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Longitudinal comparison of depressive personality disorder and dysthymic disorder

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Abstract

Background: Few studies have compared the related diagnostic constructs of depressive personality disorder (DPD) and dysthymic disorder (DD). The authors attempted to replicate findings of Klein and Shih in longitudinally followed patients with personality disorder or major depressive disorder (MDD) in the Collaborative Longitudinal Personality Disorders Study.

Methods: Subjects (N = 665) were evaluated at baseline and over 2 years (n = 546) by reliably trained clinical interviewers using semistructured interviews and self-report personality questionnaires.

Results: Only 44 subjects (24.6% of 179 DPD and 49.4% of 89 early-onset dysthymic subjects) met criteria for both disorders at baseline. Depressive personality disorder was associated with increased comorbidity of some axis I anxiety disorders and other axis II diagnoses, particularly avoidant (71.5%) and borderline (55.9%) personality disorders. Depressive personality disorder was associated with low positive and high negative affectivity on dimensional measures of temperament. Depressive personality disorder subjects had lower likelihood of remission of baseline MDD at 2-year follow-up, whereas DD subjects did not. The DPD diagnosis appeared unstable over 2 years of follow-up, as only 31% (n = 47) of 154 subjects who had DPD at baseline and also had follow-up assessment met criteria on blind retesting.

Limitations: Results from this sample may not generalize to other populations.

Conclusions: Depressive personality disorder and dysthymic disorder appear to be related but differ in diagnostic constructs. Its moderating effect on MDD and predicted relationship to measures of temperament support the validity of DPD, but its diagnostic instability raises questions about its course, utility, and measurement.

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Nothing endures but change.—Heraclitus

1. Introduction

Depressive personality disorder (DPD) is a littoral condition on the diagnostic map of mental disorders. In the territory of chronic mood disorders, DPD abuts or overlaps dysthymic disorder (DD), presumably representing trait to its state. Depressive personality disorder also occupies marginal territory as a condition worthy of further study in the Appendix of the *Diagnostic and Statistical Manual of*

Mental Disorders, Fourth Edition (DSM-IV) [1], a placement reflecting controversy over its diagnostic validity. For years, experts have disputed whether DPD exists, and if so, what it defines.

The concept of depressive character has an ancient history, and both Kraepelin [2] and early editions of the DSM [3] used it. In 1980, however, *DSM-III* [4] replaced depressive character with the concept of DD, redefining it as a chronic affective disorder [5]. Many experts felt that this new construct would subsume DPD. Yet, subsequent research has demonstrated that although their diagnostic criteria overlap, the 2 conditions are not invariably comorbid. A significant percentage of patients who meet DD criteria do not qualify for DPD, and vice versa, suggesting the legitimacy of both diagnoses.

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Several studies [3,6–10] have addressed this axis I/axis II border issue. The rates of overlap of DPD and DD have varied widely, from 18% to 95%, depending upon the sample of assessed subjects and the diagnostic criteria of the disorders [11]. Klein and Shih [9] notably assessed the relationship of *DSM-III-R* DPD and DD in 156 outpatients with mood and/or personality disorders and 267 first-degree relatives at baseline and 30-month follow-up. They used the Structured Clinical Interview for *DSM-III-R* [12] to measure axis I diagnoses, the Personality Disorders Examination [13] for axis II diagnoses, an adaptation of DPD criteria of Akiskal [14], and the revised Eysenck Personality Questionnaire [15] as a dimensional measure of depressive temperament.

Klein and Shih [9] described 89 subjects with DPD and 67 who did not meet that diagnosis. Nearly 80% ($n = 71$) of DPD subjects also met criteria for *DSM-III-R* dysthymia, whereas only 39% of non-DPD subjects met dysthymic criteria. Conversely, 73% of early-onset dysthymic subjects (total $n = 97$) met criteria for DPD. The study found a κ for the association of DPD with dysthymia of 0.42. The raters' κ for diagnostic concordance on the International Personality Disorder Examination (IPDE) for DPD itself was 0.70. Test-retest intraclass correlation for number of DPD traits was 0.81. Depressive personality disorder was not significantly associated with current or lifetime major depressive disorder (MDD). Presence of DPD predicted slight increases in comorbidity of other axis II diagnoses, especially avoidant and borderline personality disorders. Klein and Shih found DPD traits correlated positively with neuroticism (ie, negative affectivity) and correlated negatively with extraversion (positive affectivity), but did not significantly correlate with psychoticism on the Eysenck scales.

