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The Challenge of Transforming the Diagnostic System of Personality Disorders

Sabine C. Herpertz, Steven K. Huprich, Martin Bohus, Andrew Chanen, Marianne Goodman, Lars Mehlum, Paul Moran, Giles Newton-Howes, Lori Scott, Carla Sharp

Note: This paper is the product of a collaboration among the Boards of Directors of the International Society for the Study of Personality Disorders (ISSPD), European Society for the Study of Personality Disorders (ESSPD), and the North American Society for the Study of Personality Disorders (NASSPD). It was prompted by concerns about inadequacies in the current proposal for personality disorders in ICD-11. The manuscript has been approved by the elected Boards of each of the ISSPD, ESSPD, and NASSPD. While individuals in each society might have different positions from that which is described below, this manuscript represents the consensus of each Society's Board, the current position of each Society, and a broad, international agreement about the state of personality disorder assessment and diagnosis.

Corresponding author:

Sabine C. Herpertz

Dept. of General Psychiatry, University of Heidelberg

D-69115 Heidelberg, Germany

Tel. +49 6221 5622751

Email: sabine.herpertz@uni-heidelberg.de

Abstract

While the DSM-5 alternative model of personality disorder (PD) diagnosis allows the field to systematically compare categorical and dimensional classifications, the ICD-11 proposal suggests a radical change by restricting the classification of PDs to one category, deleting all specific types, basing clinical service provision exclusively upon a severity dimension, and restricting trait domains to secondary qualifiers without defining cutoff points. This paper reflects a broad, international agreement about the state of PD diagnosis. It is argued that diagnosis according to the ICD-11 proposal is based on broad, potentially stigmatizing descriptions of impaired functioning and ignores much of the impressive body of research and treatment guidelines that have advanced the care of adults and adolescents with borderline and other PDs. Before radically changing classification, which highly impacts the provision of health care, head-to-head field trials coupled with the views of patients as well as thorough debate among scientists, are urgently needed.

Introduction

The subject of diagnosis in psychiatry is often polarizing, evoking strong and varied opinions and with no clear framework for achieving consensus. While there is general agreement about the importance of accurately diagnosing mental disease, the best means to accomplish this remain unclear (P. McGorry & van Os, 2013). Over the years, this has been reflected in terms such as "subtypes within categories" (e.g., (Gabbard, 1989); (Russ, Shedler, Bradley, & Westen, 2008)), transdiagnostic approaches (Etkin & Cuthbert, 2014), clinical staging (P. D. McGorry, 2007), higher-order structure of phenotypic expression of psychopathology (Clark, Watson, & Reynolds, 1995) or hierarchical taxonomy of psychopathology (Kotov et al., 2017). Age-old debates continue regarding the best way to represent mental disorders as either distinct categories with extensive comorbidity, or as a continuum that is not more sharply distinct from healthy states.

In the absence of a clear understanding about the etiology and biological underpinnings of mental disorders, psychiatric classification remains inherently limited to a descriptive approach. This has proven particularly problematic in the field of personality disorders (PDs). Debate about the strengths and weaknesses of categories versus dimensions came to the forefront in the preparation of DSM-5 and has been re-ignited by the ICD-11 proposal to re-classify PDs based on an assessment of severity of disturbance in interpersonal functioning and a five-factor, dimensional structure of personality, while completely refraining from a categorical approach (Tyrer, Crawford, Mulder, & Disorders, 2011).

Diagnosis has been described as classification with utility (Kendell & Jablensky, 2003). Beyond satisfying the scientific requirements inherent in any medical diagnosis (Robins & Guze, 1970), a diagnostic system should have clinical utility, i.e., fulfil the needs of patients, clinicians and policy makers in mental health care. This key requirement of a diagnostic system should guide clinical decision-making and provide useful information about treatment selection, prognosis and clinical outcomes. Second, the diagnostic system should assist patients to reach an informed decision about which treatment is most likely to help them in their recovery. Third, classification should ideally inform the public resourcing of mental health services and thus ensure the necessary support for those affected. Fourth, the diagnostic system must be informed by robust science and simultaneously serves as a pragmatic research framework to assist future research endeavors. For all of these reasons, a diagnostic system, such as ICD-11, must create reliable and valid diagnoses underlying communication among clinicians, patients, insurance companies, governments, policy makers, and researchers.

