the QEWP-A and the ChEDE, the two measures were not significantly correlated in terms of frequency ratings for OBE days; comparisons for episodes of driven exercise were not possible due to the lack of variability in driven exercise ratings on the ChEDE.

**Conclusion**

The aim of the current study was to provide initial psychometric validation of a questionnaire version of the ChEDE with instructions to assess binge eating in overweight adolescents. To examine its convergent validity, the YEDE-Q was compared to two other measures designed to assess ED symptomatology in youth. The YEDE-Q was found to have significant agreement with the ChEDE in the measurement of most ED attitudes and behaviors. The YEDE-Q also showed significant agreement with the QEWP-A in the measurement of shape and weight concerns, but not in the measurement of ED behaviors.

When comparing the YEDE-Q with the ChEDE, significant correlations were yielded for all four subscale scores and the global score. The YEDE-Q consistently yielded higher mean subscale scores and frequency ratings than the ChEDE, a difference that was significant for all but the Restraint subscale and OO episodes comparisons. This finding converges with previous comparisons between questionnaire and interview forms of the EDE,<sup>41,55,58,59,64</sup> and was likely due to the fact that the ChEDE allows for detailed probing of interviewees to ensure complete comprehension of items.

Measures of internal consistency were lower than those reported for both the ChEDE<sup>52</sup> and the EDE-Q<sup>53</sup> on all but the Shape Concern subscale (Table 3), and two subscales, Restraint and Eating Concern, did not reach the standard for acceptable internal consistency proposed by Nunnally ( $\alpha = 0.70$ ).<sup>65</sup> However, all subscales reached the minimum  $\alpha$  of 0.60 suggested by Nunnally<sup>65</sup> for pilot measures. Only the Restraint subscale was considerably below the more conservative proposed  $\alpha$  of 0.70, possibly because this subscale contains items primarily assessing attempts to perform a behavior rather than actual successful implementation of that behavior. These items may be conceptually more difficult for younger respondents to understand given that they contain both a cognitive and a behavioral element, with words such as “try” indicating both subjective, mental efforts, and objective attempts (e.g., wanting to restrict food intake and making actual overt attempts to do so). Empirically, elimination of the “Empty Stomach” item (“on how many of the past 28 days have you wanted your stomach to be empty-to not have any food in it at all?”) would raise the internal consistency of the Restraint subscale the most (to 0.71), which is not surprising given that the current sample did not include individuals with AN or BN, the population in whom this item would have the most relevance; however, removing this item from the measure is not indicated since it would appear to have more diagnostic importance in eating disordered individuals, as supported by previous examinations of internal consistency of ChEDE and EDE-Q subscales.<sup>52,53</sup> Future studies should examine the internal consistency of this subscale among youth with EDs, and possibly explore means for improvement.

The YEDE-Q and the ChEDE showed significant agreement for both OBE days and episodes, representing a considerable improvement over other instruments assessing ED symptomatology in youth.<sup>41,42</sup> This may reflect the addition of the binge rating instructions for youth, which offer detailed explanations of ambiguous concepts such as “objectively large” and “loss of control.”

When holding the ChEDE as the “gold standard,” the YEDE-Q appeared to be adequate in its detection of individuals endorsing binge eating, identifying only 3 (8.6%) false-positives and 0 (0%) false negatives. It is encouraging that the YEDE-Q overestimated rather than underestimated cases of binge eating, especially if it is to be used as a screening instrument. Indeed, there is less danger in falsely identifying an individual endorsing binge eating and needlessly providing further assessment than there is in overlooking an adolescent suffer-

ing from binge eating problems who could potentially benefit from further assessment and early intervention.

Comparisons between the YEDE-Q and the ChEDE yielded non-significant correlations for SBE and OO episodes, as well as driven exercise. This could be attributed to the ChEDE’s investigator-based format, in which the assessor applies objective criteria to information supplied by the respondent to determine frequency and severity ratings; thus, episodes considered SBEs, OOs, or driven exercise by the respondent may not have been deemed as such by the ChEDE interviewer’s criteria, and vice versa. Although OBEs are the only eating episodes involved in generating ED diagnoses, future iterations of the YEDE-Q may explore ways to improve agreement between the YEDE-Q and the ChEDE on ratings of SBEs and OOs, as these items may be useful for identifying individuals at risk for developing an ED.

Significant correlations were found for the QEWP-A item assessing importance of shape and weight, and the YEDE-Q’s Shape Concern and Weight Concern subscales as well as individual items assessing the importance of shape and weight. In contrast, there was low agreement between the QEWP-A and the YEDE-Q in the measurement of binge eating. The QEWP-A also showed non-significant agreement with the ChEDE in the measurement of OBEs, providing initial evidence that the lack of agreement between the QEWP-A and the YEDE-Q may be due to the low sensitivity of the QEWP-A, corroborating reports by Tanofsky-Kraff et al.<sup>42</sup>

Limitations of the current study include the small sample size, as well as the use of an adolescent sample that was not drawn from an ED population. Although age was not found to predict better agreement between the YEDE-Q and the ChEDE, the exclusion of participants below a sixth grade reading level likely enhanced comprehension of items. Thus, the absence of an interaction between age and YEDE-Q scores could represent a ceiling effect. Indeed, it would be premature to endorse the YEDE-Q as a measure for youth outside of the current sample’s age range, as children (i.e., below age 12) are those most likely to exhibit difficulties completing a questionnaire version of the EDE. Specifically, children may not be able to understand complex nuances of questionnaire items without assistance, such as the difference between shape and weight; distinctions regarding intending to, attempting to, and actually performing a behavior; and fine gradations in severity levels. Thus, further validation of the YEDE-Q as compared to the

ChEDE in children is indicated. In addition, the use of a low-pathology group precluded generalization to ED populations. It is unclear whether significant correlations would be found for greater severity of symptoms, or whether the high correlations found in the current study should be attributed to floor effects. However, given that the current sample of overweight youth represents a group at elevated risk for eating pathology in whom assessment is clearly warranted, study results suggest that the YEDE-Q could be a useful measure for individuals with more severe eating problems. Indeed, the current study represents a crucial first step in paving the way for future YEDE-Q validation work with relevant populations.

In terms of future directions, larger replication studies clearly need to be undertaken to determine the generalizability of findings to younger age groups, populations with lower reading abilities or those for whom English is not the primary language, and individuals with EDs. Furthermore, normative data should be established in ED subgroups, as well as obese versus normal-weight youth, to facilitate use of the YEDE-Q as a screening questionnaire. The YEDE-Q should also be compared to the EDE-Q to determine whether it confers any benefit beyond the more established measure.

In conclusion, the YEDE-Q appears to be a promising measure for the assessment of ED behaviors and attitudes in overweight adolescents. While the ChEDE remains the measure of choice in ED assessment due to its allowance for detailed probing by the interviewer, the YEDE-Q shows the potential to contribute in important ways as both a screen and a research instrument. Advantages include its relatively rapid administration, and its cost-effectiveness in terms of minimal assessor burden. Further examination will determine its suitability for children and other eating- and weight-disordered populations.

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