IN REVIEW

Suggestions for a Framework for an Empirically Based Classification of Personality Disorder

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Background: The classification of personality disorder is one of the least satisfactory sections of contemporary psychiatric classification. Fundamental problems with current classifications include extensive diagnostic overlap, limited evidence of validity, and poor empirical support.

Methods: Conceptual analysis and the results of empirical studies are used to propose a framework for organizing an empirically based classification.

Results: First, personality disorder is a form of mental disorder and, therefore, should be classified as a single diagnostic entity on Axis I along with other mental disorders. A preliminary definition of personality disorder as a tripartite failure involving the self system, kinship relationships, and societal relationships is proposed. The evidence suggests that this definition can be translated into a reliable set of items. Second, the diagnosis of personality disorder should be separated from the assessment of clinically relevant personality traits. Given the consistent evidential support for a dimensional model of personality disorder, it is suggested that personality be coded on a set of trait dimensions selected to provide a systematic representation of the domain of behaviours represented by current diagnostic concepts. Third, given that personality traits are hierarchically organized, it is suggested that an axis for coding personality include basic or lower-order dimensions as the primary level of assessment and a few higher-order patterns to summarize information for some purposes.

Conclusion: A preliminary list of 16 basic dispositional traits is proposed to describe the more specific components of personality disorder based, in part, on the convergence of evidence across studies: anxiousness, affective lability, callousness, cognitive dysregulation, compulsivity, conduct problems, insecure attachment, intimacy avoidance, narcissism, oppositionality, rejection, restricted expression, social avoidance, stimulus seeking, submissiveness, and suspiciousness. Three higher-order patterns were proposed: emotional dysregulation, dissocial behaviour, and inhibitedness, which may occur independently or in combination.

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For the last 25 years, classification has been a dominant theme in the psychiatric literature. Recently, interest in the topic has
decreased, as if it were generally believed that the major problems of psychiatric nosology had been solved. When criticism of psychiatric classification is expressed, it usually involves concern about specific diagnoses or specific diagnostic criteria. Doubts are rarely expressed about more fundamental issues, although many of these issues remain unresolved (1). The basic nosological principles used to organize the DSM-IV have not been explicated. There is little consensus on the scope of psychiatric classifications or on what psychiatric classifications seek to classify—mental illness, mental disorder, or conditions treated by psychiatrists. With the DSM-IV, the rationale behind the major grouping of disorders and the hierarchical structure of the system is not apparent. Even the concept of a diagnostic category is unclear, so that some diagnoses cover a wide range of psychopathology, whereas other diagnoses are little more than single symptoms.

There is more consensus that the classification of personality disorder is the least satisfactory section of psychiatric classifications. Nevertheless, the diagnostic concepts of Axis II are widely accepted, so that it is not unusual to hear discussions about the differential diagnoses of personality disorders, as though these diagnoses were distinct entities with separate etiologies and clinical courses. There are, however, problems with the classification of personality disorder, which range from fundamental problems with the way the classification is conceptualized to minor problems with specific criteria.

**Fundamental Problems With the Classification of Personality Disorder**

Some of the more important problems and limitations of contemporary classifications of personality disorder include the following areas:

1) The lack of a cogent theoretical or empirical rationale for the selection of categories is a limitation. Current diagnostic categories are an arbitrary list drawn from diverse theoretical positions, including classical phenomenology, classical psychoanalytic theory, self-psychology, object–relations theory, and social learning concepts.

2) The continued use of categorical diagnoses is problematic. Reviews of the category versus dimension distinction indicate that the evidence consistently shows that the features of personality disorder are not organized into discrete categories but are continuously distributed (2–4). For example, distributions of diagnostic criteria do not show evidence of the discontinuity or points of rarity that Kendell argued was fundamental to the categorical model (5–8). Similarly, multivariate analyses of descriptive features yield the same structure in samples that differ with respect to the presence of personality disorder (9,10). As Eysenck noted, such findings strongly support dimensional models (11). Finally, personality disorder diagnoses can be adequately represented by models of normal personality, especially the 5-factor model, which suggests that personality disorder represents the extremes of normal personality variation (12).

3) Multivariate statistical analyses indicate that the diagnostic features and traits of personality disorder are not organized into the diagnostic categories proposed for Axis II (8,10,13).

4) Diagnostic reliability is limited. Although diagnostic agreement improved considerably with the DSM-III, largely due to the development of diagnostic criteria and fixed rules for applying them, demonstrations of improved reliability largely rely on structured interviews. Few studies have investigated the reliability of clinical assessment. Moreover, although structured interviews yield satisfactory levels of agreement across interviewers, agreement across interviews is only modest (14).

5) The validity of most diagnoses has not yet been established. The problem of validity can best be understood in terms of the internal and external components (15). Internal validity refers to the extent to which diagnostic criteria form homogeneous clusters. External validity refers to the extent to which diagnostic concepts are distinct from one other and the degree to which they predict important external criteria, such as etiology, prognosis, and response to treatment. The evidence suggests that internal validity is limited. Diagnostic criteria show limited internal consistency, and some criteria correlate higher with other diagnoses than with the one for which they were proposed (16,17). There is limited evidence that diagnostic concepts predict important external variables.