Limitations of a categorical approach

In the modern era, the use of categorical approaches for disorder-specific research dates back to the 1960s for antisocial PD (Robins LN, 1966), the 1980s for borderline PD (Gunderson & Zanarini, 1987) and the 1990s for schizotypal PD (Siever & Davis, 2004) (Gunderson & Zanarini, 1987), there are well documented limitations to this approach ((Clark, 2007); (Samuel, South, & Griffin, 2015)). Many studies have provided evidence that there is a continuity between normal and abnormal personalities (Pukrop, Herpertz, Sass, & Steinmeyer, 1998) (Widiger, Simonsen, Krueger, Livesley, & Verheul, 2005). Extensive co-occurrence among PDs - with many individuals meeting three or more categories – suggest that a unique condition as defined by a categorical PD is artificially segregated into multiple diagnoses, making it hard to develop a comprehensive understanding of patients' problems in order to identify specific treatments. Furthermore, the high prevalence of the Personality Disorder Not Otherwise Specified (PDNOS) category provides little information about the psychopathology of a specific patient. Longitudinal studies, such as the Collaborative Longitudinal Study of Personality Disorders (CLPS) and the McLean Study of Adult Development (MSAD) have shown that, although patients might 'remit' from the disorder over time (i.e. no longer meet criteria for a PD), functional impairment is an enduring feature for many people with PD ((Gunderson et al., 2011); (Hopwood et al., 2013); (Zanarini, Frankenburg, Reich, & Fitzmaurice, 2012), (Walter et al., 2009); (Keuroghlian, Frankenburg, & Zanarini, 2013)). The CLPS data showed that trait-based descriptions performed better in predicting functioning than PD categories (Hopwood et al., 2007). There are also compelling data from other sources showing that change in personality traits predicts change in PDs but not vice versa (Warner et al., 2004), suggesting that traits more closely resemble the reality of PD than categories (Newton-Howes, Clark, & Chanen, 2015).

A further point of criticism relates to the high heterogeneity of PD diagnoses which affects the reliability of clinicians' diagnoses and makes treatment planning difficult. Further criticisms of the categorical model include the arbitrary diagnostic thresholds and restricted clinical ability to predict efficacy of treatment (Skodol et al., 2011). In addition, factor analytic studies have failed to replicate the DSM-IV or DSM-5 Section II structure of personality pathology ((Sharp et al., 2015); (Wright, Hopwood, Skodol, & Morey, 2016)). Finally, with limited resources in health economies, psychiatry is challenged to carefully consider the severity of presenting difficulties in addition to diagnostic labels in order to differentiate the urgency and intensity of treatment needed.

In conclusion, there are several well-founded arguments that categorical diagnoses are not sufficiently empirically grounded and do not provide a reliable enough means for individual treatment planning.

The alternative model of personality disorder according to DSM-5, section III: a hybrid approach