In the Klein and Shih study, only 5 (8%) of 63 DPD subjects seen at 30-month follow-up, assessed by raters blind to initial assessment, still met diagnostic criteria for DPD. From the dimensional perspective of depressive personality traits, intraclass correlation across time points was 0.51. Presence of DPD at baseline predicted a higher Hamilton Depression Rating Scale (Ham-D; [16]) score at follow-up, even controlling for baseline Ham-D severity. The sample of 267 relatives yielded similar findings, and in this latter group, DPD predicted a subject's likelihood of meeting criteria for a history of mood disorder, even after controlling for positive and negative affectivity.

McDermut et al [10] recently assessed 900 adult outpatients' cross-sectionally using the Structured Clinical Interview for *DSM-IV* axis I Disorders (SCID [17]) for axis I and the Structured Interview for *DSM-IV* Personality [18] for axis II disorders. The investigators diagnosed 198 subjects with DPD, of whom 18.2% met criteria for DD, an elevated rate compared to subjects without DPD. Diagnostic concordance, on the basis of 28 paired interviews, showed a κ of 0.52. Subjects with DPD were more likely to receive axis I and axis II comorbid diagnoses than those without DPD. The most prevalent co-occurring axis II diagnoses

were avoidant (43.4%), obsessive-compulsive (21.2%), and borderline (21.7%) personality disorders. Thirty-six (48%) of 75 DD subjects met DPD criteria. Subjects with DPD were more likely than others to have chronic MDD (59.8% vs 29.1%, $P < .0001$), but had no greater likelihood of bipolar spectrum disorders [10].

The ongoing multisite Collaborative Longitudinal Personality Disorders Study (CLPS) tracks the natural course of subjects with 1 of 4 personality disorders (schizotypal, $n = 86$; borderline, $n = 175$; avoidant, $n = 156$; or obsessive-compulsive, $n = 154$) or MDD without personality disorder ($n = 94$). Its large, well-diagnosed sample provides an opportunity to assess the relationship between DPD and DD. We used this sample to corroborate the findings of Klein and Shih using *DSM-IV* rather than *DSM-III-R* criteria. An early CLPS report ($N = 571$) found a 20.9% co-occurrence of DPD and DD [19].

This research also allowed assessment of the stability of the DPD diagnosis. Personality and its disorders historically have been considered largely immutable, developmentally determined human traits; they reside on axis II in part because of their presumed resistance to change relative to axis I disorders. Yet, research is increasingly showing that personality disorder diagnoses may remit with or without treatment (eg, Ref. [20]). Shea et al [21], analyzing data from the CLPS study group, reported that only 44% of subjects with schizotypal, borderline, avoidant, or obsessive-compulsive personality disorders retained these diagnoses at 12-month follow-up.

This study explored the following questions: (1) What is the association between DPD and DD in this sample? We hypothesized that diagnostic overlap between the disorders would be modest. (2) What is the association between DPD and other axis II diagnoses? We assumed that DPD would be highly associated with other axis II diagnoses, given that subjects who meet criteria for one personality disorder are likely to meet criteria for more than one. (3) What is the association between DPD and positive and negative affectivity? Consistent with previous research [6,9], we hypothesized that subjects would have high levels of negative affectivity and low levels of positive affectivity. (4) What is the stability of DPD? On the basis of Klein and Shih's 30-month findings, we hypothesized that the DPD diagnosis would be unstable over time. (5) Does DPD moderate recovery from a major depressive episode? We hypothesized that the diagnosis of DPD at baseline would predict a lower rate of MDD remission at 2-year follow-up.

2. Methods

2.1. Subjects

The CLPS study sample comprises subjects aged 18 to 45 years, recruited at Brown, Columbia, Harvard, and Yale University medical schools, and diagnosed by experienced clinical interviewers trained to reliability on the SCID-I/P

[17] and the Diagnostic Interview for *DSM-IV* Personality Disorders (DIPD-IV [22]). The CLPS recruited subjects with 1 of 4 personality disorders—schizotypal, borderline, avoidant, or obsessive-compulsive—and subjects with MDD but no axis II diagnosis. The sample includes 179 subjects diagnosed with DPD and 115 diagnosed with DD. Although CLPS targeted 4 personality disorders, rates of diagnostic co-occurrence have been found to resemble other clinical samples [23].

2.2. Assessments

Subjects are followed longitudinally, rated after 6 months, 1 year, and 2 years, with serial assessments that include the DIPD and its follow-along version for axis II disorders [22], the SCID-I/P [17] at baseline and then the Longitudinal Interval Follow-up Evaluation (LIFE [24]) for axis I disorders, and the Schedule for Nonadaptive and Adaptive Personality (SNAP [25]) and NEO Personality Inventory-Revised (NEO-PI-R [26]) for dimensional personality traits. Raters were unaware of subjects' prior diagnoses at the 2-year assessment. Raters asked subjects whether symptoms were present during the previous interval. After the *DSM-IV* criterion B for DPD, they had to judge whether the symptoms for DPD were better accounted for by DD ([1], p 733). κ for interrater reliability were 0.80 for MDD and 0.76 for DD on the SCID, and ranged from 0.58 to 1.0 for personality disorders on the DIPD-IV, including 0.62 for DPD [27].

