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Abstract: This study sought to investigate the coherence of changes observed in diagnostic criteria for borderline, schizotypal, obsessive-compulsive, and avoidant personality disorders. Five hundred, forty-nine patients were independently evaluated 2 years apart, and correlations of observed changes in each diagnostic criterion with changes in other criteria were examined to determine if there was within-syndrome consistency in these changes. The observed changes in criteria were consistent within syndrome (median $\alpha=0.72$ across 4 disorders), and reasonably specific to that syndrome relative to the other disorders. The results support the validity of these criterion sets as representing coherent syndromes.

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The diagnostic validation of many personality disorders is at a relatively early stage. Although some validating factors (Blashfield, Sprock, & Fuller, 1990) such as specific etiologies or interventions remain to be demonstrated, others have received support, such as diagnostic reliability and syndromal status. Blashfield et al (1990) describe a “syndrome” as a group of co-occurring symptoms. For the most part internal consistency studies (Grilo et al., 2001) have supported the cross-sectional co-occurrence of specific personality disorder indicators. Our study employs a novel strategy to determine the syndromal status of four personality disorders, examining whether these indicators covary longitudinally—in other words, whether changes in these criteria are interrelated, and if they are syndrome-specific or simply markers of more global change. To address this issue, we examined the pattern of changes in the DSM-IV criteria as manifested over a 2-year period.

METHOD

SUBJECTS

Participants were part of a prospective longitudinal study (Gunderson et al., 2000) of borderline

(BPD), schizotypal (STPD), avoidant (AVPD), and obsessive-compulsive personality disorder (OCPD). Also included in the study was a comparison group meeting criteria for major depressive disorder but with no personality disorder. Participants aged 18 to 45 years were recruited primarily from patients seeking treatment at clinical services affiliated with each of the four recruitment sites of the study; patients with active psychosis, acute substance intoxication or withdrawal, a history of schizophrenia-spectrum psychosis, or organicity were excluded. All participants provided written informed consent prior to participating in any study procedures. The current report is based on 549 subjects (82% of the intake sample) for whom complete data through 24 months of follow-up were obtained. No significant differences in diagnostic assignments were observed between retained subjects and those lost to follow-up at the 24 month evaluation ($\chi^2(4)=5.77, ns$).

PROCEDURES

All consenting participants were interviewed in person by experienced and trained interviewers who were monitored and received regular ongoing supervision. Individual DSM-IV criteria were assessed by

the Diagnostic Interview for DSM-IV Personality Disorders (DIPD-IV), a semi-structured interview assessing criteria on a 3-point scale (0=not present; 1=present but of uncertain clinical significance; 2=present and clinically significant). Interrater reliability (based on 84 pairs of raters) kappa coefficients for the 4 study PDs ranged from .68 (BPD) to .73 (AVPD); test-retest kappas (based on 52 cases) ranged from .69 (BPD) to .74 (OCPD); while median reliability (Zanarini et al., 2000) correlations for criteria scores ranged from .79 to .91 (interrater) and .65 to .84 (test-retest). Participants were re-interviewed with the DIPD-IV at 24 months by an interviewer who was blind to all results from the baseline and follow-along assessments.

DATA ANALYSES

To evaluate the consistency of changes in criteria, standardized residualized change scores (Cronbach, 1970) for each criterion were calculated, using the baseline score for the criterion as the covariate. The change scores for criteria associated with a given disorder were then summed to create a total change score for that disorder. Changes in the individual criteria were correlated with these four summed scores to determine the association of change in specific criteria with changes in these four syndromes. Also, the internal consistency of these four sets of change scores was described using coefficient α (Cronbach, 1951).

RESULTS

Table 1 presents data summarizing the intercorrelation of the residualized change scores for the individual DSM criteria across the 2-year period of the study. For example, changes in the first criterion for BPD, "intense anger," correlated more highly with changes in the remaining BPD criteria (correlation of .52) than with changes observed in the other three disorders (correlations ranging from .20–.31). This result indicates that change in this feature was specifically consistent with changes in other indicators of BPD, rather than reflecting more general increases or decreases in symptomatology that would be evident across different disorders. Finally, Table 1 also presents the coefficient alphas as summary descriptions of the internal consistency of the change scores for the criteria within a disorder.