The alternative model of PD within section III of DSM-5 (5th edition, American Psychiatric Association [APA], 2013) attempts to take into account some of the above mentioned limitations. It emphasizes functional impairments of the self and in the interpersonal realm as the principal features of PD and proposes a normative metric against which personality dysfunction is measured (Bender, Morey, & Skodol, 2011). This alternative model of PD also conceptualizes pathological trait dimensions in addition to categories to represent individual differences among patients within one category or beyond categorical diagnoses. This dimensional approach includes 5 factor-analytically derived broad trait domains and 25 more specific trait facets, which have been operationalized with reference to clinical conditions, and are thus potentially helpful for fine-grained descriptions of individual psychopathology and subsequent implications for treatment planning. Additionally, instruments measuring functional impairment (Level of Personality Functioning Scale, PFS; (Bender et al., 2011)) as well as trait facets (Personality Inventory for DSM-5, PID-5; (Krueger, Derringer, Markon, Watson, & Skodol, 2012)) have been empirically developed. For instance, in a recent review of the literature, Al-Dajani, Grainick, and Bagby (Al-Dajani, Gralnick, & Bagby, 2016) reported that there are now 29 empirical studies on the PID-5's psychometric properties; however, only eight of these studies, were conducted using clinical samples. Furthermore, Al-Dajani et al note that only one paper (based upon six case studies) has described the clinical application of the PID-5 *(*Bach, Markon, Simonsen, & Krueger, 2015*)*, raising unresolved questions about the clinical utility of the PID-5. Thus, while promising, more research is needed to compare this model with the traditional categorical one and to arrive at a more effective integration of the two determinants of diagnosing PDs, i.e. functional impairment and trait facets. In addition, the extrapolation of the hybrid model to personality pathology in young people is virtually non-existent (in contrast to the categorical approach). Nonetheless, there remain many important reasons to consider dimensional frameworks and to incorporate this perspective in future diagnostic models.

The ICD-11 proposal: Limitations of a purely dimensional approach

In contrast to DSM-5, the ICD-11 proposal restricts the classification of PD to one category that is the patient does or does not meet the general definition of PD. If the general criteria are met, a second step evaluates the severity of personality disturbance (mild, moderate, severe). The assessment of any specific PD type has been relinquished. Instead, in a third step, 5 trait domains (negative affectivity, dissociality, disinhibition, anankastia, and

detachment) representing broad, heterogeneous constructs, can be used to qualify the profile of the personality structure that underlies personality dysfunction. Thus, the ICD-11 proposal differs from the alternative model of Section III of DSM-5, which uses traits as diagnostic criteria for the existing PD categories (Oltmanns & Widiger, 2017). While there are some strengths to the ICD-11 proposal, particularly that it appears to be simple to use and that it considers the measurement of severity (notwithstanding limitations outlined below), there are major limitations.

First, although the general criteria for PD are similar to previous descriptions in ICD-10 and DSM-IV, they will become the prime diagnostic criteria in ICD-11. Yet, there is only one rather small field trial that has assessed the reliability of the yes/no decision, based on these general criteria (Kim, Blashfield, Tyrer, Hwang, & Lee, 2014).

Second, the introduction of a severity dimension in ICD-11, with a related assessment instrument, is valuable and appears to be useful, as changes in functional impairments due to age, natural course, and treatment in particular, can be better represented. However, the proposed ICD-11 diagnosis is based upon only broad descriptions of impaired functioning, that is illustrating examples for mild, moderate, and severe PD, without providing a "normative image of a well-functioning personality" (Zimmermann J., 2015) (slide 11). Such a high level of abstraction is likely to diminish reliability of diagnosis. Also, it opens the door to stigmatizing PD diagnosis, arising from the global clinical impression of the very first communication between patient and clinician, instead of one based upon objective and reliable criteria. The risk of stigmatizing might be particularly high, given that the estimation of severity is entirely based on functioning and not suffering, with a focus on harm to self or others. An extremely important aspect of any mental health treatment is for the clinician to orient the patient to her/his disorder in a phenomenological and non-pejorative manner that can reduce stigma and generate hope and promote treatment engagement. This approach is key in several current major approaches to treat PD, but we fear that the proposed ICD-11 diagnosis will be unsuitable as a tool for this important psychoeducational task.

