

analyzed through dependent t-tests with bootstrapping to test for effects of potential outliers and reliability of results. These revealed significant temporal differences in basic symptoms (mean delta=3.45, $t(28)=2.38$, $p=0.024$) and positive symptoms sum scores (mean delta=2.00, $t(28)=2.48$, $p=0.021$). In contrast, differences in WSS scores remained non-significant: physical anhedonia (mean delta=1.55, $t(28)=1.79$, $p=0.106$), social anhedonia (mean delta=1.35, $t(28)=1.68$, $p=0.107$), magical ideation (mean delta=0.28, $t(28)=0.40$, $p=0.691$), and perceptual aberration (mean delta=0.62, $t(28)=0.92$, $p=0.360$).

Furthermore, examining Pearson's correlations between the scales difference scores, we found a significant strong correlation only between magical ideation and perceptual aberration ($r=0.506$, $p=0.005$), and trend-level moderate correlations between physical anhedonia and both magical ideation ($r=0.337$, $p=0.091$) and perceptual aberration ($r=0.319$, $p=0.073$), as well as between the two CHR symptoms difference scores ($r=0.328$, $p=0.083$). Difference scores of WSS and CHR symptoms never correlated ($r=0.012$ to 0.306 ; $p=0.969$ to 0.106). In linear regression analyses, WSS difference scores were not predictive of CHR symptom difference scores, which, in turn, did not predict WSS difference scores.

Our results strengthen the distinction between CHR symptoms and schizotypy in terms of independent state and trait factors and, thus, the notion that CHR symptoms occur on top of a heightened schizotypy, as suggested by the model by Debbané et al.² Furthermore, their independence support notions that the prediction of psychosis might be improved by their combination⁶. To this aim, physical anhedonia and social anhedonia, that constitute the negative schizotypy dimension, might be especially promising candidates.

Negative schizotypy might be able to detect those people most likely to progress to a severe mental disorder among those

at an already increased risk to experience psychotic or psychotic-like symptoms – detected by CHR criteria. This might explain why both anhedonia scales showed greater, though still non-significant, variation over time.

Future studies on larger samples with longer follow-up and more assessment times are needed to explore the reliability of our findings, the potential specific relationships between trait and state factors, the potential patterns related to conversion to psychosis, and, ultimately, the role of these likely important risk factors of psychoses in their aetiology¹.

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Borderline personality disorder or a disorder within the schizophrenia spectrum? A psychopathological study

Borderline personality disorder (BPD) is one of the most frequently used diagnoses in European and American psychiatry. Nonetheless, the borderline diagnosis is nosologically unclear, especially with respect to its differentiation from the schizophrenia spectrum disorders.

When entering the DSM-III, BPD was separated from schizotypal personality disorder (SPD), formerly often denoted as borderline schizophrenia. In a detailed historical, conceptual and empirical review¹, we have argued that the division of the borderline group into BPD and SPD was not entirely justified, and that the BPD category today is overinclusive and both clinically and conceptually difficult to differentiate from the schizophrenia spectrum disorders. In a separate study², we have pointed out that the BPD criteria of “identity disturbance” and “chronic feelings of emptiness” refer to multi-layered phe-

nomena which in their basic aspects of structural change of experience were both originally ascribed to the schizophrenia spectrum³.

Informed by these studies, we conducted an empirical study of 30 patients (28 females, mean age 30.0±8.0 years) who had received a main clinical diagnosis of BPD at three university-affiliated outpatient clinics specifically dedicated to the treatment of BPD in the capital region of Denmark. Among these patients, 56.7% had previously been hospitalized and 70.0% had previously received a non-BPD diagnosis, mostly affective or anxiety/stress related disorders, in line with a recent Danish register study of 10,876 patients⁴.

The patients underwent a careful psychiatric evaluation by a senior clinical psychologist and researcher. Interviews were conducted in a semi-structured and conversational manner ac-

ording to standard phenomenological principles and involved a composite instrument used for several psychopathological studies at our department⁵. In addition, we specifically rated all BPD and SPD criteria according to both DSM-5 and ICD-10. All interviews except one were videorecorded and reviewed, and narrative summaries were made of all of them.