6) Diagnostic overlap is extensive. Strictly speaking, diagnostic overlap is an aspect of external validity, but it is so important that it warrants a separate comment. Overlap is usually referred to as comorbidity. This is misleading because comorbidity refers to the cooccurrence of distinct diagnoses, and there is no evidence that personality disorder diagnoses are distinct in this sense. The term simply obscures a fundamental flaw in the system. For some diagnoses, such as paranoid personality disorder, overlap with other personality diagnoses occurs in almost all cases (18). The most distinctive category is obsessive–compulsive personality disorder, but, even here, overlap occurs in approximately 70% of cases. The usual response to this problem is to change criteria to improve the discriminant properties of the classification. The problem, however, is more fundamental and unlikely to be solved by tinkering with criteria.
Despite these problems, the DSM classification of personality disorders is unlikely to change greatly in the near future. There is too much investment in the system to permit radical change. Instead, a gradual transition is likely to be seen with the increasing use of alternative diagnostic concepts in clinical research. This is already occurring to some extent. Investigators who explore the biological correlates of personality disorder and pharmacological treatment seem to find DSM diagnostic concepts too heterogeneous for their purposes and focus instead on dimensions, such as affective instability, impulsivity, cognitive disorganization, and anxiousness (19).

Requirements for an Empirically Based Classification

1) The classification should have an explicit theoretical structure that can be modified. The principles used to organize the classification and the theoretical basis for diagnostic concepts should be stated explicitly. Only then can they be empirically evaluated (20).

2) The classification should be theory-based. The DSM emphasis on the classification being atheoretical with respect to etiology may have been a necessary interim position to free the classification of psychopathology from unsubstantiated assumptions about etiology. In the long run, however, it is an untenable position: theory lies at the very heart of classification. Hence, it is impossible to divorce the classification of personality disorder from a theory of personality disorder. Unfortunately, such a theory is not available. Nevertheless, current empirical knowledge and accumulated clinical experience permit some general statements about the psychopathology of personality, which can provide the framework for a classification.

3) The classification should be empirically based. Any classification should be consistent with empirical evidence and specified in ways that facilitate empirical evaluation and systematic revision.

4) The classification should be consistent with the general classification of psychopathology. The current distinction between Axes I and II lacks a coherent theoretical rationale and creates practical problems. Whatever advantages accrued from forcing clinicians to consider personality during the diagnostic process by placing personality disorders on a separate axis have been realized. The benefits are now more than counterbalanced by the problems created by an artificial dichotomy in the overall domain of psychopathology. There is little evidence to suggest that personality disorder is fundamentally different from Axis I disorders with respect to formal structure of psychopathology, etiology, or course (4). Moreover, the difference between personality disorder and conditions such as somatization, anxiety, and dysthymic disorders seems to be substantially less than the difference between these disorders and conditions such as schizophrenia or Alzheimer’s disease. One rationale for placing personality disorders on Axis II is that personality is fundamentally different from the symptomatology of Axis II disorders. It is argued that personality traits are stable, egosyntonic, and continuously distributed in the population, unlike the signs and symptoms of illness, which exhibit the opposite properties (21). This is undoubtedly true, but it has little bearing on the distinction between Axis I and Axis II. Although personality traits are conceptually distinct from the symptoms of illness, the features of personality disorder are not (4). The fundamental conceptual distinction is between personality and mental disorders and not between personality disorder and other mental disorders. Many of the presenting features of personality disorder, like those of other mental disorders, are caused by biological and psychosocial factors and, like those of other disorders, they wax and wane over time. Thus there seems to be little reason to continue dividing mental disorders in a way that implies that personality pathology is a different logical kind of psychopathology from all other forms of psychopathology.

5) The system should be consistent with knowledge in related fields. Contemporary classifications seem to have been constructed with minimal attention to related fields of knowledge. The classification should, however, be consistent with knowledge in such related disciplines as personality theory, cognitive science, neuroscience, behaviour genetics, and evolutionary psychology.

6) The classification should be based on the phenotypic structure of personality disorder. Although the classification should be consistent with biological thinking, the proposed diagnostic concepts should be based upon the phenotypic structure of personality disorder because it is the phenotype that we seek to explain and treat.

Clearly, we are far from developing a classification that meets these requirements. Nevertheless, it is possible to establish a framework for a classification that begins to address some of the limitations of contemporary classifications, which can also be modified on the basis of empirical findings so that it increasingly approximates a valid system.
A Structure for an Empirically Based Classification

The notion that personality disorder is a form of mental disorder has immediate implications for the organization of a classification. Based on this idea, it is proposed that the diagnosis of personality disorder (not personality disorders) be included with other mental disorders on Axis I and that Axis II (or preferably an equivalent) be retained to code clinically significant personality traits. Thus the classification would explicitly distinguish between the diagnosis of personality disorder and the assessment of personality on clinically relevant dimensions.

If personality disorder were included on Axis I, a systematic definition would be required to differentiate personality disorder from other classes of mental disorder, especially related disorders such as mood or anxiety disorders. This would also help to correct problems created by the failure of the DSM-IV to indicate clearly how the different groups of disorder are distinguished. This definition could also be used to develop diagnostic criteria to assess individual cases. Thus the diagnostic process would involve 2 components: diagnosis of personality disorder and assessment of individual differences in personality.