Third, in the ICD-11 proposal, the trait domains are secondary qualifiers with no facet-level detail being provided. Clinical service provision is exclusively based upon the severity dimension without considering the trait domains and trait facets that ultimately will direct clinical management. Consequently, services might be asked to deliver treatment to 'severe' patients with no indication of what problems this might denote. In addition, no guidance is provided on the threshold at which a trait might be considered pathological. While impressive research has been conducted on the measurement of the dimensions, a trait model without empirically-defined cutoff points could prompt clinicians, and - what might be more critical - health policy makers and funding bodies to be the ones making decisions about whether a

patient is sufficiently distressed or impaired to warrant a clinical service. Instead of basing these important clinical decisions on two levels of the diagnostic process, i.e. severity of malfunctioning and trait-based descriptions of the personality profile including relationships between them, they will be restricted to the assessment of severity alone, thereby separating the decision about whether treatment is needed from the one about which treatment to offer (e.g. when to provide hospitalization, when to recommend which psychotherapy method or/and medication, or when to shift a patient into a specialized treatment). We assume that as confusion plays out with the roll-out of the new ICD-11 proposal, clinicians will most likely continue to use a prototypic category-matching process in order to organize clinical information and to facilitate treatment decisions.

Fourth, although PDs could, in principle, be subsumed within a trait-based dimensional framework, personality traits per se, are not usually the reason for a clinical referral. For instance, difficulties in interpersonal functioning or relational patterns that are enacted with a psychotherapist often become the focus of clinical attention (Westen, 1997) and the ICD-11 model has no clear means with which to assess these issues. Borderline PD is the most important PD in clinical practice, and a large volume of research shows that for patients with this disorder, explicit attention to relationship dynamics is central to successful treatment outcome (e.g., (Clarkin, Lenzenweger, Yeomans, Levy, & Kernberg, 2007); (Clarkin, Levy, Lenzenweger, & Kernberg, 2007); (Fonagy & Bateman, 2008); (Stanley B & Brodsky B S, 2009); (Ryle, 2004)).

Fifth, for general care settings, the ICD-11 group has recommended that the field should be content with the assessment of the degree of severity, and assessment of trait domains is only expected to be conducted by a specialist (Tyrer, Reed, & Crawford, 2015). Yet it is unclear who might be appropriately qualified to undertake this 'specialist' role and – most importantly - how this designation might translate to treatment recommendations. We think it is unlikely that patients will be satisfied with a provider who suggests that there is a problem with their personality, without offering more specification of the problem. Will a patient consulting a mental health care provider understand that no distinction is made between habitual antisocial attitudes and behaviors on the one hand and negative affectivity associated with e.g., avoidant and dependent PD symptoms on the other? Critically, we currently lack the understanding about the patient perspective about classification and in particular, whether patients prefer a categorical or a dimensional approach in communicating with them about their difficulties. We think that empirical data on this key issue is required in order to inform any revision to classification.

Sixth, in arguing for accepting the ICD-11 proposal in its current form, Hopwood and colleagues (Hopwood C. J. et al., in press) write that the "majority of clinicians and researchers support a transition to a more dimensional, evidence-based framework…" (p. 4).

This statement is inaccurate and conflates the science in support of a dimensional structure of personality pathology with a diagnostic system for PD. Studies actually indicate mixed findings about the support for dimensions over categories ((Rottman, Ahn, Sanislow, & Kim, 2009); (Lowe & Widiger, 2009); (Morey, Skodol, & Oldham, 2014)[1]; (Spitzer, First, Shedler, Westen, & Skodol, 2008)). While a recent study (Nelson, Huprich, Shankar, Sohnleitner, & Paggeot, 2016) found that psychology graduate students and interns preferred the DSM 5 Section IIII trait ratings over categorical or prototype models, it also found that the *Psychodynamic Diagnostic Manual* (PDM) framework (PDM Task Force, 2006) as more appreciated for its comprehensiveness, and that trainee age was positively correlated with favorable ratings of the PDM. These findings are consistent with a number of others that show that practicing clinicians with many years of experience find prototype models to be preferable to dimensional models. Thus, it is important that future research evaluates not only the perceived utility of dimensional and categorical models, but also how clinical judgment, discipline and experience shape the perceived utility.