Several definitions of DPD and DD were used to investigate the sensitivity of the findings to differing constructs of the disorders. Depressive personality disorder was defined in 3 ways. "Definite" DIPD-IV criteria required meeting threshold criteria (rating = 2, "definitely present") for 5 or more DIPD-IV items. A broader construct included both "definite" and "probable" (rating = 1, "subthreshold") criteria. These approaches yielded 179 definite and 255 definite/probable subjects. A third analysis used a dimensional continuum by summing scores of the 7 DIPD-IV DPD symptom items, scored as 0 = absent, 1 = subthreshold, and 2 = threshold, yielding a range of 0 to 14. Dysthymic disorder was dually defined as the subset ($n = 89$) of dysthymic subjects who met SCID criteria for early onset DD (ie, before the age of 1 year), presumably defining dysthymic subjects with course and chronicity similar to DPD, and more broadly, as definite SCID DD, regardless of age of onset ($n = 115$).

2.3. Analyses

The association between DPD and DD, and between DPD and other axis II diagnoses, was assessed using κ and χ^2 tests for independence. The association between DD and the continuous DPD measure was analyzed by t test. To assess affectivity measures as predictors of DPD diagnosis, presence or absence of DPD was modeled as a function of SNAP positive and negative affectivity and

NEO extraversion and neuroticism using univariate and multiple logistic regression. Significance of the factors is assessed with Wald's test, and in all instances is compared to χ^2 distribution with 1 degree of freedom. The stability of DPD from baseline to year 2 diagnosis, on the basis of the dichotomous measures of DPD, was assessed using the κ statistic, adjusting for rater error on the basis of immediate test-retest reliability [27]. Intraclass correlation coefficient (ICC) represented the stability of the continuous DPD measure. Dysthymic disorder was measured at baseline by SCID, and by retrospective ratings at follow-up interviews by the LIFE [24]. Dysthymic symptoms must be present more often than not over a 2-year period to qualify for the diagnosis. In different analyses, we deemed subject reports of dysthymic symptoms 80% of the time over the 2 years, and more liberally, 50% of the time, as criteria for persisting DD.

The effect of DPD and DD on remission of a baseline major depressive episode at 2-year follow-up was assessed using Cox proportional hazards models [28], modeling remission as a function of baseline DPD and DD diagnoses and their interaction. In addition, the effect of DPD diagnosis was assessed after accounting for other axis II diagnoses. In the absence of significant interaction, inferences are based on the models with only main effects. Significance of the effects is based on Wald's test. Remission from MDD was defined by a rating of 2 or less (1 or 2 symptoms of mild degree with no impairment in functioning) for 8 consecutive weeks on the weekly "psychiatric status ratings" for MDD in the LIFE [24]. Raters score these symptoms retrospectively at each study assessment, cueing subject responses by asking about symptoms around holidays and other milestones during the interval. Only subjects diagnosed with an MDD episode at baseline who had available follow-up data ($n = 294$) were included in this analysis.

Because these analyses addressed specific prespecified questions, no correction for multiple comparisons was applied.

3. Results

The CLPS sample has been described previously (eg, [19,21,23,27]). Table 1 indicates that subjects with DPD were mainly female, White, with mean 31.6 (SD, 8.2) years, characteristics similar to non-DPD subjects in the sample. Compared to other subjects in the CLPS cohort, DPD subjects did not differ in gender or race, but were 1.6 years younger ($t = 2.22$, $df = 663$, $P = .03$).

3.1. Diagnostic overlap of DPD and DD

Data were available on 665 CLPS subjects, of whom 179 met definite DIPD criteria for DPD and 89 met criteria for early onset DD. Diagnostic overlap was relatively modest: only 44 subjects, representing 24.6% of subjects with DPD and 49.4% of subjects with DD, met criteria for both

Table 1
Demographics of subjects with and without DPD

	Subjects with DPD		Subjects without DPD		All subjects	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Age (mean)*	179	31.6 (SD, 8.2); range, 18–45	486	33.2 (SD, 8.0); range, 18–45	665	32.8 (SD, 8.1)
<i>Gender</i>						
Female	110	61.5	312	64.2	422	63.5
Male	69	38.6	174	35.8	243	36.5
<i>Ethnicity</i>						
Euro-American	129	72.1	377	77.6	506	76.1
African American	24	13.4	54	11.1	78	11.7
Hispanic	21	11.7	40	8.2	61	9.2
Asian	4	2.2	9	1.9	13	2.0
Other	1	0.6	6	1.2	7	1.1