The distinction between the diagnosis of personality disorder and the assessment of personality relates to a second fundamental principle for organizing the system: the classification must accommodate the overwhelming empirical evidence that the phenotypic features of personality disorder are continuously distributed by incorporating a dimensional representation of personality disorder traits. A dimensional model would replace the diagnosis of individual disorders with a profile of scores on a set of dimensions. This means that personality disorder must be defined and assessed independently of the trait structure of personality. The alternative would be to assume that an extreme position on a personality dimension is in itself indicative of the presence of personality disorder. Although some authors have advocated this position, it has little empirical support. Moreover, there appears to be little reason to assume that an extreme score on a dimension inevitably indicates pathology or that such extreme characteristics may not be used adaptively. The proposed structure is similar in principle to Schneider’s distinction between abnormal personality (an extreme position on a personality dimension) and personality disorder (causing suffering to oneself or others) (22).

A Definition of Personality Disorder

Although a systematic definition is required to differentiate personality disorder from other forms of psychopathology and normal personality, a consensual definition that is precise enough to translate into a reliable set of diagnostic items has not been established. Rutter listed 4 conceptual approaches to personality disorder: 1) personality disorders as attenuated forms of major disorders. For example, personality disorder as forme fruste of psychoses, an idea that dates back to Kraepelin; 2) failure to develop important components of personality. For example, Cleckley’s concept of psychopathy as the failure to learn from experience and to show remorse; 3) a particular form of personality structure. For example, Kernberg’s concept of borderline personality organization characterized by identity diffusion, primitive defences, and reality testing; and 4) social deviance concepts. For example, Robins’ concept of sociopathic personality as the failure of socialization (23–27). Schneider provided an additional idea: that personality disorder is an abnormal personality (in the statistical sense) which causes either the individual or society to suffer (22). Some of these ideas are not strictly definitions but, rather, etiological concepts. Perhaps only Schneider’s definition is applicable to all forms of personality disorder and precise enough to form the basis for an operational definition.

The DSM-III and subsequent editions of the DSM provided a definition that was expressed in terms of diagnostic criteria in the DSM-IV. Thus the DSM-IV classification of personality disorder contains 2 kinds of criteria—specific criteria for specific diagnoses and general criteria for personality disorder. This was probably the most important contribution of the DSM-IV to the classification of personality disorder. Although the general criteria are clinically based and probably acceptable to most clinicians, they are worded too vaguely to translate into reliable measures. They also lack a rationale that is based on an understanding of the functions of normal personality. Instead, they are merely a catalogue of descriptive features. Nevertheless, they provide a starting point for further conceptual analysis.

If we look to the clinical literature in an attempt to understand the way clinicians conceptualize personality disorder, it is apparent that clinicians emphasize 2 features: chronic interpersonal difficulties and problems with a sense of self or identity. Valliant and Perry noted that personality disorder is inevitably manifested in social situations (28). Similarly, Rutter argued that personality disorder primarily involves severe and chronic interpersonal dysfunction (23). Benjamin, who wrote about interpersonal therapy for personality disorder, also emphasized dysfunctional interpersonal patterns (29). Thus there appears to be a general acceptance that chronically dysfunctional interpersonal behaviour is an essential element of personality disorder.

Other authors with diverse theoretical orientations have commented on the ubiquity of self-pathology in personality disorder. Kernberg emphasized the importance of identity diffusion in borderline personality organization, a diagnostic concept that
encompasses many DSM-IV personality diagnoses (26). The term “identity diffusion” was coined by Erikson to describe one’s failure to establish an integrated sense of identity during adolescence (30). For Kernberg, identity diffusion is “represented by a poorly integrated concept of the self and of significant others . . . reflected in the subjective experience of chronic emptiness, contradictory self-perceptions, contradictory behaviour that cannot be integrated in an emotionally meaningful way, and shallow, flat, impoverished perceptions of others” (26, p 12). Similarly, Kohut described the self-pathology observed in narcissistic conditions (31). Again, the description applies to a variety of conditions rather than a specific diagnosis. From a different perspective, cognitive therapists have described the self-pathology that characterizes most personality disorders in terms of thoughts, beliefs, and schemas used to process information about the self and to construct self-images. Putting aside differences in descriptive terminology and theoretical explanations, it is apparent that a consensus exists that self-problems and chronic interpersonal dysfunction are the core features of personality disorder. Cloninger recognized this combination in his definition of personality disorder as involving low cooperativeness and low self-directedness (32).

**Personality Disorder as the Failure to Achieve Life Tasks**

Ideally, a satisfactory definition should derive from an understanding of the functions of normal personality. But what are these functions? More than 50 years ago, Allport stated that “personality is something and personality does something” (33). Most accounts of personality, including the DSM, are concerned with what personality is—that is, they concentrate on describing the traits and other structures that characterize personality. These structures also perform a function, however. They serve an adaptive purpose. A definition of disordered personality based on this idea would reflect an understanding of the adaptive functions of personality and why these functions are impaired. Starting with Allport’s statement, Cantor proposed that what personality does is best understood in terms of the solution of major life tasks. These are the tasks or adaptive problems that have to be solved to adapt effectively (34).

Life tasks may be understood in various ways. Some are idiosyncratic tasks that individuals impose upon themselves. Others are culturally imposed—problems that everyone in a given culture or group must address. For example, the tasks associated with Erikson’s 8 stages could be considered universal life tasks in Western culture (30). At each stage of life, it is necessary to find an effective solution to a given problem if one is to cope effectively and progress to the next stage of development. Other tasks are more universal—problems that affect all humans because they derive from a common human nature. Especially important from our perspective are those life tasks that were imposed by our ancestral environment. For most of our history, humans lived as hunter–gatherers. To survive, our ancestors had to solve certain adaptive problems. Life tasks that have evolutionary significance are particularly relevant to the definition of personality disorder because they offer the possibility of developing a definition that is universally applicable rather than culturally bound.