Seventh, in the case of borderline PD, one of the most highly prevalent and relevant categories in clinical samples, recent studies have reported that this PD cannot be sufficiently represented on the five domains but that a further broad domain incorporating borderline, histrionic and narcissistic symptoms needs further research ((Mulder, Horwood, Tyrer, Carter, & Joyce, 2016). Alternatively, borderline PD is assumed to be rather a general factor that should not be separated as a specific domain but "captures common variance in diverse expressions of personality" (Sharp et al., 2015) (page 394) or might reflect more symptoms than traits (Tyrer P., 2009), compared with other domains. Thus, it is essential that research validates the factor structure of personality pathology with external criteria before overhauling the entire diagnostic system.

Eighth, it is noteworthy and unusual that ICD-11 intends to codify some nosological categories but not others. For instance, dissociative identity disorder or possession trance disorder and specific subtypes of impulse control disorders can be diagnosed in a rather differentiated and categorical manner. Yet, the ICD-11 proposal advocates for removal of PD types including borderline PD which affects up to 3% of the general population. Only relatively recently have PDs, and particularly borderline PD, become recognized as common mental disorders associated with increased long-term impairment, morbidity, and mortality among adults ((Quirk et al., 2016); (Fok et al., 2014)). For adolescents our recognition of PDs as diagnosable conditions ((Bjorkenstam, Bjorkenstam, Holm, Gerdin, & Ekselius, 2015); (Sharp & Fonagy, 2015)) with very serious long-term implications for mental health and

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[1] It should be noted that Hopwood et al. wrote that this study supported the preference of clinicians for dimensional models; yet, the findings were more mixed that what they reported.

social functioning (Moran et al., 2016) is even more recent. This recognition has had a strong and positive impact on the development, adaptation, and implementation of treatments for patients, particularly in young people (Chanen, 2015). Nevertheless, the proposed system completely ignores this impressive body of research and clinical guidelines that have advanced the care of adolescent and adult people with this disorder. While Hopwood et al. (Hopwood C. J. et al., in press)claim that many of the extant categories are "clinically problematic" (p. 4), there are well documented accounts of the empirical scope and clinical management of DSM-derived borderline (Linehan M, 1993), dependent (Bornstein RF, 1993), and narcissistic (Ronningstam, Gunderson, & Lyons, 1995) PDs, as well as empirically-derived descriptions of most of the DSM-IV/5 PDs and how to engage and treat patients with these diagnoses ((Livesley WJ, 1995); (Clarkin JF, Fonagy P, & Gabbard GO, 2010)). What should be done with this information and body of (largely publicly-funded) research and clinical experience, especially since it was never conducted within a trait-based dimensional framework?

Ninth, much of the pre-existing work points to a number of issues about personality pathology that are outside of the ICD-11 dimensional framework, such as object relatedness, attachment patterns, coping behaviors, situational specificity of problems, patient-therapist interactions, developmental history, sequelae of trauma, accessibility of unconscious or nonconscious schema or representations and habitualized patterns of learned behavior. There is, in particular, decades of research on the construct of borderline PD which have led to the understanding that affectivity of borderline PD is not sufficiently described by negative emotions but is closely interwoven with rejection hypersensitivity (Gunderson, 2010) and damaged self-esteem (Winter, Bohus, & Lis, 2017), and that social dysfunctioning in borderline PD is not sufficiently described by either disinhibition/dissociality or negative affectivity or both of them but is mediated by a complex interplay of social threat sensitivity, low affect regulation capacity and poor social cognition (Herpertz, Jeung, Mancke, & Bertsch, 2014). Probably even more importantly, evidence-based psychotherapy programs have substantially helped patients with categorically-diagnosed borderline PD, with comparable effect sizes to treatments in other mental disorders (Cristea et al., 2017). Thus, if the borderline PD diagnosis were to disappear in the ICD-11 (and other diagnostic manuals), what would this do to groups of patients who have already suffered from discrimination and under-provision of mental health care for too long?

