

The Relation among Perfectionism, Obsessive-Compulsive Personality Disorder and Obsessive-Compulsive Disorder in Individuals with Eating Disorders

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ABSTRACT

Objective: Perfectionism and obsessionalism are core features of eating disorders (ED), yet the nature of their relation remains unknown. Understanding the relation between these traits may enhance our ability to identify relevant behavioral endophenotypes for ED.

Method: Six-hundred seven individuals with anorexia and bulimia nervosa from the International Price Foundation Genetic Study were assessed for perfectionism, obsessive-compulsive personality disorder (OCPD), and obsessive-compulsive disorder (OCD).

Results: No differences were found across ED subtypes in the prevalence of OCPD and OCD, nor with the association

between OCD and OCPD. Perfectionism scores were highest in individuals with OCPD whether alone or in combination with OCD.

Conclusion: Perfectionism appears to be more closely associated with obsessive-compulsive personality symptoms rather than OCD. The pairing of perfectionism with OCPD may be a relevant core behavioral feature underlying vulnerability to ED. © 2005 by Wiley Periodicals, Inc.

Keywords: eating disorders obsessive-compulsive personality disorder; obsessive-compulsive disorder; perfectionism

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Introduction

Perfectionism is a central feature of eating disorders (ED; Bastiani, Rao, Weltzin, & Kaye, 1995; Bulik et al., 2003; Halmi et al., 2000; Lilienfeld et al., 2000; Sutandar-Pinnock, Blake, Carter, Olmsted, & Kaplan, 2003), which may predate the onset of ED (Fairburn, Cooper, Doll, & Welch, 1999), typifies the acute phase of ED (Halmi et al., 2000; Lilienfeld

et al., 2000), and persists after recovery from ED (Bastiani et al., 1995; Kaye et al., 1998; Srinivasagam et al., 1995; Sutandar-Pinnock et al., 2003). Obsessive-compulsive disorder (OCD) is also frequently comorbid with ED—10%–60% in anorexia nervosa (AN) and 0%–40% in bulimia nervosa (BN; see review in Godart, Flament, Perdereau, & Jeammet, 2002). The prevalence of obsessive-compulsive personality disorder (OCPD) in ED patients is similar to

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that of OCD—3%–60% (Herzog, Keller, Lavori, Kenny, & Sacks, 1992; Piran, Lerner, Garfinkel, Kennedy, & Brouillette, 1988; Wonderlich, Swift, Slotnick, & Goodman, 1990), with lower prevalence reported when bulimic symptoms are present (Herzog et al., 1992). Family studies report increased prevalence of OCD and OCPD in relatives of individuals with ED (Bellodi et al., 2001; Lilenfeld et al., 1998). OCPD occurs more frequently in relatives of individuals with OCD than in relatives of controls (Samuels et al., 2000). It is unclear whether OCD and OCPD share common causative factors or represent distinct entities. Finally, studies on the relation between perfectionism and obsessive-compulsive traits reveal a significant correlation between some perfectionism subscales and obsessive-compulsive traits (Frost, Marten, Lahart, & Rosenblate, 1990; Frost & Steketee, 1997; Tozzi, Jacobson, Neale, Kendler, & Bulik, 2004).

Although perfectionism, OCPD, and OCD have all been implicated in the risk for ED, our understanding of how they interact in individuals with EDs is limited. We explored the nature of the relation among perfectionism, OCPD, and OCD to assist with the refinement of behavioral endophenotypes underlying vulnerability to ED.

Methods

Participants

Participants provided informed consent and were recruited from the Price Foundation Genetic Study of Bulimia Nervosa. Full details about the methodology and sample have been detailed elsewhere (Kaye et al., 2004). All sites received approval from local institutional review boards.

Probands (age 13–65 years) met lifetime criteria for BN, purging type, as defined in the 4th ed. of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994). Affected relatives (age 13–65 years) were biologically related to the proband and had at least one lifetime ED diagnosis. Only relatives with some form of AN and/or BN were included in these analyses. Males were excluded due to their rarity. Total sample size for the current study was 607. Based on detailed clinical interview data, participants were subtyped as follows: AN, restricting or purging subtype (absence of lifetime bingeing; $n = 75$); AN, bingeing subtype, or diagnoses of both AN and BN during the course of illness (presence of both AN and BN [ANBN] features; $n = 275$); and normal weight BN (absence of any lifetime AN; $n = 257$).

Assessments

Lifetime EDs were assessed with the Structured Inventory of Anorexia Nervosa and Bulimic Syndromes (SIAB; Fichter, Herpertz, Quadflieg, & Herpertz-Dahlmann, 1998), and with Module H of the Structured Clinical Interview for DSM-IV (SCID). Lifetime OCD and OCPD were assessed via the SCID-I (First, Gibbon, Spitzer, & Williams, 1997) and SCID-II (First, Gibbon, Spitzer, Williams, & Benjamin, 1997). Perfectionism was measured by the Multidimensional Perfectionism Scale (MPS; Frost et al., 1990), which includes six subscales: Concern over Mistakes (CM), Doubts about Actions (DA), Personal Standards (PS), Parental Criticism, Parental Expectations, and Organization (O). The PS subscale contains items referring to the setting of high standards and the importance placed on these standards for self-evaluation. The DA subscale refers to the tendency to doubt the ability to accomplish tasks. The CM subscale reflects the tendency to interpret mistakes as failures. The O subscale reflects the importance placed on orderliness and Parental Expectations and Parental Criticism are measures of perceived parental attitudes and behaviors.