Research diagnoses were made according to DSM-5 and ICD-10 at a consensus meeting between MZ and JP. In cases of uncertainty about crucial psychopathological phenomena, MZ and JP jointly evaluated extracts of video recordings or made a joint extra interview with the patient. A random sample of five interview summaries was independently diagnosed by an external senior psychiatrist, who agreed with the consensus diagnoses.

The study found that the vast majority of patients in fact met the criteria for a schizophrenia spectrum disorder (66.7% according to DSM-5 and 76.7% according to ICD-10), i.e. schizophrenia (20.0% according to both DSM-5 and ICD-10) or SPD. Among the non-schizophrenia patients, 40.0% had “quasi-psychotic episodes” (SPD criterion in ICD-10). Five patients had psychotic symptoms that were more articulated than at a “quasi-psychotic” level, yet still failing to meet the criteria for schizophrenia.

The most frequent diagnostic criteria were the SPD “inappropriate/constricted affect” and “unusual perceptual experiences”, whereas the least frequent were the BPD “impulsivity” and “intense and unstable relationships”. The BPD criteria of “identity disturbance” and “chronic feelings of emptiness” were significantly correlated with the total score of self-disorders as measured by the Examination of Anomalous Self-Experience (EASE)⁶.

Patients with schizophrenia and SPD had significantly ($p < 0.01$) higher levels of self-disorders than the non-spectrum group (17.5 ± 6.0 vs. 6.8 ± 5.4 in DSM-5; 16.9 ± 6.0 vs. 4.1 ± 2.6 in ICD-10), and these levels are very similar to findings in other studies⁵. There were no significant differences in total EASE score between the schizophrenia and SPD group according to both diagnostic systems.

We believe that this state of pronounced diagnostic confusion may in part be an unintended result of the “operational revolution” and its introduction of polythetic criteria which are defined by short layman statements open to multiple interpretations and semantic-historical drifts.

The pre-DSM-III borderline concept evolved from several sources¹.

One source was the clinical and psychotherapeutic notion of sub-psychotic cases of schizophrenia originally described as latent, pseudoneurotic or borderline schizophrenia or “Hoch-Polatin syndrome”⁷. This Gestalt comprised subtle Bleulerian fundamental symptoms such as disorders of expressivity and affectivity, formal thought disorder, ambivalence, experiential ego disorders, and a variety of psychosis-near disintegrative features.

Another source came from psychotherapeutic practice describing extroverted, dramatic patients with intense but fluctuating interpersonal relationships, shifting between idealization and devaluation, and problematic to manage in a psychotherapeutic setting.

Finally, Kernberg’s⁸ structural-dynamic concept of borderline personality organization influenced the development of BPD criteria (e.g., identity diffusion and a specific pattern of defense mechanisms such as splitting). However, Kernberg’s concept was a transdiagnostic dimension applicable to such different categories as schizoid (and presumably schizotypal), paranoid, hypomanic, narcissistic and antisocial personalities and different psychosis-near disorders.

Since 1980, the founding prototypes and the original psychopathological insights that imbued the creation of the polythetic criteria have gone into oblivion. The polythetic criteria have resulted in an a-contextual emphasis on single emblematic elements (e.g., self-mutilation) and a general decline in psychopathological knowledge. This has contributed to the contemporary diagnostic confusion. For instance, impulsivity as a personality trait (i.e., manifest in different situations across the span of life) may be confused with disorganized behaviour or impulsions appearing within the schizophrenia spectrum.

Today, near-psychotic symptoms appear as DSM-5 criteria in both BPD and SPD. This makes the differentiation of BPD from the schizophrenia spectrum heavily dependent on the detection and registration of the schizophrenic fundamental symptoms. Unfortunately, clinicians and researchers no longer pay careful attention to those features, and their expressive nature make them impossible to be assessed through self-report questionnaires and structured interviews.

Since DSM-III, psychiatric diagnoses have become reified and considered as “natural kinds”, and only research based on the diagnostic criteria of the most recent edition of DSM is usually considered for publication⁹. Instead, we perhaps ought to re-instantiate theoretical and empirical psychopathology at the core of scientific psychiatry.

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