Plutchik proposed 4 universal tasks or problems that are basic to adaptation: identity, hierarchy (issues of dominance and submissiveness), territoriality (belongingness), and temporality (problems of loss and separation) (35). The development of adaptive solutions to these tasks was critical for effective functioning and survival in the ancestral environment. It could also be argued that these tasks are equally relevant to adaptation in contemporary society. Solutions to these tasks constitute an important part of the core of personality and the failure to achieve adaptive solutions to one or more of these tasks represents some of the core dysfunctions of personality disorder.

The universal tasks proposed by Plutchik are remarkably similar to clinical concepts of personality disorder (35). This offers the possibility of an interesting convergence between clinical concepts and ideas derived from evolutionary psychology and personality theory. If universal life tasks of evolutionary significance are restated in clinical language, personality disorder could be defined as follows:

**Personality disorder is present when the structure of personality prevents the person from achieving adaptive solutions to the universal life tasks of establishing a self system, attachment and intimacy, and cooperativeness and prosocial behaviour.**

This is a deficit definition because personality disorder is considered a “harmful dysfunction” because of the failure to acquire the structures required to function effectively in these realms (36).

**A Working Definition**

This approach conceptualizes personality disorder as a tripartite failure involving 3 separate but interrelated realms of functioning: self-system, familial or kinship relationships, and societal or group relationships. To translate this definition into reliable diagnostic items requires more detailed descriptions of self-pathology and interpersonal pathology. Limitations of space prevent a detailed analysis of these issues, but it is possible to specify briefly how the different areas of dysfunction could be conceptualized.
and assessed.

**Self System.** Although the term “self” is used frequently in the clinical literature, it is rarely defined, which leads to some confusion about the relationships among such terms as identity, self, self-concept, and self-representation. Broadly speaking, clinicians describe 3 forms of self-pathology: 1) dysfunctional ideas and beliefs about the self, including self-images, self-representations, self-concepts, and the way the self is appraised, that is, self-worth and self-esteem. These problems refer to the contents of the self, and hence they will be referred to as substantive problems; 2) problems with regulating and controlling self-experience and maintaining self-esteem. These processes include the traditional ego defences of psychoanalytic theory and cognitive strategies that influence the way information is processed and interpreted; 3) problems with the structure of the self, for example, the failure to develop self-boundaries, an unstable sense of self, or low self-cohesiveness. This aspect of the self is especially important in some clinical formulations of personality disorder. Because these problems involve the structure of the self, they will be referred to as formal self-pathology.

Substantive and regulatory problems vary widely across individuals, cultures, and, perhaps, within a given individual throughout time. Problems with the formal component of the self, however, are likely to be more stable and universal. It is these features that are important to the definition of personality disorder. If the self is conceptualized as a system, formal self-pathology refers to the structure and organization of the system, whereas substantive pathology refers to the contents of the system. To develop a definition of the self-pathology associated with personality disorder, we need to describe the characteristics of formal self-pathology. The clinical literature provides a useful starting point. Kernberg’s concept of identity diffusion, for example, is similar to the concept of formal self-pathology (26). Akhtar listed the features of identity diffusion as contradictory character traits, temporal discontinuity in the self, lack of authenticity, subtle body image disturbances, feelings of emptiness, a poorly consolidated sense of gender identity, and inordinate ethnic and moral relativism (37). Although this list combines formal and substantive components, it contains important ideas. Others, such as Deutsch, have described the “as if” self, and Kohut has referred to the lack of a cohesive self and other structural problems of the self (31,38). Content analysis of the descriptive terms used by clinicians reveals 6 sets of terms that may be regarded as dimensions of formal self-pathology: diffuse self-boundaries, lack of self-clarity or certainty, labile self-concept, inconsistency and fragmentation, lack of autonomy and agency, and defective sense of self. Preliminary empirical studies suggest that these dimensions may be defined precisely enough to be used to compile a set of reliable diagnostic items (39,40).

**Interpersonal System.** The interpersonal system may also be described in terms of substantive and formal components. The substantive component includes the cognitions and behaviours associated with interpersonal relationships. The formal elements involve the organization and structure of the system. Formal interpersonal pathology involves the failure to integrate information about a given person into an organized image of the whole person, which leads to fragmentary person representations and limited person constancy. This idea forms a major part of several theories about personality disorder, especially borderline personality. A second dimension of formal interpersonal pathology involves a poorly developed concept of the generalized other. A hallmark of an adaptive interpersonal system is that it is organized to provide a set of rules which are used intuitively to understand other people and their actions.

Formal interpersonal pathology is closely related to self-pathology. Both pathologies involve the establishment of concepts of the person (self or another) and an understanding of the nature of human action. The establishment of self-boundaries depends upon an understanding of other people and the recognition of person boundaries. The self cannot be defined independently of the other. In addition, both self- and interpersonal systems are likely to be influenced by the same early dyadic relationships as explicated by object–relationships theory. For these reasons, the self-pathology component of the definition of personality disorder may be refined to incorporate these relationships.