* $t = 2.22$, $P = .027$.

definite DDPD-IV DPD and early-onset DD ($\kappa = 0.18$; $\chi^2 = 26.5$, $df = 1$, both $P < .0001$). The alternative definitions of DPD and DD described above did not alter these fundamental relationships, showing marginally lower statistical associations. For example, for definite DPD criteria and DD of any age of onset ($n = 115$), $\kappa = 0.16$, $\chi^2 = 19.4$, $df = 1$ (both $P < .001$). A t test with unequal variances to compare subjects with and without early-onset DD with respect to the continuous DPD measure was significant ($t = -6.77$, $df = 146$, $P < .001$): early-onset DD subjects scored a mean 10.9 (SD, 2.9) and non-DD subjects a mean 8.5 (SD, 4.0) of a total possible score of 0 to 14 for 7 DPD items.

3.2. Comorbidity of DPD with other axis II disorders

Assessing other axis II comorbidity using definite DDPD-IV diagnoses yielded statistically significant associations of DPD with 9 of the 11 axis II diagnoses, excepting only narcissistic and obsessive-compulsive personality disorders. Table 2 presents the proportion of subjects with personality disorders among subjects with and without definite DPD. As in the study of Klein and Shih [9] and similar to that of McDermut et al [10], DPD had strongest comorbidity with avoidant (71.5%) and borderline (55.9%) personality disorders. Results using definite or probable DPD were similar (available upon request).

We also examined axis I comorbidity of DPD and DD subjects. Neither diagnosis was associated with an increased prevalence of lifetime MDD relative to the remainder of the CLPS cohort (DPD = 78%, DD = 82%, others = 78%). Depressive personality disorder subjects had elevated lifetime rates of bipolar II disorder (7.3% vs 4.2% for the cohort, $P < .02$), panic disorder (32.4% vs 26.2%, $P < .03$), social phobia (33.0% vs 22.9%, $P = .001$), and anorexia nervosa (9.5% vs 6.0%, $P = .02$), whereas dysthymic subjects did not.

3.3. Positive and negativity affectivity

As hypothesized, definite DPD was associated with lowered levels of positive affectivity (DPD mean, 11.96; non-DPD mean, 13.77; $t = 3.20$, $df = 668$, $P = .001$) and elevated negative affectivity (DPD mean, 21.89; non-DPD mean, 18.98; $t = -6.01$, $df = 408$, $P < .0001$) on the SNAP. Interestingly, no significant difference appeared on the NEO for extraversion as an analog of positive affectivity or neuroticism as a measure of negative affectivity. Multiple logistic regression modeling presence or absence of DPD as a function of both positive and negative affectivity confirmed these analyses. The odds of having a DPD diagnosis increased as negative affectivity increased (Wald = 21.7, $P < .0001$) and positive affectivity decreased (Wald = 4.98,

Table 2
Comorbidity of DPD with other axis II diagnoses at baseline

Axis II diagnosis	DPD present (%)	DPD absent (%)	χ^2 ($df = 1$)	Odds ratio (95% CI)	κ
Paranoid	22.4	8.4	24.2 ($P < .0001$)	3.16 (1.96–5.08)	0.17
Schizotypal	20.0	12.0	5.43 ($P < .02$)	1.71 (1.09–2.70)	0.08
Schizoid	5.6	1.6	7.9 ($P < .005$)	3.57 (1.39–9.20)	0.06
Histrionic	3.91	1.22	4.9 ($P = .03$)	3.29 (1.09–9.93)	0.04
Borderline	55.9	28.7	42.0 ($P < .0001$)	3.14 (2.21–4.48)	0.24
Narcissistic	6.15	5.09	0.29 ($P = .6$)	1.22 (0.59–2.54)	0.01
Antisocial	12.9	5.3	11 ($P = .0009$)	2.64 (1.46–4.76)	0.10
Avoidant	71.5	39.7	53.1 ($P < .0001$)	3.81 (2.63–5.52)	0.25
Dependent	14.5	4.7	18.7 ($P < .0001$)	3.46 (1.92–6.24)	0.13
Obsessive/compulsive	44.7	36.7	3.6 ($P = .06$)	1.40 (0.99–1.98)	0.07
Passive/aggressive	17.9	4.7	30.3 ($P < .0001$)	4.43 (2.51–7.81)	0.17

$P < .03$) on the SNAP. Controlling for the potential confounding variables of avoidant and borderline personality disorders, the 2 most prevalent comorbid axis II diagnoses, did not affect the significance of these findings.

