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Screening for eating disorders in primary care: EDE-Q versus SCOFF

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Abstract

Objective and Methods: The comparative validity of the Eating Disorder Examination Questionnaire (EDE-Q) (22 items) and SCOFF (five items) in screening for cases of the more commonly occurring eating disorders was examined in a primary care sample of young adult women ($n = 257$). Diagnoses were confirmed in a sub-group of interviewed participants ($n = 147$).
Results: Twenty-five cases, primarily variants of bulimia nervosa (BN) not meeting formal diagnostic criteria, were identified in the interviewed sample. An EDE-Q global score of $\geqslant 2.80$ yielded the optimal trade-off between sensitivity (Se) (0.80) and specificity (Sp) (0.80) (positive predictive value (PPV) = 0.44), whereas a score of two or more positive responses on the SCOFF was optimal (Se = 0.72, Sp = 0.73, PPV = 0.35). Validity coefficients for both measures varied as a function of participants' age and body weight, although these effects were more pronounced for the SCOFF.
Conclusions: Both measures performed well in terms of their ability to detect cases and to exclude non-cases of the more commonly occurring eating disorders in a primary care setting. The EDE-Q performed somewhat better than the SCOFF and was more robust to effects on validity of age and weight. These findings need to be weighed against the advantage of the SCOFF in terms of its brevity.

Keywords: Eating disorders; Primary care; EDE-Q; SCOFF; Predictive validity

Introduction

The Eating Disorder Examination Questionnaire (EDE-Q) (Fairburn & Beglin, 1994) is a widely used self-report measure of eating disorder psychopathology (cf. Mond, Hay, Rodgers, & Owen, 2007a; Mond, Hay, Rodgers, Owen, & Beumont, 2004). Derived from the Eating Disorder Examination (EDE) interview

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(Fairburn & Cooper, 1993), the EDE-Q provides a comprehensive assessment of the specific psychopathology of eating-disordered behaviour in a comparatively brief (36-item) self-report format.

A high level of agreement between the EDE-Q and EDE assessment of the core attitudinal features of eating disorder psychopathology has been demonstrated in both community and clinical samples of adolescent and young adult women (Binford, le Grange, & Jellar, 2005; Black & Wilson, 1996; Carter, Aime, & Mills, 2001; Fairburn & Beglin, 1994; Goldfein, Devlin, & Kamenetz, 2005; Grilo, Masheb, & Wilson, 2001; Kalarchian, Wilson, Brolin, & Bradley, 2000; Mond et al., 2004; Passi, Bryson, & Lock, 2002; Sysko, Walsh, & Fairburn, 2005; Wilfley, Schwartz, Spurrell, & Fairburn, 1997; Wolk, Loeb, & Walsh, 2005). Acceptable internal consistency, test–retest reliability, and longer-term temporal stability of the EDE-Q assessment of these features have also been established (Luce & Crowther, 1999; Mond, Rodgers, Hay, Owen, & Beumont, 2004; Reas, Grilo, & Masheb, 2006). Agreement between EDE-Q and EDE assessment of binge eating and other eating disorder behaviours has been found to be lower and more variable, in part reflecting the lower temporal stability of items assessing these behaviours (Mond, Rodgers, Hay, Owen, et al., 2004). In addition, items addressing eating disorders behaviours may be more susceptible to denial or distortion than those addressing attitudinal features (Mond et al., 2007a).

Much less is known about the validity of the EDE-Q as a screening instrument, namely, its predictive validity (Mond et al., 2004). Only one study has considered the validity of the EDE-Q in screening for cases of eating disorders in community samples. Mond et al. (2004) found that the EDE-Q had acceptable validity when used to detect community cases of clinically significant eating disorders. In an earlier study, Beglin and Fairburn (1992) examined the predictive validity of a short form of the EDE-Q, comprising those nine items which best discriminated eating disorder cases from non-cases in a community sample of young adult women. While receiver operating characteristic (ROC) analysis indicated that the short form (EDE-screening version) (EDE-S) performed comparatively well, there is no reason to expect that the psychometric properties of a short form would be comparable to those of the full EDE-Q. In addition, cut-off points associated with the optimal validity coefficients were not reported for the EDE-S; hence, the EDE-S has rarely been employed in epidemiological studies.

We are not aware of any studies to consider the validity of the EDE-Q in screening for cases of eating disorders in primary care. Research of this kind would be of interest for two reasons. First, the critical role of primary care practitioners in the detection and management of eating disorders is increasingly recognized (Currin, Schmidt, & Waller, 2007; Treasure, Troop, & Ward, 1996). Second, the detection of eating disorders in primary care has been found to be poor (Hay, Marley, & Lemar, 1998; Hoek & van Hoeken, 2003; Johnson, Spitzer, & Williams, 2001). The recognition of bulimic eating disorders, namely, bulimia nervosa (BN) and variants of BN not meeting formal diagnostic criteria, such as binge eating disorder (BED) (APA, 1994) and "purging" (Keel, 2005) or "compensatory" (Mond et al., 2006) disorder, may be particularly poor (Hay et al., 1998; Johnson et al., 2001; Mond, Hay, Rodgers, & Owen, 2006a). Hence, there is a need to evaluate the performance of instruments that may facilitate the detection and management of these more commonly occurring eating disorders. Although various self-report measures of eating disorder psychopathology have been developed (Anderson & Williamson, 2002), none have demonstrated validity in screening for eating disorders in primary care.

Recently, Morgan, Reid, and Lacey (1999) developed a brief (five-item) measure designed to detect cases of eating disorders in primary care, known as the SCOFF. In the initial validation study (Morgan et al., 1999), in the UK, the measure was completed by 116 eating disorder patients ($n = 116$; AN = 68, BN = 48), aged 18–40 years, receiving specialist treatment, as well as a control sample of 96 women with no eating disorder. At a threshold of two or more positive responses, sensitivity (Se) (proportion of true cases screening positive), specificity (Sp) (proportion of true non-cases screening negative), and positive predictive value (PPV) (proportion of screen positives found to be true cases), were, respectively, 100%, 87.5%, and 90.6%. These values reflect, in part, the use of sub-groups in which differences in levels of eating disorder psychopathology are most pronounced, namely, individuals with eating disorders receiving specialist treatment and healthy individuals. Subsequently, Luck et al. (2002) examined the validity of the SCOFF in a sample of 341 women aged 18–50 attending two primary care practices, of whom 13 were found to have a DSM-IV eating disorder diagnosis upon interview. At the optimal cut-off of $\geqslant 2$ positive responses, acceptable Se (84.6%) and Sp (89.6%) were again observed, but with a PPV of 24.4%.