In addition to these formal features of the interpersonal system, the interpersonal dysfunction of personality disorder also includes the failure to achieve adaptive solutions to universal interpersonal life tasks of evolutionary significance, namely, solving the problems of intimacy, affiliation, attachment, cooperation, and prosocialization. Again, preliminary evidence suggests that these dimensions of interpersonal pathology can be measured reliably (39,40).

**Personality Disorder as a Tripartite Dysfunction**

These analyses suggest that the earlier definition could be expanded to define personality disorder as a tripartite failure involving 1 or more of the following:

1) self system: the failure to establish stable and integrated representations of oneself and others; 2) interpersonal relationships: the failure to function adaptively in interpersonal relationships, as indicated by the failure to develop the capacity for intimacy, to
function adaptively as an attachment figure, and to establish affiliative relationships; and 3) societal relationships: the failure to develop the capacity for prosocial behaviour and cooperative relationships.

This definition appears to meet the requirement of integrating clinical concepts with normative personality theory. It can also be used to develop reliable assessments and, therefore, meets the requirement of a classification that can be empirically evaluated and modified systematically in light of empirical findings. Subsequent empirical analyses may well show that not all parts of the definition are required to yield reliable and valid diagnoses of personality disorder.

**Proposals for a System for Describing Clinically Significant Personality Traits**

The second major component of a framework for classification is a system for describing clinically significant personality dimensions. If traditional approaches to personality and personality disorder are followed, a trait model would be used—most taxonomies of normal personality attributes and the DSM are based on traits.

Having decided upon a trait model, 2 questions immediately arise. First, which trait model is most appropriate? Second, personality is hierarchically organized with higher-order traits divided into several more specific lower-order traits. Which level is appropriate for clinical description? This issue is important, and it will be considered in detail later. Briefly, it will be argued that the most important level for theory, research, and treatment planning is the lower-order level of basic dispositional traits.

The choice of model is difficult because the phenotypic structure of personality is still unresolved. Several competing structures have been proposed for classifying personality disorder, including Eysenck’s 3-dimensional model, the 5-factor approach, Cloninger’s biologically based model, and the interpersonal circumplex (11,12,32,41–49). Unfortunately, there is no consensus on the number of dimensions required to represent the higher-order structure of personality. An alternative approach would be to adopt a structure derived from analyses of clinical concepts (10,50,51). Interestingly, a consensus appears to be emerging about the trait structure of personality disorder across clinically based studies.

**Empirical Studies of the Trait Structure of Personality Disorder**

Investigations of the dimensions underlying personality disorder diagnoses typically use 1 of 4 strategies. One approach is to identify the dimensions underlying diagnostic categories by examining the covariation among diagnoses using factor analysis or multidimensional scaling (8,52–6). These studies were usually designed to test the DSM proposal that diagnoses fall into 3 separate clusters. The results suggest that a few higher-order dimensions underlie personality disorder diagnoses: typically, 2 to 4 higher-order traits are identified. Unfortunately, these results do not help to identify a dimensional model of personality disorder because differences in instruments and procedures lead to the identification of different dimensions. It is also difficult to label these dimensions. Personality diagnoses are multidimensional and, therefore, it is unclear which of the features accounts for the observed covariation among diagnoses (57).

A second approach is to relate personality disorder diagnoses to one of the models of normal personality previously mentioned. Recently, attention has focused on the 5-factor structure of neuroticism, extroversion, openness to experience, agreeableness, and conscientiousness (42). This appears to subsume personality disorder diagnoses, although a component resembling openness to experience is rarely identified (58–60). The lack of consensus about the structure of normal personality is an obstacle to the acceptance of this approach.

A third approach is to explore the dimensional structure underlying DSM personality disorder criteria. Studies using this approach identify structures that show little resemblance to DSM diagnostic concepts (8,13). The limitation of this approach from the perspective of identifying a dimensional model is that the item pool to identify factors is limited to DSM diagnostic criteria for personality disorders.

The fourth approach is to explore the structure underlying a large number of traits selected to provide a systematic representation of the overall domain of personality disorder. This traditional way of investigating the structure of normal personality traits has been used less frequently to investigate the structure of personality disorder traits. Nevertheless, considerable convergence exists across studies (60–62). Independently, Livesley, Clark, and Harkness each investigated the lower-order traits delineating personality disorders (50,51,62–4). Although these investigators used different starting points and procedures, the resulting structures were substantially similar (61,62). Based on these findings, it would be easy to identify a set of basic dimensions to provide a systematic description of the domain covered by traditional diagnostic concepts.
Livesley and colleagues extracted 15 factors from the intercorrelations among 100 self-report scales of traits identified using literature review and clinical judgements to provide a systematic representation of the domain of personality disorder (10,60). This structure was found to be stable across clinical and nonclinical samples. The results were used to develop a self-report instrument—the Dimensional Assessment of Personality Pathology—Basic Questionnaire (DAPP-BQ)—to assess 18 traits that provide a systematic representation of the domain of personality disorder: anxiousness, affective lability, callousness, cognitive dysregulation, compulsivity, conduct problems, identity problems, insecure attachment, intimacy avoidance, narcissism, oppositionality, rejection, restricted expression, self-harm, social avoidance, stimulus seeking, submissiveness, and suspiciousness. Further multivariate analyses indicated that 4 higher-order factors underlie the 18 basic traits (65–67). These were labeled emotional dysregulation, dissociative behaviour, inhibitedness, and compulsivity.