A comparable analysis of subjects with early-onset DD similarly found lower positive affectivity (mean, 11.26 vs 13.06; $t = 3.17$, $df = 676$, $P = .001$) and higher negative affectivity (21.30 vs 19.53; $t = 2.45$, $df = 676$, $P = .01$) for these subjects relative to the larger cohort.

3.4. Diagnostic stability of DPD

Both κ and ICCs were used to assess the stability of DPD diagnosis from baseline to 2-year follow-up. Follow-up data were available for 547 subjects. Using the definite DPD definition, κ equaled 0.29 ($P < .0001$). Diagnostic stability needs to be adjusted for rater reliability on the basis of immediate test-retest reliability; incorporating the immediate test-retest coefficient of 0.62 [27], the adjusted 2-year κ was 0.47 (see Table 3.) Using the dimensional measure of DPD criteria to compare baseline and 2-year ratings, the ICC was 0.41 ($P < .0001$; adjusting for rater reliability $r = 0.71$, adjusted ICC = 0.57); there was a decrease of 2.85 DPD symptom items over 2 years. Table 4 indicates that only 47 (31%) of 154 subjects who initially met DIPD-IV criteria for DPD at baseline retained that diagnosis at 2-year follow-up, whereas 25 (6.4%) of 392 subjects without baseline DPD received a definite DPD diagnosis from blind raters 2 years later.

By comparison, early-onset DD was stable in 45.3% (34/75) of subjects ($\kappa = 0.17$; adjusted for immediate test-retest coefficient of .35, adjusted 2-year $\kappa = 0.49$) using a criterion of ongoing dysthymic symptoms 80% of the time, and in 57.5% (46/80; $\kappa = 0.11$; adjusted 2-year $\kappa = 0.31$) using the criterion of 50% of the time.

3.5. Effect of DPD and DD on remission of MDD

Survival analysis using a Cox-proportional hazards model indicated that subjects with baseline MDD ($n = 294$) who met baseline criteria for definite DPD at baseline had lower hazard of having MDD remit at 2 years, whereas subjects with early onset DD did not. The ratio of the hazard for MDD remission in the 2-year follow-up among subjects with baseline DPD relative to subjects without baseline DPD was 0.67 [95% confidence interval (CI) (0.54, 0.84),

Table 3
 κ and ICCs for DPD and DD

Diagnosis	κ /ICC	Acute test-retest	Adjusted κ /ICC
DPD			
Categorical (definite)	0.29	0.62	0.29/0.62 = 0.47
Dimensional	0.41	0.72	0.41/0.72 = 0.57
Dysthymic disorder			
80% of time	0.17	0.35	0.17/0.35 = 0.49
50% of time	0.11	0.35	0.11/0.35 = 0.31

DD is defined by symptoms 80% of time and 50% of time.

Table 4
Stability of DPD^a over 2 years

Baseline DPD	DPD at year 2		
	No	Yes	Total
No	367	25	392
Yes	107	47	154
Total	474	72	546

^a “Definite” DPD defined as definite as rated on the DIPD-IV.

Wald = 12.07, $P < .001$]; that is, subjects with baseline DPD had a 33% lower likelihood of remission than subjects without baseline DPD. This finding remains significant after controlling for avoidant [hazard ratio 0.70, 95% CI (0.56, 0.86), Wald = 10.72, $P = .001$] and borderline [hazard ratio 0.74, 95% CI (0.59, 0.91), Wald = 8.05, $P = .005$] personality disorders. By contrast, dysthymic subjects with baseline MDD carried no heightened risk for nonremission [hazard ratio 1.25, 95% CI (0.93, 1.66), Wald = 2.2, $P = .14$].

4. Discussion

This study attempted to replicate the baseline and longitudinal findings of Klein and Shih [9] in a large cohort of patients with personality and mood disorders, using *DSM-IV* criteria. The CLPS data provide important confirmation of previous comparisons of DPD and DD, but also meaningful differences from earlier studies. Whereas Klein and Shih selected patients for a family study of mood disorder, and McDermut et al assessed a community sample, CLPS subjects were chosen for a study of personality disorders.