The selection of the optimal classification scheme needs to be informed by evidence, but to our knowledge, there has only been one rather small head-to-head field trial (Kim et al. 2014) comparing the face or predictive validity of DSM-5 section II vs. ICD-11 proposals. We would encourage such studies as they might help to guide the field forward. Moreover, we are not aware of any guidelines in the clinical or empirical literature that document how broad

trait domains might be utilized in clinically meaningful ways (see (Clarkin & Huprich, 2011) and Meehan & Clarkin (Meehan K B & Clarkin J F, 2015)) for a further discussion of these issues), except for a recent set of published case studies based upon the DSM-5 alternative model *(Bach et al., 2015).*

To conclude, a radical revision to the classification of PDs must result in reliable and valid diagnoses that provide clinical utility and that minimize the risk of stigmatizing patients. Future classification of PDs should incorporate the hard-won scientific gains about the disorders´ etiology, course, and treatment. We fear, however, that the proposed changes in the ICD 11 could cause more harm than good, by promulgating confusion in our field and alienating the very members of society whom we are trying to help.

Conclusion: Recommending a hybrid model

The magnitude of the changes proposed for ICD-11 is immense, while the rationale is still incomplete and the evidence inconsistent and limited. Although PD criteria belonging to the current categorical classification have justifiably been accused of being inconsistent amalgams of impairments, traits, and symptomatic behaviors, we first have to clarify the relations among these features. In addition, the optimal factor structure that best represents the meta-structure of personality pathology needs to be validated by means of field trials.

Importantly, several of the critiques of categorical diagnosis of PD put forward by the ICD-11 work group on PDs are in fact critiques against psychiatric nosology in general (Chanen A. M., 2011). Thus, the current discussion about dimensional vs. categorical classification of PDs reflects a wider problem in mental health research which demands a debate in psychiatry in general. PDs are, or at least should be, an equal partner with other mental disorders. Thus, the classification of PDs should be constructed in an analogous way to the other mental disorders, and any move to dimensions should be a meta-decision for the whole of ICD – not one which is sequestered off and confined to PDs.

Recently, Huprich (Huprich S K, 2015) compared the classification and assessment of PDs to that which happens in orthopedics. He noted that the classification of bone fractures occurs within certain types of taxonomies (e.g., open or closed fracture, complete vs. partial fracture) that help to guide their classification and subsequent treatment. While research on bone growth and pathophysiology (among other domains) is critically important to understand what mechanisms are associated with healing, it is not necessarily a framework that is well-suited to become the organizing framework for a taxonomy of bone fractures − at least not yet. By comparison, some of the categorical organizing systems associated with personality pathology have heuristic value and meaning (despite being very flawed), and as such, dimensional models and frameworks hold much promise to improve the classification

scheme. But for many reasons articulated above, the field is not yet ready for an exclusive transition to this perspective. Our shared concern among Personality Disorder Societies across the globe and presented here is empirically supported and we urge for caution and extreme care in moving forward. There are no adverse consequences to delaying a radical revision to the WHO's taxonomy and until we have good data from head-to-head field trials of different approaches, coupled with the views of patients and public as well as thorough debate among scientists. In parallel with further research, efforts to bridge the gap between categorical and dimensional models could be facilitated with more cross-talk and collaboration between researchers, clinicians, and patients. Concrete guidelines or "roadmaps" could be collaboratively and iteratively developed to help pave the way for the integration of new models into existing assessment and intervention approaches.

Consequently, presuming that the time for further research is limited in face of planning to publish ICD-11 in 2019, we strongly suggest retaining a hybrid model of PD classification. This, in addition to dimensional assessment, would allow clinicians and insurers to continue to use categories until the science and consensus has been firmed up. A hybrid model, as it is included in Section III of DSM-5, allows the field to systematically compare categorical and dimensional classifications with 6 out of 10 specific PDs from DSM-IV being redefined by criterion A (impairment in personality functioning) and criterion B (pathological personality traits) and is thus backward compatible with traditional categories (Zimmermann J., 2014). It therefore provides the best basis for further research, which is urgently needed, and should be cross-disciplinary and robust.

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