Starting primarily from DSM-III diagnostic criteria for personality and related disorders, Clark used a conceptual sorting task to identify 22 symptom clusters (51). Self-report scales were developed to assess each cluster, and an iterative series of analyses resulted in a self-report scale that assesses 15 traits. Conceptual comparisons of the Clark and Livesley systems indicated considerable similarity (61). There are no scales without a counterpart in the other instrument. Differences in the number of scales in the 2 instruments are due to some constructs being divided into several scales. Direct empirical comparison of the trait scales also indicated considerable convergence in the content and structure of the 2 systems and a similar higher-order structure (60). These factors also resemble the neuroticism, extraversion, agreeableness, and conscientiousness domains of the 5-factor approach. Given this convergence, these results provide a starting point for the development of a preliminary dimensional representation of personality disorder.

**The Hierarchical Structure of Personality**

Although the hierarchical structure of personality in which higher-order traits are divided into several basic or lower-order traits is generally accepted, the nature of this structure has received little attention. In particular, it is unclear whether the lower-order traits are simply subcomponents of the higher-order traits or whether they are separate entities that cooccur to create the higher-order trait. Consider, for example, the higher-order trait of neuroticism, which Costa and McCrae suggest consists of 6 lower-order traits or facets: anxiety, hostility, depression, self-consciousness, impulsivity, and vulnerability (42). Are these 6 traits simply ways to subdivide neuroticism for descriptive purposes, or are they distinct entities with independent etiologies that tend to cooccur? Although this question may appear esoteric and divorced from clinical concerns, it has important implications for classification and etiology. Clinically, it has a bearing on whether the basic level or the higher-order level is more important for describing clinically relevant traits.

Behavioural genetic analyses based on twin study data are beginning to provide an answer to this question. Both basic and higher-order normal and disordered personality traits have a substantial heritable component that typically ranges from 40% to 60% (68,69). This raises the question of whether the heritability of lower-order traits, such as anxiety and vulnerability, is simply due to the fact that they are subcomponents of neuroticism or whether they are distinct entities with their own specific heritable component. Expressed differently, the issue is whether the genetic variation of a lower-order trait consists only of general variance due to the higher-order trait, or whether is consists of general variance plus a specific component. Investigations of this issue have been limited, but it was recently shown that the specific facet traits of the 5-factor model have substantial residual variance when the effects of the 5 higher-order dimensions are removed (70). In the case of the 6 facets of neuroticism, the heritability of the residual components ranged from 21% to 29%. There is no reason to assume that similar results would not be found for the more specific traits of personality disorder.

This finding suggests that the phenotypic structure of personality and personality disorder is based upon a large number of genetic building blocks that have relatively specific effects and a few factors with more widespread effects. This would explain the complex variation observed in the phenotypic structure of personality and personality disorder. It also implies that discrete categories of personality disorder as proposed in classifications such as the DSM-IV and ICD-10 are unlikely. Instead, an almost infinite variety of configurations of personality traits is likely to occur as these building blocks are combined in multiple ways. For this reason, the most important level in the hierarchy for coding clinically relevant traits is the basic level. This level also seems to be the most useful level of description for treatment planning. As Sanderson and Clarkin noted, DSM personality diagnoses are too heterogeneous and global for treatment planning (71). Clinical interventions are usually organized around specific features or clusters of related features rather than around diagnostic categories. Emphasis on the more specific traits is also consistent with the constructs used to investigate the biological aspects of personality disorder (19).

**Basic Dispositional Traits**

Based on investigations of the dimensions underlying personality disorder, a preliminary list of clinically relevant traits would...
include affective lability, anxiousness, callousness, cognitive dysregulation, compulsivity, conduct problems, insecure attachment, intimacy avoidance, narcissism, oppositionality, rejection, restricted expression, social avoidance, stimulus seeking, submissiveness, and suspiciousness (10,50).

This is intended to offer a preliminary list of useful traits that can be modified on the basis of future empirical findings. This list does not constitute a set of diagnostic items. For assessment purposes, interview or self-report items would be required for each trait to provide a reliable measurement.

This list does not include traits related to self-pathology or some aspects of interpersonal dysfunction because these are coded as part of the Axis I diagnosis of personality disorder. The list was developed empirically to provide a systematic representation of personality disorder, and it incorporates all of the features listed as diagnostic criteria in the DSM-IV. Nevertheless, it merely represents one way to parse the domain. Other investigators may make different analytic decisions and hence propose somewhat different dimensions. As noted previously, however, there is substantial convergence regarding the basic or lower-level traits of personality disorder.

Higher-Order Patterns of Personality Disorder

Although the basic dispositional traits may combine in various ways to yield an almost infinite range of personality profiles, statistical analyses consistently identify 4 or 5 higher-order factors. The higher-order factors underlying the above 16 traits will be used to illustrate the kind of structure that could be used to establish an empirically based classification (66,67).

Emotional Dysregulation. Most multivariate analyses of personality traits identify a general factor that resembles neuroticism as described by Eysenck and the 5-factor model (41,42). Analyses of personality disorder traits yield a similar factor that is characterized by traits, such as affective lability, anxiousness, negative temperament, eccentric perceptions, cognitive dysregulation (tendency to show cognitive disorganization under stress and brief psychotic symptoms), submissiveness, and self-harm (60,66,67).