Only a minority of CLPS subjects met criteria for both DPD and DD. A quarter of subjects meeting DPD criteria also qualified for DD, and about half of DD subjects met DPD criteria. This result suggests that these are related but different diagnostic entities. It is interesting that raters gave both diagnoses as often as they did despite the DPD (and *DSM-IV*) exclusion criterion that DPD “is not better accounted for by dysthymic disorder” ([1], p 733). In contrast, Klein and Shih reported that nearly 80% of DPD subjects had DD, and 73% vice versa. The κ of 0.18 for association of the 2 diagnoses in the current study contrasts with a κ of 0.42 in Klein and Shih’s report.

The surprising instability of DPD in this study is perhaps lessened when compared to changes in other diagnoses reassessed over time. Shea et al [21] reported that only 44% of CLPS subjects with schizotypal, borderline, avoidant, or obsessive-compulsive personality disorders retained these diagnoses at 12-month follow-up. As they and other authors have noted, diagnostic stability has been presumed central to the concept of personality disorder, yet few data address this question. Klein and Shih [9] reported $\kappa = 0.37$ for DPD, with 49% of baseline subjects meeting criteria and 10% developing a new diagnosis at 30 months. These are similar to the $\kappa = 0.47$ and 31% stability at 24 months in this study, even though the IPDE requires a 5-year duration for personality disorders, whereas the DIPD assesses a 2-year interval. In a smaller

study, which recruited subjects specifically for DPD by referral and newspaper advertisement, Phillips et al [29] reported $\kappa = 0.55$ and ICC = 0.62 at 1-year follow-up using the DIPD.

Similarly, despite using different instruments, Klein et al found that DD remained stable in 52% of 86 early-onset dysthymic outpatients blindly rated at 30 months [30] and 53% followed for 5 years [31]. In our cohort, 45% to 58% of dysthymic subjects (depending on symptom frequency) maintained their diagnosis over 2 years. This is striking for an axis I diagnosis largely defined by chronicity, and often reportedly lingering for decades.

Table 3 indicates that the differences in stability between DPD and DD do not depend on their respective κ 's, which lie not far apart. Yet, the proportions of subjects retaining the diagnoses after 2 years may offer a clinically meaningful difference: 31% for DPD vs 45% to 58% for DD. Neither diagnosis proved particularly stable over time.

If DPD, DD, and other reputedly chronic diagnoses are not stable, what does DPD mean, and what is its clinical utility? Perhaps we have held the concepts of personality and personality disorder to too rigid a standard of constancy. All longitudinal studies show declines in diagnostic rates over time (eg, Refs. [32,33]). Although instrument insensitivity, rater variability, patient recall, and interval treatment might partially account for this diagnostic instability, actual symptom fluctuation may explain much of the variance. Is it unreasonable to expect a similar degree of fluctuation in a personality disorder as in panic disorder, mood syndromes, hypertension, or systemic lupus erythematosus? Patients age and mature. They may experience periods of quiescence, or rebound with “fresh starts” in response to positive life events [34]. It may be unreasonable to expect that even an individual meeting chronic criteria for a personality disorder will always feel and behave identically. More plausibly, personality disorders, like other chronic syndromes, may be intermittent, episodic, and spontaneously remitting in some cases. For patients given this gloomy diagnosis, it is a hopeful sign that even long ingrained patterns may change.

Many personality disorders are defined by observable behaviors rather than personality traits: for example, self-mutilation as a criterion for borderline personality disorder. Such behaviors may fluctuate over time, sometimes occurring only occasionally; this might arguably account for diagnostic instability of personality disorders even if underlying personality organization remained unchanged. Yet, DPD is defined principally by traitlike rather than behavioral criteria (eg, gloominess, pessimism, self-criticism, feelings of inadequacy). Thus, the finding of diagnostic instability does not appear to derive from the nature of DPD symptom criteria.

The current findings add to the growing literature indicating that DD and DPD are distinguishable syndromes. The utility of DPD is suggested by its defining a population that differs from early-onset DD, and its prediction of the

persistence of MDD at 2-year follow-up. This latter finding is consistent with Klein and Shih's finding of elevated Ham-D scores in patients with DPD over time, and provides a curious contrast to DD, which might have been expected to worsen mood prognosis [35]. This study does not answer the question of whether DPD is a personality or a mood disorder [36,37].

This study found that DPD, like DD, was associated with high levels of negative and low levels of positive affect. Such an affective state would seem almost to define DPD. Curiously, these findings were evident on the SNAP but not on the NEO Personality Inventory-Revised neuroticism and extraversion measures, which approximate negative and positive affectivity. Because neuroticism has been shown to characterize most personality disorders [38], insufficient variance in neuroticism scores in this sample of predominantly personality-disordered subjects may account for this negative result.