Statistical Analyses

Participants were stratified into Group 1, neither OCD nor OCPD; Group 2, OCD, but no OCPD; Group 3, OCPD but no OCD; and Group 4, OCD and OCPD.

Mean differences on the standardized perfectionism dimensions across the four obsessive-compulsive groups were examined using analysis of variance with corrections for clustered sampling using generalized estimating equations (GEE; Diggle, Liang, & Zeger, 1994). Due to correlations between some scales and ED subtype, subtype was entered as a covariate. ED subtype \times scale interactions were not included because none was significant. Analyses were conducted using GENMOD in SAS version 8.1 (SAS, 1996).

This research was reviewed and approved by an institutional review board.

Results

The frequencies of OCD, OCPD, and OCD/OCPD in the total sample were 20%, 13%, and 16%, respectively. No significant differences in comorbidity frequencies were found among ED subtypes ($\chi^2 = 3.79$, $df = 3$, $p = .28$)—15% of the AN group, 21% of the ANBN group, and 21% of the BN group had OCD, and 15% of the AN group, 12% of the ANBN group, and 12% of the BN group had OCPD. OCD/OCPD was seen in 16% of the AN group, 20% of the ANBN group, and 12% of the BN group. Finally, 54% of the AN group, 48% of the ANBN group,

TABLE 1. Analysis of variance comparing four groups with GEE correction for each of the perfectionism measures

	<i>F</i> (<i>p</i>)	OC Group Differences	Group 1 <i>M</i> (<i>SD</i>) (<i>n</i> = 310)	Group 2 <i>M</i> (<i>SD</i>) (<i>n</i> = 123)	Group 3 <i>M</i> (<i>SD</i>) (<i>n</i> = 76)	Group 4 <i>M</i> (<i>SD</i>) (<i>n</i> = 98)
Concern over Mistakes	43.83 (.0001)	1≠2, 3, 4; 2≠4	27.21 (9.7)	30.89 (8.7)	32.98 (8.6)	35.36 (8.4)
Doubts about Actions	54.35 (.0001)	1≠2≠3, 4	10.92 (3.9)	12.51 (3.8)	14.13 (3.6)	14.69 (3.9)
Organization	5.39 (.5)		22.09 (5.9)	23.24 (5.6)	23.07 (5.2)	24.47 (5.5)
Parental Criticism	15.09 (.0002)	1, 2, 3≠4	10.31 (4.6)	11.36 (4.7)	10.53 (4.7)	12.73 (4.9)
Parental Expectations	14.19 (.0003)	1≠2, 4	13.40 (5.7)	15.03 (5.9)	14.79 (5.4)	15.80 (6.0)
Personal Standards	23.82 (.0001)	1, 2≠3, 4	24.02 (6.6)	25.01 (6.1)	27.41 (5.1)	27.95 (5.8)

Note: Groups: 1 = neither OCD nor OCPD; 2 = OCD only; 3 = OCPD only; 4 = OCD+OCPD. OC = obsessive-compulsive; OCD = obsessive-compulsive disorder; OCPD = obsessive-compulsive personality disorder; GEE = generalized estimating equations.

and 54% of the BN group reported neither OCD nor OCPD.

Across the four groupings, all perfectionism dimensions but the O subscale showed significant variability across groups (Table 1). Overall, Group 1 exhibited the lowest scores and Group 4 the highest scores on perfectionism subscales. The CM and DA subscales discriminated best between individuals with and without an obsessive-compulsive diagnosis. However, both of these subscales were better indicators of OCPD than OCD. PS was associated with OCPD. In contrast, Parental Expectations scores were significantly higher in Groups 2 and 4, suggesting a stronger association with OCD. Parental Criticism scores were significantly higher in Group 4, possibly indicating an association with generally elevated psychopathology.

Discussion

Perfectionism appears to be more closely associated with obsessive-compulsive personality features rather than OCD. The pairing of perfectionism with OCPD may be a relevant core behavioral feature underlying vulnerability to ED.

Although our study is strengthened by the large, well-characterized sample size, there are also limitations. Most notably, the sample is composed of families in which more than one member had an ED. Although none has yet been detected, subtle differences may exist in personality and comorbidity in individuals from higher density families in comparison to sporadic cases.

The combination of aspects of perfectionism such as concern over mistakes and doubts about actions and features of OCPD may represent an important phenotype indexing ED risk or prove valuable for refining phenotypic definitions in genetic studies of ED (Westen & Harnden-Fischer, 2001).

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