The global nature of this factor raises the possibility that it is an artifact of the statistical analyses. There are, however, several reasons to discount this explanation. First, the factor is stable across clinical and nonclinical samples and instruments. Second, the factor is consistent with clinical observations that most patients show features of multiple personality diagnoses, with empirical evidence of substantial diagnostic overlap, and the fact that the most frequent diagnosis is personality disorder not otherwise specified. These observations suggest that personality disorder is more amorphous and generalized in presentation than is implied by the categorical approach of the DSM. Third, the idea that personality is a system of interrelated components implies that severe dysfunction in one part of the system is likely to involve other parts, which leads to panpathology. This accounts of the overlap among diagnoses. Thus it seems more appropriate for future classifications to adopt a diagnostic concept that recognizes this aspect of the organization of personality disorder rather than to continue to record multiple or unspecified personality disorder diagnoses, as is presently done.

For classification purposes, the pattern will be referred to as emotional dysregulation. Because the pattern includes a wide range of traits, it is organized for descriptive purposes into core, consequential, or associated features. Core features are the basic genetically based dispositional traits that are hypothesized to define the pattern. The other features are organized around this core. Consequential features are basic dispositions that are likely to cooccur with the core features because of a common genetic predisposition or developmental factors. For example, high levels of affective lability and anxiousness are likely to lead to fearfulness in social situations; hence high levels of submissiveness and social avoidance. Associated features are basic dispositions that, if present, may increase the probability of maladaptive expressions of core and consequential features. Using this structure, emotional dysregulation may be described as follows: 1) the core components are anxiousness and affective lability; 2) the consequential components are cognitive dysregulation, dependence, submissiveness, anxious attachment, identity problems, social avoidance, and oppositionality; and 3) the associated features are narcissism and suspiciousness.

This pattern resembles neuroticism as described by Eysenck and the 5-factor approach (11,41,42). According to Eysenck, neuroticism includes anxiety, depression, feelings of guilt, low self-esteem, tension, irrationality, shyness, moodiness, and emotionality. The pattern also shows some resemblance to the DSM-IV criteria set for borderline personality disorder. The pattern differs from these concepts, however, in several ways. First, unlike the DSM criteria, emotional dysregulation does not include items describing self- or identity problems because these are implied by the diagnosis of personality disorder. Second, emotional dysregulation is a more global concept than either neuroticism or borderline personality disorder. It should be noted, however, that emotional dysregulation is empirically derived from clinical concepts, whereas neuroticism, as defined by the 5-factor approach, was rationally derived to reflect the normative behaviours. As noted earlier, borderline personality disorder overlaps significantly
with other diagnoses, which suggests that the criterion set is artificially circumscribed in an attempt to differentiate the condition from other putatively distinct diagnoses.

It is noteworthy that emotional dysregulation bears some resemblance to other conceptualizations. Linehan, when discussing the use of cognitive–behavioural therapy for treating parasuicidal behaviour, described borderline personality disorder in terms of emotional, interpersonal, behavioural, cognitive, and self-dysregulation (72). Kernberg’s concept of borderline personality organization is also descriptively similar to emotional dysregulation in that it covers such diagnoses as schizoid, paranoid, borderline, antisocial, and some narcissistic and dependent personality disorders, although the underlying conceptualization is very different (26). The concept is also consistent with evidence that neuroticism is a dimension which cuts across many personality diagnoses (43).

**Dissocial Behaviour.** A second factor consistently identified in higher-order analyses of personality disorder traits resembles the negative pole of agreeableness in the 5-factor approach and Eysenck’s psychoticism. Using the results of statistical analyses of the Dimensional Assessment of Personality Pathology scales, the pattern may be defined as follows: 1) the core features are callousness and rejection; 2) the consequential features are conduct problems; and 3) the associated features are stimulus seeking, narcissism, and suspiciousness.

Although the pattern correlates negatively with the 5-factor domain of agreeableness, the closest fit is with Eysenck’s concept of psychoticism and Zuckerman’s factor of impulsive–sensation seeking (41,73). From a clinical perspective, the pattern resembles psychopathy as described by Cleckley and operationalized by Hare’s Psychopathy Checklist (PCL-R) (24,74). Hare and colleagues’ finding that 2 factors underlie the PCL-R—an interpersonal component defined by traits, such as callousness and entitlement, and a behavioural component defined by antisocial acts—is consistent with the structure of the dissocial pattern (75).

**Inhibitedness.** The third pattern consistently identified is labeled inhibitedness to capture the introverted and withdrawn nature of the behaviours that were salient in the statistical analyses. The pattern is defined as follows: 1) the core features are intimacy problems and a restricted expression of inner experience; and 2) the consequential feature is social avoidance.

This structure assumes that the core consists of inhibition, which is expressed as difficulty with close relationships, showing feelings, and revealing information about oneself. It also assumes that these features lead to socially avoidant behaviour. The pattern is a more specific form of introversion, as described by Eysenck and the 5-factor approach (41,42). It also seems to be similar to Kagan’s concept of inhibited temperament (76).

**Other Patterns.** These 3 higher-order patterns are not discrete categories in the DSM-IV sense but, rather, higher-order dimensions that may cooccur. Thus, in addition to the 3 patterns of emotional dysregulation, dissocial behaviour, and inhibitedness, the following combinations may occur: emotional dysregulation–dissocial, emotional dysregulation–inhibitedness, dissocial–inhibitedness, and emotional dysregulation–dissocial–inhibitedness. Careful consideration of these combinations reveals that they are common in clinical and forensic settings.