The high comorbidity of DPD with other personality disorders, particularly borderline and avoidant personality disorders, echoes the findings of Klein and Shih [9] and McDermut et al [10]. The high comorbidity in this sample may reflect the personality-disordered entry criteria for the CLPS study. For example, 26% of CLPS subjects met criteria for borderline personality disorder, compared to an estimated 10% prevalence among psychiatric outpatients generally [1,39]. The comorbid prevalence of these personality disorders appears still higher for patients with DPD than the already high rates associated with DD [40].

This research has several strengths, including a large patient sample and highly trained raters who were blind both to baseline diagnosis and to this study's hypotheses. It is only the second study to examine DPD longitudinally. The study also has limitations. It assessed for chronic mood syndromes a sample of convenience that may not be generalizable to other clinical samples. It may be considered both a strength and weakness of the current study that its sample was gathered without intent to study DPD per se. Klein and Shih's longitudinal sample was recruited for a family study and included proband outpatients with *DSM-III-R* dysthymia, nonchronic major depression, and cluster B personality disorders, but no mood disorders—to some degree, the inverse of the CLPS sample. It is encouraging that these differing samples yielded convergent results.

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References

- [1] American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4th ed. Washington (DC): American Psychiatric Association; 1994.
- [2] Kraepelin E. Manic-depressive insanity and paranoia. Barclay RM (trans). Edinburgh: E&S Livingstone; 1921.
- [3] Hirschfeld RMA, Holzer III CE. Depressive personality disorder: clinical implications. *J Clin Psychiatry* 1994;55(4 Suppl):10–7.
- [4] American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 3rd ed. Washington (DC): American Psychiatric Association; 1980.
- [5] Kocsis JH, Frances AJ. A critical discussion of *DSM-III* dysthymic disorder. *Am J Psychiatry* 1987;144:1534–42.
- [6] Klein DN. Depressive personality: reliability, validity, and relation to dysthymia. *J Abnorm Psychol* 1999;99:412–21.
- [7] Klein DN, Miller GA. Depressive personality in nonclinical subjects. *Am J Psychiatry* 1993;150:1718–24.
- [8] Phillips KA, Hirschfeld RMA, Shea MT, Gunderson JG. Depressive personality disorder: perspectives for *DSM-IV*. In: Livesley WS, editor. *DSM-IV* personality disorders. New York: Guilford; 1995. p. 287–302.
- [9] Klein DN, Shih JH. Depressive personality disorder: associations with *DSM-III-R* mood and personality disorders and negative and positive affectivity, 30-month stability, and prediction of course of axis I depressive disorders. *J Abnorm Psychol* 1998;107:319–27.
- [10] McDermut W, Zimmerman M, Chelminski I. The construct validity of depressive personality disorder. *J Abnorm Psychol* 2003;112: 49–60.
- [11] Huprich S. Conceptual issues in the overlap of depressive personality and dysthymia. Presented in Symposium #95, “Depressive Personality Disorder vs. Dysthymic Disorder,” Annual Meeting of the American Psychiatric Association, 5/6/04, New York, NY.
- [12] Spitzer RL, Williams JBW, Gibbon M, First MB. Structured clinical interview for *DSM-III-R*. Washington (DC): American Psychiatric Press; 1990.
- [13] Loranger AW, Sartorius N, Andreoli A, Berger P, Buchheim P, Channabasavanna SM, et al. The international personality disorder examination: the world health organization/alcohol, drug abuse, and mental health administration international pilot study of personality disorders. *Arch Gen Psychiatry* 1994;51:215–24.
- [14] Akiskal HS. Dysthymic disorder: psychopathology of proposed chronic depressive subtypes. *Am J Psychiatry* 1983;140:11–20.
- [15] Eysenck SGB, Eysenck HF, Barrett P. A revised version of the psychoticism scale. *Pers Individ Differ* 1985;6:21–9.
- [16] Miller IW, Bishop S, Norman WH, Maddever H. The modified Hamilton rating scale for depression: reliability and validity. *Psychiatric Res* 1985;14:131–42.
- [17] First MB, Gibbon M, Spitzer RL, Williams JBW. Structured clinical interview for *DSM-IV* axis I disorders—patient version (SCID-I/P). New York: Biometrics Research Department, New York State Psychiatric Institute; 1996.