DISCUSSION

The results of this study indicate considerable consistency among the changes in criteria for these disorders, and also suggest that these changes are

Table 1. Internal Consistency and Discriminant Validity of Criterion Change Scores Over a 2-Year Period

	Border- line	Obsessive- Compulsive	Avoidant	Schizo- typal
BPD Criteria				
Intense anger	0.52	0.31	0.28	0.20
Affective instability	0.52	0.28	0.17	0.12
Chronic emptiness	0.42	0.19	0.16	0.21
Identity disturbance	0.43	0.15	0.10	0.17
Stress-related paranoia	0.45	0.26	0.28	0.25
Avoids abandonment	0.42	0.13	0.29	0.20
Self-injury	0.31	0.08	-0.04	0.06
Impulsivity	0.35	0.18	0.05	0.11
Unstable relationships	0.46	0.20	0.13	0.13
OCPD Criteria				
Rigid and stubborn	0.27	0.41	0.14	0.20
Miserly	0.05	0.19	0.08	0.05
Pack rat	0.20	0.21	0.14	0.16
Perfectionism	0.25	0.51	0.18	0.20
Rules and details	0.20	0.42	0.21	0.20
Reluctant to delegate	0.26	0.49	0.15	0.17
Inflexible about morality	0.17	0.40	0.01	0.19
Workaholic	0.11	0.35	0.10	0.12
AVPD Criteria				
Views self as inept	0.27	0.19	0.50	0.19
Preoccupied w/ rejection	0.29	0.20	0.58	0.26
Needs to be liked first	0.26	0.18	0.51	0.26
Feels inadequate	0.31	0.17	0.57	0.25
Fears being ridiculed	0.21	0.10	0.39	0.20
Avoids social jobs	0.21	0.14	0.44	0.17
Avoids taking risks	0.23	0.08	0.51	0.09
STPD Criteria				
Social anxiety	0.08	0.19	0.23	0.29
No close friends	0.06	0.01	0.32	0.18
Odd beliefs	0.17	0.22	0.29	0.35
Unusual experiences	0.20	0.18	0.33	0.39
Paranoid ideation	0.34	0.20	0.33	0.35
Ideas of reference	0.20	0.23	0.18	0.31
Odd behavior	0.13	0.08	0.10	0.36
Odd thinking/speech	0.09	0.12	0.09	0.52
Constricted affect	0.05	0.08	0.17	0.27
Alpha	0.75	0.68	0.78	0.66

Note. $n = 548$; any correlation $>.11$ is significant at $p <.01$.

relatively disorder-specific, in contrast to relatively nonspecific changes that would be expected if this relatively pathological sample were simply “regressing to the mean” in the general direction of psychological health. For the 33 criteria examined for these 4 disorders, there was a positive association between change in criterion and change in syndrome, and in 28 of 33 instances this association exceeded .30. Furthermore, change in a criterion was more highly associated with change in the parent syndrome than with changes in other syndromes, with one exception: for the STPD criterion “no close friends,” changes were more related to changes in AVPD than to STPD. Although this was the only instance where greater association across disorders was noted, a few other criteria also appeared to be relatively nonspecific. For example, the STPD criterion “paranoid ideation” was particularly related to the status of BPD and AVPD, while changes in the “miserly” and “pack rat” behavior of the OCPD did not appear to cohere particularly well with changes in any of the four disorders.

These results support the syndromal status of these four disorders, as there was considerable temporal coherence in changes among the indicators for each disorder. To illustrate, Grilo and colleagues (2001) found that the internal consistency of the criteria for these disorders at baseline ranged from .69 (OCPD) to .83 (AVPD). The comparable val-

ues of .66 to .78 obtained here suggest that the pattern of changes observed in these criteria over a 2-year period are nearly as coherent as the cross-sectional associations among the criteria themselves, which could serve as a theoretical upper limit to any observed longitudinal associations. While these findings support the nosological status of these four disorders, they also identify some potentially problematic criteria that do not appear to covary over time with other disorder indicators and can thus inform future revisions of the diagnostic criteria.

REFERENCES

- Blashfield, R.K., Spröck, J., & Fuller, A.K. (1990). Suggested guidelines for including or excluding categories in the DSM-IV. *Comprehensive Psychiatry*, 31, 15–19.
- Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334.
- Cronbach, L.J. (1970). How we should measure change—or should we. *Psychological Bulletin*, 74, 68–80.
- Grilo, C.M., McGlashan, T.H., Morey, L.C., Gunderson, J.G., Skodol, A.E., Shea, M.T., Sanislow, C.A., Zanarini, M.C., Bender, D., Oldham, J.M., Dyck, I., & Stout, R.L. (2001). Internal consistency, intercriterion overlap and diagnostic efficiency of criteria sets for DSM-IV schizotypal, borderline, avoidant, and obsessive-compulsive personality disorders. *Acta Psychiatrica Scandinavica*, 104, 264–272.
- Gunderson, J.G., Shea, M.T., Skodol, A.E., McGlashan, T.H., Morey, L.C., Stout, R.L., Zanarini, M.C., Grilo, C.M., Oldham, J.M., & Keller, M.B. (2000). The Collaborative Longitudinal Personality Disorders Study: Development, aims, design, and sample characteristics. *Journal of Personality Disorders*, 14, 300–315.
- Zanarini, M.C., Skodol, A.E., Bender, D., Dolan, R., Sanislow, C.A., Morey, L.C., Grilo, C.M., Shea, M.T., McGlashan, T.H., & Gunderson, J.G. (2000). The Collaborative Longitudinal Personality Disorders Study: II. Reliability of Axis I and Axis II diagnosis. *Journal of Personality Disorders*, 14, 291–299.

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