This structure is similar to the higher-order structures identified in other studies of the interrelationships among traits delineating personality disorders (9,77). Nevertheless, several objections could be leveled at this higher-order structure. First, some traits that resemble DSM-IV diagnoses, such as compulsivity, are not listed, although a factor resembling obsessive–compulsive personality disorder is consistently identified as a higher-order factor by multivariate studies. Moreover, the 5-factor approach includes conscientiousness, which correlates with obsessive–compulsive personality disorder. There are several reasons for excluding compulsivity from the higher-order patterns. First, compulsivity does not seem to have the pervasive effects of the 3 higher-order patterns. Second, DSM-IV diagnoses differ in breadth of content. Some, like borderline personality disorder, are broad concepts that encompass a variety of features, whereas others, such as obsessive–compulsive and narcissistic personality disorders, cover a narrower range of behaviours. For this reason, these behaviours can be adequately represented at the lower-order level. Third, compulsivity does not seem to be associated with the same level of dysfunction as the other patterns. Compulsivity is usually associated with a diagnosis of personality disorder only when it occurs with other maladaptive traits. Finally, the identification of compulsivity as a higher-order factor may simply be due to it being relatively unrelated to other basic dimensions and, therefore, it emerges as a higher-order factor in factor analyses of the basic traits. For these reasons, compulsivity is coded at the basic dispositional level of the system. Narcissism is also coded at this level for similar reasons and because it is not identified in higher-order analyses.

A second and apparently more serious objection is that these higher-order patterns do not cover all trait configurations observed in personality disorder. This is not, however, a major problem. As noted earlier, the genetic structure of personality implies an almost infinite variety of profiles. The 3 higher-order patterns and their combinations are merely profiles that are commonly identified in
statistical analyses. This does not mean that the higher-order patterns are redundant. They provide useful summaries for individuals who match these profiles, and this level of description may be useful in epidemiological and related investigations.

Conclusion

The proposed framework for classifying personality pathology is designed to remedy some of the fundamental limitations of the DSM-IV classification. The objective is a structure for organizing clinically relevant information that facilitates research. The proposed structure distinguishes between the diagnosis of personality disorder as a single diagnostic category and the assessment of personality. Unlike most dimensional systems proposed for classifying and describing personality disorder, which tend to recommend the use of a few general dimensions, the proposed system emphasizes the importance of using a larger number of more specific traits. It is argued that this is more in accord with the genetic structure of personality. It also meets the needs of clinical practice that increasingly emphasize the importance of tailoring interventions to meet the personality characteristics of the patient (71). Finally, it is consistent with suggestions from evolutionary psychology that the mental apparatus consists of specific mechanisms that evolved to solve specific tasks (78–9). The use of more specific dimensions should also aid the search for the biological correlates and the molecular genetic underpinnings of personality and personality disorder.

Clinical Implications

- The framework proposed implies that the diagnosis of personality disorder be separated from the assessment of clinically relevant traits.
- Treatment planning needs to take into account the specific traits that characterize each case.
- Treatment strategies need to recognize the complex biological and psychosocial etiology of personality disorder.

Limitations

- The proposed structure for organizing the classification of personality disorder is a conceptual framework with limited empirical support.
- The definition of personality disorder proposed has not been subjected to systematic empirical evaluation.
- The framework is not based on a systematic theory of personality disorder.

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Résumé

On propose une structure afin d’organiser une classification empirique du trouble de la personnalité. Trois propositions générales visent à organiser le système. Premièrement, le trouble de la personnalité est un type de trouble mental et devrait donc être classé comme une seule entité diagnostique parmi les autres troubles mentaux de l’axe I. On propose une définition préliminaire du trouble de la personnalité comme un échec triple mettant en jeu le système personnel, les liens de parenté et les relations sociales. Tout porte à croire que cette définition peut se traduire par un ensemble d’items fiables. Deuxièmement, il faudrait distinguer le diagnostic du trouble de la personnalité de l’évaluation des traits de personnalité pertinents d’un point de vue clinique. Puisque des observations cohérentes favorisent un modèle dimensionnel du trouble de la personnalité, on propose de coder la personnalité en fonction d’un ensemble de dimensions des traits choisis pour assurer une représentation systématique du domaine des comportements représentés par les concepts diagnostiques actuels. Troisièmement, étant donné l’organisation hiérarchique des traits de personnalité, on propose qu’un axe de codage de la personnalité comprenne des dimensions de base ou réduites, comme premier niveau d’évaluation, et quelques structures supérieures pour résumer les renseignements à certaines fins. On propose une liste préliminaire de 16 traits de disposition fondamentaux pour décrire des composantes plus spécifiques du trouble de la personnalité fondées en partie sur la convergence des observations d’une étude à l’autre : angoisse, labilité affective, insensibilité, dérèglement cognitif, compulsivité, problèmes des conduites, attachement d’insécurité, évitement de l’intimité, narcissisme, oppositionnalité, rejet, expression restreinte, évitement social, recherche de stimuli, soumission et méfiance. On a proposé trois profils supérieurs : dérèglement affectif, comportement asocial et inhibition; ceux-ci peuvent survenir de façon indépendante ou simultanée.

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