- [18] Pföhl B, Blum NH, Zimmerman M. Structured interview for *DSM-IV* personality. Washington (DC): American Psychiatric Press; 1997.
- [19] Skodol AE, Stout RL, McGlashan TH, Grilo CM, Gunderson JG, Shea MT, et al. Co-occurrence of mood and personality disorders: a report from the Collaborative Longitudinal Personality Disorders Study (CLPS). *Depress Anxiety* 1999;10:175–82.
- [20] Bateman A, Fonagy P. Effectiveness of partial hospitalization in the treatment of borderline personality disorder: a randomized controlled trial. *Am J Psychiatry* 1999;156:1563–9.
- [21] Shea MT, Sout R, Gunderson J, Morey LC, Grilo CM, McGlashan T, et al. Short-term diagnostic stability of schizotypal, borderline, avoidant, and obsessive-compulsive personality disorders. *Am J Psychiatry* 2002;159:2036–41.
- [22] Zanarini MC, Frankenburg FR, Sickel AE, Yong L. The Diagnostic Interview for *DSM-IV* Personality Disorders (DIPD-IV). Belmont (MA): McLean Hospital, Laboratory for the Study of Adult Development; 1996.
- [23] McGlashan TH, Grilo CM, Skodol AE, Gunderson JG, Shea MT, Morey LC, et al. The Collaborative Longitudinal Personality Disorders Study: baseline axis I/II and II/II diagnostic co-occurrence. *Acta Psychiatr Scand* 2000;102:256–64.
- [24] Keller MB, Lavori PW, Friedman B, Nielsen E, Endicott J, McDonald-Scott P, et al. The longitudinal follow-up evaluation: a comprehensive method for assessing outcome in prospective longitudinal studies. *Arch Gen Psychiatry* 1987;44:540–8.
- [25] Clark LA. Manual for the schedule for nonadaptive and adaptive personality (SNAP). Minneapolis: University of Minnesota Press; 1993.
- [26] Costa PT, McCrae RR. Revised NEO personality inventory (NEO-PI-R) and NEO five-factor inventory (NEO-FFI) professional manual. Odessa (FL): Psychological Assessment Resources; 1992.
- [27] Zanarini MC, Skodol AE, Bender D, Dolan R, Sanislow C, Schaefer E, et al. The Collaborative Longitudinal Personality Disorders Study: reliability of axis I and II diagnoses. *J Pers Disord* 2000;14:291–9.
- [28] Klein JP, Moeschberger ML. Survival analysis: techniques for censored and truncated data. New York: Springer-Verlag; 1997.
- [29] Phillips KA, Gunderson JG, Triebwasser J, Kimble CR, Faedda G, Lyoo IK, et al. Reliability and validity of depressive personality disorder. *Am J Psychiatry* 1998;155:1044–8.
- [30] Klein DN, Norden KA, Ferro T, Leader JB, Kasch KL, Klein LM, et al. Thirty-month naturalistic follow-up study of early-onset dysthymic disorder: course, diagnostic stability, and prediction of outcome. *J Abnorm Psychol* 1998;107:338–48.
- [31] Klein DN, Schartz JE, Rose S, Leader JB. Five-year course and outcome of dysthymic disorder: a prospective, naturalistic follow-up study. *Am J Psychiatry* 2000;157:931–9.
- [32] Lenzenweger MF. Stability and change in personality disorder features: the longitudinal study of personality disorders. *Arch Gen Psychiatry* 1999;56:1009–115.
- [33] Johnson JG, Cohen P, Kasen S, Skodol AE, Hamagami F, Brook JS. Age-related change in personality disorder trait levels between early adolescence and adulthood: a community-based longitudinal investigation. *Acta Psychiatr Scand* 2000;102:265–75.
- [34] Harris T, Brown GW, Robinson R. Befriending as an intervention for chronic depression among women in an inner city. 2: role of fresh-start experiences and baseline psychosocial factors in remission from depression. *Br J Psychiatry* 1999;174:225–32.
- [35] Keller MB, Lavori PW, Endicott J, et al. “Double depression”: two-year follow-up. *Am J Psychiatry* 1983;140:689–94.
- [36] Huprich SK. The overlap of depressive personality disorder and dysthymia, reconsidered. *Harv Rev Psychiatry* 2001;9:158–68.
- [37] Ryder AG, Bagby RM. Diagnostic viability of depressive personality disorder: theoretical and conceptual issues. *J Pers Disord* 1999;13: 99–117.
- [38] Widiger TA, Costa PT, editors. Personality disorders and the five factor model of personality. Washington (DC): American Psychological Association; 2002.
- [39] Widiger TA, Frances AJ. Epidemiology, diagnosis, and comorbidity of borderline personality disorder. In: Tasman A, Hales RE, Frances AJ, editors. *American psychiatric press review of psychiatry*, vol. 8. Washington (DC): American Psychiatric Press; 1989. p. 8–24.
- [40] Markowitz JC, Moran ME, Kocsis JH, Frances AJ. Prevalence and comorbidity of dysthymic disorder among psychiatric outpatients. *J Affect Disord* 1992;24:63–71.